


# **SELF STUDY REPORT 2016-17 to 2020-21**




**West Bengal University of Animal  
And Fishery Sciences**  
**37 & 68, Kshudiram Bose Sarani,**  
**Kolkata - 700037**



***Submitted to:***

**National Agricultural Education  
Accreditation Board  
Indian Council of Agricultural Research  
New Delhi - 110011**





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## 6.6.1. UNIVERSITY GOVERNANCE:

### 6.6.1.1. Vision, Mission and Goals:

*Whether the University has published vision document and has developed the plan of implementation with time frame and proposed financial arrangement? Whether the University has planned, developed, implemented, and evaluated intentional and purposeful programs/services that may facilitate students and other stakeholders of the University provide one paragraph for each.*

#### Mandate of the institution:

In order to fulfill its mission the university functions with the following mandates:

1. Teaching	Imparting quality teaching at the undergraduate, postgraduate and doctorate levels in the field of Veterinary & Animal Sciences, Dairy Technology & Allied fields and Fishery Sciences.
2. Research	Undertaking research works on the priority areas in its three constituent faculties dealing with the three broad targeted fields.
3. Extension	Conducting training, demonstration and other extension activities for dissemination of the scientific know-how of the existing technologies and transfer of the refined and newer technologies. The main objectives of extension being the transfer of technology from 'lab to land and land to lab'.

#### Mission statement:

Strengthening the economy of the rural mass in the State of West Bengal in particular and the country in general through promotion and improvement of the animal resources including aquaculture resources and dairy products by generation of trained human resources, advanced technologies and dissemination of scientific knowledge to the target population constitute the mission of this university.

#### Goals:

Keeping parity with the missions and the mandates, the university pursues the following goals and objectives:

- Generation of trained and expert human resources in the field of Veterinary & Animal Sciences, Dairy Technology & Allied fields and Fishery Sciences.
- Refinement of the existing technologies and development of improved technologies in the thrust areas of the respective disciplines of the constituent faculties.
- Motivating the target population for adoption of the advanced technologies with a view to strengthening their economy and improvement of their livelihood standard.

#### Objectives:

- To provide adequate modern facilities for studies of Veterinary & Animal Sciences, Dairy Science and Fishery Science.



- To provide modern infrastructure facilities for undertaking quality research in the areas concerning the three constituent faculties.
- To undertake extension education programmes on the broad areas of concern of the three faculties.
- To render technology and advisory support to the state government and its activities for development of the animal and fishery resources.

*Whether the University has published vision document and has developed the plan of implementation with time frame and proposed financial arrangement?*

**YES. Details are mentioned below:-**

Vision Document:

The University published a vision document named as **Vision 2050** and developed a plan for implementation. However, no financial budget was drawn and mentioned in the vision document. Plans and estimates were prepared subsequently and proposals for sanction of fund had been submitted time to time to the Govt. of West Bengal for sanction of fund. Some of the major objectives as per Vision 2050 have already been accomplished with financial support of the Govt. of West Bengal and ICAR as well. A short description of some major plans developed for the benefit of stakeholders and the status of implementation and evaluation is mentioned below:-

Some Major Plans as per Vision 2050	Status of Implementation and evaluation
Full fledged establishment of Teaching Veterinary Clinical Complex (TVCC) for accommodation of Clinical and Para-clinical Departments	The Teaching Veterinary Clinical Complex renamed as Veterinary Clinical Complex has already been established at Mohanpur Campus with the financial assistance of Govt. of West Bengal. Construction of an another Clinical Complex building at Belgachia, Kolkata Campus is complete. Sanction of fund for Electrical Sub Station is awaited from the State Govt. Once fund is placed by the Animal Resources Development Department, Govt of West Bengal to the Public Works Department, the Electrical sub-Station will be completed and the building will be operational.
Instructional Livestock Farm Complex (ILFC) is to be established as per VCI specification with modern facilities along with disposal of waste materials	Instructional Livestock Farm Complex (ILFC) renamed as Livestock Farm Complex has already been established at Mohanpur Campus with the financial assistance of Govt. of West Bengal.
Establishment of separate departments for a) Poultry Science, b) Animal Bio-Technology and c) Wildlife	The Department of Poultry Science renamed as Department of Avian Science and Animal Bi-Technology have already been established at Mohanpur campus. Newly recruited teachers have already joined. Establishment of Department Wildlife is under consideration of the Govt. of West Bengal.
Modernization and up-gradation of the Students' Dairy Plant with improved infrastructure and new equipments to gear up effective practical training of the students	The Govt. of West Bengal has sanctioned fund for modernization and up-gradation of the Students' Dairy Plant under the faculty of Dairy Technology at Mohanpur Campus. The renovated Students' Dairy Plant will be ready for full fledged operation by March, 2021
Establishment of Central Instrumentation facility in the faculty with modern instruments / equipment	Already Established



Creation of new departments for a) Food technology and b) Economics, Statistics and Management	As per review of the objectives and consequent up on implementation of ICAR 5 <sup>th</sup> Dean's Committee Report, the Department of Fish Nutrition and Department Dairy Business Management have been established under the faculty of Fishery Sciences and Dairy Technology respectively.
Establishment of quality control laboratory to act as nodal agency of overall quality control of milk and milk products in the eastern and north-eastern India	Due for implementation
Creation of Mobile Diagnostic Laboratory for soil, water and fishes as well	The university participated in the programme launched by the Govt. of West Bengal wherewith the Mobile Diagnostic Laboratory was operational
Establishment of Aquaclinic	The Aquaclinic subsequently changed into the Disease Diagnostic Laboratory which is operational under the Department of Aquatic Animal Health, Faculty of Fishery Sciences
Establishment of Regional Research – Extension Centres at different agro-climatic zone of the State	The proposal in under active consideration of Govt. of West Bengal
Improve the linkages and collaborations with public and private, national and international organizations.	Linkage with National and International Institutes have been established which needs to be extended further.
Establishment of New Veterinary and Fishery College	The Govt. of West Bengal has already approved the proposal for establishment of one New Veterinary and Fishery College under this university in the Jalpaiguri district of West Bengal and the PWD has already been entrusted to prepare Plans and Estimates.

#### 6.6.1.2. Statutes and Regulations:

*Provide list of Statutes and Regulations published in the gazette notification and being implemented by the University for Administration and Planning.*

Details of Statutes of the university published through Gazette Notification and Regulations prepared as per provisions of the The West Bengal University of Animal & Fishery Sciences Act 1995 for Adminstration and Planning are mentioned below:-

1. The First Statutes of the West Bengal University of Animal & Fishery Sciences presently in vogue was published in the Calcutta Gazette vide no 775-Uni dated 2<sup>nd</sup> April, 1998 by the Animal Resources Development Department, Govt. of West Bengal (**Copy Enclosed as Annexure – I**)
2. The Academic Regulations presently in vogue for the UG, PG and PhD courses as per guidelines of the Veterinary Council of India (BVSc & AH course) and Indian Council of Agricultural Research (BFSc. BTech-DT, MVSc, Mtech-DT, MFSc and Doctoral courses). The Academic Regulations have been introduced as per resolutions of the Statutory Authoities of the university as per provisions of the West Bengal University of Animal & Fishery Sciences Act 1995. No Gazette Notification is needed for implementation of the Academic Regulations presently in vogue. However, the list of Regulations are mentioned below:-
  - a. Academic Regulations and Syllabus for Under Graduate Programme i.e. BVSc & AH, BFSc and BTech – DT.



- b. Academic Regulations and Syllabus for Post Graduate Programme i.e. MVSc, MFSc and MTech – DT.
- c. Academic Regulations and Syllabus for Doctor of Philosophy Programme i.e. PhD under Faculty of Veterinary & Animal Sciences, Faculty of Fishery of Sciences and Faculty of Dairy Technology.

#### 6.6.1.3. University Statutory Officers and their Selection Process:

*Provide list of the statutory officers sanctioned in the Act, present position, their mode of appointment (selection/nomination), joining date, tenure. Please provide the reason of those statutory officers who have not been appointed so far.*

List of Statutory Officers :-

Sl No.	Position Sanctioned	Officer at Present	Selection Process
1	Vice-Chancellor	Prof. Chanchal Guha	Selected by the Hon'ble Chancellor (Governor of the State) in consultation with Ministers of the Department of Fisheries and Animal Resources Development Department, Govt. of West Bengal. However, the process of selection of Vice-Chancellor is envisaged in the WBUAFS Act (Section 9) and Statutes (Clause No 3 & 4).
2	Registrar	Dr. Sourav Chandra	Through open advertisement and recommended by the Screening Committee and the Selection Committee as per Statutes and finally approved by the Executive Council. <b>Note: At Present the post of Registrar is vacant and the Deputy Registrar is acting as the Registrar.</b>
3	Director Research, Extension and Farms	Prof. Bipul Kumar Das	Through open advertisement and recommended by the Screening Committee and the Selection Committee as per Statutes and finally approved by the Executive Council. <b>Note: At Present the post of Director Research, Extension and Farms is vacant and the Dean, Faculty of Fishery Sciences is acting as the Director Research, Extension and Farms.</b>
4	Controller of Examinations	Prof. T. S. Nagesh	Through open advertisement and recommended by the Screening Committee and the Selection Committee as per Statutes and finally approved by the Executive Council. <b>Note: Consequent upon sanction of lien to the regular Controller of Examinations, at Present the duties of the Controller of Examinations are discharge by Professor as a temporary measures.</b>
5	Finance Officer	Mr. Prasanto Dutta	The selection process of a parmanenet Finance Officer is mentioned in the Statutes of the university (Schedule 1). At



			present, the Finance Officer is deployed by the Govt. of West Bengal from West Bengal Audit and Accounts Service on deputation.
6	Dean, Faculty of Veterinary & Animal Sciences	Prof. Nilotpal Ghosh	Through open advertisement and recommended by the Screening Committee and the Selection Committee as per Statutes and finally approved by the Executive Council. <b><i>Note: At Present the post of Dean, Faculty of Veterinary &amp; Animal Sciences is vacant and the duties of the Dean, Faculty of Veterinary and Animal Sciences are discharge by Professor as a temporary measures.</i></b>
7	Dean, Faculty of Fishery Sciences	Prof. Bipul Kumar Das	Through open advertisement and recommended by the Screening Committee and the Selection Committee as per Statutes and finally approved by the Executive Council. <b><i>Note: At Present the post of Dean, Faculty of Fishery Sciences is vacant and the duties of the Dean, Faculty of Fishery Sciences are discharge by Professor as a temporary measures.</i></b>
8	Dean, Faculty of Dairy Technology	Prof. Tarun Kr. Maity	Through open advertisement and recommended by the Screening Committee and the Selection Committee as per Statutes and finally approved by the Executive Council. <b><i>Note: At Present the post of Dean, Faculty of Dairy Technology is vacant and the duties of the Dean, Faculty of Dairy Technology are discharge by Professor as temporary measures.</i></b>
9	Librarian	Vacant	No suitable candidate was recommended by the Selection Committee for appointment. The university is planning for readvertisement. At present, the Deputy Librarian is discharging the duties of Librarian as In-Charge.

#### 6.6.1.4. Decentralization of Power:

*Decentralized systems are those in which central entities play a lesser role in any or both of fiscal and administrative dimensions in the agricultural universities. The information on financial autonomy and sanctioning power to the Dean and other officers of the University shall be provided. Whether the necessary administrative powers have been delegated to the Statutory officers of the University? Provide the list.*

**The duties, responsibilities and powers of the Statutory Officers are mentioned in the Act and Statutes of the university. Relevant portions of the Act and Statutes are enclosed as Annexure – II & III.**



#### 6.6.1.5. Supporting Units:

*Whether the University has established Maintenance cell, SC/ST Cell and Health facility and what is the present mode of functioning of these units to support the student, staff and University infrastructure?*

*Whether the University has established Maintenance cell, SC/ST Cell and Health facility?*

**YES**

Present mode of functioning of these units to support the student, staff and University infrastructure is mentioned below:-

##### **Maintenance Cell:**

The Civil and Electrical major maintenance work is undertaken by the Public Works Department, Govt. of West Bengal.

The university has also an Engineering Cell headed by a retired Executive Engineer, Govt. of West Bengal supported by three nos of Sub Assistant Engineers (Civil and Electrical).

##### **SC/ST Cell:**

The SC/ST Cell in the university has been constituted as per guidelines of the Department of Backward Classes, Govt. of West Bengal read with UGC guidelines to support the different stakeholders of the university. Time to time the cell organizes programmes for awareness of stakeholders.

##### **Health facility**

The university has Medical Officers posted in the three campuses of the university assisted by staff to extend outdoor facilities to the students and employees. In case of emergency, local Govt. hospital facilities are available. The Govt of West Bengal has also introduced Health Scheme for teachers and officers for reimbursement / cashless treatment in case of hospitalization. The university has also been negotiating with the National Insurance Company Ltd. (A Govt. of India Enterprise) for Mediclaim Policies for the students in case of hospitalization.

#### 6.6.1.6. Technology Support:

*Information on Classroom technology (e.g., technology in rooms, computer labs), online learning tools, internet/Wi-Fi connectivity, student systems (e.g., online enrolment), business applications, computer help (e.g., setup for email, firewalls) and password resets being implemented at the University level. A brief note shall be provide.*

##### **Classroom technology:**

There are adequate numbers of classrooms in all the faculties with provisions for comfortable sitting of the students. The classrooms are provided with equipment for modern methods of teaching including Audio Visual arrangements, Internet / Wifi facilities are available for virtual classes.

Computer Labs exist in the Libraries of the three faculties including one in the Department of Animal Genetics and Breeding for use of the students and faculty member.



**Online learning tools:**

Academic activities on virtual mode are being undertaken through Google Classrooms, WhatsApp, email etc under the present pandemic situation. The Academic Management System (AMS) under NAHEP Component-2 has been initiated to streamline the academic activities through online mode.

**Internet/Wi-Fi connectivity:**

Internet / Wi-Fi connectivity is available for the students / teachers / researcher and staff members in the 3 (three) campuses including the Libraries of the university.

**Student systems: (e.g. online enrolment)**

A software has been designed through which online enrolment of students, fees deposition, issue of marksheets, declaration of results, issue of certificates and grade cards etc are being undertaken. The software will be further strengthened on implementation of Academic Management System (AMS) under NAHEP Component-II.

**Setup for email, firewalls:**

The facilities available in the three faculties of this university. The faculty members and official have been provided with official email ID allotted by the university.

**Password resets being implemented at the University level:**

Wifi and firewall password resets is being implemented at the university level.

**6.6.1.7. Institutional Data Base and Website Update:**

*Whether the institutional extensive database of general and specific programs in partnering with peer universities, research institutions and government agencies are available in order to facilitate a wide variety of intellectual interactions and exchanges? Mention periodicity of Website updating.*

The University has partially developed the institutional extensive database of general and specific programs in partnering with peer universities, research institutions and government agencies are available in order to facilitate a wide variety of intellectual interactions and exchanges. The university has been planning for engaging reputed outside agencies for restructuring the entire database with professional outlook. One software professional with MCA degree has already been appointed on permanent basis and some contractual appointment of professional have already been made.

The university database and the website as well are time to time updated and depicts relevant data in connection with Ongoing Projects, Research Highlights, Technologies Developed, Award Winning Projects, Patents etc with details of collaborative works and funding agencies. Events held on different aspects are also uploaded time to time.



### 6.6.1.8. Interdepartmental Linkages:

*Provide information on whether the University is currently adopting decentralized, participatory, adaptive and multifarious demand-supply side extensionresearch- academics approach; involving public, private and third sector (civil society) in research and extension programmes and strengthening capacity of framers, researchers and extension workers. Provide a note on interdepartmental linkages the University is currently having in practice. Is the University cultivating the collaborative culture within subject and across subjects?*

The university has been adopting decentralized, participatory, adaptive and multifarious demand-supply side extensionresearch- academics approach; involving public, private and third sector (civil society) in research and extension programmes and strengthening capacity of framers, researchers and extension workers

The University fosters healthy interdepartmental linkages through multidisciplinary and intersectoral collaborations in diverse areas such as participatory field research, hands-on skill development, dissemination of climate-adaptive strategies, etc. Development of location-specific and farmers-centric technologies is the priority area for the University which is achieved by building partnership with local NGOs and SHG groups. One such example is the collaboration with Joygopalpur Gram Vikash Kendra (JGVK), a leading NGO in Sundarban delta working towards securing livelihood for local communities through sustainable development in social, economic and environmental context. The University in collaboration with JGVK has developed an innovation hub for disseminating climate adaptive aquaculture technologies amongst the vulnerable aqua-farmers affected by sea level rise, cyclone and storm surge.

The University has its three KVKs in three districts of West Bengal through which participatory approach in the form of Rapid Rural Appraisal (RRA) and Participatory Rural Appraisal (PRA) is followed inculcate and to disseminate the technological know-how into field level do-how. Through this, time and situation specific adaptive research in the form of On Farm Trial / Testing are being conducted in regular basis with a participatory mode. University along with its KVKs have been regularly supplying the critical inputs like quality seeds in respect of animal husbandry, fishery and agri-horticultural practices, demand driven technological backstopping, ancillary arrangement like feed, vaccines, medicines, area specific mineral mixtures, pesticides, fungicides and also farmers friendly agricultural tools/ machineries to boost up the agricultural mechanization process.

The University has also given thrust to collect the field level problems faced by the small and marginal farmers of rural areas with a view to designing the research-extension model for its better percolation in the ground level. Moreover, the research findings evolved in the laboratories of the University is categorically communicated to the extension wings of the University/KVKs/ State departments for its better and greater reach in the field level. Certain technology assessed and refined in University or its KVK level are being demonstrated in the field through Front Line Demonstration (FLD) or large scale demonstration as per the demand of the end users considering the optimum utilization of time & space and available natural resources. In this endeavour, number of private sectors are involved to work with University in a Private Public Partnership (PPP)mode.



The University through its different projects like, NAHEP, Biotech Kisan Hub, SC-SP, TSP, AICRP etc., a number of farm science clubs, farmers groups/ gothis, SHGs, FPOs, NGOs etc, have also been selected to disseminate the technology in a large scale. A number of MOUs have been signed by different institutes/ organizations for collaborative research and extension programs which in turn will help the farming community and also the students for sustainable development in respect of farm income and academic excellence. University through its internal arrangement and also with the help of private sectors has been trying to accumulate field level problems and then it is prioritized for fixing up the intervention point with specific work plan. After executing the program, University used to perform its internal evaluation for further modification, if any, and then it is communicated to different private and govt sectors for large scale adoption. To do this, a number of hands on trainings and HRD programs are organized to enrich the knowledge and also to strengthen the skill of the farmer, ground level researcher, and field level extension personnel.

Off - farm and On-farm capacity building programs for farmers and farm women, extension workers like prani bondhus, prani mitras, krishok bondhus, input dealers, field level veterinary officers, FPO members, SHG leaders etc. are regularly conducted by the DREF section of the University and its KVKs apart from offering the diploma in Veterinary pharmacy. Farmers advisory and consultancy services are also provided by the University as per the need of farming community. A strong inter-departmental linkage for collaborative research and extension program within the subject and across the subjects has been established by the University for better human resource development.

#### 6.6.1.9. Monitoring Mechanism:

*Whether the University is following comprehensive curriculum monitoring mechanism including teachers' self reflection, surveys on teaching effectiveness, lesson observation, assignment inspection, examination papers review, appraisal system, and curriculum evaluation.*

The University is following comprehensive curriculum monitoring mechanism including teachers' self reflection, surveys on teaching effectiveness, lesson observation, assignment inspection, examination papers review, appraisal system, and curriculum evaluation. As a part of monitoring mechanism, faculty members have to submit a Self Appraisal Report envisaging detailed achievement including teachers' self reflection, surveys on teaching effectiveness, lesson observation, assignment inspection, examination papers review and curriculum evaluation etc as a part of promotion process under Career Advancement Scheme. To facilitate the process of Best Teachers Award assessment by the students are also undertaken by the Screening Committee constituted for the purpose.

#### 6.6.1.10. Institute Quality Assurance Cell /PME Cell:

*Please mention establishment and the active functioning of both the cells and kind of outcome based assignment presently being carried out through these cells.*

At present the university has no Institute Quality Assurance Cell. However, the University has a **Project Monitoring Evaluation cell (PME)** under the chairmanship of Directorate Research and Extension of Farms of the University. The Deans of the three faculties i.e Faculty of Fisheries Sciences & Faculty of



Dairy technology along with Principal Investigator of the concerned project are the member of the said cell. The cell is evaluating the progress of the research work on individual project basis. The PME cell is used to give suggestion (s) for betterment of research activities. The specific recommendation of the PME cell has been placed in the Research Extension council of the University (the highest statutory Research & Extension work evaluation committee) for formulation of future work , research plan & Extension activities on periodical i.e twice in a year.

#### 6.6.1.11. Collaboration with Academic Institutions and Industry:

*What type and how much collaboration are currently in place with academic institutions and industry? Does the University has some more proposal for the future collaboration? Give details with road map.*

The university shares its human resources and infrastructure with other academic institutions like ICAR-NDRI, ICAR-IVRI, ICAR-CIFE, ICAR-CARI, ICAR-Directorate of Poultry Research, Hyderabad, Bose Institute, Kolkata, IICB, ICAR-CIBA, Kakdwip All India Institute of Hygiene & Public Health, some Medical Colleges of the state located at Kolkata and many other national level academic and research institutes for undertaking collaborative research works and exchange of faculty members. The university has also signed MoUs with two Agricultural Universities of Bangladesh. Details of collaboration with Academic and Research Institutes are mentioned below:-

Sl. No.	Names of Collaborating Universities / Institutes	Nature of Collaboration
1	Chittagong Veterinary and Animal Sciences University, Khulshi, Chittagong, Bangladesh	a) Joint Research project development and execution b) Staff and faculty exchange for advanced training and human resource development c) Sharing research infrastructure between researchers between two universities
2	Sher-e-Bangla Agricultural University, Dhaka, Bangladesh	a) Joint Research project development and execution b) Staff and faculty exchange for advanced training and human resource development c) Sharing research infrastructure between researchers between two universities
3	Council of Scientific & Industrial Research (CSIR). Anusandhan Bhawan, 2, Rafi Marg, New Delhi-110001.	Research project development and execution
4	CSIR-Central Glass & Ceramic Research Institute. 196, Raja S.C. Mullick Road, Kolkata-700032.	Research & Development in the area of Glass & Ceramics.
5	Department of Biotechnology(DBT), Govt. of India, New Delhi	1) DBT twining programme for the North Eastern Region related to the project on "Multi-layer Skin Graft for Full Thickness Wound". 2) DBT twining programme for the North Eastern Region related to the project on "Development of novel tissue engineered silk biomaterial based wound dressing patch for diabetic foot ulcers". 3) Project on "Manipulation of rumen fermentation for improving growth performance of growing animals". 4) Project on " Development of Animal cartilage for surgical implantation in Microtia and Rhinoplasty of human patient".



		5) Project on “Epidemiology of Extended-Spectrum Beta Lactamases (ESBL <sub>s</sub> ) in Enterobacteriaceae group of bacteria isolated from swine in NER (Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim & Tripura) and swine & poultry in West Bengal”.
6	ICAR- Indian Veterinary Research Institute (IVRI), Izatnagar, Uttar Pradesh-243122.	Co-operation in research and academic activities.
7	Indian Institute of Technology (IIT), Kharagpur, India	Co-operation in the field of research programme on “ Immunostimulatory role of edible mushroom ( <i>Pleurotus florida</i> ) in poultry.
8	National Research Institute of Ayurveda for Drug Development(NRIADD), CCRAS, Dept. of Ayush, Govt. of India	Implementation of collaborative research project on promotion & recognition of Ayurveda with integration of interrelated science.
9	National Meat & Poultry Processing Board (NMPPB). 7/6, AMDA Building, Siri Institutional Area, August Kranti Marg, New Delhi-110049.	Project on “ Development of the meat and poultry processing sector in the country and production of healthy and hygienic meat for domestic consumption.
10	ICAR-Directorate of Coldwater Fisheries Research (DCFR). Bhimtal, 263136, District Nainital-Uttarakhand.	To Promote and accelerate research on coldwater fisheries.
11	Indian Institute of Science Education & Research (IISER), Kolkata, Mohanpur, Nadia, West Bengal-741246.	Prevention and Control of birth rates of stray dogs in accordance with the provisions of Animal Birth Control (Dogs) 2001 Rules.
12	ICAR-Central Island Agricultural Research Institute, Port Blair	Facilitating Students’ Training/Postgraduate Research
13	ICAR- National Dairy Research Institute, Anand, Gujarat	Co-operation in research and academic activities.
14	Indian Institute of Packaging, Kolkata	Co-operation in research and academic activities.
15	Pennsylvania State University, USA, LUVAS, Hisar; TANUVAS etc.	Co-operation in research and academic activities.
16	London School Hygiene & Tropical Medicine, Royal Veterinary College, Institute of Development Studies, Liver Foundation and Center for Public Health and Development	Co-operation in research and academic activities.
17	Assam Agricultural University, Jorhat and TANUVAS	Co-operation in research and academic activities.
18	Indian Institute of Technology Guwahati and R.G. Kar Medical College & Hospitals, Kolkata	Co-operation in research and academic activities.

#### Collaboration with industries:-

Sl. No.	Names of Collaborating Universities / Institutes	Nature of Collaboration
1	AB Vista (3 Woodstock Court, Mariborough Business Park, Blenheim Rd., Mariborough, Wiltshire, UK, SN84AN).	Co-operation in research and academic activities.
2	Danisco UK Ltd. Trading as Danisco Animal Nutrition ( Market House, Ailesbury Court, High Street,	Co-operation in research and academic activities.



	Marlborough, Wiltshire, SN81AA, UK).	
3	Dex iberica, s.a. Poligon Industrial Estacio num. 2443480 VILASECA Tarragona (Spain)	Co-operation in research and academic activities.
4	Alivira Animal Health Limited. No. 301, 3 <sup>rd</sup> Floor, Dosti Pinnacle, Plot No. E7, Road No. 22, Wagle Industrial Estate, Thane (West), Mumbai-400604.	Co-operation in research and academic activities.
5	M/S Chigurupati Technologies Private Ltd. Hyderabad.	Co-operation in research and academic activities.
6	M/S Granules India Ltd. Hyderabad.	Co-operation in research and academic activities.
7	South DumDum Municipality. Nagerbazar, Dum Dum Road, Kolkata-700074.	Animal Birth Control Programme
8	WEBCON Consulting (India) Limited. Chatterjee International Centre, 4 <sup>th</sup> Floor, 33A, J L Neheru Road, Kolkata-700071.	Co-operation in research and academic activities.

#### **Future plans for collaboration:-**

1. The university has a plan to extend the international collaborations and presently examining the proposals received for collaborative Academic and Research activities with The University of Missouri, Columbia, Hajee Mohammad Danesh Science and Technology University, Dinajpur, Bangladesh, Agriculture and Forestry University, Bharatpur, Nepal.
2. The university has a plan for further strengthening the collaborations with the Pharmaceutical companies and Poultry Feed Industries for trial of veterinary medicines and animal feeds.
3. The university is examining the proposal received from the Agricultural and Processed Food Products Export Development Authority (APEDA), Ministry of Commerce and Industry Govt. of India for enhancing exports of APEDA's scheduled products from the state of West Bengal. The university has a plan to finalize the MoU shortly.

### **6.6.2. ACADEMIC SUPPORT:**

#### **6.6.2.1. Academic Council:**

*Provide the composition and date of Academic Council Meetings held in last five years along with ATRs.*

The Executive Council is the highest Authority of the university to make policy decisions. For academic issues, there are three Faculty Councils for the three Faculties which is the supreme academic authority for recommending policy matters to the Executive Council. There is a provision of an Academic Council only in the Statutes but not in the Act. However, the meetings of the Faculty Councils are held at regular intervals whereas the meetings of the Academic Councils are convened occasionally only when there is a common issue for all the Faculties.



**Academic Council – Compositions and Meetings held:-**

Vice Chancellor	Chairman
Deans of the Faculties (3)	Members (Ex-officio)
Director of Research, Extension & Farms	Member (Ex-officio)
Secretary, Dept. of ARD, Govt. of W.B	Member (Ex-officio)
University Librarian	Member (Ex-officio)
All Heads of the Departments of all the three Faculties(29)	Members (Ex-officio)
One Lecturer (Assistant Prof.), one Reader (Assoc. Prof) & one Professor from each of the three faculties (9)	Members (Elected)
One UG student from each Faculty & One PG student from the university (4)	Members (Elected)
Two Eminent Academicians (Vet. /Dairy/Fishery Science)	Members (Nominated)
Registrar	Member-Secretary
Controller of Examinations	Member

**Meetings Held:** 12.05.2016, 17.05.2017, 11.09.2018, 05.08.2019

**Action Taken Report:**

- 1) Approval of list of students eligible to receive UG, PG and PhD degrees during the Convocation – Implemented
- 2) Approval of list of students eligible to receive Gold Medals during the Convocation – Implemented

**Faculty Council – Compositions and Meetings held:-**

There are 3(three) Faculty Councils viz. Faculty Council for the Faculty of Veterinary & Animal Sciences, Faculty Council for the Faculty of Fishery Sciences and Faculty Council for the Faculty of Dairy Technology. As per Section 21(2) of the WBUAFS Act 1995 each Faculty Council consists with the following members:-

Vice Chancellor	Chairman
Secretary of Faculty Councils	Member Secretary
Dean of the concerned Faculty	Member (Ex -officio)
Director of Research, Extension & Farms	Member (Ex -officio)
Registrar of the University	Member (Ex -officio)
Librarian of the University	Member (Ex -officio)
All Heads of Depts. of the concerned Faculty	Members (Elected)
One Lecturer (Assistant Prof.), one Reader (Assoc. Prof) & one Professor from the concerned faculty (3)	Member (Elected)
Representatives of the Students (2)- one U.G. & one P.G., of the concerned faculty	Members (Elected)
Controller of Examinations	Invitee

**Meetings of faculty Councils held: (Dates) Last Five Years**

Sl No.	Name of the Faculty	2016-17	2017-18	2018-19	2019-20	2020-21*
1	Faculty of Veterinary & Animal Sciences	22.08.2016 05.12.2016 28.02.2016	15.05.2017 03.07.2017	23.04.2018 14.07.2018	29.04.2019 11.09.2019	15.07.2020 13.10.2020
2	Faculty of Fishery Sciences	22.08.2016 05.12.2016 28.02.2016	15.05.2017	23.04.2018 24.07.2018	29.04.2019 11.09.2019 11.03.2020	15.07.2020 13.10.2020
3	Faculty of Dairy Technology	22.08.2016 05.12.2016 28.02.2016	15.05.2017	23.04.2018 24.07.2018	29.04.2019 11.09.2019	15.07.2020 13.07.2020

\* As on 31.12.2020



## Action Taken Report:

### Year 2016-17

- 3) Minimum Standards of Veterinary Education – Degree Course Regulations 2016 of Veterinary Council of India (VCI) implemented for the BVSc & AH course – Implemented
- 4) Introduction 2 years Diploma Course in Veterinary Pharmacy – Implemented
- 5) Finalization of visit of ICAR Peer Review Team (PRT) for accreditation – Implemented
- 6) Finalization of Seat Matrix for UG and PhD courses – Implemented

### Year 2017-18

- 1) Implementation of Diploma in Veterinary Pharmacy Course syllabus – Implemented
- 2) Approval of list of students eligible to receive UG, PG and PhD degrees during the 11<sup>th</sup> Convocation – Implemented
- 3) Approval of list of students eligible to receive Gold Medals during the 11<sup>th</sup> Convocation – Implemented

### Year 2018-19

- 1) Introduction of OBC-A (10%) and OBC-B (7%) quota as per Govt. of West Bengal direction for admission in the PG & PhD courses including seat matrix – Implemented
- 2) Implementation of modified fees structure – Implemented
- 3) Approval of list of students eligible to receive UG, PG and PhD degrees during the 12<sup>th</sup> Convocation – Implemented
- 4) Approval of list of students eligible to receive Gold Medals during the 12<sup>th</sup> Convocation – Implemented

### Year 2019-20

- 1) Approval of Admission Committee for various courses for the session 2019-20 – Implemented
- 2) Admission schedule for the session 2019-20 for UG, PG and PhD courses – Implemented
- 3) Inclusion of Faculty members to act as PhD supervisor – Implemented
- 4) Implementation of QR code and online University Academic Management System – Implemented
- 5) Introduction of Research Grants for Master Degree students and Project Grants for teachers – Implemented

### Year 2020-21 (as on 31.12.2020)

- 1) Revision of Academic Calendar for UG, PG and PhD courses in reference to Advisories of ICAR, DAHD, Govt. of India read with Govt. of West Bengal during the pandemic situation arising out of COVID-19 – Implemented
- 2) Finalization of admission schedule for the session 2020-21 – Implemented



### 6.6.2.2. Innovation and Best Practices:

*An innovative practice could be a pathway created to further the interest of the student and the institution, for internal quality assurance, inclusive practices and stakeholder relationships. What are the innovative efforts of an institution that help in its academic excellence?*

For Academic Excellence the following initiatives have taken by the university:-

- i) Sanction of Research Grant from the university's own fund to the faculty members through a selection process.
- ii) Financial and Administrative support to the faculty members to participate in National and International seminars/symposium/workshop.
- iii) Regular participation of faculty members in Extension Activities.
- iv) Sanction of Research Grant to the Post Graduate students through a selection process.
- v) Scholarship and Stipend to the UG/PG and PhD students.
- vi) Summer and winter visit of students to the Academic Institutes outside the state of West Bengal.
- vii) Regular field visit of students.
- viii) Participation of a students in the Agri-Uni Sports and Agri-Uni Cultural Meets of ICAR and other events organized by AIU etc.
- ix) Permission to faculty members to act as Guest Faculties in other universities / institutions.
- x) Promotion of collaborative research activities by the faculty members funded by external Govt. and Private Agencies.
- xi) Participation of students and faculty members in the Policy Making Authorities of the university.
- xii) Institution of Medals, Best Student Award, Best Teacher Award and Best Employee Award for motivating the stakeholders towards quality development and academic excellence.
- xiii) Publication of Magazines, organizing Annual Sports and Cultural Meets for the students, seminar, symposium etc for the stakeholders.

### 6.6.2.3. Library:

*Write about the University library (in one page) mentioning its space for stocking and reading, automation, library staff, library committee meetings, library management system, text books availability, subscription of research journals, periodicals, e-journals and other necessary state-of-the-art software/ programme, timing etc.*

The Central Library of West Bengal University of Animal & Fishery Sciences (WBUAFS) has come into existence w.e.f. 1995 at Kolkata Campus after being bifurcated from the Bidhan Chandra Krishi Viswavidyalaya. The Central Library of WBUAFS has also been maintaining facultywise Libraries i.e.two at Mahanpur Campus for Faculty of Veterinary and Animal Sciences & Faculty of Dairy Technology and other at Chankaria Campus for Faculty of Fishery Sciences. The Central Library was renamed as the Central Library and Information Network Service (CLINS), in the year 2002 by virtue of its location at main campus.



The Central Library of West Bengal University of Animal and Fishery Sciences procures the books and other materials in every year for increasing and strengthening of library collections for 4 (four) libraries in addition to existing collection by utilizing the fund released from the **ICAR Development Grant and Library Strengthening from the year 2016-2020**. The Central Library improved the collection with regards to books & journals out of funds which were available from ICAR. The university received fund under Library Strengthening from ICAR amounting to Rs. 25.25 lakh in 2016-17, Rs. 59 Lakh during 2017-18, Rs. 30 Lakh during 2018-19 and Rs. 26 Lakh during 2019-20. No fund received in this respect from ICAR during 2020-21 upto 31<sup>st</sup> December, 2020.

#### **Central Library and Information Network System (CLINS):**

- 1) Central Library at Belgachia Main Campus
- 2) Central Library Unit, Faculty of Veterinary & Animal Sci., Mohanpur
- 3) Central Library Unit, Faculty of Dairy Technology, Mohanpur
- 4) Central Library Unit, Faculty of Fishery Sci., Chakgaria

#### **Existing Staff pattern of the Central Library and its Unit:**

At present total 18 persons are working in different campuses are as follows:

<b>Designation</b>	<b>No. of post</b>
Librarian	Vacant
Deputy Librarian	1 (One)
Assistant Librarian	1 (One)
Jr. Library Assistant	2 (Two)
Jr. Assistant	2 (Two)
Office Attendant	2 (Two)
Supporting workers (Semi-Skilled & Un-skilled)	09 (Nine) – Contractual basis

#### **Library Management System:**

Since the post of Librarian is vacant and the university has initiated the process of recruitment against the said post, at present the Deputy Librarian is the In-Charge of the Central Library which functions as per the decisions of the Library Committee which is headed by the Director of Research, Extension and Farms as the Chairman. During last 5 years (as on December, 2020) the total number of meetings of the Library Committee held is 06 (six) numbers.

#### **Library Committee Meeting held during 2016-2020:**

<b>SL No.</b>	<b>Meeting</b>	<b>Date</b>
01.	29 <sup>th</sup> Library Committee Meeting	14 <sup>th</sup> December, 2016
02.	30 <sup>th</sup> Library Committee Meeting	06 <sup>th</sup> March, 2017
03.	31 <sup>st</sup> Library Committee Meeting	05 <sup>th</sup> July, 2017
04.	32 <sup>nd</sup> Library Committee Meeting	17 <sup>th</sup> November, 2017
05.	33 <sup>rd</sup> Library Committee Meeting	30 <sup>th</sup> January, 2018
06.	34 <sup>th</sup> Library Committee Meeting	24 <sup>th</sup> September, 2019



**Library Hours:**

On working days the services of the following sections of the all the Libraries of the campuses will remain open, as follows:

a.	Reading Room	10 am to 7 pm
b.	Reference Section	10 am to 7 pm
c.	Internet Section	11 am to 7 pm
d.	Lending Section	11 am to 4.30 pm
e.	Photocopying Service	11 am to 5.30 pm
f.	Membership Section	11 am to 5.30 pm
g.	Library Office	10 am to 5.30 pm on weekdays

**Library Holdings:**

Printed Books	e-Books	e-Journal (Foreign)	e-Journal (Indian)	Printed Journal
23793	235	10	05	05

**Library Space:**

Particulars	Space (Sqft)
Central Library, Belgachia	12000 Sqft (two storied building)
Library at Faculty of Veterinary & Animal Sciences, Mohanpur	3000 Sqft
Library at Faculty of Fishery Sciences, Chakgaria	1500 Sqft
Library at Faculty of Dairy Technology, Mohanpur	2500 Sqft

**Library Automation:**

- The resources of the Library in terms of printed accessioned books have been entered, catalogued and classified into the Library Management Software (Koha).
- Bar coding of all library documents.
- Electronic circulation control system through Koha
- Electronic ID cards for all library users generated through Library Management Software (Koha)
- Wi-fi Facilities given in four libraries.
- Electronic surveillance system (CCTV) has been installed in the all libraries to ensure proper safety and security of the valuable library collection.
- Information hub has been introduced in four libraries.
- Maintenance of University Official e-mail Ids

**Availability of computers and access to internet:**

Availability of computers and access to internet is available in Central Library in the libraries at the faculty level.

**Library borrowing including electronics borrowing arrangement with other institutions**

The above facility is available within the institution amongst three faculties of this university.

**The library rules as applicable and in vogue in the university are appended below:**

- The e-ID card is valid for entire academic session.
- Loss of the card must immediately be reported in writing to the Librarian. A duplicate card may have ever been issued on payment of Rs. 15/- (Ten) only.



- The students are entitled to borrow 3 books in case of U.G and 4 in case of P.G. for a period of 30 (Thirty) days.
- The faculty members are entitled to borrow 5 books for a period of 60 (Sixty) days.
- If a book is not returned by the user within the due date an overdue charge of Re. 1/- (One) per volume per day shall be levied.
- Reference books, journals and theses will not be issued from libraries.
- Library membership card is non-transferable.
- Users shall be responsible for any loss or damage of books and other reading materials while using the library and shall be required to replace the same in case of loss of books.
- The librarian reserves the right to cancel the membership of any user violating the library rules.

#### **Services:**

- Book borrowing facility
- Reference Service
- Internet Browsing privileges to the users: Extended to Post graduate and Research level users with 1 GBPS lease line at main Campus through NKN (National Knowledge Network) funded by MHRD, Govt of India and provide Broadband Internet Connectivity to other three campuses.
- Readers assistance and guidance through 'Open Access' system
- Online Public Access Catalogue(OPAC)
- Access to e-books and e-journals
- On line journals: Access from CERA (Regularly maintaining (Document Delivery Request (DDR) and Document Delivery Services ( DDS)
- Access to Career guidance resources
- Photocopying services (Private agency)
- Book Bank
- Wi-fi service
- Information Hub
- Electronic ID cards for Library users and University staff also.

#### **Books, Reference, Reading materials:**

The existing book collection for three faculties of this University is strengthened through ICAR Library Strengthening Grant with adding new collection on the basis of the recommendations of the faculty members on the subjects of Veterinary, Dairy, Fishery and allied sciences. Addition of new text and reference books have also enhanced the borrowing and reading facilities to the Undergraduate & Post Graduate students of each faculty for their studies. Moreover a good number of text books have been added for providing the lending facilities to the users in each faculty so that they can issue at least three numbers (3) of books for a period of 30 days for students & 5 books for faculty members for 60 days.

#### **Book Bank:**

The Central Library extends the book bank facilities by increasing the number of text books to the library collections which benefits the students. These facilities are now only provided to the students of Faculty of Veterinary & Animal Sciences (Under-graduate studies).



### Competitive Examination Books:

This section is strengthened with the addition of different books on competitive examinations like ICAR-JRF/ Tofel /GRE and other related competitive examination both at national and international level.

### Any other unique instructional material/technique adopted:

A separate unit like information hub has been developed with computer on latest configuration in all campuses Libraries where the students, Scientists can access the internet facility / CERA / on-linenational / international journals / Vety.Sc. / Beast abstracts. OPAC facility through web has been developing. Internal OPAC facility also available. The faculty members of all campuses access the internet surfing from their respective Departments through LAN which has been monitoring by the Central Library.

### 6.6.2.4. Center for Excellence/Advance Studies/ Center for Advanced Faculty Training:

*Clearly mention about the name, number, year of establishment, funding agency and outcome of Center for Excellence/Advance Studies/Center for Advanced Faculty Training.*

At present there is no Center for Advanced Faculty Training (CAFT). A proposal in this context was submitted earlier to the ICAR but no approval has been received so far.

### 6.6.2.5. Incubation Center/Start Up Units/ Venture Capital:

*Provide the list of incubation center(s) start up units/ venture capital set up by the University for the promotion of technologies generated at the University.*

- 1) The university has established Milk Parlours to sale various milk products along with sale counters for meat and meat products.
- 2) Mineral Supplement named as "UAFSMIN-P" for livestock has also been launched by the Department of Animal Nutrition, Faculty of Veterinary & Animal Sciences on commercial basis. The financial support is extended by the university from its own sources and also from ongoing project funds.
- 3) In the year 2019-20, University conferred with the status of Nodal Training Institute by MANAGE (National Institute of Agricultural Extension Management) for its flagship programme "Aqua Clinics and Aquapreneurship Development Programme (AC&ADP)". The purpose of AC&ADP is to promote entrepreneurship development and support innovative technologies amongst unemployed graduates and post graduates in fisheries/ allied subjects. The successful trainees are entitled to receive financial support from MANAGE /NFDB for establishment of Aqua One Centre (AOC). The objective of AOC is **to provide Information & Communication Technology (ICT)-enabled aquaculture support service to the fish farmers, disseminate newer technologies and innovations and facilitate their wider adoptions. In the year 2019-20, total 25 candidates received the** residential training programme and now eligible for establishment of AOCs in their areas.



#### 6.6.2.6. Technology enabled Learning Resources:

*Technology allows for personalizing learning, building capacity of teachers and driving decisions based on real-time data. What kind of infrastructure, digital content, teacher training and data systems have been created in this regard. What are monitoring and evaluation frameworks to maintain and sustain these facilities?*

The University has created a cohesive ecosystem for technology-enabled teaching and learning with the help of **Information & Communication Technology (ICT)**. To facilitate e-learning, university has developed required infrastructure and digital contents. During COVID induced lockdown, University extensively used various digital platforms for uninterrupted teaching and learning from home. These digital platforms are accessed by teachers, students and researchers alike. The University also took part in “Bharat Padhe Online” Campaign. Feedback from the students on the efficacy of e-learning was obtained at regular interval. The Deans of the three faculties have been provided with the link to monitor the programmes.

#### 6.6.2.7. Integrated Learning Systems (Experiential Learning):

*How many these units have been sanctioned by the ICAR? Mention the functional condition of each unit. Provide data regarding year wise profit sharing with the students from each unit.*

There are 2(Two) functional EL modules in the University:

Sl No.	Name of the Faculty	Title of E.L.	Year of sanction	Amount (Rs.)
1	Faculty of Dairy Technology	Processing Milk and Milk Products	2011-12	95.25
2	Faculty of Fishery Sciences	Fish Post Harvest Technology	2011-12	50.00

#### Faculty of Fishery Sciences (Fish Post Harvest Technology):

Year	No. of Students trained under EL	Product being developed under EL	Revenue earned	Revolving Fund Generated	% Share of income distributed to students	Entrepreneurship Develooped
2016 - 2017	12	1. Shrimp Chop	13333/-	60000/-	10000/-	1 (8.33%)
2017 - 2018	19	2. Fish Kachuri	3293/-	20300/-	2470/-	1 (5.26%)
2018 - 2019	14	3. Fish Burger	10640/-	62000/-	7980/-	Nil
2019 - 2020	17	4. Fish Cutlet	-	-	-	Nil
2020 - 2021	19	5. Fish Ball	-	-	-	Nil
		6. Fish Roll				
		7. Fish Sandwich				
		8. Fish Momo				
		9. Prawn pickle				
		10. Fish pickle				



**Faculty of Dairy Technology (Processing of Milk and Milk Products):**

Year	No. of Students trained under EL	Product being developed under EL	Total Sales	Revenue earned	% Share of income distributed to students*	Entrepreneurship Developed
2016-2017	16	1. Paneer	169408/-	3425/-	Nil	Nil
2017-2018	23	2. Khoa	932443/-	202454/-	Nil	Nil
2018-2019	17	3. Farm Fresh Milk	1590724/-	358645/-	Nil	Nil
2019-2020	29	4. Lassi	1931091/-	225236/-	50% of profit	Nil
2020-2021	29	5. Rosgulla	ELU Operation is not functioning due to Covid 19 from April, 2020 to till date			

\* Up to December, 2018 profit sharing with the students could not be implemented which was informed to the ICAR in the Action Taken Report submitted earlier for Accreditation of the faculty of Dairy Technology. At present during the year 2020-21 the production is stopped due COVID-19 Pandemic and will be resumed very shortly.

**6.6.2.8. Academic Industry Interface:**

*Mention the important channels for knowledge transfer between University and firms. How the university has been benefited in last five years in terms of resource mobilization, research funding, knowledge transfer and others.*

**Important channels for knowledge transfer:**

To promote Academic and Industry interface, seminar, workshops and meetings with the industry are time to time organized at regular intervals. For dissemination of knowledge and technology transfer to the firms and others, Consultancy Cell for Advisory Services has been functioning under the Directorate of Research, extension and Farms of this university in the fields of Livestock farming, dairy product processing and fish farming. Faculty members and officials / scientists of the university render their expertise through field visits, farm visit, face-to-face discussions and postal communications. During 2016-2020, several livestock owners and firms were rendered technical advice through the Directorate. The Extension wing also provides consultancy on animal husbandry, dairy technology and fishery related laboratory and firms.

**Resource mobilization, research funding, knowledge transfer and others**

During the last five years, the university accumulated resource amounting to Rs.34.87 (Approx) for consultancy services and knowledge transfer. The University already taken up research activities with the following firms / agencies.

Sl No.	Name of the Firms / Companies / Agencies	Knowledge transfer and others	Fund received (Rs. in lakh)
1	AB Vista (3 Woodstock Court, Marlborough Business Park, Blenheim Rd., Marlborough, Wiltshire, UK, SN84AN).	Effect of yeast cell wall products on broiler performance.	4.20
2	Danisco UK Ltd. Trading as Danisco Animal Nutrition (Market House, Ailesbury Court, High Street, Marlborough, Wiltshire, SN81AA, UK).	Compare efficacy of two phytases in broiler	4.14
3	Dex iberica, s.a. Poligon Industrial Estacio	Antibacterial and nutrient	3.15



	num. 2443480 VILASECA Tarragona (Spain)	spearing effects of AMARIL in broiler chicken	
4	Alivira Animal Health Limited. No. 301, 3 <sup>rd</sup> Floor, Dosti Pinnacle, Plot No. E7, Road No. 22, Wagle Industrial Estate, Thane (West), Mumbai-400604.	Antibacterial Effects of Lysozyme (Entegard <sup>TM</sup> ) in Broiler Chicken	3.00
5	M/S Chigurupati Technologies Private Ltd. Hyderabad.	Hepato-protective efficacy of different formulations (approx 20 groups) in Wistar Rats	2.50
6	M/S Granules India Ltd. Hyderabad.	Efficacy and toxicity study of alcoholic preparation in Wistar Rats	2.50
7	South DumDum Municipality. Nagerbazar, Dum Dum Road, Kolkata-700074.	Animal Birth Control Programme for stray Dogs.	3.00
8	DuPoint Industrial Biosciences Danisco Animal Nutrition, UK.	Comparison of Different Phytase form in Broilers	6.42
9	Unique Biotech Ltd., Hyderabad	Supplementation of Selenium yeast on growth performance, immunity and meat quality in Broiler Chickens	5.96

#### 6.6.2.9. National Ranking (ICAR/MHRD):

*Mention about the rank of the University in last five years in the NIRF from ICAR/MHRD.*

ICAR Ranking from 2016 to 2020

Year	Rank
2016-17	28
2018	39
2019	46

#### 6.6.3. RESEARCH SUPPORT

##### 6.6.3.1. Research Council:

*Mention the present composition of the research council and provide the dates of meetings in last five year in tabular form.*

The University has no separate Research Council and separate Extension Council. The research and extension activities of the university are planned and monitored by the Research and Extension Education Council which has been constituted as per provisions of the university Act (Section 17 sub Section 4) and First Statutes (Clause No 61(2)). The present composition of Research and Extension Education Council is mentioned below:

• The Vice-Chancellor	- Chairman
• The Director of Research, Extension & Farms	- Member- Secretary
• The Director of Veterinary Services and Animal Husbandry, Govt. of West Bengal	- Member
• The Dean of three faculties	- Member
• The Director of Fisheries, Govt. of West Bengal	- Member
• Head of all Research Stations and Project Co-ordinators of State/ICAR/other agencies	- Member
• Three Scientist of eminence to be nominated by the Vice-Chancellor for their specialized knowledge	- Member
• Three progressive farmers to be nominated by the Vice-Chancellor with Veterinary, Animal Husbandry/Fisheries/Dairy Technology	- Member



**Dates of the Meetings of the Research & Extension Education Council during last five years:**

Year	Dates of Meeting
2016-17	29.03.2016
2017-18	22.02.2017
2018-19	11.04.2018
2019-20	19.01.2019
2020-21	25.09.2020

**6.6.3.2. Directorate of Research:**

*Give brief information about the present establishment of the Directorate of Research, staff pattern, research coordination mechanism, research and seed production centers and contribution in academic programmes.*

**Establishment of the Directorate of Research, Extension and Farms:**

The university has no separate Directorate of Research, Directorate of Extension and Directorate of Farms. The Directorate of Research, Extension and Farms has been established under the functional and administrative control of the Director of Research, Extension and Farms for planning, coordinating and implementing the research and extension activities of the university and establishment and control of the farms.

**Staff pattern:**

- 1) Director of Research, Extension and Farms
- 2) Deputy Director of Research – 2 posts
- 3) Assistant Director of Research
- 4) Assistant Director of Farms
- 5) Assistant Director of Extension
- 6) Farm Manager
- 7) Computer Programmer
- 8) Scientists – 2 posts
- 9) Supporting Staff – 5 nos

**Activities of the Directorate of Research, Extension and Farms:**

- 1) To approve and review the research and extension activity of the university.
- 2) To Co-ordinate the Extension Education programme and projects of the university with the Research To Centers.
- 3) To Co-ordinate and co-operate the Extension Educational activities of various agencies for improvement of Animal Husbandry/Fisheries/Dairy for the development of rural communities.
- 4) To develop the farmers' education and advisory service, identification and resolution of field problems and transfer of information.
- 5) To develop the methodology of extension education activities of the region.
- 6) Integration of extension education with teaching and research in the university and participation of teachers in the field of extension programmes and education for their work.

**Research Coordination Mechanism:**

All the Research Programmes conducted in WBUAFS are monitored by the Directorate of Research, Extension & Farms (DREF). The Research Monitoring Cell of DREF provides necessary guidance for



preparation of new project proposals as well as provides information to Principal Investigators for scheduling their jobs and acts as liaison unit for internal as well as external communications.

#### Seed production Centers:

The Seed Production Centers have been established at the three KVKs under the aegis of this university. The names of the KVKs where the Seed production Center are presently functioning along with quantity of seed production are mentioned below:

Name of the KVKs	Seed Production				
	2016-17	2017-18	2018-19	2019-2020	2020-21*
Jalpaiguri KVK	23 q.	25.5 q.	9.5 q.	43 q.	26 q.
Murshidabad KVK	32 q.	31.29 q.	33.68 q.	50.7 q.	18 q.
North 24PGS KVK	38.16 q.	38.66 q.	38.99 q.	50.0 q.	19.84 q.

\* As on 31.12.2020

#### Contribution in academic programmes

The Directorate of Research, Extension and Farms ensures integration of extension education with teaching and research in the university and participation of teachers and students in the field of extension programmes and education as a part of academic activities.

#### 6.6.3.3. Technology Developed and its Adoption:

*Provide the list of approved technologies developed in last five years along with their adoption and coverage in the jurisdiction of the University.*

The jurisdiction of the university as per Act is all over West Bengal. Certain useful technologies have been generated / evolved through various research programmes undertaken by the three faculties and the Directorate of Research, Extension & Farms of the University. The technologies developed during the studies are lying ready for distribution to the grass root level. The developed and tested technologies might be of immense help to the State farmers for enhancement of their livelihood and income. These technologies may also be applied to the other regions of the country after going through proper refinement, thus in turn benefiting the vast farming community of the country.

#### The technologies developed during the research works carried out and its adoption in last five years is as follows:

Sl No	Name of the Technology	Inventor	Year	Adoption and coverage
1	Development of live attenuated thermostable lentogenic Newcastle disease vaccine from local isolate for chicken	Dr. Chanchal Guha, Dr. Ujjwal Biswas and Dr. Partha Sarathi Jana	2017	Applied for Patent. Once Patent is approved, the vaccine will be commercialized for Newcastle disease control for poultry birds in the State of West Bengal
2	Oligonucleotide primer pair usable for performing RT-qPCR	Prof. S. C. Mandal, Prof. P. K. Senapati, Prof. S. Batabyal, Prof. S.N. Joardar, Dr. S. Baidya and Dr. (Mrs.) R. Jas	2019	Applied for Patent. Once patent is approved, the technology can be use for easy detection of diseases
3	A process for preparing animal choncal cartilage for transplantation	Dr. Samit Kumar Nandi, Dr. S. N. Joardar, Dr. B. K. Biswas, Dr. S. Batabyal of WBUAFS and Dr. R. N. Bhattacharya	2016	Applied for Patent. Once paptent is approved, cartilage transplantation on animals and humans



				can be undertaken at a low cost and applicable not only in West Bengal but in India as well.
4	Bioactive compound(s) from marine gastropod mollusc ( <i>Telescopium telescopium</i> ) as potential anticancer/ antiproliferative agents	Subhasis Roy, Uttam Datta, Samit Kumar Nandi, Partha Sarathi Dasgupta, Debaki Ghosh and Uttio Roy Chowdhury	2018	Patent Granted [Patent No-291906 Date of Grant-19.01.2018]. The Technology is used for prevention and control of carcinoma in animals.
5	Development of Value added duck Meat products	Prof. S. Biswas and Others	2019	Applied for Patent. Taste of duck meat products is enhanced and found commercially viable.
6	Biodegradable coated Mg based bone plate for orthopaedic surgery	Prof. S. Nandi and others	2016	The technology has immense impact in animal vis-a-vis human orthopedic surgery which may dramatically reduce the cost of operation.
7	Determination of proximate composition of Boreli fish and its shelf life under frozen storage	Prof. K. C. Dora and Others	2016	Applied for Patent. This will help in increasing the cultivation of endangered fish species, Boreli as well as will help in export.
8	Use of Zinc nano-particles in enhancing the shelf life of surimi prepared from tilapia	Prof. K. C. Dora and Others	2018	The technology may show new vista in self life as well as will help in export.
9	New modality for treatment for corneal scarring entitled "Pirfenidone compositions for eye diseases"	Prof. Sarbani Hazra, Uday Kompella, Ruchit Trivedi	2020	Patent Granted. The technology has great impact in treatment of corneal scarring in pet animals as well as in human in future.
10	New modality for sealant and wound healing material having a title "Peptide based tissue sealant, Process and Application thereof"	Snehasis Biswas, Vinod Kumar, V. Kishore, Rituparna Sinha Roy, Prof. Samit Kumar Nandi	2019	Applied for Patent. Once patented, it may enhance the complicated wound healing process as well as develop affordable and alternate blood clotting material for use of animal and human.
11	A Process for development of Cenosphere Dispersed Ti Composite Foam with Improved Performance for use as implant material in orthopaedic surgery	Prof. Samit Kumar Nandi and Others	2019	Applied for Patent. Once patented, this new technology of Ti based foam and subsequent development of orthopaedic implant will be helpful for animal and human orthopaedic surgery.



#### 6.6.3.4. Research Publication:

Provide the list of research articles (NAAS ranking 5.00 or more) published in National and International Journals (only based on the work conducted in the University).

#### List of Research Publications of Faculty of Veterinary & Animal Sciences, WBUAFS

Year - 2016

Sl. No.	Scientific Research Publication in Journals
1	B. Sarkar, K. Ray and U. Sarkar (2016). Prevalence of uterine infection in relation to certain haematological and biochemical changes of blood serum in dairy cows. <i>Indian Journal of Animal Research</i> . 50 (4): 557-560. NAAS rating: 6.09.
2	Ahlawat, Sonika., Sharma, Rekha., Roy, Manoranjan., Mandakmale, Sanjay., Prakash, Ved. and Tantia, M.S. (2016): Genotyping of novel SNPs in BMP1B, BMP15 and GDF9 genes for association with prolificacy in seven Indian Goat Breeds. <i>Animal Biotechnology</i> , 2016, 27 (3): 199-2017. NAAS rating: 6.69.
3	AK Das, S Kumar, A Rahim, LS Kokate and AK Mishra (2016). Assessment of body conformation and feed efficiency characteristics in CARI-Debendra crossbred grower chicken. <i>Indian Journal of Animal Sciences</i> 86 (12): 1472-75. NAAS rating: 6.19.
4	AK Das, S Kumar and A Rahim (2016). Genetic analysis of layer performances in a selected line of Rhode Island Red chicken. <i>Indian Journal of Animal Sciences</i> 86 (11): 1291-95. NAAS rating: 6.19.
5	AK Das, S Kumar, AK Mishra, A Rahim and LS Kokate (2016). Estimating genetic parameters of immunocompetent traits in Rhode Island Red chicken. <i>Indian Journal of Animal Sciences</i> 86 (9): 1015-20. NAAS rating: 6.19.
6	AK Das, S Kumar, A Rahim and LS Kokate (2016). Association study between microsatellite genotypes and layer performances in Rhode Island Red chicken. <i>Indian Journal of Animal Sciences</i> 86 (9): 1021-24. NAAS rating: 6.19.
7	Ghosh, A., G.P. Mandal, A. Roy and A.K. Patra, 2016. Effects of supplementation of manganese with or without phytase on growth performance, carcass traits, muscle and tibia composition and immunity in broiler chickens. <i>Livestock Science</i> , 191, 80-85. NAAS rating: 7.38
8	Patra, A.K., and M. Lalhriatpuii, 2016. Predicting enteric methane emission in sheep using linear and non-linear statistical models from dietary variables. <i>Animal Production Science</i> 56: 574-584. NAAS rating: 7.37
9	Biswas J, Mandal A, Pal M, Chakraborti A, De A and Pan S (2016) Effect of crenellation on different semen characteristics of cattle <i>Indian Journal of Animal Sciences</i> 86 (3), 294-297. NAAS rating : 6.17
10	Debnath T, Bera S, Deb S, Pal P, Debbarma N, Das Choudhury D and Halder A (2016) Real-time monitoring of peripheral body temperature using noninvasive, self-powered, sensor based radio-frequency device in goats ( <i>Capra hircus</i> ) <i>Small Ruminant Research</i> , 144:135-139. NAAS rating : 7.08
11	Das Sudip Kumar, Biswas, O., Biswas, S.(2016): Shelf life extension of restructured fish nuggets from low-value cuts of Wallago attu by aqueous extract of Ferula asa-foetida. <i>Fleischwirtschaft Internationala</i> . 31 (6); 64-69 NAAS rating : 6.172 (IF-0.172)
12	Rajkumar.V, Verma A.K, Patra.G, Pradhan, S, Biswas. S, Chauhan. P, Das, A.K (2016): Quality and Acceptability of Meat Nuggets with Fresh Aloe vera Gel. <i>Asian-Australasian journal of animal sciences</i> 29 (5); 702 NAAS rating: 6.756 IF (0.756)
13	Arun K Das, Vincent Rajkumar, Pramod K Nanda, Pranav Chauhan, Soubhagya R Pradhan, Subhasish Biswas. (2016) Antioxidant Efficacy of Litchi (Litchi chinensis Sonn.) Pericarp Extract in Sheep Meat Nuggets. <i>Antioxidants.</i> , 5(2);16 NAAS rating : 8.69 (IF-2.69)
14	Keshab Chandra Dhara, Nita Ray, Prabir K Bandopadhyay, Subhasish Biswas, Arunasish Goswami (2016). Influence of Gastrointestinal Parasites on Productive and Reproductive Performances of Black Bengal Goat under Farm Condition. <i>International Journal of Livestock Research</i> 6(2); 25-36 NAAS rating: 6.677 (IF-0.677)
15	R. Rai, D. Bhattacharyya, P. K. Praveen , S. Ganguly ,N. Dalai, S. Shekhar, (2016): Evaluation of various cooking methods on the nutritional and biochemical attributes and consumer appeal of



	chevon. <i>International journal of science, environment and technology</i> ., 5(3); 1520-1529. NAAS rating : 6.765 IF (0.765)
16	Kar D, Bandyopadhyay, Dimri U, Mondal D, Nanda PK , Das AK, Batabyal S, Dandapat P and Bandyopadhyay S. (2016). Antibacterial effect of silver nanoparticles and capsaicin against MDR-ESBL producing <i>Escherichia coli</i> : An <i>in vitro</i> study. <i>Asian Pacific Journal of Tropical Disease</i> . 6 (10): 807-810. NAAS rating : Nil (SINP: 0.747 )
17	Nandi SK, Bandyopadhyay S, Das P, Samanta I, Mukherjee P, Roy S and Kundu B. (2016). Understanding osteomyelitis and its treatment through local drug delivery system. <i>Biotechnology Advances</i> .34 (8): 1305-1317. NAAS rating : 16.60
18	Halder T, Datta U, Basu S and Mukherjee P (2016). Is lithium essential for epididymal sperm maturation? <i>Medical Hypotheses</i> . 96(2016): 48-50. NAAS rating : 7.5
19	Khan PK, Mahato A, Kundu B, Nandi SK, Mukherjee P, Datta S, Sarkar S, Mukherjee J, and Nath S. (2016). Influence of single and binary doping of strontium and lithium on <i>in vivo</i> biological properties of bioactive glass scaffolds. <i>Scientific Reports</i> . 6 (32964): 1-18. NAAS rating : 10.26
20	Mukherjee KP, Basu S, Sahoo A K,Datta U, Ray K, Chattaraj S (2016). Cryoprotective effect of EDTA, lactose, ascorbic acid and L-cysteine as additives on garole ram ( <i>Ovis aries</i> ) semen. <i>Int. J. Adv. Res. Biol. Sci.</i> (2016). 3(7): 92-98. Impact factor: 6.433
21	Sarkar, B, Ray K and Sarkar U. (2016). Prevalence of uterine infection in relation to certain haematological and biochemical changes of blood serum in dairy cows. <i>Indian J. Anim. Res.</i> , 50 (4) 2016: 557-560. NAAS rating : 6.09
22	Chandan Kumar Jena, Amit Raj Gupta and Ramesh Chandra Patra (2016). Osteo-dental fluorosis in cattle reared in villages on the periphery of the aluminium smelter in Odisha, India. <i>Fluoride</i> 49(4 Pt 2):488-493. NAAS 2018 Rating 7.34.
23	Koovapra S, Bandyopadhyay S, Das G, Bhattacharyya D, Banerjee J, Mahanti A, Samanta I, Nanda PK, Kumar A, Mukherjee R, Dimri U and Singh RK (2016): Molecular signature of extended spectrum $\beta$ -lactamase producing <i>Klebsiella pneumoniae</i> isolated from bovine milk in eastern and north-eastern India. <i>Infection, Genetics and Evolution</i> 44: 395-402. NAAS rating: 8.89
24	Adikesavalu H, Paul P, Priyadarsani L, Banerjee S, Joardar SN and Abraham TJ (2016): <i>Edwardsiella ictaluri</i> induces dynamic changes in immune effector activities and endocrine network of <i>Pangasius pangasius</i> (Hamilton, 1822). <i>Aquaculture</i> 462: 26-29. Impact Factor (ISI)-1.893, NAAS rating: 8.33
25	Bhattacharya D, Banerjee J, Bandyopadhyay S, Mondal B, Nanda PK, Samanta I, Mahanti A, Das A K, Das G, Dandapat P and Bandyopadhyay S (2016): First Report on Vancomycin-Resistant <i>Staphylococcus aureus</i> in Bovine and Caprine Milk. <i>Microbial Drug Resistance</i> 22(8): 675-681. NAAS rating: 8.31
26	Dash JR, Sar TK, Samanta I and Mandal TK (2016): Effects of herbal extract of <i>Ocimum sanctum</i> as supportive therapy with intravenous ceftriaxone in experimentally induced staphylococcal chronic mastitis in goat. <i>Small Ruminant Research</i> 137: 1-8. NAAS rating: 6.97
27	Debnath C, Mitra T, Kumar A and Samanta I (2016).Occurrence of Dermatophytosis in healthy companion cats and dogs in Eastern India. <i>Iranian Journal of Veterinary Research</i> 17 (1): 20-24. NAAS rating: 6.17
28	Debnath C, Mitra T, Kumar A and Samanta I (2016): Evaluation of healthy farm and companion rabbits as carriers of dermatophytes. <i>Veterinarski Arhiv</i> 86(6): 805-813. NAAS rating: 6.30
29	Kumar R, Sar TK, Patra PH, Samanta I, Mishra A and Mandal TK (2016) : Disposition kinetics of ceftiozime in acute mastitis in Murrah buffaloes. <i>Indian Journal of Animal Sciences</i> 86(2): 140-142. NAAS rating: 6.16
30	Aich R, Batabyal S and Joardar SN, Kesh SS and Chattopadhyay S (2016): Immunobiochemical characterization of purified beta-lactoglobulin of cow milk origin. <i>Indian Journal of Animal Sciences</i> 86 (6): 729-731. NAAS rating: 6.16
31	Bandyopadhyay S, Mahanti A, Samanta I and Batabyal S (2016): Isolation and characterization of enterovirulent <i>Escherichia coli</i> from yaks with diarrhoea. <i>Indian Journal of Animal Research</i> 50(4): 544-550. NAAS rating: 6.15
32	Das M, Isore I, Joardar SN, Samanta I and Mukhopadhyay SK (2016): Immunomodulatory effect of levamisole on PPR vaccine in goats and change in haematological profile. <i>Indian Journal of Animal Research</i> 50 (3): 411-414. NAAS rating: 6.15



33	Aich R, Batabyal S and Joardar SN (2016): Immunochemical characterization of purified buffalo beta-lactoglobulin. <i>Buffalo Bulletin</i> 35(2): 269-275. Impact Factor (ISI)-0.03, NAAS rating: 6.03
34	Mukhopadhyay E, Mazumder A, Joardar SN, Saha G K and Banerjee D (2016): An annotated checklist of Culicoides Latreille, 1809 (Insecta: Ceratopogonidae: Diptera) with incorporation of a vector species list from India. <i>Journal of Vector Ecology</i> 41(2): 279-284. Impact Factor (ISI)-1.42
35	Jas R., Ghosh J. D and Das K. (2016). Antigenic Cross-reactivity among <i>Haemonchus contortus</i> , <i>Oesophagostomum columbianum</i> and <i>Trichuris ovis</i> of Goat. <i>Iranian Journal of Parasitology</i> : 11(4):542-548. NAAS rating : 6.76.
36	Dash, J.R., Sar, T.K., Samanta, I. and Mandal, T.K. (2016). Effects of herbal extract of <i>Ocimum sanctum</i> as supportive therapy with intravenous ceftriaxone in experimentally induced staphylococcal chronic mastitis in goat. <i>Small Ruminant Research</i> , 137: 1-8; NAAS rating : 6.95.
37	Kumar, R., Sar, T.K., Patra, P.H., Samanta, I., Mishra, A. and Mandal, T.K. (2016). Disposition kinetics of ceftiozime in acute mastitis in Murrah buffaloes. <i>Indian Journal of Animal Sciences</i> , 86(2): 140-142; NAAS rating : 6.19.
38	Nandi, S., Joardar, S.N., Samanta, I., Roy, B., Das, P.K., Sar, T.K. and Alam, S.S. (2016). Haringhata black chicken shows resistance to pathogenic e. Coli by high immune-effector activities. <i>Journal of Experimental Biology</i> , 4(2): 149-155; NAAS rating : 9.2
39	Vupru K, Das P K, Mukherjee J, Banerjee, Perumap P, Ghosh P R (2016). Infradian Rhythmicity in lactogenic hormone (prolactin, growth hormone, cortisol and thyroid hormone) secretion throughout the lactation cycle in mithun cows ( <i>Bos frontalis</i> ). <i>Biological Rhythm Research</i> 47 (6) (2016):841-850. NAAS rating : 6.62.
40	Mukherjee S., Nandi S.K., Kundu B., Chanda A, Sen S., Das P.K. (2016). Enhanced bone regeneration with carbon nanotube reinforced hydroxyapatite in animal model, <i>Journal of the Mechanical Behaviour of Biomedical Materials</i> , 60: 243 – 255. Impact Factor: 3.239.
41	Maity S, Das, P K, Ghosh P R, Banerjee D, Mukherjee J (2016). Infradian rhythmicity in egg production features in relation to antioxidant profiles of Rhode Island Red (RIR) birds reared at backyard in different agroclimatic zones of West Bengal during summer stress. <i>Biological Rhythm Research</i> 47 (5) (2016): 659-667. NAAS rating : 6.62.
42	Alhussien M, Manjari P, Sheikh A A, Mohammed Seman S, Reddi S, Mohanty A K, Mukherjee J, Dang A K (2016). Immunological attributes of blood and milk neutrophils isolated from crossbred cows during different physiological conditions. <i>Czech J. Anim. Sci.</i> 61 (5) (2016): 223–231. NAAS rating : 6.74.
43	Kujur K, Ghosh S, Batabyal S, Mukherjee J (2016). Effect of micronutrient supplementation on hormonal profile of local goat and sheep breeds of West Bengal. <i>Indian Journal of Animal Sciences</i> . 86(2) (2016):224-225. NAAS rating : 6.19.
44	Debnath, C, Mitra T, Kumar A. and Samanta I. (2016). Evaluation Of Healthy Farm And Companion Rabbits As Carriers Of Dermatophytes. <i>Vet. Arhiv.</i> 86(6): 805-813; NAAS rating : 6.30
45	Debnath C, Mitra T, Kumar A and Samanta I (2016). Occurrence of Dermatophytosis in healthy companion cats and dogs in Eastern India. <i>Iranian Journal of Veterinary Research</i> 17 (1): 20-24; NAAS rating : 6.17.
46	Mukherjee, S., Nandi, S. K., Kundu, B., Chanda, A., Sen, S. and Das, P. K. 2016. Enhanced bone regeneration with carbon nanotube reinforced hydroxyapatite in animal model. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> 60:243-255. NAAS rating : 9.11.
47	Bhattacharjee, P., Naskar, D., Maiti, T. K., Bhattacharya, D., Das, P., Nandi, S. K., and Kundu, S. C. 2016. Potential of non-mulberry silk protein fibroin blended and grafted poly (ε-caprolactone) nanofibrous matrices for in vivo bone regeneration. <i>Colloids and Surfaces B: Biointerfaces</i> . 143:431-439. NAAS rating : 9.89.
48	Prerak Gupta, Manishekhar Kumar, Nandana Bhardwaj, Jodi Praveen Kumar, C.S Krishnamurthy, Samit Nandi and Biman B Mandal. 2016. Mimicking form and function of native small diameter vascular conduits using mulberry and non-mulberry patterned silk films. <i>ACS Applied Materials &amp; Interfaces</i> . 29;8(25):15874-88. NAAS rating :13.50.
49	Manishekhar, Deepak Jain, Nandana Bhardwaj, Prerak Gupta, Samit K Nandi and Biman B Mandal. 2016. Native honeybee silk membrane: A potential matrix for tissue engineering and regenerative medicine. <i>RSC Adv.</i> 6, 54394–54403. NAAS rating : 9.11.
50	P Gupta, M Kumar, N Bhardwaj, JP Kumar, CS Krishnamurthy, SK Nandi, BB Mandal. 2016. Bioengineered silk vascular grafts for coronary artery bypass surgery. <i>European Cells and Materials</i> 31(Suppl. 1): P412. NAAS rating : 10.0.



51	Dimple Couhan, Samit K. Nandi and Biman B. Mandal. Non-mulberry silk fibroin based smart nanofibrous wound dressing for chronic cutaneous ulcers. <i>European cells &amp; materials</i> , 2016; 31:239. NAAS rating : 10.0.
52	Pintu Kumar Khan, Arnab Mahato, Biswanath Kundu, Samit K. Nandi, Prasenjit Mukherjee, Someswar Datta, Soumya Sarkar, Jayanta Mukherjee, Shalini Nath, Vamsi K. Balla and Chitra Mandal. 2016. Influence of single and binary doping of strontium and lithium on in vivo biological properties of bioactive glass scaffolds. <i>Sci. Rep.</i> 6, 32964; doi: 10.1038/srep32964. NAAS rating :10.26
53	S Ray, R Acharya, S Saha, A Islam, S Dey, S.K. Nandi, TK Mandal, Goutam Banerjee and Jui Chakraborty. 2016. Role of nitrogenous bisphosphonate (local delivery) incorporated vitreous coating (with/without polymer) on surgical grade SS316L implant material to improve fixation at the damaged tissue site. <i>RSC Adv.</i> 6 (92), 89467-89483. NAAS rating :9.11.
54	Samit K Nandi, Samiran Bandhopadhyay, Piyali Das, Indranil Samanta, Prasenjit Mukherjee, Subhasis Roy and Biswanath Kundu. 2016. Understanding osteomyelitis and its treatment through local drug delivery system. <i>Biotechnology Advances</i> 34(8): 1305-1317. NAAS rating :16.60.
55	Keshab Chandra Dhara, Nita Ray, Prabir K Bandopadhyay, Subhasish Biswas, Arunasish Goswami (2016). Influence of Gastrointestinal Parasites on Productive and Reproductive Performances of Black Bengal Goat under Farm Condition. <i>International Journal of Livestock Research</i> 6(2); 25-36. NAAS rating: 6.677 (IF-0.677)
56	K C Dhara, N. Ray, P.K Bandopadhyay, A. Goswami (2016). Socio- economic Status of the Goat Farmers in Nadia District of West Bengal. <i>Int. J. Livest. Res.</i> 6(9): 29-37. NAAS rating: 6.677

#### Year - 2017

Sl. No.	Scientific Research Publication in Journals
1	Ananta Kumar Das, S Kumar, AK Mishra, A Rahim, LS Kokate (2017). Genetics of body weights in a control line of Rhode Island Red grower chicken. <i>Indian Journal of Animal Sciences</i> , 87(8):1042-45. NASS rating: 6.19.
2	Ananta Kumar Das, S Kumar, A Rahim, LS Kokate (2017). Genetic and non-genetic parameters of grower and layer performances in CARI-Sonali chicken. <i>Indian Journal of Animal Sciences</i> , 87(6):786-89. NASS rating: 6.19.
3	Ananta Kumar Das, AK Mishra, S Kumar, A Rahim, LS Kokate (2017). Characterizing grower performance, body conformation and morphology in crosses of RIR and Indian native chicken genotypes. <i>Indian Journal of Animal Sciences</i> , 87(6):782-85. NASS rating: 6.19.
4	A Rahim, S Kumar, J Debnath, R Yadav, Ananta Kumar Das, A S Yadav (2017). Fold changes in relative mRNA expression of immune response genes in lymphoid tissues of Rhode Island Red chicken. <i>Indian Journal of Animal Sciences</i> , 87(6):772-74. NASS rating: 6.19.
5	LS Kokate, S Kumar, A Rahim and Ananta Kumar Das (2017). Estimating serological immune response against Newcastle disease vaccine in Aseel, Kadaknath and White Leghorn chicken by haemagglutination test. <i>Indian Journal of Animal Sciences</i> , 87(2): 136-38. NASS rating : 6.19.
6	LS Kokate, S Kumar, A Rahim and Ananta Kumar Das (2017). Kinetics of serum antibody response to Newcastle disease vaccine in Aseel, Kadaknath and White Leghorn chicken using ELISA. <i>Indian Journal of Animal Sciences</i> , 87 (2): 168-70. NASS rating : 6.19.
7	LS Kokate, S Kumar, A Rahim and Ananta Kumar Das (2017). Investigating immunocompetence in Aseel, Kadaknath and White Leghorn chicken. <i>Indian Journal of Animal Sciences</i> , 87(1): 35-38. NASS rating : 6.19.
8	P Ghosh, A Mohanti, I Samanta, SN Joardar, K Batabyal, S Dey, S Taraphder and DP Isore (2017). Occurrence of extended-spectrum cephalosporine producing <i>Escherichia Coli</i> in broiler birds. <i>Veterinarski Archives</i> , 87 (6): 745-57. NASS rating : 6.30.
9	Pathak, M., Mandal, G. P., Patra, A., Samanta, I., Padhan., S and Haldar, S. 2017. Effects of dietary supplementation of cinnamaldehyde and formic acid on growth performance, intestinal microbiota and immune response in broiler chickens, <i>Animal Production Science</i> , 57: 821-827. NASS rating: 7.37.
10	Kumar, A., Kumar, K., Kumar, K., Chandramoni, Sinha, R.R.K., Paswan, J.K. and Mandal, G.P. 2017. Effect of feeding different level of <i>Moringa oleifera</i> leaf meal on growth performance, lipid profile and meat fatty acid composition of Vanaraja chicken in tropics, <i>Indian Journal of Animal Science</i> , 87:644-648. NASS rating: 6.19



11	Patra, A.K., T. Park , M. Kim , and Z. Yu, 2017. Rumen methanogens and mitigation of methane emission by anti-methanogenic compounds and substances. Journal of Animal Science and Biotechnology, 8, DOI: 10.1186/s40104-017-0145-9. NASS rating: 8.05.
12	Jayaraman, S., Das, P., Saini, P., Roy, B. and Chatterjee, P.N. 2017. Use of Bacillus Subtilis PB6 as a Potential Antibiotic Growth Promoter Replacement in Improving Performance of Broiler Birds. Poultry Science, 96:2614-2622. NASS rating: 7.91.
13	Pal, A., Chatterjee, P.N., Das, S., Battobyal, S., Biswas, P. And Sharma, A. 2017. Biodiversity among sheep and goat reared under different agroclimatic regions of West Bengal, India. Indian Journal of Animal Sciences, 87(1): 80-86. NAAS rating : 6.19.
14	Kumar, P., Patra, A.K., Mandal, G.P., Samanta, I. and Pradhan, S. 2017. Effect of black cumin seeds on growth performance, nutrient utilization, immunity, gut health and nitrogen excretion in broiler chickens. Journal of the Science of Food and Agriculture, 97: 3742-3751. NASS rating : 8.46.
15	Kumar, P and Patra, A.K. 2017. Beneficial uses of black cumin (Nigella sativa L.) seeds as a feed additive in poultry nutrition. World's Poultry Science Journal, 73:872-885. NASS rating : 7.04
16	Pal, A., Chatterjee, P.N., Das, S., Batobyal, S., Biswas, P. and Sharma, A. 2017. Biodiversity among sheep and goat reared under different agroclimatic regions of West Bengal, India. Indian Journal of Animal Science, 87 (1): 80-86. NAAS rating : 6.19
17	Panigrahy, K.K., Behera, K., Mandal, A. K., Sethy, K. and Panda, S. (2017). Effect of age and sex in determining cognitive ability in Vanaraja chickens. British Poultry Science, 58 (5) : 1-5, DOI : 10.1080/00071668.2017.1373388. NAAS rating : 6.93.
18	Gupta, S.K., Behera, K., Pradhan, C.R., Mandal, A.K., Sethy, K., Behera, D., and Panigrahy, K.K. (2017). Cognitive performance for 2 strains of broiler birds in homogeneous and mixed grouping system. Journal of Veterinary behavior Clinical Applications and Research, 20(4) : 109-115. NAAS rating : 7.37.
19	Pal A, Chatterjee PN, Das S, Batabyal S, Biswas P and Sharma A. (2017). Biodiversity among sheep and goat reared under different agroclimatic regions of West Bengal, India. Indian Journal of Animal Science. 87 (1): 80-86. NAAS rating : 6.17
20	Pradhan N, Mukherjee J, Biswas U, Jana P S and Guha C (2017): Effect of peripartum micronutrient supplementation on postpartum udder health in high-yielding crossbred cattle. Indian J. Animal Sciences. 87(9): 1095-1096 (NAAS Rating- 6.19)
21	Debbarma A, Pandit S, Jas R, Baidya S, Mandal S C and Jana P S (2017). Prevalence of hard tick infestations in cattle of West Bengal, India. Biological Rhythm Research. <a href="https://doi.org/10.1080/09291016.2017.1395527">https://doi.org/10.1080/09291016.2017.1395527</a> (Impact Factor- 0.624)
22	Patra M K, Hajra D K, Das R K, Sarkar P and Deka B C (2017): Effect of season on growth and reproduction performance of improved backyard poultry on North Eastern Hill Region. Indian J. Anim. Res. (DOI: 10.18805/ijar.v0iOf.9122). NAAS rating: 6.15
23	S. Murmu, C. Debnath, A.K. Pramanik, T. Mitra, S. Jana, S. Banerjee, D.P. Isore and K. Batabyal (2017). Characterization and anti-fungal susceptibility pattern of dermatophytes isolated from dogs, cats and pet owners in and around Kolkata, India. Indian Journal of Animal Research, 51(2): 336-339. NAAS rating: 6.15
24	Jas R and Pandit S (2017). Seasonal variation in prevalence of gastrointestinal helminthoses in cattle of New Alluvial zone of West Bengal, India. Biological Rhythm Research: 48 (4): 631-637. NAAS rating : 6.70.
25	Jas R., Kumar D., Bhandari A. and Pandit S. (2017). Seasonal alteration in prevalence and intensity of naturally occurring gastrointestinal helminth infection in goats of New Alluvial zone of West Bengal, India. Biological Rhythm Research: 48 (6): 867-876. NAAS rating 6.70.
26	Debbarma A, Pandit S, Jas R, Baidya S, Mandal S C and Jana P S (2017). Prevalence of hard tick infestations in cattle of West Bengal, India, Biological Rhythm Research: DOI: 10.1080/09291016.2017.1395527. NAAS rating : 6.70.
27	Ghosh S , Gupta S , Kumar A KG, Sharma A K , Kumar S , Nagar G, Kumar R, Paul S, Fular A, Chigure G, Nandi, A, Manjunathachar H V, Mohammad A, Verma M R , Saravanana B C , Ray D (2017). Characterization and establishment of a reference deltamethrin and cypermethrin resistant tick line (IVRI-IV) of Rhipicephalus (Boophilus) microplus. Pesticide Biochemistry and Physiology :138: 66-70. NAAS rating : 8.59.
28	Manjunathachar H V, Saravanan B C, Kumar B, Tamilmahan P, Sharma A K, Shinde S, Nandi A, Nagar G, Chigure G, Mohmad A, Fular, A , Kumar, S, Ghosh S (2017). Expression and determination of immunization dose of recombinant tropomyosin protein of



	Hyalomma anatolicum for the development of anti-tick vaccine. Indian Journal of Animal Sciences : 87 (3): 275–279. NAAS rating : 6.19.
29	Ghosh S , Gupta S , Kumar A KG, Sharma A K , Kumar S , Nagar G, Kumar R, Paul S, Fular A, Chigure G, Nandi, A, Manjunathachar H V, Mohammad A, Verma M R , Saravanana B C , Ray D (2017). Characterization and establishment of a reference deltamethrin and cypermethrin resistant tick line (IVRI-IV) of Rhipicephalus (Boophilus) microplus. Pesticide Biochemistry and Physiology :138: 66-70. NAAS rating : 8.59.
30	Manjunathachar H V, Saravanan B C, Kumar B, Tamilmahan P, Sharma A K, Shinde S, Nandi A, Nagar G, Chigure G, Mohmad A, Fular, A , Kumar, S, Ghosh S (2017). Expression and determination of immunization dose of recombinant tropomyosin protein of Hyalomma anatolicum for the development of anti-tick vaccine. Indian Journal of Animal Sciences : 87 (3): 275–279. NAAS rating : 6.19.
31	Kumar, P., Patra, A.K., Mandal, G.P., Samanta, I. and Pradhan, S. (2017). Effect of black cumin seeds on growth performance, nutrient utilisation, immunity, gut health, and nitrogen excretion by broiler chickens: Black cumin seeds as feed additive in chickens. J. Sci Food Agric.; NAAS 8.46
32	Kar, I., Mukhopadhyay, S.K., Patra, A.k. and Pradhan, S. (2017). Bioaccumulation of selected heavy metal and histopathological and hematobiochemical alterations in backyard chickens reared in an industrial area, India. Environmental Science and pollution; NAAS 8.74
33	Chowdhury, S., Mandal, G.P., Patra, A.K., Kumar, P., Samanta, I., Pradhan, S., Samanta, A.K.(2017). Different essential oils in diets of broiler chickens: 2. Gut microbes and morphology, immune response, and some blood profile and antioxidant enzymes. Animal Feed Science and Technology; NAAS 7.76
34	Kumar D, Baidya S, Jas R, Pandit S, Das P K (2017). Sero-prevalence of Toxoplasma gondii infection in backyard poultry birds of Tarai Zone of West Bengal, India; Asian Pacific Journal of Tropical Disease, 7 (9): 930 – 933. NAAS rating : 6.93.
35	Parkun T., Das A. K., Banerjee D., Mohanty N., Paul A., Nanda P. K., Biswas T. K., Naskar S., Bag S., Sarkar M., Mohan N. H., and Das B. C. (2017). Changes in expression of monocarboxylate transporters, heat shock proteins and meat quality of Large White Yorkshire and Ghungroo pigs during hot summer period; Asian-Australas J Anim Sci., 30(2): 246–253. doi: 10.5713/ajas.16.0020. NAAS rating : 6.86.
36	Mukherjee J, Chaudhury M, Dang A K (2017). Alterations in the milk yield and composition during different stages of lactation cycle in elite and non-elite Karan-Fries cross-bred cows (Holstein Friesian x Tharparkar). Biological Rhythm Research 48(4) (2017): 499-506. NAAS rating : 6.62.
37	Mukherjee J, Chaudhury M, Dang A K (2017). Alterations in the relative abundance of Haptoglobin (Hp) transcripts in total milk somatic cells during different stages of lactation cycle in high yielding cross-bred cows. Biological Rhythm Research. 48(4) (2017) :577-581. NAAS rating : 6.62.
38	Sharma (Buragohain) T, Reddy R C, Das P K, Ghosh P R, Banerjee D, Mukherjee J (2017). Correlation between in vitro activity of milk leukocytes with milk constituents in high yielding crossbred cows. Indian Journal of Animal Sciences 87 (5) (2017): 656–658. NAAS rating : 6.19.
39	Pradhan N, Mukherjee J, Biswas U, Jana P S, Guha C (2017). Effect of peripartum micronutrient supplementation on postpartum udder health in high-yielding crossbred cattle. Indian Journal of Animal Sciences 87 (9) (2017): 1095–1096. NAAS rating : 6.19.
40	Howa Begam, Samit Kr. Nandi, Biswanath Kundu and Abhijit Chanda. 2017. Strategies for delivering bone morphogenetic protein for bone healing”. Material Science Engineering C 70(1): 856–869. NAAS rating : 10.16.
41	Dimple Chouhan, Bijayshree Chakraborty, Samit K Nandi and Biman B. Mandal. 2017. Role of nonmulberry silk fibroin in deposition and regulation of extracellular matrix towards accelerated wound healing. Acta Biomaterialia 48: 157-174. NAAS rating : 12.32.
42	Howa Begam, Samit Kumar Nandi and Abhijit Chanda. 2017. Effect of bone morphogenetic protein on Zn-HAp and Zn-HAp/collagen composite: A systematic in vivo study. Res. Vet Sci. DOI 10.1016/j.rvsc.2017.01.012. NAAS rating :7.30.
43	Howa Begam; Biswanath Kundu, Abhijit Chanda and Samit K Nandi. 2017. MG63 osteoblast cell response on Zn doped hydroxyapatite (HAp) with various surface features. Ceramic International. 43 (4), 3752-3760. NAAS rating : 8.99.
44	Bhattacharjee, P., Maiti, T. K., Bhattacharya, D. and Nandi, S. K. 2017. Effect of different mineralization processes on in vitro and in vivo bone regeneration and osteoblast-macrophage



	cross-talk in co-culture system using dual growth factor mediated non-mulberry silk fibroin grafted poly (ε-caprolactone) nanofibrous scaffold. <i>Colloids and Surfaces B: Biointerfaces</i> 156: 270-281. NAAS rating :9.89.
45	Naskar, D., Ghosh, A. K., Mandal, M., Das P., Nandi, S. K., and Kundu, S. C. 2017. Dual growth factor loaded nonmulberry silk fibroin/carbon nanofiber composite 3D scaffolds for in vitro and in vivo bone regeneration <i>Biomaterials</i> 136: 67- 85. NAAS rating : 14.40.
46	Mahato, A., Kundu, B., Mukherjee, P. and Nandi, S. K., 2017. Applications of different bioactive glass and glass-ceramic materials for osteoconductivity and osteoinductivity. <i>Trans Ind Cer Soc.</i> 76(3): 149-158. NAAS rating :6.58.
47	Mehrotra, S., Nandi, S. K., and Mandal, B. B. 2017. Stacked silk-cell monolayers as a biomimetic three dimensional construct for cardiac tissue reconstruction. <i>J. Mater. Chem. B</i> , <b>5</b> , 6325-6338. NAAS rating : 10.54.
48	Kumar, M., Nandi, S. K., Kaplan, D. and Mandal, B. B. 2017. Localized Immunomodulatory Silk Macrocapsules for Islet-like Spheroid Formation and Sustained Insulin Production. <i>ACS Biomaterials Science &amp; Engineering</i> 3 (10), pp 2443–2456. NAAS rating : 9.2.
49	Kumar, M., Nandi, S. K., Kaplan, D. and Mandal, B. B. Immunomodulatory bioartificial pancreas for sustained insulin production in diabetic patients. <i>European Cells &amp; Materials</i> , 2017; 33:Suppl. 2, 0323. NAAS rating :10.0.
50	Guru, J., Nandi, S. K., and Mandal, B. B. 2017. Functional hepatocyte clusters on bioactive blend silk matrices towards generating bioartificial liver constructs. <i>Acta Biomaterialia</i> doi:10.1016/j.actbio.2017.11.053. NAAS rating :12.32.

#### Year - 2018

Sl. No.	Scientific Research Publication in Journals
1	Chowdhury, S., Mandal, G.P. and Patra. 2018. Different essential oils in diets of chickens: 1. Growth performance, nutrient utilisation, nitrogen excretion, carcass traits and chemical composition of meat. <i>Animal Feed Science and Technology</i> , 236: 86-97. NASS rating : 7.76
2	Chowdhury, S., Mandal, G.P., Patra, A.K., Kumar, P., Samanta, I., Padhan, S. and Samanta, A.k. 2018. 2. Gut microbes and morphology, immune response, and some blood profile and antioxidant enzymes, <i>Animal Feed Science and Technology</i> , 236: 39-47. NASS rating : 7.76
3	Ranjan, R. and Das, P. (2018). Gross Anatomy and Histoarchitecture of Rabbit stomach. <i>International Journal of advance Research.</i> 6(1) : 647-653, IF 2.54.
4	Chowdhury S, Mandal GP, Patra AK, Kumar P, Samanta I, Pradhan S and Samanta AK (2018): Different essential oils in diets of broiler chickens: 2. Gut microbes and morphology, immune response, and some blood profile and antioxidant enzymes. <i>Animal Feed Science and Technology</i> 236: 39-47. NAAS rating: 7.76
5	Nandi A, Sagar S V, Chigure G , Fular A , Sharma A K , Nagar G, Kumar S, Saravanan, B C , Ghosh S (2018). Determination and validation of discriminating concentration of ivermectin against <i>Rhipicephalus microplus</i> . <i>Veterinary Parasitology</i> 250: 30-34. NAAS rating : 8.36
6	Nandi A, Sagar S V, Chigure G , Fular A , Sharma A K , Nagar G, Kumar S, Saravanan, B C , Ghosh S (2018). Determination and validation of discriminating concentration of ivermectin against <i>Rhipicephalus microplus</i> . <i>Veterinary Parasitology</i> 250: 30-34. NAAS rating : 8.36.
7	Chowdhury S, Mandal GP, Patra AK, Kumar P, Samanta I, Pradhan S and Samanta AK (2018): Different essential oils in diets of broiler chickens: 2. Gut microbes and morphology, immune response, and some blood profile and antioxidant enzymes. <i>Animal Feed Science and Technology</i> 236: 39-47; NAAS rating : 7.76.
8	Nandi, S. K., Shivaram, A., Bose, S. and Bandhopadhyay, A. 2018. Silver nanoparticles coated implants to treat osteomyelitis. <i>Journal of Biomedical Materials Research Part B: Applied Biomaterials.</i> 106(3):1073–1083. NAAS rating : 9.19.
9	Chouhan, D., Guru, J., Chakraborty, B., Nandi, S. K., and Mandal, B. B. 2018. Functionalized PVA-Silk blended nanofibrous mats promote diabetic wound healing via regulation of extracellular matrix and tissue remodeling. <i>Journal of Tissue Engineering and Regenerative Medicine</i> 12(3): e1559-e1570. NAAS rating : 9.989.
10	Joseph CM, Samit Kumar Nandi and Biman B. Mandal 2018. Multifunctional Cell Instructive Silk-Bioactive Glass Composite Reinforced Scaffolds Toward Osteoinductive, Proangiogenic, and



	Resorbable Bone Grafts. <i>Advanced Healthcare Materials</i> DOI: 10.1002/adhm.201701418. NAAS rating :11.11.
11	Sween Gilotra, Dimple Chouhan, Nandana Bhardwaj, Samit Nandi, Biman Mandal, Potential of silk sericin based nanofibrous mats for wound dressing applications. <i>Materials Science and Engineering C</i> , 2018; 90: 420-434. NAAS rating :10.16.
12	K. Bavya Devi, Bipasa Tripathy, Prashant N Kumta, Samit Kumar Nandi, and Mangal Roy. 2018. In vivo biocompatibility of zinc doped magnesium silicate ceramics. <i>ACS Biomaterials Science &amp; Engineering</i> DOI: 10.1021/acsbomaterials.8b00297. NAAS rating :9.2.
13	Priyanka Majee, Shampa Dhar, P. K. Mitra, Lalzawmliana V., Samit Kumar Nandi, Piyali Basak and Biswanath Kundu. 2018. In vivo performance analysis of bone regeneration of tri-layer coated 316L stainless steel implant in rabbit model. <i>Journal of Material Research</i> DOI: 10.1557/jmr.2018.119. NAAS rating :7.673.
14	Kumar, P., A.K. Patra , G.P. Mandal, B.C. Debnath, 2018. Carcass characteristics, chemical and fatty acid composition, and oxidative stability of meat from broiler chickens supplemented with black cumin ( <i>Nigella sativa</i> ) seeds. <i>Journal of Animal Physiology and Animal Nutrition</i> , DOI: 10.1111/jpn.12880. NAAS>7.5
15	Hausmann, J., C. Deiner, A.K. Patra, I. Immig, A. Starke, and J.R. Aschenbach, 2018. Effects of a combination of plant bioactive lipid compounds and biotin compared with monensin on body condition, energy metabolism and milk performance in transition dairy cows. <i>PLoS One</i> , 13(3), e0193685. NAAS>8.5
16	Mina, V., M. Dehghan-banadaky, K. Rezayazdi, A. Nejati-Javaremi, H. Mirzaei Alamouti, and A.K. Patra , 2018. Short communication: Effects of diets containing supplemental fats on ruminal fermentation and milk odd- and branched-chain fatty acids in dairy cows. <i>Journal of Dairy Science</i> , 101: 6133-6141. NAAS>8.5
17	Yanza, Y.R., M. Szumacher-Strabel, M. Bryszak, M. Gao, P. Kolodziejski, A. Stochmal, S. Slusarczyk, A.K. Patra, and A. Cieslak, 2018. <i>Coleus amboinicus</i> (Lour.) leaves as a modulator of ruminal methanogenesis and biohydrogenation in vitro. <i>Journal of Animal Science</i> , 96: 4868-4881. NAAS>7.5
18	Alagawany, M., M.R. Farag, K. Dhama, and A.K. Patra, 2018. Nutritional significance and health benefits of designer eggs. <i>World's Poultry Science Journal</i> , 74:317-330. NAAS>7.2
19	Abd El-Hack, M.E., M. Alagawany, M. Arif, M. Emam, M. Saeed, M.A. Arain, F.A. Siyal, A. Patra, S.S. Elnesr, and R.U. Khan, 2018. The uses of microbial phytase as a feed additive in poultry nutrition—a review. <i>Annals of Animal Science</i> , <a href="https://doi.org/10.2478/aoas-2018-0009">https://doi.org/10.2478/aoas-2018-0009</a> . NAAS>7
20	Patra, A.K., and J.R. Aschenbach, 2018. Ureases in the gastrointestinal tracts of ruminant and monogastric animals and their implication in urea-N/ammonia metabolism. <i>Journal of Advanced Research</i> , 13:39-50, <a href="https://doi.org/10.1016/j.jare.2018.02.005">https://doi.org/10.1016/j.jare.2018.02.005</a> . NAAS>10
21	Alagawany, M., M.E. Abd El-Hack, M.R. Farag, M.M. Shaheen, M.A. Abdel-Latif, A.E. Noreldin, and A.K. Patra, 2018. The usefulness of oregano and its derivatives in poultry nutrition. <i>World's Poultry Science Journal</i> , <a href="https://doi.org/10.1017/S0043933918000454">https://doi.org/10.1017/S0043933918000454</a> NAAS>7.2
22	Patra, A.K., S. Amasheh, and J.R. Aschenbach, 2018. Modulation of gastrointestinal barrier and nutrient transport function in farm animals by natural plant bioactive compounds - a comprehensive review. <i>Critical Reviews in Food Science and Nutrition</i> , <a href="https://doi.org/10.1080/10408398.2018.1486284">https://doi.org/10.1080/10408398.2018.1486284</a> NAAS>12
23	Aschenbach, J.R., Q. Zebeli, A.K. Patra, G. Greco, S. Amasheh, and G.B. Penner, 2018. Symposium review: The importance of the ruminal epithelial barrier for a healthy and productive cow. <i>Journal of Dairy Science</i> <a href="https://doi.org/10.3168/jds.2018-15243">https://doi.org/10.3168/jds.2018-15243</a> . NAAS>8.5
24	Patra, A.K., 2018. Interactions of plant bioactives with nutrient transport systems in gut of livestock. <i>Indian Journal of Animal Health</i> , 57:125-136. NAAS<3.5
25	Pal, A., Pal, A. Jr., Mallick, A.I., Biswas, P. and Chatterjee, P.N. 2018. Molecular characterization of Bu-1 and TLR2 gene in Haringhata Black chicken. <i>Genomics</i> , <a href="https://doi.org/10.1016/j.ygeno.2019.03.010">https://doi.org/10.1016/j.ygeno.2019.03.010</a> NAAS 9.16
26	Pal, A. and Banerjee, S. 2018. Mitochondrial replacement therapy-a new remedy for defects in reproduction. <i>Indian Journal of Animal Sciences</i> 88 (6): 637–644. IF:6.28
27	Pradhan, M., Pal, A., Samanta, A.K., Banerjee, S., Samanta, R. 2018. Mutations in cytochrome B gene effects female reproduction of Ghungroo pig. <i>Theriogenology</i> . 119: 121-130. IF: 8.14
28	Ranjan R and Das P (2018): Histochemical studies on gastro-intestinal tract of Rabbit. <i>Int. J. Agr.</i>



	Sci (2018): 10.13: 6510-6513. IF:2.75
29	Panigrahi K, Behera K, Mohapatra LM, Mandal AK, Shethy K, Panda S, Gupta S K and Behera D (2018): Age and sex biometrical studies in Vanaraja chickens. Ind. J. Anim. Res: 51(7): 990-994.NAAS:6.16
30	Mahanti, A., Ghosh, P., Samanta, I., Joardar, S. N., Bandyopadhyay, S., Bhattacharyya, D., Banerjee, J., Batabyal, S., Sar, T.K., Dutta, T.K. (2018). Prevalence of CTX-M-Producing <i>Klebsiella</i> spp. in Broiler, Kuroiler, and Indigenous Poultry in West Bengal State, India. Microb Drug Resist.; 24(3):299-306. NAAS Rating: 8.34
31	Lalzawmliana V, Anand A, Mukherjee P, Chaudhuri S, Kundu B, Nandi S K, and Narsinh L Thakur N L. (2018): Marine organisms as a source of natural matrix for bone tissue engineering. Ceramics International. 45 (2A): 1469-1481. NAAS rating : 9.06
32	Debbarma, A., Pandit, S., Jas, R., Baidya, S., Mandal, S. C., Jana, P. S. and Das, M. (2018). Prevalence of tick-borne haemoparasitic diseases in cattle of West Bengal, India. Biological Rhythm Research, DOI:10.1080/09291016.2018.1528693, Impact Factor- 0.57
33	Patra M K, Hajra D K, Das R K, Sarkar P, and Deka B C. (2018): Effect of season on growth and reproduction performance of improved backyard poultry in North Eastern Hill Region. Indian J. Anim. Res., 52 (7) 2018: 1071-1076. NAAS rating : 6.2
34	Mahanti A, Ghosh P, Samanta I, Joardar SN, Bandyopadhyay S, Bhattacharyya D, Banerjee J, Batabyal S, Sar TK and Dutta TK (2018). Prevalence of CTX-M –producing <i>Klebsiella</i> spp. in broiler, kuroiler and indigeous poultry in West Bengal, India. Microbial Drug Resistance 24 (3): 299-306. DOI: 10.1089/mdr.2016.0096Impact Factor (ISI)-2.344. NAAS Rating : 8.53
35	SamantaA,Mahanti A, Chatterjee S, Joardar SN, Bandyopadhyay S, Sar T, Mandal GP, Dutta TK and Samanta I (2018). Pig farm environment as a source of beta lactamase or AmpC producing <i>Klebsiella pneumoniae</i> and <i>Escherichia coli</i> . Annals of Microbiology. <a href="https://doi.org/10.1007/s13213-018-1387-2">https://doi.org/10.1007/s13213-018-1387-2</a> . Impact Factor (ISI)-1.667. NAAS Rating: 7.12
36	Bhattacharyya R, Das P, Joardar SN, Biswas BK, Batabyal S, Das PK and Nandi SK (2018). Novel decellularizedchconcal cartilage graft for application in human patient. Journal of Tissue Engineering and Regenerative Medicine. DOI: 10.1002/term.2767. Impact Factor (ISI)-4.089. [NAAS rating:10 (anticipated)]
37	Mahanti A, Ghosh P, Samanta I, Joardar SN, Bandyopadhyay S, Bhattacharyya D, Banerjee J, Batabyal S, Sar TK and Dutta TK (2018). Prevalence of CTX-M-Producing <i>Klebsiella</i> spp. in Broiler, Kuroiler, and Indigenous Poultry in West Bengal State, India. Microbial Drug Resistance, 24(3): 299-306. NAAS Rating: 8.34
38	Ghosh P, Mahanti A, Samanta I, Joardar SN, Batabyal K, Dey S, Taraphder S and Isore DP (2018). Occurrence of extended-spectrum cephalosporinase producing <i>Escherichia coli</i> in kuroiler birds. VeterinarskiArhiv, 87 (6): 745-757. NAAS Rating: 6.29
39	Chowdhury S, Mandal GP, Patra AK, Kumar P, Samanta I, Pradhan S and Samanta AK (2018). Different essential oils in diets of broiler chickens: 2. Gut microbes and morphology, immune response, and some blood profile and antioxidant enzymes. Animal Feed Science and Technology, 236: 39-47. NAAS Rating: 8.14
40	Sar TK, Samanta I, Mahanti A, Akhtar S, Dash JR (2018). Potential of a polyherbal drug to prevent antimicrobial resistance in bacteria to antibiotics. Scientific Reports8 (1):10899. NAAS Rating: 10.12
41	Samanta A, Mahanti A, Chatterjee S, Joardar SN, Bandyopadhyay S, Sar TK, Mandal GP, Dutta TK andSamanta I (2018). Pig farm environment as a source of beta-lactamase or AmpC-producing <i>Klebsiella pneumoniae</i> and <i>Escherichia coli</i> . Annals of Microbiology 68(11): 781-791. NAAS Rating: 7.41
42	Buragohaina R, Sar TK, Samanta I, Biswas U and Mandal TK (2019). Disposition of ceftizoxime in Staphylococcal mastitis in Indian crossbred cows. The Veterinary Journal, 245: 12-14. NAAS Rating:7.77
43	Nandi A., Sagar S.V., Chigure G., Fular A., Sharma A.K., Nagar G., Kumar S., Saravanan B.C., Ghosh S. 2018. Determination and validation of discriminating concentration of ivermectin against <i>Rhipicephalus microplus</i> . Veterinary Parasitology, 250: 30-34. Impact Factor: 2.422. NAAS Rating: 8.42
44	Apurba Debbarma, Soumitra Pandit, Ruma Jas, Surajit Baidya, Subhash Chandra Mandal, Partha



	Sarathi Jana & Mamoni Das. 2018. Prevalence of tick-borne haemoparasitic diseases in cattle of West Bengal, India. Biological Rhythm Research, DOI: 10.1080/09291016.2018.1528693. NAAS Rating: 6.62
45	Datta, S., Dandapat, P. and Jas, R. 2018. Diagnosis of mixed gastrointestinal nematode infection in goat by an indirect-ELISA. Iranian Journal of Veterinary Research, 19(3):189 – 193. NAAS Rating: 6.17
46	Banerjee A, Pradhan S, Debnath C, Patra N C. , Hansda R N, Mondal S , Kumar R and Singh A D (2018): Comparative pathogenicity analysis of Cryptococcus neoformans RAPD types, Indian J. Ani. Sci. B-3637: 1-4. NAAS rating: 6.28
47	Sar TK, Samanta I, Mahanti A, Akhtar S, Dash JR. Potential of a polyherbal drug to prevent antimicrobial resistance in bacteria to antibiotics. Scientific Reports. 2018;8(1):10899. NAAS rating: 10.12
48	Perveen S, Das P K, Ghosh P R, Banerjee D, Mukherjee J, Naskar S and Mondal M (2018): Alterations in haemato-biochemical profile and blood metabolites during different periods of prepubertal growth in black Bengal goat (Capra hircus): Effect of sex and season. Biological Rhythm Research. DOI: 10.1080/09291016.2018.1478687. NAAS rating: 6.70
49	Banerjee A, Pradhan S, Debnath C, Patra NC, Hansda RN, Mondal S, Kumar R and Singh AD (2018). Comparative Pathogenicity Analysis of Cryptococcus neoformans RAPD types. Indian Journal of Animal Research. Online publication with DOI: 10.18805/ijar.B-3637. NAAS Rating : 6.20
50	Chowdhury, S., Mandal, G.P., Patra, A.K., Kumar, P., Samanta, I., Pradhan, S., Samanta, A. K. (2018). Different essential oils in diets of broiler chickens: 2. Gut microbes and morphology, immune response, and some blood profile and antioxidant enzymes. Animal Feed Science and Technology 236: 39-47. NAAS Rating : 8.14
51	Sar, T.K., Samanta, I., Mahanti, A., Akhtar, S., Dash, J.R. (2018). Potential of a polyherbal drug to prevent antimicrobial resistance in bacteria to antibiotics. Scientific Reports 8 (1):10899. NAAS Rating : 10.12
52	Samanta, A., Mahanti, A., Chatterjee, S., Joardar, S.N., Bandyopadhyay, S., Sar, T.K., Mandal, G.P., Dutta, T.K., Samanta, I. (2018). Pig farm environment as a source of beta-lactamase or AmpC-producing Klebsiella pneumoniae and Escherichia coli. Annals of Microbiology 68(11): 781-791. NAAS Rating : 7.41
53	Guru, J., Nandi, S. K., and Mandal, B. B. 2018. Functional hepatocyte clusters on bioactive blend silk matrices towards generating bioartificial liver constructs. Acta Biomaterialia 67:167-182. NAAS Rating : 12.38
54	Nandi, S. K., Shivaram, A., Bose, S. and Bandhopadhyay, A. 2018. Silver nanoparticles coated implants to treat osteomyelitis. Journal of Biomedical Materials Research Part B: Applied Biomaterials. 106(3):1073–1083. NAAS Rating : 9.37
55	Chouhan, D., Guru, J., Chakraborty, B., Nandi, S. K., and Mandal, B. B. 2018. Functionalized PVA-Silk blended nanofibrous mats promote diabetic wound healing via regulation of extracellular matrix and tissue remodeling. Journal of Tissue Engineering and Regenerative Medicine 12(3): e1559-e1570. . NAAS Rating : 10.089
56	Joseph CM, Samit Kumar Nandi and Biman B. Mandal 2018. Multifunctional Cell Instructive Silk-Bioactive Glass Composite Reinforced Scaffolds Toward Osteoinductive, Proangiogenic, and Resorbable Bone Grafts. Advanced Healthcare Materials 7(10):e1701418. DOI: 10.1002/adhm.201701418. NAAS Rating : 11.11
57	Sween Gilotra, Dimple Chouhan, Nandana Bhardwaj, Samit Nandi, Biman Mandal, Potential of silk sericin based nanofibrous mats for wound dressing applications. Materials Science and Engineering C , 2018; 90: 420-434. NAAS Rating : 11.08
58	K. Bavya Devi, Bipasa Tripathy, Prashant N Kumta, Samit Kumar Nandi, and Mangal Roy. 2018. In vivo biocompatibility of zinc doped magnesium silicate ceramics. ACS Biomaterials Science & Engineering 4 (6): 2126–2133. NAAS Rating : 10.432
59	Priyanka Majee, Shampa Dhar, P. K. Mitra, Lalzawmliana V., Samit Kumar Nandi, Piyali Basak and Biswanath Kundu. 2018. In vivo performance analysis of bone regeneration of tri-layer coated 316L stainless steel implant in rabbit model. Journal of Material Research 33(14): 2106-2117. NAAS Rating : 7.495
60	Akrity Anand, Biswanath Kundu, Vamsi Krishna Balla and Samit Kumar Nandi. 2018. Synthesis and physico-chemical characterization of different mesoporous bioactive glass nanopowders: In vitro SBF activity and cytotoxicity. Transactions of the Indian Ceramic Society 77(2): 1-12. NAAS Rating : 6.761



61	Sarmita Sinha, Howa Begam, Vinod Kumar, Samit Nandi, Kubacki, Jerzy and Abhijit Chanda. 2018. Improved performance of the functionalized Nitinol as a prospective bone implant material. <i>Journal of Material Research</i> 7: 1-11. NAAS Rating : 7.495
62	Samit Nandi, Gary Fielding, Dishary Banerjee, Amit Bandyopadhyay and Susmita Bose. 2018. 3D printed $\beta$ -TCP bone tissue engineering scaffolds: Effects of chemistry on in vivo biological properties in rabbit tibia. <i>Journal of Material Research</i> 33(14):1939-1947 . NAAS Rating : 7.495
63	Yogendra Pratap Singh, Joseph CM, Bibhas K Bhunia, Samit Kumar Nandi, Biman B. Mandal. 2018. Hierarchically Structured Seamless Silk Scaffolds for Osteochondral Interface Tissue Engineering. <i>Journal of Material Chemistry B</i> . 6, 5671-5688 . NAAS Rating : 10.78
64	Manishekhar Kumar, Prerak Gupta, Sohenii Bhattacharjee, Samit K. Nandi, Biman B. Mandal. 2018. Immunomodulatory injectable silk hydrogels maintaining functional islets and promoting anti-inflammatory M2 macrophage polarization. <i>Biomaterials</i> . 187: 1-17. NAAS Rating : 14.81
65	Rameshbabu, Arun Prabhu, Sayanti Datta, Kamakshi Bankoti, Elavarasan Subramani, Koel Chaudhury, V. Lalzawmliana, Samit Nandi and Santanu Dhara. 2018. Polycaprolactone Nanofibers Functionalized with Placental Derived Extracellular Matrix for Stimulating Wound Healing Activity. <i>Journal of Materials Chemistry B</i> . 6, 6767-6780. NAAS Rating : 10.78
66	K. Bavya Devi, Bipasa Tripathy, Abhijit Roy, Boeun Lee, Prashant N. Kumta, Samit Kumar Nandi and Mangal Roy. 2018. In Vitro Biodegradation and In Vivo Biocompatibility of Forsterite Bio-Ceramics: Effects of Strontium Substitution. <i>ACS Biomaterials Science &amp; Engineering</i> 5 (2):530-543. NAAS Rating : 10.432
67	Kumar V, Sur VP, Guha R, Konar A, Hazra S. 2018. Estrogen Modulates Corneal Nociception and Maintains Corneal Homeostasis in Rat Eye. <i>Cornea</i> . 37(4):508-514. NAAS Rating : 8.464
68	Dixon P, Ghosh T, Mondal K, Konar A, Chauhan A, Hazra S. 2018. Controlled delivery of pirfenidone through vitamin E-loaded contact lens ameliorates corneal inflammation. <i>Drug Deliv Transl Res</i> . 8(5):1114-1126. NAAS Rating : 9.395

#### Year 2019

Sl. No.	Scientific Research Publication in Journals
1	Phillip Dixon, Keith Christopher, Sarbani Hazra, Namrata Maity, Caryn Plummer, Anuj Chauhan. 2019. In vitro and ex vivo implantation of cystine crystals and treatment by contact lens. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> 562:229-236. NAAS Rating : 8.829
2	Buragohaina, R., Sar, T.K., Samanta, I., Biswas, U., Mandal, T.K. (2019). Disposition of ceftizoxime in Staphylococcal mastitis in Indian crossbred cows. <i>The Veterinary Journal</i> 245: 12-14. NAAS Rating : 7.77
3	Banerjee A, Batabyal K, Debnath C, Joardar SN, Isore DP, Dey S, Taraphder S, Singh AD, Pal S and Samanta I (2019). Antifungal Resistance in cnlac 1 Possessing <i>Cryptococcus neoformans</i> Isolated from Domestic and Feral Pigeons in West Bengal, India. <i>Indian Journal of Animal Research</i> . Online publication with DOI: 10.18805/ijar.B-3739. NAAS Rating : 6.20
4	Bhattacharya R., Das P., Joardar S. N., Biswas B. K., Batabyal S., Das P. K. and Nandi S. K. (2019): Novel decellularized animal conchal cartilage graft for application in human patient, <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 13:46-57. DOI: 10.1002/term.2767 Impact Factor(IF): 4.089
5	Perveen S, Das P K, Ghosh P R, Banerjee D and Mukherjee J (2019): Alterations in plasma sodium (Na), potassium (K), calcium (Ca) and iron (Fe) during different days of pre-pubertal male and female black Bengal kids, <i>Biological Rhythm Research</i> , DOI: 10.1080/09291016.2019.1594125 NAAS rating: 6.70
6	Buragohain R, Sar TK, Samanta I, Biswas U, Mandal TK. Disposition of ceftizoxime in Staphylococcal mastitis in Indian crossbred cows. <i>The Veterinary Journal</i> . 2019;245:12-14. NAAS rating: 7.77
7	Buragohaina R, Sar TK, Samanta I, Biswas U and Mandal TK (2019). Disposition of ceftizoxime in Staphylococcal mastitis in Indian crossbred cows. <i>The Veterinary Journal</i> , 245: 12-14. NAAS Rating:7.77
8	Banerjee A, Batabyal K, Debnath C, Joardar SN, Isore DP, Dey S, Taraphder S, Singh AD, Pal S and Samanta I (2019). Antifungal resistance in cnlac1 possessing <i>Cryptococcus neoformans</i> isolated from domestic and feral pigeons in West Bengal, India. <i>Indian Journal of Animal Research</i> (doi:



	10.18805/ijar.B-3739). NAAS Rating: 6.20
9	Banerjee A, Bardhan R, Chowdhury M, Joardar SN, Isore DP, Batabyal, K, Dey S, Sar TK, Bandyopadhyay S, Dutta TK and Samanta I (2019). Characterization of beta-lactamase and biofilm producing Enterobacteriaceae isolated from organized and backyard farm ducks. Letters in applied microbiology (in press) (NAAS Score: 7.47 )
10	Somraj Chattaraj, Siddhartha Basu, Kalyani Ray, and Dhiman S. Pal (2019) Vitamin D As an important constituent of epididymal luminal micro-environment for maturation of spermatozoa in Large White Yorkshire boar. Veterinarski Arhiv 89(2) :169-182. NAAS rating : 6.29
11	Pal, A., Pal, A., Banerjee, S., Batabyala, S., Chatterjee, P.N. (2019). Mutation in Cytochrome B gene causes debility and adverse effects on health of sheep. Mitochondrion; 46, 393-404. Impact Factor: 3.226
12	Bhattacharya. R., Das, P., Joardar, S.N., Biswas, B.K., Batabyal, S., Das, P.K., Nandi, S. K. (2019). Novel decellularized animal conchal cartilage graft for application in human patient. J Tissue Eng Regen Med.; 13(1):46-57. Impact factor: 4.089
13	Aruna Pal, Abantika Pal, Samiddha Banerjee , S.Batobyal and P.N. Chatterjee. 2019. Mutation in Cytochrome B gene causes debility and adverse effects on health of sheep. Mitochondrion <a href="https://doi.org/10.1016/j.mito.2018.10.003">https://doi.org/10.1016/j.mito.2018.10.003</a> . Volume 46, Pages 393-404. I.F. 9.2
14	Pal, A, Pal, A. Jr., Mallick, A.I., Biswas, P. And Chatterjee, P.N. 2019. Molecular characterization of Bu-1 and TLR2 gene in Haringhata Black chicken. Genomics. <a href="https://doi.org/10.1016/j.ygeno.2019.03.010">https://doi.org/10.1016/j.ygeno.2019.03.010</a> IF: 8.91
15	Leip, A., S. Ledgard, A. Uwizeye, J. Palhares, F. Aller, B. Amon, C.M.d.S. Cordovil, D. Hongmin, A. Fusi, J. Helin, S. Hörtenhuber, A.N Hristov, R. Koelsch, C. Liu, C. Masso, N.V. Nkongolo, A.K Patra, M.R. Redding, M.C. Rufino, R.Sakrabani, G. Thoma, F. Vertès, and Y. Wang, 2019. The value of manure - manure as co-product in life cycle assessment. Journal of Environmental Management, 241: 293-304. NAAS>10
16	Das AK, Kumar S, Rahim, A and Kokate LS (2019): Genetic analysis of body weights in a selected line of Rhode Island Red grower chicken. Indian Journal of Animal Sciences 89 (3), 310-313. NAAS rating : 6.28
17	Pal, A., Pal,A. Jr., Banerjee ,S., Batobyal,S. and Chatterjee,P.N. 2019. Mutation in Cytochrome B gene causes debility and adverse effects on health of sheep. Mitochondrion 46 : 393-404. <a href="https://doi.org/10.1016/j.mito.2018.10.003">https://doi.org/10.1016/j.mito.2018.10.003</a> . NAAS: 9.9
18	Kumar B, Sahoo AK, Dayal S, Das AK, Taraphder S, Batabyal S, Ray PK and Kumari R (2019). Genetic profiling of Hsp70 gene in Murrah buffalo ( <i>Bubalus bubalis</i> ) under sub-tropical climate of India. Cell Stress and Chaperones, 24(6): 1187-95. <a href="https://doi.org/10.1007/s12192-019-01042-7">https://doi.org/10.1007/s12192-019-01042-7</a> NAAS Rating: 8.9 & Impact Factor: 2.903
19	Das AK, Kumar S, Rahim A and Kokate LS (2019). Genetic analysis of body weights in a selected line of Rhode Island Red grower chicken. Ind. J. Anim. Sci., 89 (3): 310-13. NAAS Rating: 6.23 & Impact Factor: 0.227
20	Debnath J, Kumar S, Das AK and Rahim A (2019). Investigating association of microsatellites with pre-housing body weights and age at sexual maturity of Rhode Island Red chicken. Ind. J. Anim. Sci., 89 (10): 1118-22. NAAS Rating: 6.23 & Impact Factor: 0.227
21	Rahim A, Kumar S, Das AK, Debnath J and Krishnan J (2019). Genetic analysis of immunocompetence and growth performances in a selected strain of Rhode Island Red chicken. Ind. J. Anim. Sci., 89 (8): 866-70. NAAS Rating: 6.23 & Impact Factor: 0.227
22	G. Mahapatra, S. Biswas, G. Patra and D. Bhattacharya (2019). Improving shelf-life of raw pork and pork meatballs by starfruit powder supplementation. Indian Journal of Animal Science .90 (1); 74-79. NAAS-6.28.
23	Biswas, S., Banerjee, R., Bhattacharyya, D., Patra, G., Das, A., & Das, S. (2019) Technological investigation into duck meat and its products - a potential alternative to chicken(2019).World's Poultry Science Journal, 75(4), 609-620. doi:10.1017/S004393391900062X. (IF-1.802)
24	Sinha B P, Chatterjee S, Buragohain R., Samanta, I, Joardar S N, P Mukherjee, Majhi A K, Das P & Sar T K (2019). Efficacy evaluation of ethanolic extract of Tamarindus indica L. leaves as possible alternate therapy in septic arthritis model of rabbit. BMC complementary and alternative medicine, 19(1), 1-12. NAAS rating 8.11
25	Patra G, Efimova M A, Ana S, Borthakur S K, Ghosh S, Behera P, Polley S, Debbarma A (2019): Incidence of ecto-and endo-parasitic fauna in small wild ruminants from North Eastern region of India. Biological Rhythm Research (2019): 1-12. NAAS rating: 6.77



26	Sinha, B.P., Chatterjee, S., Buragohain, S., Samanta, I., Joardar, S.N., Mukherjee, P., Maji, A.K., Das, P., Mandal, T.K. and Sar, T.K. (2019). Efficacy evaluation of ethanolic extract of <i>Tamarindus indica</i> L. leaves as possible alternate therapy in septic arthritis model of rabbit. <i>BMC complementary and alternative medicine</i> . 19(1): 261. NAAS Scoring: 8.48
27	Samanta, S.K., Devi, K.B., Das, P., Mukherjee, P., Chanda, A., Roy, M. and Nandi, S.K. (2019). Metallic ion doped tri-calcium phosphate ceramics: Effect of dynamic loading on in vivo bone regeneration. <i>Journal of the mechanical behavior of biomedical materials</i> . 96: 227-235. NAAS Scoring: 9.49
28	Somraj Chattaraj, Siddhartha Basu, Kalyani Ray, and Dhiman S. Pal (2019) Vitamin D As an important constituent of epididymal luminal micro-environment for maturation of spermatozoa in Large White Yorkshire boar. <i>Veterinarski Arhiv</i> 89(2) :169-182. NAAS rating : 6.43
29	Banerjee A., Bardhan R., Chowdhury M., Joardar S.N., Isore D.P., Batabyal K., Dey S., Sar, T.K., Bandyopadhyay S., Dutta T.K. and Samanta I. (2019). Characterization of beta-lactamase and biofilm producing <i>Enterobacteriaceae</i> isolated from organized and backyard farm ducks. <i>Letters in Applied Microbiology</i> . 69: 110-115. NAAS 7.81
30	Sinha, B., Chatterjee, S., Burangohain, R., Samanta, I., Joardar, S.N., Mukherjee, P., Maji, A.K., Das, P., Mandal, T.K. and Sar, T.K. (2019). Efficiency evaluation of ethanolic extract of <i>Tamarindus indica</i> L. leaves as possible alternate therapy in septic arthritis model or rabbit. <i>BMC Complementary and Alternative Medicine</i> 19:261-270. <a href="http://doi.org/10.1186/s12906-019-2676-4">http://doi.org/10.1186/s12906-019-2676-4</a> . NAAS 8.11
31	Madhusoodan AP, Das K, Mili B, Kumar K, Kumar A, Saxena AC, Singh P, Dutt T, Bag S (2019). In vitro proliferation and differentiation of canine bone marrow derived mesenchymal stem cells over hydroxyl functionalized CNT substrates. <i>Biotechnology Reports</i> , 24: e00387. <a href="https://doi.org/10.1016/j.btre.2019.e00387">doi.org/10.1016/j.btre.2019.e00387</a> (Elsevier CiteScore 5.9)
32	Perveen S, Das P K, Ghosh P R, Banerjee D and Mukherjee J (2019): Alterations in plasma sodium (Na), potassium (K), calcium (Ca) and iron (Fe) during different days of pre-pubertal male and female black Bengal kids. <i>Biological Rhythm Research</i> 50 (4): 626-636. NAAS rating: 6.77.
33	Perveen S, Das P K, Ghosh P R, Banerjee D, Mukherjee J and Naskar S (2019): Pre-pubertal growth performance and its inter-relationship with physiological responses of black Bengal goats in free range rearing system. <i>Indian Journal of Animal Sciences</i> 89(9): 1021-1024. NAAS rating: 6.23.
34	Bhattacharya R, Das P, Joardar S N, Biswas B K, Batabyal S, Das P K and Nandi S K (2019): Novel decellularized animal conchal cartilage graft for application in human patient, <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 13:46-57. DOI: 10.1002/term.2767 [IF: 4.089]
35	Malvika S, Ghosh P R, Devi N N, Paul R, Halder A, Mazumder A, Choudhury Y, Ghosh S K (2019): Genetic status of indigenous poultry (red jungle fowl) from India. <i>Gene</i> . 705: 77-81. [IF: 2.984]
36	S. Dasgupta, Kanchan Maji and Samit Nandi. 2019. Investigating the Mechanical, Physiochemical and Osteogenic Properties in Gelatin-Chitosan-Bioactive Nanoceramic Composite Scaffolds for Bone Tissue Regeneration: In Vitro and In Vivo. <i>Material Science &amp; Engineering C</i> 94: 713-728 NAAS rating 10.96
37	Lalzawmliana V, Akriti Anand, Prasenjit Mukherjee, Shubhamitra Chaudhuri, Biswanath Kundu and Samit Kumar Nandi and Narsinh L. Thakur. 2019. Marine organisms as a source of natural matrix for bone tissue engineering". <i>Ceramics International</i> 45: 1469-1481 NAAS rating 9.45
38	Rupnarayan Bhattacharya, Piyali Das, Siddhartha Narayan Joardar, Bikash Kanti Biswas, Subhasis Batabyal, Pradip Kumar Das and Samit Kumar Nandi. 2019. Novel decellurized animal choncal cartilage graft for application in human patient" <i>Journal of Tissue Engineering and Regenerative Medicine</i> 13(1):46-57 NAAS rating 9.078
39	V. Lalzawmliana, Akriti Anand, Vinod Kumar, Piyali Das, K. Bavya Devi, Jayanta Mukherjee, Asit Kumar Maji, Biswanath Kundu, Mangal Roy and Samit Kumar Nandi. 2019. Potential of growth factor incorporated mesoporous bioactive glass for in vivo bone regeneration. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> 91:182-192 NAAS rating 9.49
40	K. Bavya Devi, Bipasa Tripathy, Abhijit Roy, Boeun Lee, Prashant N. Kumta, Samit Kumar Nandi and Mangal Roy. 2019. In Vitro Biodegradation and In Vivo Biocompatibility of Forsterite Bio-Ceramics: Effects of Strontium Substitution. <i>ACS Biomaterials Science &amp; Engineering</i> 5 (2):530-543 NAAS rating 10.152
41	Akriti Anand, V. Lalzawmliana, Vinod Kumar, Piyali Das, K. Bavya Devi, Asit Kumar Maji, Biswanath Kundu,, Mangal Roy, Samit Kumar Nandi. 2019. Preparation and in vivo biocompatibility studies of different mesoporous bioactive glasses. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> 89: 89-98 NAAS rating 9.49
42	Joseph Christakiran Moses, Mainak Dey, K. Bavya Devi, Mangal Roy, Samit Kumar Nandi and Biman



	B. Mandal. 2019. Synergistic effects of silicon/zinc doped brushite and silk scaffolding in augmenting the osteogenic and angiogenic potential of composite biomimetic bone grafts. ACS Biomaterials Science & Engineering 5 (3): 1462–1475 NAAS rating 10.152
43	Sujan Krishna Samanta, K. Bavya Devi, Piyali Das, Prasenjit Mukherjee, Abhijit Chanda, Mangal Roy and Samit Kumar Nandi. 2019. Metallic Ion Doped Tri-calcium Phosphate Ceramics: Effect of Dynamic Loading on in vivo Bone Regeneration. Journal of the Mechanical Behavior of Biomedical Materials 91:182-192 NAAS rating 9.49
44	Piyali Das, Kanike Rajesh, V. Lalzawmliana, K. Bavya Devi, Piyali Basak, Debrupa Lahiri, Biswanath Kundu, Mangal Roy and Samit Kumar Nandi. 2019. Development and characterization of acellular caprine chondral cartilage matrix for tissue engineering applications. Cartilage <a href="https://doi.org/10.1177/1947603519855769">https://doi.org/10.1177/1947603519855769</a> NAAS rating 9.857
45	Dimple Chowhan, Piyali Das, Naresh Thatikonda, Samit Kumar Nandi, My Hedhammar, and Biman B. Mandal. 2019. Silkworm silk matrices coated with functionalized spider silk accelerate healing of diabetic wounds. ACS Biomaterials Science & Engineering 5(7): 3537-3548 NAAS rating 10.152
46	Kaushik Sarkar, Vinod Kumar, K. Bavya Devi, Debaki Ghosh, Samit Kumar Nandi and Mangal Roy. 2019. Anomalous in vitro and in vivo Degradation of Magnesium Phosphate: Role of Zinc Addition. ACS Biomaterials Science & Engineering DOI: 5(10): 5097-5106 NAAS rating 10.152
47	Mangal Roy, Bavya K. Devi and Samit Kumar Nandi. 2019. Magnesium Silicate Bioceramics for Bone Regeneration -A Review" Journal of the Indian Institute of Science 99(3):261–288: NAAS rating 6.742
48	Vinod Kumar, Kaushik Sarkar, K. Bavya Devi, Debaki Ghosh, Samit Kumar Nandi and Mangal Roy. 2019. Quantitative assessment of degradation, cytocompatibility and in vivo bone regeneration of silicon incorporated magnesium phosphate bioceramic. Journal of Materials Research 34(24): 4024-4036 NAAS rating 8.502

#### Year - 2020

Sl. No.	Scientific Research Publication in Journals
1	Ghosh T, Maity N, Sur VP, Konar A, Hazra S. Mitigating fibrosis-An impediment to corneal re-innervation following lamellar flap surgery. Exp Eye Res. 2020;194:108009. doi:10.1016/j.exer.2020.108009. NAAS rating 9.011
2	Yu Y, Hsu KH, Gharami S, Butler JE, Hazra S, Chauhan A. Interfacial polymerization of a thin film on contact lenses for improving lubricity. J Colloid Interface Sci. 2020;571:356-367. doi:10.1016/j.jcis.2020.03.060 NAAS rating 12.361
3	Gharami, S., Bhattacharjee, A., Konar, A. et al. Antheraea mylitta Silk Films Support Corneal Re-epithelialisation as Inlay Grafts in Large-Sized Corneal Defect. Regen. Eng. Transl. Med. (2020). <a href="https://doi.org/10.1007/s40883-020-00159-x">https://doi.org/10.1007/s40883-020-00159-x</a> . NAAS rating 7.43
4	J. Chowdhury, T.K. Mandal, S. Mondal. Heliyon 6(2020). Genotoxic impact of emerging contaminant amoxicillin residue on Zebra fish (Danio rerio) embryos(2020). e 05379
5	S. Sen, P. Basak, B. Sinha, P. Maurya ((2020) : Anti inflammatory effect of epidermal growth factor conjugated silk fibrosin immobilized poly urethane ameliorates diabetic burn wound healing. International Journal of Biological Macromolecule. Vol.143; p.1009-1032. NAAS Rating : 10.78
6	Shakya M, Kumar S, Fular A, Upadhaya D, Sharma A K, Bisht, Nandi A and Ghosh S. Emergence of fipronil resistant Rhipicephalus microplus populations in Indian states. Exp Appl Acarol 80, 591–602 (2020). NAAS rating : 7.76
7	Das, S., Mandal, S.C., Pandit, S., Nandi, A., Baidya, S., Jas, R. and Batabyal, S. (2020) Explanatum explanatum strain Sud1 5.8S ribosomal RNA gene, partial sequence; internal transcribed spacer 2, complete sequence; and large subunit ribosomal RNA gene, partial sequence. NCBI GenBank Accession No. : MT053286
8	Das, S., Mandal, S.C., Pandit, S., Nandi, A., Baidya, S., Jas, R. and Batabyal, S. (2020) Explanatum explanatum strain Sud2 5.8S ribosomal RNA gene, partial sequence; internal transcribed spacer 2, complete sequence; and large subunit ribosomal RNA gene, partial sequence. NCBI GenBank Accession No. : MT117844
9	Das, S., Mandal, S.C., Pandit, S., Nandi, A., Baidya, S., Jas, R. and Batabyal, S. (2020) Explanatum explanatum strain Sud3 5.8S ribosomal RNA gene, partial sequence; internal transcribed spacer 2, complete sequence; and large subunit ribosomal RNA gene, partial sequence. NCBI GenBank Accession No. : MT117846



10	Banerjee A., Batabyal K., Debnath C., Joardar S.N., Isore D.P., Dey S., Taraphder S., Singh A.D., Pal S., Samanta I. (2020). Antifungal resistance in CNLAC1 possessing <i>Cryptococcus neoformans</i> isolated from domestic and feral pigeons in West Bengal, India. <i>Indian Journal of Animal Research</i> . 54(2): 228-233. NAAS 6.44
11	Chakraborty S., Roychoudhury P., Samanta I., Subudhi P.K., Lalhruaipuii, Das M., De A., Bandyopadhyay S., Joardar S.N., Mandal M., Quereschi A., Dutta T.K. (2020). Molecular detection of biofilm, virulence and antimicrobial resistance associated genes of <i>Salmonella</i> serovars isolated from pig and chicken of Mizoram, India. <i>Indian Journal of Animal Research</i> . 54(5): 608-613. NAAS 6.44
12	Chakraborty S., Dutta T.K., Roychoudhury P., Samanta I., Lalhruaipuii, Kalai S., Bandyopadhyay S. (2020). Molecular characterization of biofilm-producing <i>Pseudomonas aeruginosa</i> isolated from healthy pigs and chicken in India. <i>Indian Journal of Animal Research</i> (in-press, doi: 10.18805/ijar.B-3903). NAAS 6.44
13	Maji Chinmoy, Biswas S, Sarkar PK, Patra PH, Bandopadhyay S, Sarkar S, Chattopadhyay A and Mandal TK (2020): Evaluation of ameliorative effect of two selected plant drugs on experimentally induced arsenic toxicity in sheep. <i>Environmental Science and Pollution Research</i> , 27(29): 3674-36753. Impact factor: 3.056, NAAS rating: 8.31.
14	Somraj Chattaraj, Siddhartha Basu, Kalyani Ray, Sanjoy Datta, Pradip Sarkar and DURGADAS MANDAL. (2020). Analysis of biomarkers for prediction of idiopathic infertility in Large White Yorkshire boar ( <i>Sus scrofa domestica</i> ) <i>Indian Journal of Animal Sciences</i> 90(2): 176–180. NAAS rating : 6.23
15	Patra G, Efimova M A, Ana S, Al-Awsi G R, Ghosh S, Polley S, Kumar S B, Debbarma A (2020). Expression Profiling and Quantification of Interferon Gamma (IFN- $\gamma$ ) Gene in Sheep Experimentally Infected with <i>Haemonchus contortus</i> Approaches in Poultry, Dairy & Veterinary Sciences 7(3): 638-643. NAAS rating: 6.5
16	Kumar B, Sahoo AK, Dayal S, Das AK, Taraphder S, Batabyal S, Ray PK, Kumari R (2020). Investigating genetic variability in HSP 70 gene-5'-fragment and its association with thermotolerance in Murrah buffalo ( <i>Bubalus bubalis</i> ) under sub-tropical climate of India. <i>Cell Stress and Chaperons</i> . 25:317-326.
17	Sen S, Basak P, Sinha P B, Maurye P, Jaiswal K K, Das P, Mandal T K, (2020) Anti-inflammatory effect of epidermal growth factor conjugated silk fibroin immobilized polyurethane ameliorates diabetic burn wound healing, <i>International Journal of Biological Macromolecules</i> , 143, 15th January, P 1009-1032 NAAS rating 9.11
18	Das AK, Nanda PK, Madane P, Biswas S, Das A, Zhang W and Lorenzo JM (2020). A comprehensive review on antioxidant dietary fibre enriched meat-based functional foods. <i>Trends in Food Science and Technology</i> , 99(5): 323-336 doi: doi.org/10.1016/j.tifs.2020.03.010 (IF-11.077).
19	Banerjee DK, Das AK, Banerjee R, Pateiro M, Nanda PK, Gadekar YP, Biswas S, McClements DJ and Lorenzo JM (2020). Application of enoki mushroom ( <i>Flammulina velutipes</i> ) stem wastes as functional ingredients in goat meat nuggets. <i>Foods</i> , 9(4): 432 doi:doi.org/10.3390/foods9040432 (IF-4.091).
20	Das AK, Nanda PK, Bandyopadhyay S, Banerjee R, Biswas S and McClements, DJ (2020). Application of nanoemulsion-based approaches for improving the quality and safety of muscle foods: A comprehensive review. <i>Comprehensive Review in Food Science and Food Safety</i> , doi:10.1111/1541-4337.12604 (IF-9.912).
21	Pal, A., Pal, A. Jr. and Chakravarty, A.K. 2020. Mutations in Growth hormone gene affect stability of protein structure leading to reduced growth, reproduction and milk production in Cross Bred cattle- an insight. <i>Domestic Animal Endocrinology</i> . <a href="https://doi.org/10.1016/j.domaniend.2019.106405">https://doi.org/10.1016/j.domaniend.2019.106405</a> . NAAS: 8.3
22	Kumar B, Sahoo AK, Dayal S, Das AK*, Taraphder S, Batabyal S, Ray PK and Kumari R (2020). Investigating genetic variability in Hsp70 gene-5'-fragment and its association with thermotolerance in Murrah buffalo ( <i>Bubalus bubalis</i> ) under sub-tropical climate of India. <i>Cell Stress and Chaperones</i> , 25(2): 317-326. <a href="https://doi.org/10.1007/s12192-020-01075-3">https://doi.org/10.1007/s12192-020-01075-3</a> NAAS Rating: 8.9 & Impact Factor: 2.903
23	Pal, A, Pal, A. Jr., Mallick, A.I., Biswas, P. And Chatterjee, P.N. 2020. Molecular characterization of Bu-1 and TLR2 gene in Haringhata Black chicken. <i>Genomics</i> . 112(1):472-483. <a href="https://doi.org/10.1016/j.ygeno.2019.03.010">https://doi.org/10.1016/j.ygeno.2019.03.010</a> NAAS:9.16



## List of Research Publications of Faculty of Fishery Sciences, WBUAFS

### Year - 2016

Sl. No.	Scientific Research Publication in Journals
1	Sahoo, P.K., Swaminathan, T.R., Abraham, T.J., Kumar, R., Pattanayaka, S., Mohapatra, A., Ratha, S.S., Patra, A., Adikesavalu, H., Sood, N., Pradhan, P.K., Das, B.K., Jayasankar, P. and Jena, J.K. 2016. Detection of goldfish haematopoietic necrosis herpes virus (Cyprinid herpesvirus-2) with multi-drug resistant <i>Aeromonas hydrophila</i> infection in goldfish: First evidence of any viral disease outbreak in ornamental freshwater aquaculture farms in India. <i>Acta Tropica</i> 161: 8–17. NAAS Rating : 8.22; IF: 2.218
2	Adikesavalu, H., Paul, P., Priyadarsani, L., Banerjee, S., Joardar, S.N. and Abraham, T.J. 2016. <i>Edwardsiella tarda</i> induces dynamic changes in immune effector activities and endocrine network of <i>Pangasius pangasius</i> (Hamilton, 1822). <i>Aquaculture</i> , 462: 24–29. NAAS Rating : 8.57; IF: 2.57.
3	Abraham, T.J., Paul, P., Adikesavalu, H., Patra, A. and Banerjee, S., 2016. <i>Stenotrophomonas maltophilia</i> as an opportunistic pathogen in cultured African catfish, <i>Clarias gariepinus</i> (Burchell, 1822). <i>Aquaculture</i> , 450: 168–172. NAAS: 8.57; IF: 2.57.
4	Rani, S, Nagesh, T.S., Dash, G. and Abraham, T.J. 2016. Haematological response of <i>Labeo rohita</i> (Hamilton) fingerlings exposed to low salinities. <i>Indian Journal of Fisheries</i> , 63(2): 127-131. NAAS Rating : 6.16.
5	Dubey, S. K., Trivedi, R. K., Chand, B. K., Mandal, B. and Rout, S. K. (2016) : The effect of salinity on survival and growth of the freshwater stenohaline fish spotted snake head <i>Channa punctata</i> (Bloch, 1793). <i>Zoology and Ecology</i> (Taylor & Francis), DOI: 10.1080/21658005.2016.1225867. NAAS rating. 6.53.
6	Chowdhury S, Raychaudhuri U, Nath S and Dora K C (2016). Shelf life of lactic acid bacteria inoculated vacuum packed <i>Tenualosa ilisha</i> (Hamilton, 1822) at low temperature. <i>Indian J. Fish.</i> DOI:10.21077/ijf.2016.63.1.27811-63(1) (2016): 156-161. NAAS rating: 6.24.
7	Supriya Rani, Nagesh T S, Dash G, and Abraham T J (2016): Haematological response of <i>Labeo rohita</i> (Hamilton) fingerlings exposed to low salinities. <i>Indian Journal of Fisheries</i> . 63(2): 127-131. NAAS Rating : 6.24.
8	Keshab Chandra Dhara, Nita Ray, Prabir K Bandopadhyay, Subhasish Biswas, Arunasish Goswami (2016). Influence of Gastrointestinal Parasites on Productive and Reproductive Performances of Black Bengal Goat under Farm Condition. <i>International Journal of Livestock Research</i> 6(2); 25-36 NAAS rating: 6.677, IF-0.677
9	K C Dhara, N. Ray, P.K Bandopadhyay, A. Goswami (2016) Socio- economic Status of the Goat Farmers in Nadia District of West Bengal. <i>Int. J. Livest. Res.</i> . 6(9): 29-37.

### Year - 2017

Sl. No.	Scientific Research Publication in Journals
1	Mandal, A., Das, S. K., Majumder, A. (2017): <b>Studies on physico-chemical environment and management of crab (<i>Scylla serrata</i>) farming in 24 Parganas (West Bengal).</b> <i>Indian Journal Animal Research</i> , DOI:10.18805/ijar.B-3423. NAAS Rating : 6.15.
2	Abraham, T.J., Sarker, S., Dash, G., Patra, A. and Adikesavalu, H., 2017. <i>Chryseobacterium</i> sp. PLI2 and <i>Aeromonas hydrophila</i> co-infection in pacu, <i>Piaractus brachipomus</i> (Cuvier, 1817) fries cultured in West Bengal, India. <i>Aquaculture</i> , 473: 223-227. <a href="http://dx.doi.org/10.1016/j.aquaculture.2017.02.016">http://dx.doi.org/10.1016/j.aquaculture.2017.02.016</a> NAAS Rating : 8.57; IF: 2.57
3	Sarker, S., Abraham, T.J., Banerjee, S., Adikesavalu, H., Patra, A., 2017. Characterization, virulence and pathology of <i>Flavobacterium</i> sp. KG3 associated with gill rot in carp, <i>Catla catla</i> (Ham.). <i>Aquaculture</i> , 468: 579–584. <a href="http://dx.doi.org/10.1016/j.aquaculture.2016.11.024">http://dx.doi.org/10.1016/j.aquaculture.2016.11.024</a> NAAS Rating : 8.57; IF: 2.57)
4	Dubey, S. K., Trivedi, R. K., Chand, B. K., Mandal, B. and Rout, S. K. (2017): Farmers' perception of climate change, impacts on freshwater aquaculture and adaptation strategies in climate change hotspots: A case of Indian Sundarban delta, <i>environmental Development</i> (Elsevier Publication) 21: 38-51. NAAS rating. 8.12.
5	Avijit Halder, Dhrubojyoti Das, Biswarup Saha, P. Pal, S. Das, D. Rajkhowa, S. Hazarika and M. Datta (2017), Smallholder Pig Farming for Rural Livelihoods and Food Security in North East India,



**Year - 2018**

Sl. No.	Scientific Research Publication in Journals
1	Mandal, A. and Das, S. K. (2018). Comparative efficacy of neem ( <i>Azadirachta indica</i> ) and non-neem supplemented biofloc media in controlling the harmful luminescent bacteria in natural pond culture of <i>Litopenaeus vannamei</i> . <i>Aquaculture</i> , 492:157-163 (Elsevier Science Publishers B. V., Netherlands), <a href="https://doi.org/10.1016/j.aquaculture.2018.04.006">https://doi.org/10.1016/j.aquaculture.2018.04.006</a> . NAAS rating: 8.71
2	Mandal, A., Das, S. K., Majumder, A. (2018). Studies on physico-chemical environment and management of crab ( <i>Scylla serrata</i> ) farming in 24 Parganas (West Bengal). <i>Indian Journal Animal Research</i> ; 52 (12): 1782-1789. DOI:10.18805/ijar.B-3423. NAAS rating: 6.2
3	Hoque F, Abraham T.J., Nagesh T.S. and Kamilya D. (2018): <i>Pseudomonas aeruginosa</i> FARP72 offers protection against <i>Aeromonas hydrophila</i> infection in <i>Labeo rohita</i> . <i>Probiotics and Antimicrobial Proteins</i> , <a href="https://doi.org/10.1007/s12602-018-9456-1">https://doi.org/10.1007/s12602-018-9456-1</a> . Published online on 15 August 2018. (NAAS rating: 8.35; IF: 2.35).
4	Purkait S, Abraham T.J., Karmakar S, Dey B and Roy A (2018): Inhibition of fish pathogenic <i>Aeromonas hydrophila</i> and <i>Edwardsiella tarda</i> by <i>Centella asiatica</i> in-vitro. <i>Journal of Aquaculture Research and Development</i> , 9(2): 524. doi: 10.4172/2155-9546.1000524. (NAAS: Nil; Impact factor: 1.47).
5	Sanyal K, Mukherjee D, Guchhait A and Dash G (2018): Isolation and identification of different parasites from Indian major carps and exotic carps from South 24 Parganas West Bengal. <i>Indian J. Animal Sci.</i> 88 (8): 979-984. (NAAS Rating. 6.09)
6	Farhana Hoque, T Jawahar Abraham, T S Nagesh and Dibyendu Kamilya (2018): <i>Pseudomonas aeruginosa</i> FARP72 Offers Protection Against <i>Aeromonas hydrophila</i> Infection in <i>Labeo rohita</i> Probiotics and Antimicrobial Proteins. <a href="https://doi.org/10.1007/s12602-018-9456-1">https://doi.org/10.1007/s12602-018-9456-1</a> . NAAS rating : 8.35
7	Samanta R, Chakraborty, S K, Shenoy, L, Nagesh, T S, Behera, S, Bhoomik, T S (2018): Bycatch characterization and relationship between trawl catch and lunar cycle in single day Shrimp Trawls from Mumbai Coast of India. <i>Regional Studies in Marine Science</i> 17:47-58. NAAS: 7.152.

**Year - 2019**

Sl. No.	Scientific Research Publication in Journals
1	Mondal, B. and Das, S. K. (2019). Comparative evaluation of mahua ( <i>Bassia latifolia</i> ) oil cake and castor bean ( <i>Ricinus communis</i> ) seed as fish toxicants for tilapia ( <i>Oreochromis mossambicus</i> ) and panchax ( <i>Aplocheilichthys panchax</i> ). <i>Aquaculture Research</i> (in press) John Wiley and Sons Ltd.). NAAS rating: 7.48
2	Dinda R., Mandal, A and Das, S. K. (2019). Potential of neem, <i>Azadirachta indica</i> (A. Juss) supplemented biofloc in replacing artificial feed in common carp, <i>Cyprinus carpio</i> var. communis (Linnaeus) culture. <i>Journal of Applied Aquaculture</i> (in press) Taylor & Francis, <a href="https://doi.org/10.1080/10454438.2019.1645076">https://doi.org/10.1080/10454438.2019.1645076</a> , NAAS rating: 7.5
3	T. K. Ghosh, Y.H Chauhan and R. N. Mandal (2019). Growth performance of <i>Labeo bata</i> (Hamilton, 1822) in freshwater and its acclimatization in brackish water with betaine as feed additive. <i>Aquaculture</i> . 501 (2019) 128-134. NAAS rating: 8.71
4	Karmakar S, Abraham T.J, Kumar S, Kumar S, Shukla S.P, Roy U and Kumar K. (2019): Triclosan exposure induces varying extent of reversible antimicrobial resistance in <i>Aeromonas hydrophila</i> and <i>Edwardsiella tarda</i> . <i>Ecotoxicology and Environmental Safety</i> , 180: 309-316. (NAAS rating: 9.97; IF: 3.97).
5	Hoque F, Abraham T J, and Jaisankar P (2019): Isolation and partial characterization of secondary metabolites from fish-borne antagonistic bacterium, <i>Pseudomonas aeruginosa</i> . <i>Indian Journal of Fisheries</i> , 66(1): 81-91. (NAAS rating: 6.28)
6	Mondal, B., & Das, S. K. (2019). Comparative evaluation of mahua ( <i>Bassia latifolia</i> ) oil cake and castor bean ( <i>Ricinus communis</i> ) seed as fish toxicants for tilapia ( <i>Oreochromis mossambicus</i> ) and panchax ( <i>Aplocheilichthys panchax</i> ) with residual toxicity assessment on <i>Labeo bata</i> . <i>Aquaculture Research</i> , 50(9), 2341-2349. John Wiley and Sons (UK). doi: 10.1111/are.14115. Impact Factor:



	1.748, NAAS: 7.748
7	Sarker, S., Abraham, T.J., Dash, G. and Nagesh, T.S., 2019. Pathogenicity and pathology of <i>Chryseobacterium</i> sp. PLI2 in experimentally challenged ornamental goldfish, <i>Carasius auratus</i> (L.). <i>Veterinarski Arhiv</i> , 89(5): 697-707. DOI: 10.24099/vet.arhiv.0476. NAAS: 6.426; IF: 0.426
8	Roy, A., Abraham, T.J., Namdeo, M.S., Singha, J., Julinta, R.B., and Boda, S., 2019. Effects of oral oxytetracycline-therapy on wound progression and healing following <i>Aeromonas caviae</i> infection in Nile tilapia ( <i>Oreochromis niloticus</i> L.). <i>Brazilian Archives of Biology and Technology</i> , 62: e19180766, 2019. <a href="http://dx.doi.org/10.1590/1678-4324-2019180766">http://dx.doi.org/10.1590/1678-4324-2019180766</a> . NAAS: 6.76
9	Julinta, R.B., Abraham, T.J., Roy, A., Singha, J., Boda, S., Patil, P.K., 2019. Dietary influences of oxytetracycline on the growth and serum biomarkers of <i>Oreochromis niloticus</i> (L.). <i>Ecotoxicology and Environmental Safety</i> , 186: (2019) 109752. <a href="https://doi.org/10.1016/j.ecoenv.2019.109752">https://doi.org/10.1016/j.ecoenv.2019.109752</a> . NAAS: 10.527; IF: 4.527
10	Karmakar, S., Abraham, T.J., Kumar, S., Kumar, S., Shukla, S.P., Roy, U. and Kumar, K., 2019. Triclosan exposure induces varying extent of reversible antimicrobial resistance in <i>Aeromonas hydrophila</i> and <i>Edwardsiella tarda</i> . <i>Ecotoxicology and Environmental Safety</i> , 180: 309-316. <a href="https://doi.org/10.1016/j.ecoenv.2019.05.010">https://doi.org/10.1016/j.ecoenv.2019.05.010</a> . NAAS: 10.527; IF: 4.527
11	Hoque, F., Abraham, T.J., and Jaisankar, P., 2019. Isolation and partial characterization of secondary metabolites from fish-borne antagonistic bacterium, <i>Pseudomonas aeruginosa</i> . <i>Indian Journal of Fisheries</i> , 66(1): 81-91. NAAS: 6.26
12	Hoque, F., Abraham, T.J., Nagesh, T.S. and Kamilya, D., 2019. <i>Pseudomonas aeruginosa</i> FARP72 offers protection against <i>Aeromonas hydrophila</i> infection in <i>Labeo rohita</i> . <i>Probiotics and Antimicrobial Proteins</i> , 11(3): 973-980. <a href="https://doi.org/10.1007/s12602-018-9456-1">https://doi.org/10.1007/s12602-018-9456-1</a> . NAAS: 8.96; IF: 2.35

#### Year - 2020

Sl. No.	Scientific Research Publication in Journals
1	Widyastuti, Y. R., Prihadi, T. H., Taufik, I., Pamungkas, B. A., & Das, S. K. (2020) Increasing productivity of snakehead fish ( <i>Channa striata</i> ) juvenile in ponds with different bottom substrates. <i>Ecological intensification: A new paragon for sustainable aquaculture IOP Conference Series: Earth and Environmental Science</i> (Vol. 521, No. 1, p. 012017). IOP Publishing (UK). doi:10.1088/1755-1315/521/1/012017. Impact Factor: 0.85, NAAS: 6.85
2	Julinta, R.B., Abraham, T.J., Roy, A., Singha, J., Dash, G., Sar, T.K., and Patil, P.K., 2020. Effects of oral-dosing of an antiparasitic drug emamectin benzoate on the growth and serum biomarkers of Nile tilapia <i>Oreochromis niloticus</i> (L.) juveniles. <i>Journal of Environmental Biology</i> , 41. NAAS: 6.73; IF: 0.555
3	Julinta, R.B., Abraham, T.J., Roy, A., Singha, J., Bardhan, A., Sar, T.K., Patil, P.K., and Kumar, K.A., 2020. Safety of emamectin benzoate administered in feed to Nile tilapia <i>Oreochromis niloticus</i> (L.). <i>Environmental Toxicology and Pharmacology</i> , 75 (2020) 103348. NAAS: 9.061; IF: 3.061
4	Abraham, T.J., David, M., Patra, A., Banerjee, S., and Adikesavalu, 2020. Surveillance of herpesviruses in koi carp <i>Cyprinus carpio</i> koi and goldfish <i>Carassius auratus</i> cultured in West Bengal, India. <i>Journal of Exotic Pet Medicine</i> , 33: 1-6. NAAS: 6.244; IF: 0.244
5	Chakraborty, R., Mukherjee, D., Bardhan, A., Mali, P., Bhattacharya Sanyal, K. and Dash, G., 2020. Prevalence of <i>Argulus</i> sp. In Indian Major Carps from Bhangore Block of South 24 Parganas District, West Bengal, India. <i>Journal of Fisheries Science</i> , Vol.02. Issue 01:05
6	Julinta, R.B., Abraham, T.J., Roy, A., Singha, J., Dash, G., Sar, T.K., and Patil, P.K., 2020. Effects of oral-dosing of an antiparasitic drug emamectin benzoate on the growth and serum biomarkers of Nile tilapia <i>Oreochromis niloticus</i> (L.) juveniles. <i>Journal of Environmental Biology</i> , 41. NAAS: 6.73; IF: 0.555
7	Siddhant, Ranjan A, Mohanty B P, Sakhlani P, Dora K C and Chowdhury S (2020): Dry fish and its contribution towards food and nutritional security. <i>Food Reviews International</i> . DOI: 10.1080/87559129.2020.1737708. NAAS: 9.93



## List of Research Publications of Faculty of Dairy Technology, WBUAFS

### Year - 2016

Sl.No.	Scientific Research Publication in Journals
1	Haldar, L. and Gandhi, D.N. (2016). Effect of oral administration of <i>Bacillus coagulans</i> B37 and <i>Bacillus pumilus</i> B9 strains on faecal coliforms, <i>Lactobacillus</i> and <i>Bacillus</i> spp. in rat animal model. <i>Veterinary World</i> . 9(7): 766-772.
2	Ray, P. R., Ghatak, P. K., Bag, S. K. and Maji, S. (2016). Electrophoretic Characterization of Casein of refrigerated cow and Buffalo milk Preserved with Banana Pseudostem Juice. <i>Animal Science Reporter (International Journal of Animal Science Research)</i> , 10(4).
3	Nigam, R., Khamrui, K., Prasad, W., Lodh, J., Singh, B. and Debnath, A. (2016). Optimization and sensory profile of chhana based kulfi as function of ingredients using response surface methodology. <i>Indian J. Dairy Sci.</i> , 69(1): 33-40.

### Year - 2017

Sl. No.	Scientific Research Publication in Journals
1	Ray, S., Barman, A.K., Roy, P. K. and Singh, B.K. (2017). Chicken Eggshell Powder as Dietary Calcium Source in Chocolate Cakes. <i>The Pharma Innovation Journal</i> , ISSN print: 2344-8242ISSN online: 2277-7695
2	Singh, B.K., Sen, D.C., Kumar, R., Rani, B. and Barman, A.K. (2017). Storage Study of DanadarPrepared from Cow Milk.Chemical Science Review and Letters (ISSN 2278-6783).
3	Haldar, L., Gandhi, D. N. and Mazumdar, D. (2017). Functional properties of spore-forming <i>Bacillus</i> strains: pre-requisite for probiotic functions. <i>International Journal of Current Microbiology and Applied Sciences</i> . 6(2): 162- 169.
4	Saha, P., Ray, P. R.,Ghatak , P. K., Bag, S. K. and Hazra, T. (2017) . Physico-chemical quality and storage stability of fermented Chhana whey beverages. <i>Indian Journal of Dairy Science</i> , 70(4):398-403.
5	Chakraborty, C., Ray, P.R., Ghatak, P.K. and Bandyopadhyay, A. K. (2017). Phenolic content and antioxidant properties of Herbal Sandesh. <i>International Journal of Current Microbiology and Applied Sciences</i> ,6(7): 729-737.
6	Ray, P. R., Ghatak, P. K., Chakraborty, C. and Maji, S. (2017). Effect of banana ( <i>Musa paradisiaca</i> ) pseudostem juice on proteolytic and lipolytic changes in cow milk during storage. <i>Asian Journal of Dairy and Food Research</i> , 36(2): 117-121.
7	Saha, P., Ray, P. R. and Hazra, T. (2017). Evaluation of Quality and stability of Chhana WheyBeverage fermented with lactic acid bacteria. <i>Asian Journal of Dairy and Food Research</i> , 36(2): 112-116.
8	Debnath, A., Kanawjia, S. K., Khetra, Y., Singh, B. and Lodh, J. (2017). Estimation of Production Cost for cream cheese and low fat cream cheese incorporated with inulin and phytosterol ester. <i>Indian J. Dairy Sci.</i> , 70 (6) 693-700.
9	Singh, B., Singh, A.K., Rekha Rani, Debnath, A. and Raju, P.N. (2017). Effect of milk fat (white butter) and vegetable fat (Shortening) on the sensory, colour and textural attributes of Eggless muffins. <i>The Pharma Innovation Journal</i> , 6(4): 140-144.
10	Singh, B., Khamrui, K., Lodh, J., Debnath, A., Prasad, W. (2017). Selection of Levels of Ingredients for the Preparation of Milk-coconut sweet (A traditional Indian delicacy) by Using Sensory and Instrumental Colour Attributes. <i>Asian Journal of Dairy and Food Research</i> , 36(2): 106-111.
11	Singh, B.K., Sen, D.C. and Debnath, A. (2017). Sensory and microbiological attributes of Danadarmarketed at three adjacent markets of West Bengal. <i>The Pharma Innovation Journal</i> , 6(4): 87-90.
12	Nayek, S., Khamrui, K.,Prasad, W. Singh, B. and Debnath, A. (2017). Optimization of sensory profile of steamed dahi (BhapaDoi) as function of ingredients using response surface methodology. <i>Indian J. Dairy Sci.</i> , 70(3): 271-277.
13	Singh, B., Khamrui, K., Debnath, A., Lodh, J., Gupta, H.R., Prasad, W. (2017). Sensory and Colour Profile of Milk-coconut Sweet as a Function of Ingredients. <i>Indian J. Dairy Sci.</i> , 70(5), 497-507.
14	Marwade, D. H., Kanawjia, S. K., Khetra, Y., Puri, R., Debnath, A. and Gupta, H. R. (2017). Changes in sensory and physico-chemical attributes of low sodium Mozzarella cheese during storage. <i>Indian</i>



	Journal of Dairy Science, 70(6), 650-657.
15	Bansal, V., Kanawjia, S. K., Khetra, Y. Puri, R., Debnath, A. (2017). Effect of whey protein concentrate, sodium caseinate, Cheddar cheese, and milk fat on sensory and functional properties of cheese dip. J. Food Process Preserv. 41(5), e13174.

#### Year - 2018

Sl. No.	Scientific Research Publication in Journals
1	Bisoi, P.K., Kumar, R. Rani, B, Singh, B. K., Barman A.K. (2018). Effect Of Whey Protein Concentrate On Manufacturing Of Nonfat Fermented Milk. International Journal of Microbiology Research, ISSN: 0975-5276 & E-ISSN: 0975-9174.
2	Paul, A., Barman, A. K., Roy, P.K. and Ray, S. (2018) A Study on Antimicrobial Properties and Medicinal Value of Adhatodavastica, Centella asiatica, Paederiafoetida, Nyctanthes arbor-tristis. <b>International Journal of Current Microbiology and Applied Science</b> , ISSN:2319-7692(Print), ISSN:2319-7706 (Online)
3	Kumar, R. Rani, B, Singh, B. K. and Barman, A. K. (2018) Development and Evaluation of Antimicrobial Properties of Synbiotic Products Prepared With selected Natural Prebiotics. The Bio- scan, ISSN 0973-7049
4	Haldar, L. and Gandhi, D.N. (2018). Cholesterol-lowering effects of Bacillus coagulans B37 and Bacillus pumilus B9 strains in a rat animal model. Indian Journal of Animal Research. Online ISSN:0976-0555.
5	Singla V, Mandal S, Sharma P, Anand S and Tomar S K (2018): Antibiotic susceptibility profile of <i>Pediococcus</i> spp. from diverse sources. 3 Biotech 8(12):489. Impact factor: 1.497.
6	Anand S, Mandal S, Singh K S, Patil P and Tomar S K (2018): Synbiotic combination of <i>Lactobacillus rhamnosus</i> NCDC 298 and short chain fructooligosaccharides prevents enterotoxigenic <i>Escherichia coli</i> infection. LWT Food Science and Technology 98: 329-334. Impact factor: 3.129
7	Hati S, Patel N, Sakure A and Mandal S (2018): Influence of whey protein concentrate on the production of antibacterial peptides derived from fermented milk by lactic acid bacteria. International Journal of Peptide Research and Therapeutics 24(1): 87-98. NAAS rating: 7.13
8	Yadav K, Bajaj R K, Mandal S, Saha P and Mann B (2018): Evaluation of total phenol content and antioxidant properties of encapsulated grape seed extract in yoghurt. International Journal of Dairy Technology 71(1): 96-104. NAAS rating: 7.23
9	Prasad W, Khamrui K, Mandal S and Badola R (2018): Effect of combination of essential oils on physicochemical and sensorial attributes of burfi in comparison with individual essential oil and BHA. International Journal of Dairy Technology 71(3): 810-819. NAAS rating: 7.23
10	Hati S, Patel N and Mandal S (2018): Comparative growth behavior and bio-functionality of lactic acid bacteria during fermentation of soy milk and bovine milk. Probiotics and Antimicrobial Proteins 10(2): 277-283. NAAS rating: 8.35
11	Soma Maji. Pinaki R. Ray, Pijus Kanti Ghatak and Chaitali Chakraborty (2018). Total phenolic content (TPC) and quality of herbal lassi fortified with Turmeric ( <i>Curcuma longa</i> ) extract. Asian Journal of Dairy and Food Research. 37 (4): 273-277. NAAS rating 4.2
12	Bandyopadhyay, K., Ganguly, S., Chakraborty, C. and Modak A. (2018). Studies on extraction of polyphenols from food wastes and its utilization for fortification of polyphenols, International Journal of Agricultural Engineering, 11(1): 216-219, ISSN: 0976-7223.
13	Debnath, A., Kanawjia, S. K., Khetra, Y., Lodh, J., Singh, B., Bansal, V. and Nigam, R. (2018). Effect of processing parameters on quality attributes of cream cheese. Indian J. Dairy Sci., 71(1) 7-12.
14	Roy, K., Debnath, A., & Singh, B. (2018). Estimation of production cost for ghee residue based snack. The Pharma Innovation Journal, 7(10): 630-634.
15	Das, A., Sanyal, M. K., Debnath, A., & Ganguly, S. (2018). Development of spiced and smoked sausage from buffalo skim milk. Journal of Pharmacognosy and Phytochemistry, 7(6), 121-125.
16	Debnath, P. P., & Ghosh, B. C. (2018). Enzyme Modified Ghee Flavour: Application and Shelf Life Studies. Int. J. Pure App. Biosci, 6(5), 822-826.
17	Debnath, P. P., & Ghosh, B. C. (2018). Role of lactose, glucose and citrate in the flavour



enhancement of enzyme modified ghee. International Journal of Chemical studies, 6(5), 3269-3274.

## Year-2019

Sl. No.	Scientific Research Publication in Journals
1	Haldar, L, and Gandhi, D N (2019) Cholesterol-lowering effects of Bacillus coagulans B37 and Bacillus pumilus B9 strains in a rat animal model. Indian Journal of Animal Research 53(4) (2019) : 469-475. NAAS rating: 6.20
2	Haldar L and Gandhi D N (2019) Development of vacuum-dried probiotic milk powder with Bacillus coagulans. International Journal of Dairy Technology 73 (1): 283-291. NAAS Rating : 7.52
3	Anand S, Mandal S and Tomar S K (2019). Effect of Lactobacillus rhamnosus NCDC 298 with FOS in Combination on Viability and Toxin Production of Enterotoxigenic Escherichia coli. Probiotics and Antimicrobial Proteins 11(1): 23-29.
4	Chaitali Chakraborty, Pinaki Ranjan Ray, Rimli Chatterjee and Manasi Roy (2019). Applications of bio-colour in Dairy Industry. The Pharma Innovation Journal. 8(1): 126-138. NAAS rating 5.03.
5	S. Soren, B. Roy, J. A. Gore, M. C. Pakhira, and P. R. Ray (2019). Influence of Nutrisigma on lactational performance of Sahiwal cows in declining milk production stage. Indian Journal of Animal Health. 58(01): 101-110. NAAS rating 4.08
6	Chandrakanta Sen and Pinaki Ranjan Ray (2019). Biopreservation of dairy products using bacteriocin. Indian Food Industry. 1(4): 51-60.
7	Bandyopadhyay, K., Ganguly, S., Chakraborty, C. and Roychowdhury, R. (2019). A Relative Study on Utilisation of Fenugreek Seeds for Enhancement of the Antioxidant Activities in Various Baked Products. SSRG International Journal of Agriculture & Environmental Science (SSRG - IJAES), 6(1): 67-70.
8	Dasgupta, R., Chakraborty, C., Bandyopadhyay, K. and Ganguly, S. (2019). Development and characterization of biocolor (Brassica oleracea var. capitata f. rubra) fortified lime squash. The Pharma Innovation, 8(1): 42-47.
9	Chakraborty C., Mukherjee S. and Biswas S. (2019). Evaluation of rheological, physicochemical, and sensory properties of apple incorporated yoghurt, Indian J Dairy Sci, 72(1): 53-58,
10	Pratap, D., Halder, K., Singh, R., Ojha, A., Thangalakshmi, S., Rani, S. 2019. Antioxidant properties and sensory attributes of blends prepared from standardized milk and soy milk. Nutrition & Food Science
11	Ghosh, D., Debnath, A, Chetri, A. (2019). Effect of Processing Parameters on quality attributes of cow skim milk paneer. The Pharma Innovation Journal 2019; 8(1): 429-431.

## Year-2020

Sl. No.	Scientific Research Publication in Journals
1	Yadav K, Bajaj R K, Mandal, S and Mann B (2020) Encapsulation of grape seed extract phenolics using whey protein concentrate, maltodextrin and gum arabica blends. Journal of Food Science and Technology 57 (2): 426-434. NAAS rating: 7.85
2	Soma Maji, Pinaki R. Ray and Pijus K. Ghatak (2020). Fortification of Lassi with herbal extracts- Effects on quality and total phenolic content. International Journal of Current Microbiology and Applied Sciences, 9 (11): 444-453. NAAS Rating: 5.38
3	P. R. Ray and C. Sen (2020). Biochemical residues in milk and milk products. Indian Journal of Animal Health. 58(2): 145-152. NAAS rating 4.08



### 6.6.3.5. Innovation and Best Practices:

*What are the innovative efforts of the University that help in its excellence in research?*

Innovative efforts of the university for Research Excellence are mentioned below:-

- i) Sanction of Research Grant from the university's own fund to the faculty members through a selection process.
- ii) Financial and Administrative support to the faculty members to participate in the Research oriented Workshops organized by different Institutes of repute.
- iii) Sanction of Research Grant to the Post Graduate students through a selection process.
- iv) Motivating the faculty members to submit research projects to different Govt and Private funding agencies.
- v) Promotion of collaborative research activities by the faculty members funded by external Govt. and Private Agencies.

### 6.6.3.6. IPR Cell/ ITMU:

*Whether the University is currently having functional Intellectual Property Right Cell in place. Mention the date of the meetings conducted by the Cell in last three years and what were the major recommendations. Is the University having Institute Technology Management Unit in place. Mention the date of the meetings conducted by the Unit in last three years and what were the major recommendations.*

**Whether the University is currently having functional Intellectual Property Right Cell in place:**

YES. In the University, IPR cell is actively functioning since 2009-10. The cell is headed by Director of Research, Extension and Farms as Chairman. Teachers from each faculty having significant contribution in the research field along with scientist from Directorate of Research, Extension and Farms are nominated as members. Two officials nominated by Department of Science and Technology, Govt. of West Bengal are also members. In last three years, two meeting were conducted.

**Date and major recommendations of the meetings are as below.**

Date of the meeting	Major Recommendations
17.04.2018	All members congratulated the team of scientists comprising of Dr. Samit Kumar Nandi & Dr. Dabaki Ghosh, Dept. of Vety. Surgery & Radiology from WBUAFS who were associated with the patent entitled "Bioactive compound(s) from marine gastropod mollusc ( <i>Telescopium telescopium</i> ) as potential anticancer/ antiproliferative agents" which was granted patent on 19.01.2018. Researchers should examine the commercialization potential of their technologies/innovations before they seek the permission of the University for filing the patent on these.
10.07.2019	Draft patent application submitted by Prof. Subhas Chandra Mandal, Prof. Department of Vety. Parasitology, Faculty of Veterinary & Animal Sciences on "Oligonucleotide primer pair usable for performing RT-qPCR" was discussed and all members unanimously recommended in favour of filing it for patent. Young teachers/scientists should be encouraged to select the research topics having wider scope for patent.

**Is the University having Institute Technology Management Unit in place: NO**



### 6.6.3.7. Central Instrumentation Unit:

*Is there a Central Instrumentation Unit in place? What are the facilities available in the unit?*

#### **Is there a Central Instrumentation Unit in place?**

Yes. The West Bengal University of Animal & Fishery Sciences had received a fund from the Indian Council of Agricultural Research (ICAR), New Delhi under 'Establishment of Central Instrumentation Facility' during 11<sup>th</sup> five year plan. Utilizing that fund the University has strengthened its Central Instrumentation facilities in its faculties. Several valuable scientific equipments have been procured out of the fund received from several funding agencies such as, Government of India, ICAR, State Government etc. The present status of such equipment / instruments are furnished below –

#### **List of Equipment / Instruments to facilitate academic and research activities under the Central Instrumentation Facility :**

##### **A. Faculty of Veterinary & Animal Sciences**

Sl. No.	Equipment / Instruments
1	8 TPL Lab Model Torque Twin Screw Centrifuge
2	Electron capture detector
3	Inverted Tissue Culture (Sigma)
4	Inverted Trinocular
5	ECD with Electrometer
6	Low Pressure Chromatography System
7	HP Proliant Server : Web & Mail Server
8	UV – VIS Spectrophotometer
9	Ultra Pure Water Purification System
10	ELISA Reader
11	PCR Thermocycler
12	Gel Doc System
13	Electrophoresis System
14	Inverted Microscope, Steriozoom Microscope and Fluorescence Microscope with Photographic attachment
15	Fluorescence Spectrophotometer
16	HPLC Unit
17	Rotary Microtome
18	Trinocular Research Microscope
19	Gradient Microplate Spectrophotometer
20	BOD incubator with Shaker
21	Refrigerator, 2 nos.
22	ESCO Microprocessor Controlled Class II Total Exhaust Biological Safety Cabinet with Exhaust Facility
23	ESCO Ultra Low Temperature, Vertical Laboratory Freezer (-86° C)
24	Real-time PCR
25	Gel doc system
26	Cooling centrifuge
27	Deepfreeze -20C
28	Vortexer



## B. Faculty of Fishery Sciences

Sl. No.	Equipment / Instruments
1	High Performance Liquid Chromatography
2	Analytical Balance
3	Modular Laboratory
4	Atomic Absorption Spectrophotometer
5	Water purification system
6	Carbon di-oxide Incubator
7	Microfuge
8	Thermal cycler
9	Microblock Digestion system
10	U-V Trans-illuminator
11	Air purifier/curtain
12	Gas chromatograph
13	Inverted Microscope
14	Deep freeze
15	Generator
16	Canning Machine
17	Applied Biosystems 7500 Real-time PCR system
18	Refrigerated centrifuge

## C. Faculty of Dairy Technology

Sl. No.	Equipment / Instruments
1	Protein Analyzer
2	Infra red Analyzer
3	Ice Cream Plant
4	Condensing Unit
5	Drying Unit
6	Moisture Analyzer
7	Gel Filtration
8	Rheometer
9	BOD Analyzer
10	PCR
11	Vacuum Milk Concentrator

### 6.6.3.8. Global Support:

*Global Support may assist Universities to organize and undertake activities outside of the Regions by providing a centralized location for administrative resources and a single point of contact for addressing related questions. Does the University maintains functional experts in a range of administrative areas to provide technical advice and guidance in the areas of exchange programmes, visa related issues, International MoUs, collaborative research etc.?*

The University maintains functional experts in a range of administrative areas to provide technical advice and guidance in the areas of exchange programmes, International MoUs, collaborative research except visa related issues some of which are mentioned below:-

- 1) A farmers' friendly Mobile App alongwith Websites have been developed by the Directorate of Research, Extension and Farms in the year 2019 to address the issues raised by the farmers. Two



Agricultural Universities of Bangladesh have also developed the Mobile App for farmers as per advice of WBUAFS.

- 2) Extended support and guidance for drafting and preparing international MoUs to The University of Missouri, Columbia, Hajee Mohammad Danesh Science and Technology University, Dinajpur, Bangladesh, Agriculture and Forestry University, Bharatpur, Nepal.
- 3) Some teachers of the three faculties are also extending functional support and technical guidance as experts to various National and International Institutes on various facets of education and collaborative research.
- 4) As a part of Global Support, a multi institutional project is initiated the University (Department of Veterinary Microbiology, Faculty of Veterinary and Animal Sciences) with London School of Hygiene and Tropical Medicine, Royal Veterinary College (RVC), Institute of Development Studies (IDS), UK; Liver Foundation and Centre for Public Health and Development, India on value chain analysis of antibiotic usage in human and animals. A project start-up meeting was conducted in Kolkata and field visit to the study villages was arranged during February 27-28, 2019. Dr. Pablo Alarcon (RVC) and Dr Ayako Ibata (IDS) visited University Headquarters on March 1, 2019 to appraise the progress of the work.
- 5) Through International MoU with the Sher-e-Bangla Agricultural University, Dhaka, Bangladesh and Chittagaong Veterinary and Animal Sciences University, Bangladesh for whom this University has been imparting international internship training on Veterinary Clinics to the students of Bangladesh. For the year 2019-20, total 95 students from the Faculty of Veterinary & Animal Science, Hajee Mohammad Danesh Science and Technology University (HSTU), Dinajpur, Bangladesh have undergone twenty-day of internship training in 5 batches at the Veterinary Clinical Complex, Belgachia campus of WBUAFS. During the internship, the students worked extensive clinical hours in medicine, surgery and gynaecology and performed basic hospital work under direct supervision of teachers and senior staff.

#### **6.6.4. EXTENSION SUPPORT**

##### **6.6.4.1. Extension Council:**

*Mention the present composition of the Extension Council and provide the dates of meetings in last five years in tabular form.*

The Research Extension and Farm activities of the university are undertaken and monitored by the Directorate of Research, Extension and Farms. There is one Research and Extension Education Council and there is no separate Extension Council. Details mentioned under **SI No 6.6.3.1.**

##### **6.6.4.2. Directorate of Extension Education:**

*Give brief information about the present establishment of the Directorate of extension education, staff pattern, KVK and other off-campus extension programmes, extension coordination mechanism, extension and technology dissemination system and contribution in academic programmes.*

Details staff pattern and activities of Directorate of Extension Education mentioned under **SI. No. 6.6.3.2.**



### Krishi Vigyan Kendras (KVKs):-

There are three (3) Krishi Vigyan Kendras under the aegis of this university viz 1) North 24 Parganas KVK, Ashokenagar 2) Murshidabad KVK, Murshidabad and 3) Jalpaiguri KVK, Ramsai, Jalpaiguri. The Staff pattern of the KVKs are mentioned below:-

### Staff Position of Three KVKs:-

	In Position	% of Filled
KVKs	42	87.5%

### Staff Pattern:

Sl No.	Name of Post	Number of Post
1.	Senior Scientist & Head/ Programme Co-ordinator	1
2.	Subject Matter Specialist /T6	6
3.	Programme Assistant (Farm Manager)/T4	1
4.	Programme Assistant (Computer)/T4	1
5.	Programme Assistant (Lab Technician)/T4	1
6.	Assistant	1
7.	Stenographer Grade III	1
8.	Driver/T1	2
9.	Skilled Supporting Staff	2

### Off Campus Extension Programme of KVKs:-

Name of the KVKs	No of off campus Extension Programme Conducted				
	2016-17	2017-18	2018-19	2019-2020	2020-21*
Jalpaiguri KVK	117	108	123	105	96
Murshidabad KVK	92	101	112	110	78
North 24PGS KVK	121	98	131	112	81

\* As on 31.12.2020

### Extension coordination mechanism:

All the Extension Programmes undertaken by WBUAFS through the three KVKs are monitored by the Directorate of Research, Extension & Farms (DREF). The Extension wing of the Directorate of Research, Extension and Farms provides Consultancy and Farm Advisory services to the stakeholders in the fields of livestock farming, dairy product processing and fish farming. Faculty members and officials/scientists of the University render their expertise through field visits, farm or home visits, face-to-face discussions, over telephone, e-mails and postal communications. During last five years, a good number of persons



were rendered technical advises through this Directorate. The Extension wing also provides consultancy on animal husbandry, dairy technology and fishery related laboratory and field services. Consultancies for establishment of livestock, dairy and fishery farms as well as other animal origin food products processing projects / schemes were provided through the Consultancy Cell. Such consultancies were provided to the clientele through the Individual or group consultants from the University. In addition, need based training and distribution of extension literature to the beneficiaries is being made available during such Advisory and Consultancy services.

**Contribution in academic programmes:**

The Directorate of Research, Extension and Farms ensures integration of extension education with teaching and research in the university and participation of teachers and students in the field of extension programmes and education as a part of academic activities.

**Extension and technology dissemination system:**

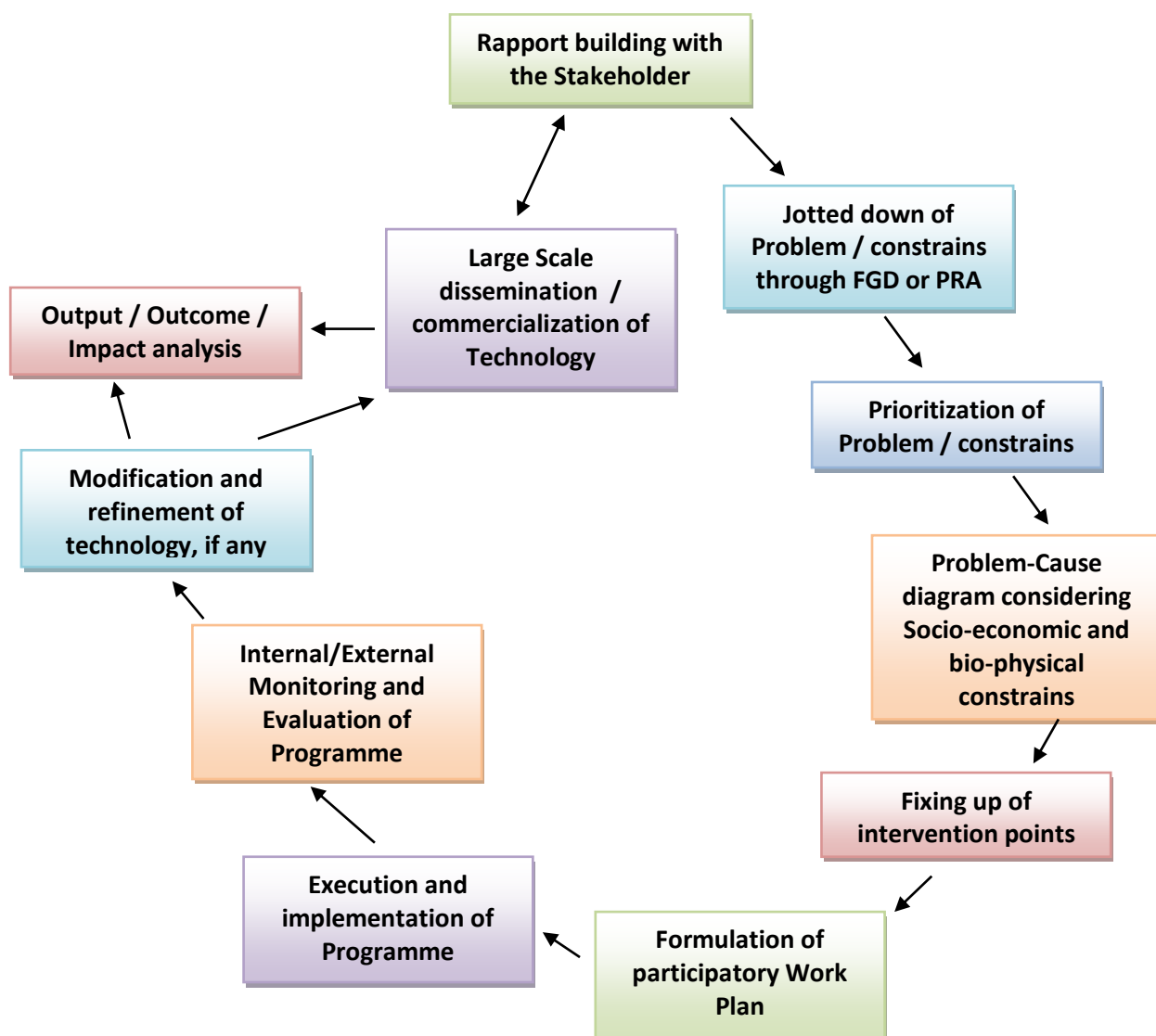
The extension and technology dissemination system has been developed to undertake collaborative on research findings and outreach programmes with the State Govt. Department of Animal Resource Development, Fishery Development and other Governmental and Non-Governmental agencies. Time to time a series of training programmes and refresher courses at regular intervals are organized for farmers / beneficiaries to enhance their technical knowledge for livelihood improvement. Publication of periodicals, newsletters, research highlights, leaflet, booklets etc. have been made to create awareness amongst the farmers on latest developments in the field of Veterinary, Dairy and Fishery Sciences. The Directorate also responsible for organizing awareness camps, production of documentary films, participation in technology demonstration fairs and exhibitions, radio and TV shows at frequent intervals. It organizes different types of programs with the aim to disseminate technologies evolved in the University, to the rural mass through its extension wing. Moreover, it monitors the extension of knowledge and information about the activities of the University through the use of print media and web media.



#### 6.6.4.3. Extension Planning and Technological Impact:

*In what way the extension planning help to support enterprises in adopting and deploying new technologies and in commercializing innovations? What is the mechanism in place to study the technological impact?*

In connection with the ways of extension planning to help and to support enterprises in adopting and deploying new technologies and in commercializing innovations, the following path way is developed for planning, execution and commercialization of technologies on the ground level:-



#### 6.6.4.4. Implementation of National Initiatives:

*Mention the status of implementation of Student Ready, green initiatives, Farmers First Scheme, Mera Gaon Mera Gaurav, NICRA and other similar schemes.*

##### Student Ready

Name of the KVKs	No of Student Trained in Student READY in collaboration with other Institute				
	2016-17	2017-18	2018-19	2019-2020	2020-21*
Jalpaiguri KVK	--	--	03	15	15
Murshidabad KVK	-	-	55	60	-
North 24PGS KVK	28	28	15	15	30



### Green Initiatives:

The university has undertaken the following Green Initiatives through the Krishi Vigyan Kendars:-

- Aranya Saptaha,
- Celebration of Environmental Day
- Brown manuring
- Rain water harvesting structure at KVK campus
- Use of herbal dewormer for small livestock
- Bio-village programme at Swarupnagar block

### Farmers First Scheme

Presently not under implementation.

### Mera Gaon Mera Gaurav

Name of the KVKs	Collaborative MGMT Programme				
	2016-17	2017-18	2018-19	2019-2020	2020-21*
North 24PGS KVK	-	-	4	6	-

\* As on 31.12.2020

### NICRA

Presently not under implementation.

### Other Schemes

Name of the KVKs	No of Student Trained in Student READY in collaboration with other Institute				
	2016-17	2017-18	2018-19	2019-2020	2020-21*
Jalpaiguri KVK	TSP, NIFTD, NHM, NMOOP, MGNREGS	NMOOP, MGNREGS, NABARD, WBSCST&OBC DFC, DRDC, IFFCO, ATMA, NTRF, SMAM, PKVY, RSETI, NBU, CFLD	NHM, MGNREGS, NABARD, DRDC, IFFCO, ATMA, MANAGE-SAMETI, DHO, WBSCL & AICURD, DOF, WBADMIP	DFO, MGNREGS, NABARD, DRDC, ATMA, MANAGE-SAMETI, ATC, Krishi Jagran & Mahindra, IWMP, CIFA-NFDB, IMD	DFO, MGNREGS, NABARD, ATMA, MANAGE-SAMETI, Krishi Jagran & Mahindra, IWMP, CIFA-NFDB, WBSCST&OB CDFC, IFFCO, SU-Barasat, ICAR- SCSP, WBADMIP
Murshidabad KVK	-	NABARD, ATMA, CDB, NFDB	NABARD, Ambuja Cement Foundation, ATMA	ASCI, MANAGE, CSISA IMD, ATMA	ASCI, MANAGE, NIAM, ATMA, IFFCO
North 24PGS KVK	TSP	TSP	TSP	WBUAFS-SCSP, IVRI-SCSP, ICAR-CIFA SCSP, IMD	WBUAFS-SCSP

\* As on 31.12.2020



#### 6.6.4.5. Innovation and Best Practices:

*What are the innovative efforts of an institution that help in its excellence in extension?*

Name of the KVKs	Name of the Innovation and best practices				
	2016-17	2017-18	2018-19	2019-20	2020-21*
Jalpaiguri KVK	-	Multi Tier Vegetable cultivation	Eco friendly technique of a) rabbit trap b) pheromone trap for fruit fly control	1) Multi Tier cage poultry farming 2) Vertical gardening	1) Multi Tier cage poultry farming 2) Vertical gardening
Murshidabad KVK	-	Use of coconut oil and Naphthalene to control ecto-parasite (lice) of goat kid	a) Low cost breeding trap of freshwater livebearer ornamental fishes b) Natural breeding of Singhi ( <i>H. fossilis</i> ) in jute retting cement tank	Farmers Friendly Low Cost Poultry Incubator	-
North 24PGS KVK	Broken Rice Separator Machine	Tornado rotovator	Turmeric grinder	Feeding the rice mill oven: an innovation	a) Practice of Dry cow therapy for prevention of Mastitis b) Use of herbal dewormer

\* As on 31.12.2020

#### 6.6.4.6. Consultancy/Certification/Testing:

*Mention about the resources generated through Consultancy/ Certification/Testing etc. in last five years. Give details of all activities. Give summary of participation of faculty in Consultancy/Certification/ Testing and outreach programmes.*

Resource Generation by the University from Consultancy/Certification/Testing (Other than KVK)

(Rupees in Crore)						
Sl No.	Total Revenue generated (A)	2016-17	2017-18	2018-19	2019-20	2020-21*
1.	Consultancies	0.09	0.15	0.18	0.19	0.00
2.	Certification	0.02	0.03	0.02	0.01	0.00
3.	Testing	0.11	0.21	0.56	0.55	0.00

\* As on 31.12.2020

Resource Generation from Consultancy/Certification/Testing through KVKs

Name of the KVKs	Rupees				
	2016-17	2017-18	2018-19	2019-2020	2020-21*
Jalpaiguri KVK	18,21,506/-	17,71,308/-	21,09,212/-	26,72,908/-	23,82,312/-
Murshidabad KVK	8,92,603/-	19,07,928/-	10,05,770/-	29,57,840/-	24,09,300/-
North 24PGS KVK	13,15,500/-	15,33,250/-	13,50,000/-	37,64,800/-	25,61,000/-



### Details of Activities

The Extension wing of the Directorate of Research, Extension and Farms provides Consultancy and Farm Advisory services to the stakeholders in the fields of livestock farming, dairy product processing and fish farming. Faculty members and officials/scientists of the University render their expertise through field visits, farm or home visits, face-to-face discussions, over telephone, e-mails and postal communications. During these years a good number of persons were rendered technical advises through this Directorate. The Extension wing also provides consultancy on animal husbandry, dairy technology and fishery related laboratory and field services. A good number of Consultancies for establishment of livestock, dairy and fishery farms as well as other animal origin food products processing projects / schemes were provided during these years through the Consultancy Cell. Such consultancies were provided to the clientele through the Individual or group consultants from the University. In addition, need based training and distribution of extension literature to the beneficiaries is being made available during such Advisory and Consultancy services. There are Soil Test Laboratories in the three KVKs

### Certification, Testing and Outreach programmes by the Directorate of Research, Extension and Farms through the KVKs and other Extension projects:-

#### Extension Services with supply of critical inputs:-

Sl.	Item	2016-17	2017-18	2018-19	2019-20	2020-21
2	Animal health care provided (Number)	250	310	330	350	105
3	Introduction of superior germplasm of Poultry (Number of farmers)	3125	3425	4125	4254	2451
4	Introduction of superior germplasm of Pig/ Goat/ Rabbit (Number of farmers)	1525	1515	1662	1954	1412
5	Planting material /seedlings produced and distributed (Number)	132504	142004	238945	371041	102101
6	Introduction of Green Fodder cultivation (in ha)	10.87	12.74	13.54	15.76	12.52
10	Soil testing and distribution of Soil health card (Number)	2105	3457	4578	3254	1457
11	Consultancy on land use planning and cropping pattern (Number of Farmer)	1212	1451	1356	1452	1054
13	Fish fingerling production (Number)	305456	457851	525482	458754	358794
14	Field Day Conducted (Number)	14	18	22	21	13

#### Outreach programmes:-

Name of the KVKs	No of Outreach programme attended				
	2016-17	2017-18	2018-19	2019-2020	2020-21*
Jalpaiguri KVK	18	16	21	18	12
Murshidabad KVK	-	10	12	12	9
North 24PGS KVK	21	23	19	26	13



**Note:**

- 1) Apart from above, the university has test facilities of all domestic animals in the Diagnostic Laboratories set up under the Department of Veterinary Microbiology, Veterinary Biochemistry, Veterinary Parasitology and Veterinary Pathology, Veterinary Physiology.
- 2) As a part of test facility, there are some other units namely X-ray Unit, USG Unit and Dialysis Unit.
- 3) There is a Fish Disease Diagnostic Laboratory under the Faculty of Fishery Sciences.
- 4) The faculty members attached to the aforesaid departments who monitor the testing facilities also issue test certificates.
- 5) Test Certificate: Certificates are issued as per requisitions.

## **6.6.5. FACULTY AND STAFF DEVELOPMENT**

### **6.6.5.1. Recruitment and Promotional Avenue:**

*Give the detailed recruitment procedure for faculty, technical, supporting and administrative staff (in brief) and further mention the last recruitment for each category held in the University. Similarly, career advancement procedure and its implementation for all categories shall be given. How many staff have been recruited directly at the higher positions in the last five years?*

#### **Detailed recruitment procedure for faculty, technical, supporting and administrative staff**

- 1) Recruitment of teachers is made as per procedures enshrined in the schedule 1 of the First Statutes of the university 1998.
- 2) Recruitment of staff members is made as per procedures enshrined in the schedule 2 of the First Statutes of the university 1998.

#### **Last recruitment for each category held in the University:**

During the year 2019-20 30 nos of Assistant Professors, 6 nos of Associate Professors and 4 nos of Professors along with 6 nos of officers and 10 nos of supporting staff have been recruited have been recruited.

#### **Career advancement procedure and its implementation**

- 1) Promotion of teachers: As per notifications of the UGC / ICAR duly endorsed and promulgated by the Govt. of West Bengal.
- 2) Career Advancement of teachers: As per notifications of the UGC / ICAR duly endorsed and promulgated by the Govt. of West Bengal.
- 3) Career Advancement of staff members: As per notifications issued by the Govt. of West Bengal

#### **How many staff have been recruited directly at the higher positions in the last five years?**

40 nos of teachers and 6 officers have been recruited directly at higher positions in the last five years.



### 6.6.5.2. Participation of Faculty in Symposia/Workshops:

*Give the comprehensive list (year wise, College wise) participation of faculty in National/International Seminars/ Symposia/ Workshops/ Training/ Consultancy visits/Special assignments etc.*

Faculty members and scientists of West Bengal University of Animal & Fishery Sciences always look forward for interactive and collaborative work with the scientists from other institutes within the State, Country and other countries to strengthen its basic, applied and strategic research in the fields of Veterinary and Animal Sciences, Dairy Technology and Fishery Sciences. They participate in different conferences, training programmes, summer/winter school, short courses on their related subjects, seminars, symposiums, workshops etc. to refresh and update themselves with the latest scientific knowledge and technologies. The University also encourages its faculty members to participate in such Human Resource Development programs. The important programs attended by the Faculty members and scientists during 2016-17 to 2020-21 (As on 31.12.2020) are depicted below:

#### Faculty of Veterinary & Animal Sciences

Name of the faculty member with Designation	Title of Seminar, Symposium, Workshop, Training attended	Venue	Date
Prof. P K Senapati, Professor	Invited speaker: ICAR sponsored 10 days short course on "Conservation of indigenous breeds of small ruminants in their respective tracts"	WBUAFS, Belgachia	18th July 2017
	Video-conference with ARDD officials of West Bengal	Nabannya, Kolkata	17th Oct, 2017
Dr. Manoranjan Roy, Assistant Professor	2nd International Seminar on Veterinary Ayurveda	WBUAFS, Belgachia, Kolkata-37	1st December, 2016
	National Symposium on "Recent trends in agriculture and allied sciences for better tomorrow (NSRTAS-2016)"	ViswaBharati, Sriniketan, Bhirbhum, West Bengal.	4th December, 2016
	National symposium on "Enhancement of livelihood security through sustainable development of livestock and fishery sector"	WBUAFS, Belgachia, Kolkata-37.	10th-11th January, 2017
	National seminar on "Challenges in quantitative genetics for improvement of Indigenous Animal Genetic Resources (AnGR)"	ICAR-IVRI, Izatnagar-243122, UP.	19th-20th January, 2017
	National symposium on "Biodynamic animal farming for the management of livestock diversity under changing global scenario"	College of Veterinary and Animal Sciences, Kerala Veterinary and Animal Sciences University, Mannuthy-680 651.	8th-10th February, 2017
	National seminar on "Improvement of small ruminant production system for livelihood security"	ICAR-CSWRI, Avikanagar, Rajasthan-304501.	9th -10th March, 2017
	Live phone in programme "Krishidarshan" on Govt. schemes for commercial livestock and poultry farming	DDK, Kolkata	11th Oct, 2017



	Video-conference with ARDD officials of West Bengal	Nabannya, Kolkata	17th Oct, 2017
	National Symposium on “Use of Reproductive Technologies and Production Improvement in Livestock Species Aiming to Socioeconomic Development of Rural Mass” organized by The Indian Society for Study in Animal Reproduction, West Bengal Chapter	ARDD, Govt. of West Bengal and WBUAFS, Belgachia, Kolkata-700037.	9th-11th Feb, 2018
<b>Dr. UttamSarkar, Assistant Professor</b>	2nd International Seminar on Veterinary Ayurveda	WBUAFS, Belgachia, Kolkata-37	1st December, 2016
	National Symposium on “Recent trends in agriculture and allied sciences for better tomorrow (NSRTAS-2016)”	ViswaBharati, Sriniketan, Bhirbhum, West Bengal.	4th December, 2016
	National seminar on “Challenges in quantitative genetics for improvement of Indigenous Animal Genetic Resources (AnGR)”	ICAR-IVRI, Izatnagar-243122, UP.	19th-20th January, 2017
	National Symposium on “Enhancement of Livelihood Security Through Sustainable Development of Livestock and Fishery Sector”	WBUAFS, Belgachia	10th-11th January, 2017
	Orientation Programme	UGC-HRD Centre Jadavpur University, Saltlake, Kolkata	6th February - 4th March, 2017
	Invited speaker: ICAR sponsored 10 days short course on “Conservation of indigenous breeds of small ruminants in their respective tracts”	WBUAFS, Belgachia	25th July 2017
	MOOC on Teaching Management organized by ICAR-NAARM	IASRI-Delhi	1st - 30th Nov, 2017
	National Symposium on “Use of Reproductive Technologies and Production Improvement in Livestock Species Aiming to Socioeconomic Development of Rural Mass” organized by The Indian Society for Study in Animal Reproduction, West Bengal Chapter	ARDD, Govt. of West Bengal and WBUAFS, Belgachia, Kolkata-700037.	9th - 11th Feb, 2018
<b>Dr. SanjoyDatta, Assistant Professor</b>	2nd International Seminar on Veterinary Ayurveda	WBUAFS, Belgachia, Kolkata-37	1st December, 2016
	National Symposium on “Recent trends in agriculture and allied sciences for better tomorrow (NSRTAS-2016)”	ViswaBharati, Sriniketan, Bhirbhum, West Bengal.	4th December, 2016
	National Symposium on “Enhancement of Livelihood Security Through Sustainable Development of Livestock and Fishery Sector”	WBUAFS, Belgachia	10th-11th Jan., 2017
	Workshop on “Drug Development and Safety Issues-Current Scenario”	WBUAFS, Belgachia	23rd Feb., 2017
	Participated as expert in “Krishidarshan” programme on “ParibarikmuktangonpaddhatiteMurgiPal on”	DDK, Kolkata	13th July, 2017
	ICAR sponsored 10 days short course on “Conservation of indigenous breeds of small ruminants in their respective tracts” as participant	WBUAFS, Belgachia	18th July 2017 to 27th July 2017



	Domain skill & platform skill training under ASCI	WBUAFS, Belgachia	29th August, 2017
	MOOC on Teaching Management organized by ICAR-NAARM		1st-30th Nov, 2017
	2nd Regional Science & Technology Congress, 2017	University of Kalyani, West Bengal	14th- 15th December, 2017
	National symposium on Role of Veterinarian in improving food safety through “One world-One health and One medicine” approach in India	WBUAFS, Belgachia	10th January, 2018
	National Symposium on “Use of Reproductive Technologies and Production Improvement in Livestock Species Aiming to Socioeconomic Development of Rural Mass” organized by The Indian Society for Study in Animal Reproduction, West Bengal Chapter	ARDD, Govt. of West Bengal and WBUAFS, Belgachia	9th-11th Feb, 2018
<b>Dr. Ananta Kumar Das, Assistant Professor</b>	National Symposium on “Enhancement of Livelihood Security Through Sustainable Development of Livestock and Fishery Sector”	WBUAFS, Belgachia	10th-11th Jan., 2017
	National seminar on “Challenges in quantitative genetics for improvement of Indigenous Animal Genetic Resources (AnGR)”	ICAR-IVRI, Izatnagar-243122, UP.	19th -20th January, 2017
<b>Dr. Guru Prasad Mandal, Associate Professor</b>	National conference on “One health: Approaches towards practice and future challenges”	CKV, Durg	2nd-3rd December, 2016
	Workshop on: “Drug development and safety issues-current scenario”	WBUAFS, Kolkata	23rd February, 2017
<b>Dr. Amlan Kumar Patra, Assistant Professor</b>	2nd International Seminar on Veterinary Ayurveda (a part of 7th World Ayurveda Congress & AROGYA Expo.)	Kolkata	1st December, 2016
<b>Dr. Paresh Nath Chatterjee, Assistant Professor</b>	CAFT course on ‘Advances in Rumen Manipulation to Improve Livestock Productivity’	Centre for Advanced Faculty Training in Animal Nutrition, IVRI, Izatnagar	1st – 21st February, 2017
	24th West Bengal State Science & Technology Congress	Science City, Kolkata	28th February, 2017
	ELSVIER Authors’ Workshop	DST, Govt. of West Bengal	2nd December, 2016
	UGC Sponsored National Seminar on ‘Food Safety and Sustainable Nutrition in India : The Present Scenario	APC College, New Barrackpore	15th – 16th September, 2016
	1st Regional Science and Technology Congress	DST, Govt. of West Bengal	13th November, 2016
<b>Dr. Aruna Pal, Assistant Professor</b>	National seminar on Opportunities and Challenges of Translational Research in the Frontier Areas of Animal Biotechnology and V Annual Convention of SVSBT	OUAT, Bhubaneswar	22nd- 23rd September, 2017
	National Seminar on Food Security and sustainable nutrition in India-the present scenario, 2016, organized by Department of Food and Nutrition	APC College, West Bengal State University, Govt. of West Bengal at Kolkata,	15th-16th September, 2016



	Short term Training Course on Advances in Livestock Production, management Technologies,	ICAR-IVRI, ERS, Kolkata	23rd-30th November, 2016
	ICAR sponsored 10 days Short Course on "Conservation of indigenous breeds of small ruminants in their respective tracts",	DREF, WBUAFS	24th July, 2017 & 25th July, 2017
<b>Dr.Chittapriya Ghosh, Assistant Professor</b>	"Accommodation of livestock"	DREF, WBUAFS in collaboration with ASCI	19th to 21st December, 2016
	"Aprachalitokhadeyer Babaher"	DOORDARSHAN	11th April, 2017
	"Shitkalingobadipashurparicharcha"	DOORDARSHAN	13th February, 2018
	Advances in Livestock Production System including Poultry"	DDARD & PO, Nadia, Krishnanagar	5th-6th January, 2018
<b>Dr.M.C.Pakhira, Assistant Professor</b>	"Dairy feed and feed preparation including water requirement"	DREF, WBUAFS in collaboration with ASCI	19th-21st December, 2016
	"Murgirrog -o-tar protikar"	DOORDARSHAN	28th November, 2017
<b>Dulal Ch. Roy, Assistant Professor</b>	National Symposium on Recent trends in agriculture and allied sciences for better tomorrow- Institute of Agriculture, Visva-Bharati, Sriniketan and The Society of Bio-resource, Environment and Agricultural Research	Shantiniketan, West Bengal	4th December, 2016
	National Conference on Environmental pollution, Biodiversity conservation and climate change: Issues and Challenges, - organized by Dept. of Environmental Sciences and Dept. of Zoology, Nistarini College, Purulia & Scientific and Environmental Research Institute, Kolkata	Nistarini College, Purulia	8th-9th September, 2017
	National Seminar on 'Agri-chemical for benign environment' organized by Society for Fertilizer and Environment and BCKV	Academy and Convention Centre, BCKV Kalyani	29th March, 2018
<b>Dr S.Bera, Assistant Professor</b>	Outdoor shooting for Krishidarsan Programme (As expert)	Gosaba, South 24 Parganas	29th-30th June, 2016
	Farmers Training under RKVY project (As expert)	Lodhasuli, Jhargram	13th-14th August, 2016
	Lecture on "Organic poultry & Duckery production" (As expert)	RRC, CIFA-Kalyani	21st October, 2016
	Lecture on "Organic poultry production" (As expert)	RRC, CIFA-Kalyani	27th November, 2016
	Lecture on "Milking Process" (As expert)	DREF, WBUAFS	19th December, 2016
	Farmers Training under AICRP project (As expert)	Mohanpur Campus, WBUAFS	4th-5th January, 2017



	Lecture on “Integrated Livestock Farming” (As expert)	FACC, BCKV, Kalyani	25th January, 2017
	Farmers Training under AICRP project (As expert)	Lodhasuli, Jhargram	28th-29th January, 2017
	NABARD sponsored training programme (As expert)	SasyaShyamala KVK	17th February, 2017
	Participation & Presentation of paper at International Conference on “Bio-resource, environment and agricultural sciences (ICBEAS)”	Institute of Agriculture, VisvaBharati	4th-6th February, 2017
	Farmers Training under AICRP project (As expert)	Mursidabad KVK	18th -19th February, 2017
	Farmers Training under AICRP project (As expert)	Rangabelia, Gosaba	25th-26th February, 2017
	Prospects & Constraints of Duck Farming in West Bengal (As expert)- Live Phone in Programme	PrasarBharti, Doordarshan Kendra, Kolkata	28th February, 2017
	Farmers Training Programme organized by Project under TSP (As expert)	Mohanpur Campus, WBUAFS	15th-16th March, 2017
	Farmers Training Programme organized by Project under TSP (As expert)	Lodhasuli, Jhargram	18th-19th March, 2017
	Farmers Training under RKVY project (As expert)	Lodhasuli, Jhargram	18th-19th March, 2017
	Farmers Training Programme organized by Project under TSP (As expert)	Purbasthali-I, East Bardwan	21st –22nd March, 2017
	Farmers Training Programme organized by Project under TSP (As expert)	Bali-I, Gosaba, South 24 Parganas	24th–25th March, 2017
	ICAR Sponsored 10 days Short Course on “Conservation of indigenous breeds of small ruminants in their respective tracts” (As expert)	DREF, WBUAFS	24th July, 2017
	Lecture in a workshop on “Interdependance between Agro-Biodiversity & Animal Resources ” (As expert)	IBRAD Campus, V.I.P. Road Kestopur, Kolkata	6th September, 2017
	NABARD sponsored training program on ‘Piggery Management’ (As expert)	SasyaShyamala KVK, Narendrapur	22nd September, 2017
	Training under project entitled “New dimension in agricultural marketing and rural employment generation through value added duck meat products” (As expert)	Nimpith KVK, South 24 parganas	16th October, 2017
	Workshop on “Backyard poultry farming: Important source of livelihood in Sundarban area” (As expert)	Bali Island, Gosaba, South 24 parganas	18th October, 2017
	Agricultural Training for Women Farmers on “Integrated Landscape Development” (As expert)	IBRAD Campus, Kolkata	2nd November, 2017
	Guest speaker in Short Term Training Course on “Advances in Livestock Production Management Technologies” (As expert)	ERS, IVRI, Kolkata	28th November, 2017
	Participation & Presentation of paper at Regional Science & Technology Congress (Southern Region)	Kalyani University	14th–15th December, 2017
	Farmers Training Programme organized by Project under TSP (As expert)	DREF, WBUAFS, Kolkata	23rd March, 2018
Dr. S. Pan, Professor	Lecture on “Establishment of small scale dairy unit”	NRC on Mithun, Nagaland	30th October, 2017



Dr. N.Ghosh, Professor	Lecture on “Livestock rearing in livelihood development” in a seminar organized by SBI Officer’s Association (Bengal Circle)	BCKV, Kalyani, Nadia	13th December, 2017
Prof. S. Biswas, Professor	International Symposium and 7th - Conference of Indian Meat Science Association New Horizons for Augmenting Meat Production and Processing to Ensure Nutritional Security, Food Safety and Environmental Sustainability	GADVASU, Ludhiana	10th – 12th Nov., 2016
Dr.GopalPatra, Assistant Professor & Head	Techniques for assessment of quality and safety of meat products through species identification and detection of chemical residues and microbial contaminants	NRC on Meat, Hyderabad	3rd – 12th January, 2017
	The 7th world Ayurveda congress (Veterinary Ayurveda)	W.B VCI, Belgachia	1st December, 2016
	Drug development and safety issues- current scenario	Deptt. of Vety. Pharmacology & Toxicology, Kolkata	23rd February, 2017
	2nd Regional Science and Technology Congress	Kalyani University, Nadia	14th -15th December, 2017
Dr. Debasish Bhattacharyya, Assistant Professor	The 7th world Ayurveda congress (Veterinary Ayurveda)	W.B VCI, Belgachia	1st December, 2016
Prof. S.Ray, Professor  Prof. P. Das, Professor  Dr. A. K. Mandal, Associate Professor  Dr. N.K. Tudu, Assistant Professor	32nd Annual Convention of National Symposium on Advances and Application of Veterinary Anatomy in livestock, pet, poultry, Lab animal and Wild Life – Health and production	OUAT, Bhubneswar	21st – 23rd December, 2017
Dr. S. Batabyal, Professor  Dr. A. Maity, Associate Professor	Workshop on “Drug development and safety issues – current scenario”	WBUAFS , Kolkata -700037	23rd February, 2017
Dr. S. Batabyal, Professor  Dr. A. Maity, Associate Professor	2nd International Seminar on Veterinary Ayurveda (7th World Ayurveda Congress & Arogya Expo, Foal Theme : Strengthening the Ayurveda Ecosystem)	WBUAFS , Kolkata -700037	1st December, 2016
Dr. S Batabyal, Associate Professor  Dr.S.Chattopadhyay, Reader(Reemployed)  Dr. A. Maity, Associate Professor	XLVIIth Reunion of Past and Present students of Bengal Veterinary College, BCKV and WBUAFS	WBUAFS, Kolkata -37	10th-11th January, 2017
Dr M.Mondal, Associate Professor	Veterinary Pathology Congress (2016)	College of Veterinary Science & AH, CGKV, Durg, Chhattisgarh	9th- 11th November , 2016
Dr. Chanchal Guha, Professor	XXXVI Annual Convention of Indian Society for Veterinary Medicine and	College of Veterinary Sc. and	1st– 3rd February, 2018



	National Symposium on “Animal Health Service Delivery- The Priorities of the Professionals for Enhancing Farmers’ Income”	Animal Husbandry, OUAT, Bhubaneswar	
Prof. Siddhartha Basu, Professor	7th World Ayurveda Congress & Arogya Expo	Science City, Kolkata	1st – 4th December, 2016
	National Symposium on Role of Veterinarian in improving food safety through “One world-One Health and one Medicine” approach in India	WBUAFS	10th January, 2018
	The Indian Society For Study Of Animal Reproduction XXXIII Annual Convention And National Symposium	WBUAFS	9th-11th February, 2018
Prof. Kalyani Ray, Professor	7th World Ayurveda Congress & Arogya Expo	Science City, Kolkata	1st – 4th December, 2016
	National Symposium on ‘Enhancement of Livelihood Security through Sustainable Development of Livestock and Fishery Sector’	WBUAFS	10th - 11th January, 2017
	A scientific seminar on the occasion of 5th commemoration of late Animesh Kumar Chakraborty	WBUAFS	21st February, 2017
	National Symposium on Role of Veterinarian in improving food safety through “One world-One Health and one Medicine” approach in India	WBUAFS	10th January, 2018
	The Indian Society For Study Of Animal Reproduction XXXIII Annual Convention And National Symposium	WBUAFS	9th - 11th February, 2018
	The Indian Society For Study Of Animal Reproduction XXXIII Annual Convention And National Symposium	WBUAFS	9th - 11th February, 2018
Dr. Pradip Sarkar, Assistant Professor	The Indian Society For Study Of Animal Reproduction XXXIII Annual Convention And National Symposium	WBUAFS	9th - 11th February, 2018
Dr. Durgadas Mandal, Assistant Professor	The Indian Society For Study Of Animal Reproduction XXXIII Annual Convention And National Symposium	WBUAFS	9th - 11th February, 2018
Prof. Chandan Lodh, Professor	Emerging issues, innovative Techniques and comprehensive overview of Research Development in Canine Practice.	Department of Veterinary Medicine NTR College of Veterinary Science, Gannavaram-521102	7th – 9th February, 2018
Dr. Indranil Samanta, Assistant Professor	Invited speaker on ‘Disease prevention practices’ at Veterinary Officer training programme	Regional Director, Animal Husbandry, Chittonagpur range, Ranchi, Jharkhand	6th March, 2017
	Invited speaker on ‘Dengue awareness’	South Dum Dum Municipality	20th May, 2017
	Invited Lecture on ‘Update on diagnosis of Rabies in animals’ in Veterinary Officer’s training programme entitled ‘Laboratory Diagnosis of Animal Diseases and Zoonoses’	Eastern Regional Station, Indian Veterinary Research Institute, Kolkata	14th September, 2017
	Invited lecture on ‘Emerging disease of poultry and livestock’ at Veterinary Officer training programme (ASCAD)	Deputy Director, ARD & PO, South 24 Parganas, Government of West Bengal	6th January, 2018
	Invited lecture on ‘Integrated role of environment, livestock and agriculture in	Institute of Post graduate medical	21st February, 2018



	Antimicrobial resistance'	education and research, Kolkata jointly organized by London School of Hygienec and Tropical Medicine and IPGMER	
Dr. S. N. Joardar, Professor	International level Seminar on Recent Trends in Microbiology. Org. by Department of Microbiology, Ramkrishna Mission Vidyamandira	Belur Math, Howrah	14thJanuary, 2017
	International level Seminar on Multidisciplinary Research org. by BijaygarhJyotish Ray College, Kolkata	Bijoygarh, Kolkata	29thJanuary, 2018
Dr. S. Pradhan, Assistant Professor	Winter School on "Recent Advances in Development of Recombinant vaccines for veterinary use"	Division of Veterinary Biotechnology, ICAR-IVRI, U.P.	8th-28thNovember , 2016
	Participated in 12th conference of Association of Public Health Veterinarians and National Symposium on "One Health:Approaches towards Practice and Future Challenges"	Department of Veterinary Medicine, College of Veterinary Science and AH, Durg	2nd - 3rd December,2016
	Participated in National Symposium on "Enhancement of Livelihood Security through sustainable Development of Livestock and Fishery Sector"	WBUAFS,Kolkata	10th-11th January, 2017
Dr.S.K. Mukhopadhyay, Professor	Veterinary Pathology Congress- 2016 XXXIII Annual Conference of Indian Association of Veterinary Pathologists & VII Annual Meeting of Indian College of Veterinary Pathologist National symposium on "Innovative approaches for Diagnosis and Control of Emerging and Re-emerging Diseases of Livestock, Poultry and Fish"	Dept. of Pathology, NTR College of Veterinary Science & IAVP, Gannavaram, A.P	9th-11th November, 2016
Dr.S.K. Mukhopadhyay, Professor Dr R.N Hansda, Assistant Professor	Regional Conference on "Occupational Health and CME Programme"	Regional Occupational Health Centre (Eastern), ICMR, Saltlake City, Kolkata	26th November,2016
Dr.S.K. Mukhopadhyay, Professor Dr R.N Hansda, Assistant Professor DrN.C.Patra, Assistant Professor Dr. SamiranMondal, Assistant Professor	Workshop on " <b>Veterinary Ayurveda</b> " The 7th World Ayurveda Congress	W.B.U.A.F.S. Kolkata-37	1stDecember,2016
Dr R.N. Hansda, Assistant Professor	International seminar on "Recent Trends in Microbiology"	Department of Microbiology, Ramakrishna Mission Vidyamandira, Belur Math, Howrah-711202	14th January, 2017
Dr R.N Hansda, Assistant Professor	Scientific Seminar on " The occation of 5th Commemoration on Late Animesh Kumar Chakraborty"	Department of Pharmacology & Toxicology,	21st February, 2017



		W.B.U.A.F.S. Kolkata-37	
Dr.S.K. Mukhopadhyay, Professor Dr. S. Pradhan, Assistant Professor Dr R.N. Hansda, Assistant Professor Dr. N.C.Patra, Assistant Professor Dr. SamiranMondal, Assistant Professor	Workshop on “ Drug Development and Safety Issues-Current Scenario”	Department of Pharmacology & Toxicology, W.B.U.A.F.S. Kolkata-37	23rd February, 2017
Dr R.N Hansda, Assistant Professor	Continuing education programme on “ Ethics in Human Health Research and Good Clinical Practice”	WBUAFS Kolkata-37	17th March, 2017
Dr. S.Pradhan Dr.R.N.Hansda Dr.S.Mondal Dr.N.C.Patra Assistant Professors Prof. S.K.Mukhopadhyay, Professor	Participated in XXXIII Annual convention & National symposium of ISSAR	WBVC Auditorium, West Bengal	9th-11th February,2018
Dr. S.Pradhan Dr.R.N.Hansda Dr.S.Mondal Assistant Professors	Pre Conference Symposium “ The 27th annual Conference of IPS, WB on “Use of animal in bio-medical research & ethical issues involved”.	WBUAFS,Kolkata	8th February, 2018
Prof.S.K.Mukhopadhyay, Professor	Veterinary Pathology Congress- 2017 XXXIV Annual Conference of Indian Association of Veterinary Pathologists & VIII Annual Meeting of Indian College of Veterinary Pathologist	Deptt. of Pathology, College of Veterinary Science & IAVP, Bangalore, Karnataka	9th-11th November, 2017
Prof.S.K.Mukhopadhyay, Professor Dr R.N Hansda DrN.C.Patra Dr. SamiranMondal, Assistant Professors	Participated in XXXIII Annual convention & National symposium of ISSAR	WBVC Auditorium, West Bengal	9th-11th February,2018
DrN.C.Patra Dr. SamiranMondal Assistant Professors	Workshop on “ Increase Teaching Effectiveness”	W.B.U.A.F.S. Kolkata-37	24th-25th March, 2018
Dr. T.K. Sar, Assistant Professor (Senior)	7th World Ayurveda Congress and AROGYA Expo	Science City, Kolkata	1st-4th December, 2016
	Invited to deliver a lecture in the 47th Reunion of Past and Present students of Bengal Veterinary College, Veterinary and Animal Science, WBUAFS	WBUAFS, Kolkata	10th-11th January, 2017
	Invited to deliver a lecture in the National conference of Society of Animal Physiologists of India	Bidar Veterinary College, Karnataka	20th-21st December, 2017
	Invited by the Organizing Secretary to be present at the 27th Annual State Conference of Indian Pharmacological Society, West Bengal branch	IPGMER, Kolkata	9th-10th February, 2018
Prof. T.K. Mandal, Professor	Invited to deliver a lecture on “Pharmacokinetic interaction between ceftriaxone and sulbactam in renal failure goats”	PGIMER, Chandigarh	21st October, 2016



	Invited by Organizing Secretary of Tripura Veterinary College to deliver a lecture in World Veterinary Day on "Antimicrobial resistance awareness"	Agartala, Tripura	29th April, 2017
	Invited to deliver a lecture on "Arsenic toxicity" in the Workshop	Bidhan Chandra KrishiViswavidyalaya, Nadia	12th May, 2017
	Invited to deliver a lecture about Arsenic toxicity and chemotherapy for ASCAD	Narendrapur, Kolkata	5th – 6th January, 2018
	Invited in the 1st Farmers' Innovation Congress	Bidhan Chandra KrishiViswavidyalaya, Mohanpur, Nadia	12th January, 2018
	Invited by the Organizing Secretary to Chair a Scientific Session of the 27th Annual State Conference of Indian Pharmacological Society, West Bengal branch	IPGMER, Kolkata	10th February, 2018
<b>Prof. Pradip Kumar Das, Professor</b>	Invited Speaker on Refresher Course for the Veterinary Officers of India on Advances in Animal Husbandry Practices	ICAR-IVRI (ERS), Kolkata	November, 2016
	Invited Speaker on Refresher Course for the Veterinary Officers of India on Animal Husbandry Practices	ICAR-IVRI (ERS), Kolkata	November, 2017
<b>Dr. Joydip Mukherjee, Assistant Professor</b>	Invited Speaker on Refresher and Hands on Training Course on Advanced Diagnostics Imaging in Veterinary Practices	DREF section, WBUAFS	4th-8th December, 2017
<b>Dr. Dipak Banerjee, Assistant Professor</b>	Invited Speaker on Refresher and Hands on Training Course on Advanced Diagnostics Imaging in Veterinary Practices	DREF section, WBUAFS	4th-8th December, 2017
<b>Dr. Chanchal Debnath Associate Professor</b>	Invited speaker and practical demonstrator on the topic "Isolation And Identification Of Zoonotic Dermatophytes From Man And Animals"	Short term training course on "Laboratory Diagnosis of Animal Diseases and Zoonoses" organized by Dr. SC Das, Principal Scientist and Course Coordinator, IVRI, ERS, Kolkata-37.	7th September, 2016
	Guest speaker on "Management Of Biological Risks From Companion Animals: A Practical Approach"	Three Days Residential Workshop on Common Diseases and Their Management with Reference to ABC Programme in Pet Organised by West Bengal Veterinary Council in collaboration with F/O- VAS, WBUAFS and The Directorate of A.R. & A.H., West Bengal.	26th September, 2016
	Invited speaker on "Slaughter House Practices And Zoonotic Diseases"	One day symposium organized by the Directorate of	4th March, 2017



		Animal Husbandry, Ranchi, Jharkhand.	
	Invited speaker on “Important Zoonotic Diseases And Their Control Measures”	Training programme on “Control & Prevention of Livestock Diseases of Economic Importance” for VOs working under MVCs in West Bengal, Co-organized by RDEF, WBUAFS and MANAGE, Hyderabad from 15th to 19th Jan, 2018 at Farmers’ Hostel, Belgachia, Kolkata-37.	17th January, 2018
	Invited speaker on “Control Of Mosquito Borne Diseases”	One day Public Awareness Programme organized by Maslandapur Vigyan Chetana Mancha on 04/03/2018 at Maslandapur, North 24 Parganas, West Bengal.	4th March, 2018
<b>Samit Kumar Nandi Professor</b>	Invited Lecture on “Towards application of natural resources in wound and bone healing” Workshop on “Biomedical Implants for Orthopaedics: Leveraging Efficacy through Alliance Programs (BIO-LEAP 2016)”	CSIR-CGCRI, Kolkata	21st – 22nd April, 2016.
	Invited Speaker on “Advances in surgical approaches in the field of veterinary sciences” on the Seminar of Veterinarians at Baharampur, in	Animal Resources Development Department, Murshidabad District, Government of West Bengal.	2016
	Invited Lecture on “Silk and xenocartilage based matrices for hard and soft tissue engineering applications” The Second Annual convention of Society of Veterinary Biochemists and Biotechnologists of India (SVBBI) and National Symposium on “Innovative and Emerging Biochemical and Biotechnological Tools to augment Animal Health and Production” during	Department of Veterinary Biochemistry, Veterinary College, Hebbal, Bengaluru.	2nd-3rd June, 2017
	Lead Paper on “Development of Biomaterials in bone and Cartilage tissue Engineering” The 41st Annual Congress of Indian Society for Veterinary Surgery, 2017	College of Veterinary Science, Tirupati during	14th-16th December, 2017
	Invited lecture on “Development of Animal models for biomedical research” at Workshop on Animal Care, Handling	Department of Zoology, University of Kalyani, Kalyani	23rd-31st March, 2018



	and Management	Nadia-741235, West Bengal	
<b>Prof.Sarbani Hazra, Professor</b>	CPCSEA workshop as Nominee	New Delhi	2016
<b>Dr. Asit Kumar Maji, Assistant Professor</b>	Lead Paper in ISACP Canine Congress in Pookode,Kerala	College of Veterinary Science, KAFSU	April, 2016
	Co-Chairman in Rabies Conference of APCRI	NIMHANS,Bangalore	July, 2016
	Lead Paper in ISACP Canine Congress in Pookode,Kerala	Vet.College, Gannavaram	February, 2017
	Co- Chairman, Avian Surgery SessionThe 41st Annual Congress of Indian Society for Veterinary Surgery, 2017	College of Veterinary Science, Tirupati during	14-16th December, 2017
<b>Prof. A.Goswami, Professor</b>	Delivered lecture on “Extension approaches for adoption of new technologies among the farming community” in the training programme entitled “Strengthening of Production Systems for sustainable Animal Husbandry and Fishery Farming Practices”	DREF, WBUAFS, Kolkata	4th - 6th January, 2017
	Delivered lecture on “” in the training programme entitled “Food and Nutritional Security of the Rural Household : Role of KVK”	DREF, WBUAFS, Kolkata	25th - 27th January, 2017
	Delivered lecture on “Extension approaches for adoption of new technologies among the farming community for promotion of organic farming” in the training programme entitled “Recent development in Organic Farming for Sustainable Agriculture and its allied sectors”	DREF, WBUAFS, Kolkata	27th February – 1st March, 2017
	Delivered lecture in the training programme entitled “Effective Extension Methodology in Dissemination of Technology through KVK system”	DREF, WBUAFS, Kolkata	13th – 15th September, 2017
	Delivered lecture on “Extension approaches for adoption of new technologies among the farming community for organic farming” in the training programme entitled “Integrated Farming : Adopting Organic Farming Practices”	DREF, WBUAFS, Kolkata	19th – 21stMarch, 2018
<b>Dr. SanjoyDatta, Assistant Professor</b>	Pre-conference workshop of 27th Annual Conference Indian Pharmacological Society, West Bengal & Eastern Regional Colloquium	Deptt. OfVety. Pharmacology and Toxicology, WBUAFS, Mohanpur.	8 August, 2018 1 day
	International Symposium and 8th Conference of Indian Meat Science Association	Belgachia campus, WBUAFS, Kolkata	22-24 November, 2018 3 days
	XXVI Annual Conference of IAAVR and National Symposium	Belgachia campus, WBUAFS, Kolkata	1–2February, 2019 2 days
<b>Dr. UttamSarkar, Assistant Professor</b>	CAFT on Tools for genetic improvement of Animal Welfare and Productivity	DCB Division, NDRI, Karnal	25 February - 17 March, 2019
<b>Dr. SanjoyDatta,</b>			



Assistant Professor			21 days
Dr. G.P. Mandal, Associate Professor Dr. P.N. Chatterjee, Assistant Professor	XI Biennial ANA Conference	BASU, Patna	19-21 November, 2018 3 days
Prof. B. Roy, Professor Dr. G.P. Mandal, Associate Professor Dr. P.N. Chatterjee, Assistant Professor Dr. A.K.Patra, Assistant Professor Dr. S. Soren, Assistant Professor	International Symposium & 8th conference of Indian Meat Science Association (IMSACON-VIII)	Belgachia campus, WBUAFS, Kolkata	22-24 November, 2018 3 days
	19th Indian Veterinary Congress(IVC) XXVI Annual Conference of IAAVR	Belgachia campus, WBUAFS, Kolkata	1-2 February, 2019 2 days
Dr. Pares Nath Chatterjee, Assistant Professor	26th West Bengal Science and Technology Congress	Science City, Govt. of West Bengal	28 February - 1 March, 2019 2 days
Dr.Chittapriya Ghosh, Assistant Professor	Pre-conference workshop of 27th Annual Conference Indian Pharmacological Society, West Bengal & Eastern Regional Colloquium	Deptt. ofVety. Pharmacology and Toxicology, WBUAFS, Mohanpur.	8 August, 2018  1 day
	ICAR Sponsored Winter School on “Nutritional Strategies to Enhance Livestock Productivity and Farm Economy”.	Animal Nutrition Division, ICAR- NDRI, Karnal	5-25 September, 2018 21 days
	XXVI Annual Conference of IAAVR and National Symposium		
Dr.M. C. Pakhira, Assistant Professor	International Symposium & 8th conference of Indian Meat Science Association (IMSACON-VIII)	Belgachia campus, WBUAFS, Kolkata	22-24 November, 2018 3 days
	“Importance of veterinary, dairy and fishery education in the economic scenario of the country”	Belgachia campus, WBUAFS, Kolkata	2 January, 2019 1 day
Dr.Chittapriya Ghosh, Assistant Professor  Dr. M.C. Pakhira, Assistant Professor	19th Indian Veterinary Congress & XXVI Annual Conference of IAAVR on “ Innovative Progress in Animal health and production for safe and secured food under one health perspective”	Belgachia campus, WBUAFS, Kolkata	1-2 February, 2019 2 days
Dr S. Bera, Assistant Professor	CAFT training programme on “Acclimation and adaptation of high altitude livestock in changing climate scenario”	IVRI, Izatnagar	1– 21 June, 2018 21 days
	Lecture on “Integrated farming-Livestock Management”	IBRAD, Kolkata	23 July, 2018 1 day
	Lecture on “Management of Sheep & Goat”	Farmer’s Hostel, WBUAFS	27 August, 2018 1 day
	Lecture on “UnnataPaddhatite Hans MurgiPalan”	FACC, BCKV	19 November, 2018 1 day
	Participation & Poster presentation in International Symposium on ‘Technological Innovations in Muscle Food Processing for Nutritional Security, Quality andSafety’& 8th Conference of at IMSACON-VIII	WBUAFS, Kolkata	22-24 November, 2018 3 days



	Health camp cum goat exhibition and goat training under AICRP-G	Rangabelia, South 24 Pgs	7-8 December, 2018 2 days
	An expert in Grassroots Field Exposure Initiatives (GFES) (Indo-UK collaborative programme)	Gosaba, Sundarban	10 December, 2018 1 day
	Lecture on "Management & common diseases of goat" (As expert)	ATC, R K Mission Ashram, Narendrapur	12 December, 2018 1 day
	Paper presentation at 3rd Regional Science & Technology Congress (Southern Region)	Bidhannagar College, Salt Lake	18-19 December, 2018 2 days
	Lecture on "Piggery Development as a business venture" (As expert)	ATC, R K Mission Ashram, Narendrapur	29 December, 2018 1 day
	Farmers Training under Biotech Kisan Hub (As expert)	WBUAFS, Kolkata	9 January, 2019 1 day
	Participation & Oral presentation in the 19th IVC, XXVI Annual Conference of IAAVR & National Symposium on 'Innovative Progress in Animal Health and Production for Safe and Secured Food under one health perspective'	WBUAFS, Kolkata	1-2 February, 2019 2 days
<b>Prof. R.Samanta, Professor Prof.N.Ghosh, Professor</b>	Participation in International Symposium on 'Technological Innovations in Muscle Food Processing for Nutritional Security, Quality and Safety' & 8th Conference of at IMSACON-VIII	WBUAFS, Kolkata	22-24 November, 2018 3 days
	Participation in the 19th IVC, XXVI Annual Conference of IAAVR & National Symposium on 'Innovative Progress in Animal Health and Production for Safe and Secured Food under one health perspective'	WBUAFS, Kolkata	1-2 February, 2019 2 days
<b>Prof. S. Biswas, Professor &amp; Head</b>	Innovation in livestock sector in doubling farmers income..... Meat value chain, ICAR 21 days summer school training	NRC on Meat, Hyderabad	30 July, 2018 1 day
	Participation & Lead paper presentation in the 19th IVC, XXVI Annual Conference of IAAVR & National Symposium on 'Innovative Progress in Animal Health and Production for Safe and Secured Food under one health perspective'	WBUAFS, Kolkata	1-2 February, 2019 2 days
<b>Dr. Gopal Patra, Assistant Professor</b>	Lecture on "Sheep & Goat meat processing"	Farmer's Hostel, WBUAFS	30 August, 2018 1 day
	Lecture on "Sheep & Goat meat processing and value addition"	Ramkrishna Ashram KVK, Nimpith	27 September, 2018 1 day
	Lecture on "Sheep & Goat meat processing and value addition"	Farmer's Hostel, WBUAFS	31 October, 2018 1 day
	Paper presentation at 3rd Regional Science & Technology Congress (Southern Region)	Bidhannagar College, Salt Lake	18-19 December, 2018 2 days
	Participation & Oral presentation in the	WBUAFS, Kolkata	1-2 February,



	19th IVC, XXVI Annual Conference of IAAVR & National Symposium on 'Innovative Progress in Animal Health and Production for Safe and Secured Food under one health perspective'		2019 2 days
Prof. S. Biswas, Professor & Head Dr. Debasish Bhattacharyya, Assistant Professor Dr. Gopal Patra, Assistant Professor	Participation in International Symposium on 'Technological Innovations in Muscle Food Processing for Nutritional Security, Quality and Safety' & 8th Conference of IMSACON-VIII	WBUAFS, Kolkata	22-24 November, 2018 3 days
Dr. Debasish Bhattacharyya, Assistant Professor	Participation & Oral presentation in the 19th IVC, XXVI Annual Conference of IAAVR & National Symposium on 'Innovative Progress in Animal Health and Production for Safe and Secured Food under one health perspective'	WBUAFS, Kolkata	1-2 February, 2019 2 days
Prof. S. Ray, Professor  Prof. P. Das, Professor  Dr. A. K. Mandal, Associate Professor	International Symposium on 'Technological Innovations in Muscle Food Processing for Nutritional Security, Quality and Safety' & 8th Conference of IMSACON-VIII	WBUAFS, Kolkata	22-24 November, 2018 3 days
Prof. S. Ray, Professor  Prof. P. Das, Professor  Dr. A. K. Mandal, Associate Professor Dr. N.K. Tudu, Assistant Professor	19th IVC, XXVI Annual Conference of IAAVR & National Symposium on 'Innovative Progress in Animal Health and Production for Safe and Secured Food under one health perspective'	WBUAFS, Kolkata	1-2 February, 2019 2 days
Prof. S. Ray, Professor  Prof. P. Das, Professor	33rd National Symposium of Indian Association of Veterinary Anatomist	CVS & AH, CAU, Aizwal	28-30 November, 2018 3 days
Dr. N.K. Tudu, Assistant Professor	International Conference on Agriculture and Allied Sciences: The Productivity, Food Security and Ecology	BCKV, Kalyani	13-14 August, 2018 2 days
	ICAR-Winter School	DUVASU, Mathura, UP	14 November - 4 December, 2018 21 days
Dr. S. Batabyal, Professor & Head Dr. A. Maity, Associate Professor	<b>Third Convention of SVBBI and National Symposium on "Bridging Biochemical Interventions and Environmental Remediations for One Health Improvement"</b>	College of Veterinary and Animal Sciences, LUVAS, Hisar, Haryana	2-3 November, 2018 2 days
	International symposium & VIII-IMSACON-2018 on "Technological Innovations In Muscle Food Processing For Nutritional Security, Quality And Safety"	WBUAFS Kolkata	22-24 November, 2018 3 days
	19th Indian Veterinary Congress & XXVI Annual Conference of IAAVR	WBUAFS Kolkata	1-2 February, 2019 2 days
Dr. M Mondal,	International symposium & VIII-	WBUAFS	22-24



Associate Professor Dr. P. Mukherjee, Assistant Professor Dr. S.S. Kesh, Assistant Professor	IMSACON-2018 on “Technological Innovations In Muscle Food Processing For Nutritional Security, Quality And Safety”	Kolkata	November, 2018 3 days
Dr. M Mondal, Associate Professor P. Mukherjee, Assistant Professor Dr. S.S. Kesh, Assistant Professor Dr.S. Chaudhuri, Assistant Professor	19th Indian Veterinary Congress & XXVI Annual Conference of IAAVR	WBUAFS Kolkata	1-2 February, 2019 2 days
Dr. ParthaSarathi Jana, Assistant Professor	The Role of Veterinary Public Health in Improving Food Security & Safety through One Health Approach, XIII Biennial National Conference of APHV	College of Veterinary and Animal Scs., G.B. Pant University of Agri. And Tech., Pantnagar	30 November - 1 December, 2018 2 days
	Innovative Progress in Animal Health and Production for Safe and Secured Food under One Health Perspective, 19th Indian Veterinary congress and XXVI Annual Conference of IAAVR	WBUAFS, Kolkata	1-2 February, 2019 2 days
Dr. ChanchalGuha, Professor Dr. ParthaSarathi Jana, Assistant Professor	One Health India Conference, DBT, Ministry of Science & Technology	New Delhi	18-19 February, 2019 2 days
	Training on ‘Bovine Tuberculosis Diagnosis by Tuberculin Skin Testing’ under DBT on MyDAN	Deptt. of Public Health & Epidemiology, LUVAS, Hisar	20-21 February, 2019 2 days
Dr. ChanchalGuha, Professor Dr. UjjwalBiswas, Professor Dr. ParthaSarathi Jana, Assistant Professor	Importance of Veterinary, Dairy and Fishery education in the present economic scenario of the country, Seminar during 25th Foundation Day Celebration of WBUAFS	WBUAFS, Kolkata	2 January, 2019 1 day
Dr. ChanchalGuha, Professor	Holistic Approach in Veterinary Medicine for Better Animal Health to Meet Challenges of One Health Mission, 37th Annual Convention of ISVM	College of Veterinary and Animal Science, Bikaner RAJUVAS, Bikaner, Rajasthan	1-3 February, 2019 3 days
Prof. Siddhartha Basu, Professor  Prof. Kalyani Ray, Professor  Dr. Pradip Sarkar, Assistant Professor  Dr. Durgadas Mandal, Assistant Professor	Seminar on “ Importance of Veterinary , Dairy and Fishery education in the present economic scenario of the country”	WBUAFS, Kolkata	2 January, 2019 1 day
	19th IVC & xxvi Annual conference of IAAVR and symposium entitled “ Innovative progress in Animal Health and Production for safe and Secured Food Under One Health Perspective”	WBUAFS, Kolkata	1-2 February, 2019 2 days
	Second National Workshop of ICAR-BSMA Committee for Veterinary Clinical Subjects	Bombay Veterinary College	16-17 November, 2018 2 days
	Training on ‘ Current reproductive technologies vis-s-vis fertility	Dept. Vety. Gynaecology&	9-29 October, 2018



	augmentation in farm animals'	Obstetrics, G.A.D.V.A.S.U., Ludhiana, Punjab	21 days
<b>Dr.PradipSarkar, Assistant Professor</b>	Training on 'Molecular techniques in sheep reproduction'	ICAR- C.S.W.R.I., Avikanagar	14-23 May 2018 7 days
<b>Dr.DurgadasMandal, Assistant Professor</b>	International Symposium & Conference on "Technological innovations in muscle food processing for nutrition security, quality and safety'	WBUAFS, Kolkata	22-24 November, 2018 3 days
<b>Dr.Amit Kumar Saren Assistant Professor</b>	Conference of Indian Meat Science Association (IMSACON-VIII) and International Symposium	WBUAFS, Kolkata	22-24 November, 2018 3 days
	ICAR sponsored short course on "Laparoscope aided artificial insemination and embryo transfer in sheep	CSWRI, Avikanagar, Rajasthan	14-23 January, 2019 10 days
	Annual Conference of IAAVR and National Symposium	WBUAFS, Kolkata	1-2 February, 2019 2 days
<b>Dr.Amit Raj Gupta Associate Professor</b>	Importance of Veterinary, Fisheries and Dairy Education in the present Economic Scenario of the Country	WBUAFS, Kolkata	2 January, 2019 1 day
<b>Prof. ChandanLodh, Professor</b>	Sixteen Annual Convention of ISACP & National Symposium on exploring New Horizons in Canine Practice and Welfare	Khalsa College of Veterinary and Animal Sciences, Amritsar	26 – 28 February, 2019 3 days
<b>Dr. Indranil Samanta, Assistant Professor</b>	Television Talk Show for farmers on ' <i>BorshakalinMurgirrog O protikar</i> '	Doordarshan Kendra, Kolkata	10 July, 2018 1 day
	Invited lecture on 'Antimicrobial Resistance: role of Veterinarian' organized by Department of Veterinary Pharmacology and Toxicology, WBUAFS under the project "ICAR-Outreach programme on monitoring of drug residue"	WBUAFS	16 November, 2018 1 day
	Presented Lead paper in Antimicrobial Resistance session in 19th Indian Veterinary Congress and Annual Conference of IAAVR organized by WBUAFS and IAAVR.	WBUAFS	1-2 February, 2019 2 days
	Training programme for 'CPCSEA Nominees' organized by Committee for the purpose of control and supervision of experiments on animals (CPCSEA)	Ministry of Environment, Forest and climate change, Government of India, New Delhi	17-18 January, 2019 2 days
	One Health India Conference (2019) Organized by DBT, Government of India in SCOPE Complex, New Delhi, India	DBT, Government of India , New Delhi	18- 19February, 2019 2 days
	Training on 'Bovine Tuberculosis diagnosis by tuberculin skin testing'	LUVAS, Hissar	20-21 February, 2019 2 days
<b>Dr. S. N. Joardar, Professor</b>	17th Convocation of National Academy of Veterinary Sciences (I) and scientific seminar on Livestock sector towards one health food security and safety.	Orissa University of Agriculture and Technology (OUAT), Bhubaneswar, Odisha	19-20 December, 2018 2 days
<b>Dr. S. N. Joardar,</b>	Indian Society of Extension Education	WBUAFS	5-7 December,



Professor Dr. Indranil Samanta, Assistant Professor	National Seminar (2018) on 'Integrated farming system for enhancing farmer's income and nutritional security'		2018 2 days
Dr. K Batabyal, Assistant Professor	XIII Biennial National Conference of APHV and national Symposium on 'The role of veterinary public health in improving food security and safety through one health approach'.	CoVAS, GBPUAT, Pantnagar, Uttarakhand	30 November – 1 December, 2018 2 days
Dr. S. N. Joardar, Professor Dr. Indranil Samanta, Assistant Professor Dr. K Batabyal, Assistant Professor	International symposium & VIII-IMSACON-2018 on Technological Innovations In Muscle Food Processing For Nutritional Security, Quality And Safety.	WBUAFS, Belgachia, Kolkata	22-24 November, 2018 3 days
Dr. D.P. Isore, Assistant Professor Dr. S. Dey, Assistant Professor Dr. K Batabyal, Assistant Professor	Seminar on 'Importance of Veterinary, Dairy and Fishery education in the present economic scenario of the country'	WBUAFS, Belgachia, Kolkata	2 January, 2019 1 day
Dr. S. N. Joardar, Professor Dr. D.P. Isore, Assistant Professor Dr. S. Dey, Assistant Professor Dr. K Batabyal, Assistant Professor	19th Indian Veterinary Congress and XXVI annual conference of IAAVR and National symposium on 'Innovative Progress in Animal Health and Production for Safe and Secured Food Under One Health Perspective'	WBUAFS	1-2 February, 2019 2 days
Dr. S. Pradhan, Assistant Professor	"Technological Innovations in Muscle Food processing for Nutritional Security, Quality and Safety" and 8th Conference of IMSACON-VIII	WBUAFS, Kolkata	22-24 November, 2018 3 days
	Refresher Course Winter School on "Recent Advancement in Food and Bioprocess Technology"	Jadavpur University	2-22 January, 2019 21 days
Dr. S. Mondal Assistant Professor	Refresher Course Winter School on "Recent approaches in diagnostics pathology & oncology"	GADVASU	12 November – 2 December, 2018 21 days
Dr. S.K. Mukhopadhyay Professor Dr. N.C. Patra Assistant Professor Dr. R.N. Hansda Assistant Professor Dr. S. Mondal Assistant Professor	"Importance of Veterinary, Dairy and Fishery education in the present economic scenario of the country" and 25th Foundation Day Celebration of WBUAFS	WBUAFS, Kolkata	2 January, 2019 1 day
Dr. S.K. Mukhopadhyay Professor Dr. N.C. Patra Assistant Professor Dr. S. Pradhan Assistant Professor Dr. R.N. Hansda Assistant Professor Dr. S. Mondal	"Innovative Progress in animal Health and Production for Safe and Secured Food Under one Health Perspective" and 19th IVC & XXVI Annual Conference of IAAVR	WBUAFS, Kolkata	1-2 February, 2019 2 days



Assistant Professor			
Dr N.C. Patra Assistant Professor	Orientation Programme	Jadavpur University	6 February – 5 March, 2019 28 days
Prof. T.K. Mandal, Professor Dr. T.K. Sar, Assistant Professor	International symposium & 8th Conference of Indian Meat Science Association (IMSACON-VIII)	WBUAFS, Kolkata	22-24 November, 2018 3 days
Prof. T.K. Mandal, Professor	World Zoonosis Day	WBUAFS, Kolkata	6 July, 2019
	World Rabies Day	WBUAFS, Kolkata	27 September, 2019
Prof. Pradip Kumar Das, Professor Dr. PrabalRanjanGhosh, Associate Professor Dr. Kinsuk Das, Assistant Professor Dr Joydip Mukherjee Assistant Professor	Presented Lead Paper on the International Symposium on 'Technological Innovations in Muscle Food Processing for Nutritional Security, Quality and safety'	WBUAFS, Kolkata	22-24 November, 2018 3 days
	Presented Lead Paper on the National Symposium on 'Augmentation of Animal Productivity under Changing Socio- economic Scenario'	NDRI, Karnal	27-28 November, 2018 2 days
	Co-chaired a session of National Symposium on 'Innovative progress in animal health and production for safe and secured food under one health perspective'	WBUAFS, Kolkata	1-2 February, 2019 2 days
	Conducted the Quiz Competition for students on 'Poultry Development'	International Poultry Fair, 2019, Kolkata	19-21 February, 2019 2 days
	Invited Lecture in the plenary session of the National Seminar on 'Waste Management for Greener and Cleaner Environment'	University of Kalyani	25-26 March, 2019 2 days
	Participated and presented paper in the International Symposium on 'Technological Innovations in Muscle Food Processing for Nutritional Security, Quality and safety'	WBUAFS, Kolkata	22-24 November, 2018 3 days
	Participated and presented paper in the National Symposium on 'Augmentation of Animal Productivity under Changing Socio-economic Scenario'	NDRI, Karnal	27-28 November, 2018 2 days
	Participated and presented paper in a session of National Symposium on 'Innovative progress in animal health and production for safe and secured food under one health perspective'	WBUAFS, Kolkata	1-2 February, 2019 2 days
	Invited Lecture in the session 'Nano for Medicine' and a Session Chairperson at the 3rd International Conference on Nanomaterials: Synthesis, Characterization and Applications (ICN 2018)	Mahatma Gandhi University, Kerala.	11-13 May, 2018 3 days
	Attended Wellcome Trust UK/DBT India Alliance Science Communication Workshop	Indian National Science Academy, New Delhi	25-26 September, 201 8 2 days
	Resource Person in Farmers' Training Programme on 'Scientific rearing practices of Garole Sheep and Black Bengal Goat'	WBUAFS	12 November, 2018 1 day



	Resource Person in Refresher and Hands on Training Course on 'Advanced Diagnostics Imaging in Veterinary Practices'	WBUAFS	10-15 December, 2018 6 days
<b>Dr. Dipak Banerjee, Assistant Professor</b>	Expert in KrishiDarshan programme on DD Bangla on Duck Farming	PrasarBharati	9 October, 2018 1 day
	Presented oral presentation on the International Symposium on 'Technological Innovations in Muscle Food Processing for Nutritional Security, Quality and safety'	WBUAFS, Kolkata	22-24 November, 2018 3 days
	Presented poster on the National Symposium on 'Augmentation of Animal Productivity under Changing Socio-economic Scenario'	NDRI, Karnal	27-28 November, 2018 2 days
	Resource Person in hands on training on 'Refresher and Hands on Training Course on Advanced Diagnostics Imaging in Vety. Practice.'	WBUAFS	10-15 December, 2018 6 days
	Resource Person in Farmers' Training Programme on 'Preventive care of sheep and goat diseases.'	DREF, WBUAFS	8 January, 2019 1 day
	Participated as a member of organizer in the Quiz Competition for students on 'Poultry Development'	International Poultry Fair, 2019, Kolkata	19-21 February, 2019 2 days
<b>Dr. ChanchalDebnath Associate Professor</b>	Attended and presented paper on "Detection of Nitrate in Processed and Ready to Eat Meat Products in and Around Kolkata" in the International Symposium entitled Technological Innovations in Muscle Food Processing for Nutritional Security, Quality and Safety.	WBUAFS, Kolkata	22-24 November, 2018 3 days
	Acted as Chairman in a Technical Session in a National Symposium on Role of Veterinary Public Health in Improving Food Security and Safety Through One Health Approach	CoVAS, G.B. Pant University of Agri. & Tech., Pantnagar-263145, Uttarakhand	30 November – 1 December, 2018 2 days
	Participated and presented paper in the national symposium entitled 'Innovative Progress in Animal Health and Production for Safe and Secured Food Under One Health Perspective' in 19th Indian Veterinary Congress(IVC) and XXVI Annual Conference of Indian Association for the Advancement of Veterinary Research (IAAVR)	WBUAFS, Kolkata	1-2 February, 2019 2 days
<b>Samit Kumar Nandi Professor</b>	Presented paper & acted as Rapporteur, Session I. Livestock, poultry and fisheries resources: A way to livelihood by doubling farmers' income of International conference and IMSACON-VIII on "Technological Innovations in Muscle Food Processing for Nutritional Security, Quality and Safety"	WBUAFS, Kolkata	22-24 November, 2018 3 days
	Lead paper delivered at 19th Indian Veterinary Congress, XXVI Annual conference of IAAVR and National Symposium on "Innovative progress in	WBUAFS, Kolkata	1-2 February, 2019 2 days



	animal Health and production for safe and secure food under one health prospective”		
<b>Prof. Debaki Ghosh, Professor</b>	Lead paper presented in National Congress on canine practice	Khalsa College of Veterinary & Animal Sciences, Amritsar Punjab	26 – 28 February, 2019 3 days
<b>Prof. Sarbani Hazra, Professor</b>	Workshop on Ocular Infections at ARVO-INDIA	Hotel Taj Vedanta, Hyderabad	27 July, 2018
	ARVO-India, Indian eye research conference, 2018 LVPEI, Hyderabad	Hotel Taj Vedanta, Hyderabad	28-29 July 2018
<b>Dr. Asit Kumar Maji, Assistant Professor</b>	Oral Presentation “Advances in Diagnostic Imaging and Surgical Techniques in Farm and Companion Animals” and Co-Chairman in Radiology and Imaging Session.	NAU, Navsari, Gujarat	22 – 24 November, 2018 3 days
	APCRICON 2018 (Medico and Vets. Assoc) CME and Oral Presentation	Bardhaman Mahavir Med. College New Delhi,	6 – 7 July, 2018 3 days
<b>Dr. Aditya Pratap Acharya, Assistant Professor</b>	International Conference of Animal Nutrition, INCAN 2019	Kolkata	17-19 December, 2019 3 days
	Advances in management of Inland open-water ecosystem health	ICAR-CIFRI, Kolkatta	21st January - 10th February 2020 21 days
<b>Prof. A. K. Sahoo Dean &amp; Professor</b> <b>Dr. Manoranjan Roy Associate Professor</b>	International Conference on Animal Nutrition 2019 (INCAN 2019) on ‘Nutritional Strategies for Improving Farm Profitability and Clean Animal Production’	Biswa Bangla Convention Centre, Kolkata	17-19 Dec, 2019 3 days
<b>Dr. G.P. Mandal, Associate Professor</b>	International Conference on Animal Nutrition 2019 (INCAN 2019) on ‘Nutritional Strategies for Improving Farm Profitability and Clean Animal Production’	Biswa Bangla Convention Centre, Kolkata	17-19 Dec, 2019 3 days
<b>Dr. M.C. Pakhira, Associate Professor</b>	Winter School Training on “Recent Biotechnological Advances for Precision Feeding of Livestock and Poultry”	WBUAFS, Kolkata	4-24 September, 2019 21 days
	International Workshop on Molecular Diagnosis on Poultry Diseases	Veterinary College & Research Institute, Namakkal, Tamilnadu	17-21 February, 2020 5 days
<b>Dr. M.C. Pakhira, Associate Professor</b> <b>Dr. H.K. Maity, Assistant Professor</b> <b>Dr. I. Kar, Assistant Professor</b> <b>Dr. P. Biswas, Assistant Professor</b> <b>Dr. S. Biswas, Assistant Professor</b>	International Conference of Animal Nutrition, INCAN 2019	WBUAFS, Kolkata	17-19 December, 2019 3 days
	National seminar for 49th Veterinary Reunion National symposium on Role of veterinarians for Sustainable livestock and poultry production to boost up rural economy	WBUAFS, Kolkata	10-11 January 2020 2 days
<b>Dr. Dulal Chandra Roy, Assistant Professor</b>	Short Term Training Course	ICAR-CRIJAF, Barrackpur	Nov. 14-23, 2019 10 days
<b>Dr. Dulal Chandra Roy, Assistant Professor</b>	International Conference on Animal Nutrition 2019 (INCAN 2019) on ‘Nutritional Strategies for Improving	Biswa Bangla Convention Centre, Kolkata	17-19 Dec, 2019 3 days



Dr. Aruna Pal, Assistant Professor Dr. Amitava Roy, Assistant Professor	Farm Profitability and Clean Animal Production'		
Dr.ChittapriyaGhosh, Assistant Professor	Advanced Short course training	ICAR-IVRI, Izatnagar, UP	03-23 December, 2019 21 days
Prof. S. Biswas, Professor & Head Dr.GopalPatra, Assistant Professor	International Conference on Animal Nutrition 2019 (INCAN 2019) on "Nutritional Strategies for Improving Farm Profitability and Clean Animal Production"	Biswa Bangla Convention Centre, Kolkata	17-19 December, 2019 3 days
	National Symposium on Role of Veterinarians for sustainable livestock and poultry Production to boost up rural economy	WBUAFS, Kolkata	10-11 January, 2020 2 days
Prof. P. Das, Professor	National Symposium and Annual Convention of IAVA	CVSC, Hebbal Bangalore	28-30th , November, 2019 3 days
Prof. P. Das, Professor Prof. S.Ray, Professor Dr. N.K. Tudu, Assistant Professor	International Conference on Animal Nutrition 2019 (INCAN 2019) on "Nutritional Strategies for Improving Farm Profitability and Clean Animal Production"	Biswa Bangla Convention Centre, Kolkata	17-19 December, 2019 3 days
Dr. N.K. Tudu, Assistant Professor	National Symposium on Role of Veterinarians for sustainable livestock and poultry Production to boost up rural economy	WBUAFS, Kolkata	10-11 January, 2020 2 days
Prof. P. Das, Professor	20th Indian Veterinary Congress	TANUVAS, Chennai	21-22 February, 2020 2 days
Prof. S. Batabyal, Professor & Head Dr. A. Maity, Associate Professor Dr. ShamikPolley, Assistant Professor	International Conference on Animal Nutrition 2019 (INCAN 2019) on "Nutritional Strategies for Improving Farm Profitability and Clean Animal Production"	WBUAFS, Kolkata	17-19 December, 2019 3 days
Prof. S. Batabyal, Professor & Head Dr. A. Maity, Associate Professor Dr. ShamikPolley, Assistant Professor Dr. SwarajBiswas, Assistant Professor	20th Indian Veterinary Congress, XXVII Annual Conference of IAAVR and National Symposium on "Veterinary Research Priorities in Translational Animal Health, Production and Food safety" organized by Tamil Nadu Veterinary And Animal Sciences University (TANUVAS) & Indian Association for the Advancement of Veterinary Research (IAAVR)	Madras Veterinary College Chennai – 600007	February 21-22, 2020 2 days
Dr. Mrityunjay Mondal Associate Professor	National Symposium on "Advances in Veterinary Pathology for Fostering One Health, Food Security and Environment Protection"	College of Veterinary Science & AH, CAU, Selesih, Aizawl	06-08 November, 2019 3 days
Dr. Falguni Mridha Assistant Professor	National seminar on "Antimicrobial Resistance – A Global Menace: One Health Approach" organised by Indian Journal of Animal Health, Kolkata	Kolkata	07 March, 2020 1 day
Dr. UjjwalBiswas, Professor Dr. ParthaSarathi	National Symposium on "Advancement in Veterinary Medicine in Mitigating Challenges to Animal Health"	Veterinary College, K.V.A.F.S.U., Hebbal, Bengaluru -560024	5-7 February, 2020 3 days



<b>Jana, Assistant Professor</b>			
<b>Prof. Siddhartha Basu, Professor Prof. Kalyani Ray, Professor Dr. Pradip Sarkar, Assistant Professor Dr. Durgadas Mandal, Assistant Professor Dr. Amit Kumar Saren Assistant Professor</b>	International Conference on Animal Nutrition 2019 (INCAN 2019) on “Nutritional Strategies for Improving Farm Profitability and Clean Animal Production”	WBUAFS, Kolkata	17-19 December, 2019 3 days
<b>Dr. Indranil Samanta, Assistant Professor</b>	International Conference on Animal Nutrition -2019	WBUAFS	17 – 19 December, 2019 3 days
	Farmer’s training and Zoonoses awareness camp	Krishi Vigyan Kendra, Ashoknagar	28 February, 2020 1 day
	Farmer’s training on ‘Scientific rearing of Kadaknath and Charachameliduck’	West Bengal Comprehensive Area Development Corporation (WBCDAC), Haringhata Unit	14 June, 2019 1 day
	ICAR Sponsored Winter School on ‘Gut Microbiome’, organized by Deptt. of Animal Nutrition, WBUAFS	WBUAFS	12 September, 2019 1 day
	National seminar on ‘Antimicrobial Resistance-a global menace: One Health approach’, organized by Indian Journal of Animal Health	WBUAFS	7 March, 2020 1 day
	WHO (India) workshop on ‘ESBL EcEpi-X tricycle project’	Kolkata Medical College	04-06 September, 2019 3 days
<b>Dr. K. Batabyal, Assistant Professor</b>	World Rabies Day, organized by APCRI, APHV and WBUAFS	WBUAFS	27 September, 2019 1 day
	Workshop on “Innovation & Entrepreneurship”, org. by DSIR-TOCIC, IIT-KGP, CSIR-CGCRI, CSIR-CMERI & WBUAFS	WBUAFS	13 August, 2019 1 day
	World Zoonosis Day – Seminar – org. by APHV	WBUAFS	06 July, 2019 1 day
	National Symposium and XIV Biennial Conference of APHV, org. by APHV	CVS & AH, DUVASU, Mathura	24–25 January, 2020 2 days
	21 Days ICAR Sponsored Winter School, org. by CVS, AAU, Assam	CVS, AAU, Khanapara, Assam	03– 23 December, 2019 21 days
<b>Prof. S. C. Mandal, Professor</b>	DSIR Workshop cum Awareness Camp	WBUAFS, Kolkata	13 August, 2019 1 day
	International Conference on Animal Nutrition 2019 (INCAN 2019) on “Nutritional Strategies for Improving Farm Profitability and Clean Animal Production”	WBUAFS, Kolkata	17-19 December, 2019 3 days



Dr. Surajit Baidya Associate Professor Dr. R. Jas, Assistant Professor Dr. S. Pandit, Assistant Professor	Conference of Indian Academy of Tropical Parasitology	WBUAFS, Kolkata	7 – 8 December, 2019 2 days
Dr. Surajit Baidya Associate Professor	National symposium and XIV biennial National Conference of APHV	DUVASU, Mathura	24 – 25 January, 2020 2 days
Prof.S.K. Mukhopadhyay Professor Dr. S. Pradhan Assistant Professor Dr. R.N. Hansda Assistant Professor Dr. SamiranMondal Assistant Professor	Participated in Indian Association of Veterinary Pathologists Zonal Conference, 2020 on “Recent Advances in Diagnostic Pathology for Emerging and Re-emerging Diseases of Livestock, Poultry Under Farming Conditions and Wildlife” of IAVP-Jharkhand Chapter, ICAR NAHEP-CAAST Programme, BAU, IAVP Central Zone & East Zone	CVSc& AH, BAU, Ranchi, Jharkhand	22-23 February,2020 2 days
Prof. S. K. Mukhopadhyay Professor	Veterinary Pathology Congress-2019 XXXVI Annual Conference of IAVP –IV Annual Meeting of ICVP and National Symposium , Central Agricultural University	Selesih, Aizawl, Mizoram	06-08 November, 2019 3 days
Dr.R.N.Hansda Assistant Professor	UGC-Sponsored Orientation Programme (HRDC) at Jadavpur University, Kolkata	Jadavpur University, Kolkata	26 August – 16 September, 2019 21 days
	Mahatma Gandhi National Council of Rural Education (MGNCRE), Department of Higher Education, MHRD, GOI & UGC-Sponsored Orientation Programme (HRDC) at Jadavpur University, Kolkata	Jadavpur University, Kolkata	06-07 September, 2019 2 days
Dr.SamiranMondal Assistant Professor	International Conference on Animal Nutrition, 2019 on “Nutritional Strategies for Improving Farm Profitability and Clean Animal Production”	WBUAFS, Kolkata	17-19 December, 2019 3 days
	7th KVAFSU/CVA Workshop on Rabies Diagnosis	CVA, Bengaluru	24-25 February, 2020 2 days
	UGC-Sponsored Orientation Programme (HRDC) at JadavpurUniversity, Kolkata	Jadavpur University, Kolkata	03-24 February, 2020 21 days
Prof. T.K. Mandal, Professor Dr. T.K. Sar, Assistant Professor	29th Annual Conference of Indian Pharmacological Society	Medical College, Kalyani	6-7 February, 2020 2 days
Prof. T.K. Mandal, Professor	World Zoonosis Day	WBUAFS, Kolkata	6 July, 2019
	Summer School Training	Dept. of Animal Nutrition, WBUAFS	September, 2019
	World Rabies Day	WBVC	27 September, 2019
	National symposium on Public health challenge mitigation strategies at the confluence of One health approaches and XIV Biennial National Conference of Association of Public health Veterinarians	College of Veterinary Science and Animal Husbandry, U.P. Pt. Dean DayalUpadhyayaPas huchikitsaVigyanVis	24-25 January, 2020 2 days



		hwavidyalayaEvam Go-AnusandhanSansathan, Mathura	
	One day workshop on Bioactive glass, ceramics and composites in healthcare : current technological trends BIOCOM, 2020	Central Glass and Ceramic Research Institute	29 January, 2020 1 day
<b>Dr. P. K Das, Professor</b> <b>Dr. P. R. Ghosh, Associate Professor</b> <b>Dr. D. Banerjee, Assistant Professor</b> <b>Dr. J Mukherjee, Assistant Professor</b>	International Conference on Animal Nutrition 2019 (INCAN 2019) on “Nutritional Strategies for Improving Farm Profitability and Clean Animal Production”	Biswa Bangla Convention Centre, Kolkata	17-19 December, 2019 3 days
	National seminar on “Antimicrobial Resistance – A Global Menace: One Health Approach” organised by Indian Journal of Animal Health, Kolkata	Kolkata	07 March, 2020 1 day
<b>Dr. P. K Das, Professor</b> <b>Dr. P. R. Ghosh, Associate Professor</b>	National Symposium on Physiological approaches to address environmental challenges for increasing animal productivity and farmer’s income organized by Society of Animal Physiologists of India	CSWRI, Avikanagar, Jaipur, Rajasthan	18-19 February, 2020 2 days
<b>Dr. J. Mukherjee Assistant Professor</b> <b>Dr. D Banerjee, Assistant professor</b>	Acted as resource person in Refresher and Hands on Training Course on ‘Advanced Diagnostics Imaging in Veterinary Practices’	WBUAFS	17-22 February, 2020 5 days
	Acted as resource person in ICAR Sponsored Winter School on "Recent Biotechnological Advances for Precision Feeding of Livestock and Poultry	WBUAFS	04-24 September, 2019 21 days
	Acted as an expert in the tutorial class for the SC students under ICAR SC-SP programme	WBUAFS	04 January, 2020 1 day
	Acted as an expert in Farmers’ Training Programme on "Reproductive disorders in farm animals.	Farmers Hostel	13 January, 2020 1 day
	Acted as Convener in Zonal level Quiz programme	Dept. of Veterinary Physiology	17 January, 2020 1 day
	Acted as resource person in Refresher and Hands on Training Course on ‘Advanced Diagnostics Imaging in Veterinary Practices’	WBUAFS	17-22 February, 2020 5 days
	Acted as resource person in ICAR Sponsored Winter School on "Recent Biotechnological Advances for Precision Feeding of Livestock and Poultry	WBUAFS	04-24 September, 2019 21 days
	Acted as Programme Convener and an experts in the tutorial class for the SC students under ICAR SC-SP programme	WBUAFS	21 December, 2019 – 26 January, 2020 1 month
	Acted as an expert in Farmers’ Training Programme on "Metabolic diseases in cattle”.	Farmers Hostel	13 January, 2020 1 day
<b>Dr. Kinsuk Das Assistant Professor</b>	ICAR sponsored short term course on ‘Neuroendocrine regulations of livestock production: prospect and retrospect’	Centre of Advanced Faculty Training in Veterinary Physiology, ICAR-IVRI, Izatnagar	28 January – 17 February, 2020 21 days



Prof. Sarbani Hazra, Professor	ECVO ( European college of Veterinary Ophthalmologists) 2019 Antwerp, Belgium	Hotel Hilton Antwerp	23-26 May, 2019 3 days
Prof. Samit Kumar Nandi, Professor	3rd International Symposium on Genomics in Aquaculture (ISGA- III)	Bhubaneswar, Odisha	21-23 January, 2020 3 days
Prof. A. Goswami, Professor Dr. S. Biswas, Associate Professor	International Conference on Animal Nutrition 2019 (INCAN 2019) on “Nutritional Strategies for Improving Farm Profitability and Clean Animal Production”	Biswa Bangla Convention Centre, Kolkata	17-19 December, 2019 3 days
Prof. A. Goswami, Professor Dr. S. Biswas, Associate Professor Dr. D. Saha, Assistant Professor	National Symposium on Role of Veterinarians for sustainable livestock and poultry Production to boost up rural economy	WBUAFS, Kolkata	10-11 January, 2020 2 days
Dr. S. Biswas, Associate Professor	Training of Biotech-Kishan Hub Project of DBT, GOI	DREF, WBUAFS	22 November, 2019 1 day
	Trainng of DST project, GWB by the Dept. of LPT, WBUAFS	Mohanpur, WBUAFS	5 December, 2019 1 day
	External Examiner of M.Sc. at RKMVERI, Narendrpur, WB	RKMVU, Kolkata	23 December, 2019 1 day
	KrishiDarshanProgramme of Doordarshan, Govt. of India	Kolkata	24 December, 2019 1 day

#### Faculty of Fishery Sciences:-

Name of the faculty member with Designation	Title of Seminar, Symposium, Workshop, Training attended	Venue	Date
Dr. ShibKinkar Das, Professor	Expert in NFDB sponsored training programme in North 24 Parganas KVK on Beel fishery management of North 24 Parganas district.	KVK, Asoke Nagar, 24 Pgs.(N)	26th – 28th October, 2016
	Expert in NFDB sponsored training programme in North 24 Parganas KVK on Best management practices of Brackish water shrimp farming.	KVK, Asoke Nagar, 24 Pgs.(N)	26th – 28th October, 2016
	Invited Speaker on Safe Reuse of Municipal Wastewater in Aquaculture and Allied Activities. In the National Seminar cum Workshop on Integrated Safe Reuse of Municipal Wastewater Potentials and Prospects, 9-10th September, 2016.	International Centre for Ecological Engineering in the University of Kalyani, Kalyani	9th – 10th September, 2016
	Invited Speaker in the Fifth International Conference on Agriculture & Fisheries; Systems & Technology	Colombo, Sri Lanka	8th – 9th December, 2017



	2017 (AgriFish2017)		
	Expert in Sensitization Workshop on 'Technology Application in Animal and Fishery Sciences'.	ICAR- ATARI, Kolkata	16th – 17th March, 2017
Prof. G.D. Dash Professor Prof. T.J. Abraham, Professor	National Seminar on Priorities in Fisheries and Aquaculture at College of Fisheries,	COF, OUAT Odisha	11th – 12th March, 2017
	29th All India Congress of Zoology, International Symposium on Culture based fisheries in Inland Open Waters , Satellite Symposium on Fish Immunology	CIFRI, Barrack pore	12th – 13th March, 2017
	Project Review Meeting and International Symposium on Aquatic Animal Health and Epidemiology for sustainable Aquaculture	NBFGR Lucknow	17th – 21st April, 2017
	Awareness programme on Acute Hepatopancreatic Necrosis Disease (AHPND)	Hasnabad Block, North 24 pgs	3rd March, 2018
	National Workshop on Issues in Antibiotic Residues in Shrimp Aquaculture	ICAR-CIBA, Chennai	18th August, 2016
	Brainstorming Workshop on Responsible Use of Antimicrobials in Indian Aquaculture	ICAR-CIBA, Chennai	6th December, 2016
	Rusa Funded International level Seminar on Recent Trends in Microbiology	Dept.of Microbiol., RMV, Belur Math, Howrah	14th January, 2017
	29th All India Congress of Zoology, International Symposium on Culture based fisheries in inland open waters and Satellite Symposium on Fish immunology	ICAR-CIFRI, Barrackpore	9th–11th June, 2017
	International Workshop on "Development of Surveillance Framework for Antimicrobial Resistance in Food Animals and Environment"	Center for Sc. and Env.New Delhi	3rd–4thAugust, 2017
	Seminar cum Workshop on "Pros and Cons of use of antibiotics in aquaculture	DDF Office, Pailan	22nd February, 2018
	National Workshop on Antimicrobial Resistance and Alternatives to Antibiotics use in Aquaculture (AMR 2018)	ICAR-CIFA, BBSR	12th–13th March, 2018
Sri P. Mali Asst. Professor	National Seminar on Priorities in Fisheries and Aquaculture at College of Fisheries.	COF, OUAT Odisha	11th–12th March, 2017
	International symposium on culture based fisheries in inland open waters & satellite symposium on fish immunology"	CIFRI Barrackpore	9th – 11th June, 2017



	International symposium on “Aquatic animal health and epidemiology for sustainable Asian aquaculture”	NBFGR, Lucknow	20th – 21st April, 2017.
	National conference on “Innovation farming for good and livelihood security in changing climate	FACC, BCKV	12th – 13th January, 2018
<b>Prof. B.K. Das Professor &amp; Dean</b>	A Review Workshop for All India Network Project on Mariculture	ICAR-Central Marine Fisheries Research Institute, Cochin, Kerala	27th – 28th, September, 2016
	Review Meeting for All India Network Project on Mariculture	Indian Council of Agricultural Research (ICAR), KrishiAnusandhanBhavan, New Delhi, India	3rd – 4th November, 2016
<b>Dr. Raman Kumar Trivedi, Professor</b>	3rd PAF National Conference	CIFE, Mumbai	27th – 29th April, 2016
	Blue Paper Forum-2016 India Aquaculture Pathfinder.	Novotel, Visakhapatnam	22nd – 23rd September, 2016.
	Dynamics of Challenges and options in integrated Aquaculture.	Patna	2nd November, 2016
	Winter school on Optimization of Production Efficiency of Fish-livestock Integrated Farming.	ICAR Research Complex for Eastern Region, Patna	21st November, 2016.
	5th Biennial Convention of WBPFGA	RabindraBhaban, Uluberia, Howrah	3rd February, 2017
	National Convention on Agriculture for Prosperity and Sustainable Development	National Agriculture Science Complex, ICAR, New Delhi	25th–26th March, 2017
	Policy development meeting on National Mission on Clean Ganga	ICAR-CIFRI, Barrackpore	26th May, 2017
	29th All India Congress of Zoology & International Symposium on Culture Based Fisheries in Inland Open Waters & Satellite Symposium on Fish Immunology	ICAR-CIFRI, Barrackpore	9th June, 2017
	National Convention on Making Policies for Promoting Innovations, Entrepreneurship & Startups.	Bhopal, Madhya Pradesh	20th June, 2017
	Policy development meeting organized by Department of Sundarban Affairs, Govt. of West Bengal on “Searching Roadmap for Sustainable Sundarbans: a discussion”	MayukhBhaban, salt lake city, kolkata	6th July, 2017
	Fourth zonal stakeholders consultation on National Inland Fisheries & Aquaculture Policy	Directorate of fisheries, Patna, Bihar	22nd July, 2017
	Stakeholders consultation on “Developing Climate Smart Panchayat in the Sundarbans Region”.	CSSRI, Canning	12th September, 2017
	11th Indian Fisheries and Aquaculture Forum	ICAR-CIFT, Cochin	21st – 24th November, 2017



	Workshop on “Biodiversity of River Ganga and its Conservation for Sustainable Fisheries”.	ICAR-CIFRI, Barrackpore	15th March, 2018
	National convention on “Resource Conservation for Sustainable Agriculture and Food Security.	NASC complex, ICAR, New Delhi	24th – 25th March, 2018.
<b>Prof. B.K.Das Professor &amp; Dean Dr R K Trivedi Professor</b>	Expert consultation on Revitalizing Indian Fisheries Educaton-2016 (RIFE – 2016).	Fisheries College and Research Institute, Tamil Nadu Fisheries University, Thoothukudi, Tamil Nadu, India	17th – 18th June, 2016.
<b>Dr. Raman Kumar Trivedi, Professor Dr. Sangram Keshari Rout, Professor</b>	National Seminar on Priorities in Fisheries and Aquaculture (PFA 2017)	College of Fisheries (OUAT), Rangailunda, Odissa	11th – 12th March, 2017
<b>Dr. Somen Sahu, Professor</b>	Workshop: “Mariculture: New era of technological intervention towards community development of coastal W.B.” As Invited lecture organized by TEQIP and Centre of Excellence, University of Calcutta	Centre for Research in Nanoscience & Nanotechnology, Kolkata	19th March, 2017
	Conference: “How to conduct a research in ICU?” Organized by Indian Society of Critical Care Medicine (ISCCM) as Both Invited Speaker and Chairperson of whole Session	Cirayu Medical College, Bhopal	29th – 30th April, 2017
	Invited lecture: “Statistical modeling and its application in economics” As Invited lecture	Delhi School of Economics, New Delhi	27th April, 2017
	Training: “Sustainable development for marine fisheries-” as lead speaker at Training programme for the drivers/ majhi of trawler organized by Digha Fisherman and Fish Traders Association	Digha Fisherman and Fish Traders Association. Digha	8th May, 2017
<b>Biswarup Saha, Associate Professor</b>	Workshop on “Technological Interventions in Agri- Aquaculture Research ”	Assam University, Silchar	27th – 28th September, 2016
<b>Dr. Sudhir Kumar Das, Professor</b>	Delivered lecture on "Promotion of rural livelihood through Aquapreneurship and Aqua tourism adopting Rainbow Revolution."	Agriculture & Biotechnology Sub Congress, FOSET, Kolkata	4th – 5th Feb., 2017
<b>Dr. Nagesh Talagunda Srinivasan, Professor</b>	International Conference on “Bio resource, Environment and Agricultural Sciences”	Society of Bio-resource, Environment and Agricultural Research, Shantiniketan	4th – 6th Feb., 2017
	Expert Lecture to Students and Faculty	College of Fisheries, Ludhiana	12th – 13th March, 2018
	Integrated Farming: Adopting Organic Farming Practices	Directorate of Research, Extension & Farms,	19th – 21st March, 2018



		WBUAFS	
Dr. Samarendra Behera, , Professor	International seminar on “Agriculture & Food for Inclusive Growth and Development”	SamagraVikas Welfare Society and Anna;oorana life Organic Food pvt, Ltd.	14th – 15th January,2017
	National seminar on “priorities in fisheries and aquaculture-2017”	Inland fishery society of India,Barrackpore	11th – 12th March, 2017
	2nd Regional Science and Technology Congress (South region),2017	Kalyani University and Department of higher education, science and technology and biotechnology government of West Bengal.	14th – 15th December,2017
Prof. T. K. Ghosh, Professor Dr. Shib Kinkar Das,Professor Dr. A. Mondal, Associate Professor	ISEE National Seminar-2018 “Integrated Farming System for Enhancing Farmers’ Income and Nutritional Security”	WBUAFS	5-7 December, 2018 3 days
	19th Indian veterinary congress & 26th Annual Conference of IAAVR	WBUAFS	1-2 February, 2019 2 days
Dr. Shib Kinkar Das ,Professor	NICRA Workshop on Impact of Climate Change on Inland Open Water Fisheries	ICAR-CIFRI, Barrackpore	15 March,2019 1 day
	National Seminar on Advancement in green technology for controlling and managing current environmental pollution	University of Kalyani	22 - 23 March, 2018 2 days
	National Seminar on Waste Management for Greener and Cleaner Environment	University of Kalyani	25-26 March, 2019 2 days
Prof. T. K. Ghosh, Professor	3rd Regional Science and Technology Congress, Southern Region	Bidhannagar College, Salt Lake, Kolkata	18-19 December, 2018 2 days
Prof. G.D. Dash Professor& Head	Awareness programme on Acute Hepatopancreatic Necrosis Disease (AHPND).	Hasnabad, 24 Pgs (N)	3 March, 2018 1 day
	Awareness Camp on AMR in Shrimp Farming.	Baruipur, 24 Pgs (S)	5October,2018 1 day
	Shrimp diseases and its Management.	Hasnabad, 24 Pgs (N)	21 February, 2019 1 day
	Parasitic diseases of Fishes.	DREF, WBUAFS	11 March, 2019 1 day
	Fish and Shrimp diseases In ponds.	CIFE, Saltlake, Kolkata	13 March, 2019 1 day
	Health Management in Shrimps(P.vannamei)	Namkhana, 24 Pgs (S)	20 March, 2019 1 day
Prof. T.J. Abraham, Professor	International Conference on Changing Contours of Blue Economy-Promises and Challenges (ICBE-2019)	Centre of Advanced Study in Marine Biology, Annamalai University, Parangipettai, Tamil Nadu	7-8 February, 2019 2 days
	Workshop on Syllabus Revision and Academic Reformation in Higher Education	ICAR-CIFE, Mumbai	18-19 February, 2019 2 days
Sri P. Mali Asst. Professor	Training programme on – “Concept building and basis	ICAR-CIFRI, Barrackpore	3 – 10 August, 2018



	statistical analysis for inland fisheries management”.		7 days
	International Symposium & 8th Conference of Indian Meat Science Association (IMSACON-VIII) on “Technological Innovations in Muscle Food Processing for Nutritional Security, Quality and Safety”	Department of LPT, Faculty of Veterinary and Animal Sciences, WBUAFS, Kolkata, W.B.	22 – 24 November, 2018 3 days
	XXVI Annual conference of IAAVR	Belgachia campus, WBUAFS, Kolkata	1–2February, 2019 2 days
<b>Prof. G.D. Dash Professor&amp; Head</b>	ISEE National Seminar-2018 on “Integrated Farming System for Enhancing Farmers’ Income and Nutritional Security”	Belgachia campus, WBUAFS, Kolkata	5 – 7December, 2018 3 days
<b>Prof. T.J. Abraham, Professor</b>			
<b>Sri P. Mali Asst. Professor</b>	Seminar on “Importance of veterinary, dairy and fishery education in the present economic scenario of the country” during the 25th Foundation day celebration of WBUAFS	Belgachia campus, WBUAFS, Kolkata	2nd January, 2019 1 day
<b>Dr. Sangram Keshari Rout, Professor and Head</b>	International Symposium and 8th Conference of Indian Meat Science Association (IMSACON-VIII)	Belgachia campus, WBUAFS, Kolkata	22 – 24 November, 2018 3 days
	ISEE National Seminar – 2018 on Integrated Farming System for Enhancing Farmers’ Income and Nutritional Security	Belgachia campus, WBUAFS, Kolkata	5-7 December, 2018 3 days
	Seminar on Importance of Veterinary, dairy and Fishery education in the present economic scenario of the country.	Belgachia campus, WBUAFS, Kolkata	2 January, 2019 1 day
<b>Dr. Somen Sahu, Professor</b>	International Symposium and 8th Conference of Indian Meat Science Association (IMSACON-VIII)	Belgachia campus, WBUAFS, Kolkata	22 – 24 November, 2018 3 days
	ISEE National Seminar – 2018 on Integrated Farming System for Enhancing Farmers’ Income and Nutritional Security	Belgachia campus, WBUAFS, Kolkata	5-7 December, 2018 3 days
	Seminar on Importance of Veterinary, dairy and Fishery education in the present economic scenario of the country.	Belgachia campus, WBUAFS, Kolkata	2 January, 2019 1 day
<b>Dr.N.A.Talwar, Professor</b>	ISEE National Seminar – 2018 on Integrated Farming System for Enhancing Farmers’ Income and Nutritional Security	Belgachia campus, WBUAFS, Kolkata	5-7 December, 2018 3 days
	Seminar on Importance of Veterinary, dairy and Fishery education in the present economic scenario of the country.	Belgachia campus, WBUAFS, Kolkata	2 January, 2019 1 day
	Seminar on “ 19th Indian Veterinary Congress, XXVI	Belgachia campus, WBUAFS, Kolkata	1-2 February 2019



	Annual Conference of IAAVR and National Symposium”		2 days
BiswarupSaha, Associate Professor	9th National Extension Education Congress-2018, organized by Society of Extension Education, Agra on “Climate Smart Agricultural Technologies : Innovations and Interventions”	CAPHET, Ranipool, Sikkim	15-17 November, 2018 3 days
Smt. Moumita Ray (Sarkar) Assistant Professor	Training Programme on Concept Building and Basic Statistical Analysis for Inland Fisheries Management	CIFRI, Barrackpore	3-10August, 2018 8 days
BiswarupSaha, Associate Professor Smt. Moumita Ray (Sarkar) Assistant Professor	National Symposium on Innovative Process in Animal Health and Production for Safe and Secured Food under One Health Perspective	Belgachia campus, WBUAFS, Kolkata	1-2February, 2019 2 days
	Seminar on Importance on Veterinary, Dairy and Fishery education in the present economic scenario of the country	Belgachia campus, WBUAFS, Kolkata	2January, 2019 1 day
Prof. S.S.Dana Professor BiswarupSaha, Associate Professor Smt. Moumita Ray (Sarkar) Assistant Professor	ISEE National Seminar-2018 on ‘Integrated Farming System for Enhancing Farmers’ Income and Nutritional Security’	Belgachia campus, WBUAFS, Kolkata	5-7 December, 2018 3 days
Dr. K.C. Dora, Professor Dr. S. Chowdhury Associate Professor Mr. PrasantaMurmu Assistant Professor	International Symposium & 8th Conference of Indian Meat Science Association (IMSACON-VIII)	Belgachia campus, WBUAFS, Kolkata	22 – 24 November, 2018 3 days
	ISEE National Seminar 2018 on Integrated Farming System for Enhancing Farmers’ Income and Nutritional Security	Belgachia campus, WBUAFS, Kolkata	5-7 December, 2018 3 days
	Seminar on “ Importance of Veterinary, Dairy and Fishery Education in the present economic scenario of the country”	Belgachia campus, WBUAFS, Kolkata	2January, 2019 1 day
Prof. Nagesh Talagunda Srinivasan, Professor Prof. SamarendraBehera, Professor	ISEE National Seminar-2018 on ‘Integrated Farming System for Enhancing Farmers’ Income and Nutritional Security’	Belgachia campus, WBUAFS, Kolkata	5-7 December, 2018 3 days
Prof. Nagesh Talagunda Srinivasan, Professor	Seminar on “Importance of Veterinary, Dairy and Fishery Education in the present Economic Scenario of the Country”	Belgachia campus, WBUAFS, Kolkata	2January, 2019 1 day
	19th Indian Veterinary Congress and XXVI Annual Conference of IAAVR and National Symposium on “Innovative Progress in Animal Health and production for Safe	Belgachia campus, WBUAFS, Kolkata	1-2February, 2019 2 days



	and Secured Food Under One Health Perspective”		
	Workshop on “Syllabus Revision and Academic Reformation in Higher Fisheries Education”	ICAR-CIFE, Mumbai	18-19 February, 2019 2 days
Prof. S. K. Das, Professor	International Conference on Ecological intensification: A new paragon for sustainable aquaculture	Bogor, Indonesia	28-30 October, 2019 3 days
	International Conference on Animal Nutrition 2019 (INCAN 2019) on “Nutritional Strategies for Improving Farm Profitability and Clean Animal Production”	Biswa Bangla Convention Centre, Kolkata	17-19 December, 2019 3 days
	National Seminar on Antimicrobial Resistance - A Global Menace: One Health Approach	WBUAFS, Kolkata	7 March, 2020 1 day
Prof. G.D. Dash Professor & Head Prof. T.J. Abraham, Professor	National Seminar on Antimicrobial Resistance - A Global Menace: One Health Approach	WBUAFS, Kolkata	7 March, 2020 1 day
Prof. G.D. Dash Professor & Head	Workshop on Fish and Shrimp Diseases and their remedial measures.	COF, OUAT, Rangailunda (Under NAHEP)	27-28 December, 2019 2 days
	Two – days workshop: Hands-on Training on Fish Disease Management in Aquaculture	Fisheries Research and Training Centre (FRTC), Dept. Of Zoology, University of North Bengal, Darjeeling	22-23 Feb, 2020 2 days
Prof. T.J. Abraham, Professor	International Conference and Exposition 'Asian-Pacific Aquaculture' (APA-2019).	Tamil Nadu Fisheries University, Chennai	19-21 June 2019 3 days
	International Conference on Ecosystem health and fisheries of Indian inland waters: Multiple stressors, management and conservation and AEHMS-12	G.B. Pant University of Agriculture and Technology, Pantnagar, Uttarakhand	17-19 February, 2020 3 days
Sri P. Mali Asst. Professor	International Conference on Animal Nutrition 2019 (INCAN 2019) on “Nutritional Strategies for Improving Farm Profitability and Clean Animal Production”	Biswa Bangla Convention Centre, Kolkata	17-19 December, 2019 3 days
Dr. Sangram Keshari Rout, Professor and Head Mr. Sutanu Karmakar, Assistant Professor	International Conference on Animal Nutrition 2019 (INCAN 2019) on “Nutritional Strategies for Improving Farm Profitability and Clean Animal Production”	Biswa Bangla Convention Centre, Kolkata	17-19 December, 2019 3 days
Dr. S.Chowdhury, Associate Professor Dr. SwarnadyutiNath, Assistant Professor	National Conference on Doubling Farmers Income for Sustainable and Harmonious Agriculture ‘DISHA 2019’	Birsa Agricultural University, Ranchi, Jharkhand	10-11 August, 2019 2 days
Prof. K. C. Dora, Professor Dr. S. Chowdhury, Associate Professor Mr. PrasantaMurmu	DSIR-PRISM sponsored workshop on “Innovation and Entrepreneurship” TePP Outreach cum Cluster Innovation Centre	WBUAFS	13 August, 2019, 1 day



<b>Assistant Professor</b>			
<b>Dr. Swarnadyuti Nath, Assistant Professor</b>	International Research Conference on 'Recent Trends in Life Sciences'	SidhuKanhuBirsha University (SKBU), Purulia, West Bengal	28-29Nov, 2019 2 days
	3rd National Conference on Promoting and Reinvigorating Agri-Horti, Technological Innovations, 'PRAGATI 2019'	Dhanbad, Jharkhand	24-25Dec, 2019 2 days
<b>Prof. K. C. Dora, Professor</b> <b>Dr. S. Chowdhury, Associate Professor</b> <b>Dr. SwarnadyutiNath, Assistant Professor</b>	International Conference on Animal Nutrition 2019 (INCAN 2019) on 'Nutritional Strategies for Improving Farm Profitability and Clean Animal Production'	Biswa Bangla Convention Centre, Kolkata	17-19Dec, 2019 3 days

### Faculty of Dairy Technology

Name of the faculty member with Designation	Title of Seminar, Symposium, Workshop, Training attended	Venue	Date
<b>Prof. P.R.Ray, Professor</b>	UGC Sponsored National Seminar on "Food Security and Sustainable development in India: The Present Scenario"	Kolkata	15th – 16th September , 2016
	Oxidative Stress Symposium	Kalyani	30th– 31st March, 2017
	National Seminar on " A Dairy Snapshot"	Mohanpur	5th August, 2017
<b>Dr. Chaitali Chakraborty, Associate Professor</b>	46th Dairy Industry Conference	Kochi	8th– 10th February, 2018
<b>Dr. S. K. Bag, Professor</b>	International Conference on Bio-Resource, Environment and Agricultural Sciences (ICBEAS)	PalliSikshaBhavana Santiniketan	4th – 6th Feb,2017
	Role of Examination System in Increasing Effectiveness of Dairy Science Education and Career Movement of Dairy Professionals	AAU, Anand	26th March, 2018
<b>Dr. Lopamudra Halder Associate Professor</b>	National Seminar on Role of Examination system in Increasing effectiveness of dairy science education, and career movement of dairy professionals	SMC College of Dairy Science, Anand Agricultural University, Gujarat	26th March, 2018
<b>Dr. Anindita Debnath, Assistant Professor</b>	National Seminar on " A Dairy Snapshot"	Mohanpur	5th August, 2017
<b>Prof. P.R.Ray, Professor</b>	Seminar on "Importance of Veterinary, Fisheries and Dairy Education in the present economic scenario of the country"	Belgachia campus, WBUAFS, Kolkata	2January, 2019 1 day
	National Seminar on "Industry oriented research in processing- An update and future strategies"	Faculty of Dairy Technology, WBUAFS, Mohanpur	22-23 February, 2019 2 days
<b>KumaresH Halder, Assistant Professor</b>	International Conference on "Agriculture and Allied Sciences: The Productivity, Food Security and Ecology"	Farmers' Academy and Convention Centre, (Lake Hall, Kalyani) BCKV	13-14August, 2018 2 days
	Centre of Advanced Faculty Training on "Nano-Technological	Dairy Chemistry Division , ICAR-NDRI, Karnal,	1-21 December, 2018



	and Biochemical Techniques for assessing the quality and safety of Milk and Milk Products”	Haryana	21 days
<b>Dr. S. K. Bag, Professor</b>	47th Dairy Industry Conference, 2019	Samrat Ashok International Convention Centre, Patna	7-9 February, 2019 3 days
<b>Dr. P. K. Roy , Associate Professor KumaresHalter, Assistant Professor</b>	Seminar on “Importance of Veterinary, Fisheries and Dairy Education in the present economic scenario of the country”	Belgachia campus, WBUAFS, Kolkata	2 January, 2019 1 day
<b>Prof. S.K.Bag, Professor Dr. P.K.Roy, Associate Professor</b>	ISEE National Seminar-2018 on ‘Integrated Farming System for Enhancing Farmers’ Income and Nutritional Security’	Belgachia campus, WBUAFS, Kolkata	5-7 December, 2018 3 days
<b>Prof. S.K.Bag, Professor Prof. P. Maiti, Professor Dr. P. K. Roy , Associate Professor KumaresHalter, Assistant Professor</b>	National Seminar on “Industry oriented research in processing- An update and future strategies”	Faculty of Dairy Technology, WBUAFS, Mohanpur	22-23 February, 2019 2 days
<b>Dt. Lopamudra Halder Associate Professor Mr. Amit Kumar Barman Assistant Professor</b>	International Conference on Agriculture and Allied Sciences: The Productivity, Food Security and Ecology-2018	BCKV Lake Hall (FACC), Kalyani, Nadia	13-14 August, 2018 2 days
<b>Dr. SurajitMandal, Professor</b>	National Conference on “Challenges and Opportunities for the New Generation Dairy Foods in India”	College of Dairy Technology, Sri Venkateswara Veterinary University, Tirupati	9-10 September, 2018 2 days
	International Conference on ‘Rural Livelihood Improvement by Enhancing Farmers’ Income through Sustainable Innovation Agri and Allied Enterprises (RLISAAe)’	Birla Institute of Technology, Patna	30 October -1 November, 2018 3 days
<b>Dr. Lopamudra Halder Associate Professor</b>	International Symposium and 8th Conference of Indian Meat Science Association (IMSACON VIII ) - 2018 on Technological Innovations in Muscle Food Processing for Nutritional Security, Quality and Safety	Belgachia campus, WBUAFS, Kolkata	22 – 24 November, 2018 3 days
<b>Dr. SurajitMandal, Professor Dr. LopamudraHalder Associate Professor</b>	Gut Microbiota and Probiotic Science Foundation (India), 9th India Probiotic Symposium, “Probiotics through the lifespan”	Amity University, Kolkata	24 – 25 November, 2018 2 days
<b>Dr. SurajitMandal, Professor Dr. LopamudraHalder Associate Professor Mr. Amit Kumar Barman Assistant Professor</b>	ISEE National Seminar-2018 on ‘Integrated Farming System for Enhancing Farmers’ Income and Nutritional Security’	WBUAFS, Kolkata	5-7 December, 2018 3 days
<b>Mr. Amit Kumar Barman Assistant Professor</b>	Seminar on “Importance of Veterinary, Fisheries and Dairy Education in the present economic scenario of the	WBUAFS, Kolkata	2 January, 2019 1 day



	country”		
<b>Dr. LopamudraHaldar</b> Associate Professor	47th Dairy Industry Conference-2019, organized by Indian Dairy Association, (EZ)	SamratAshoke International Convention Centre ,Patna	7-9 February, 2019 3 days
<b>Mr. Goutam Kumar Das, Assistant Professor</b>	Gut Microbiota and Probiotic Science Foundation (India), 9th India Probiotic Symposium, "Probiotics through the lifespan"	Amity University, Kolkata	24-25 November, 2018 2 days
<b>Dr. AninditaDebnath, Assistant Professor</b> <b>Mr. Goutam Kumar Das, Assistant Professor</b>	47th Dairy Industry Conference organised by Indian Dairy Association	Samrat Ashok International Convention Centre, Patna	7-9 February, 2019 3 days
<b>Prof. P.R.Ray, Professor</b> <b>Dr. ChaitaliChakraborty, Associate Professor</b>	National Seminar on “ Traditional Indian Dairy Products- Prospects of Commercialization” Organized by the National Agricultural Higher Education Project (NAHEP)- Innovation Grant of Dairy Faculty	Faculty of Dairy Technology, WBUAFS, Nadia	13 March, 2020 1 day
<b>Dr. S. K. Bag, Professor</b> <b>Sri KumareshHalder, Assistant Professor</b>	Regional Workshop on Efficient Operation & Maintenance of Boilers and Energy Conservation	NDDB Block, Salt Lake	18 January, 2020 1 day
<b>Prof. P. Maiti, Professor</b> <b>Prof. S. K. Bag, Professor</b>	48th Dairy Industry Conference	Jaipur, Rajasthan	20-22 February,2020 3 days
<b>Dr. Surajit Mandal, Professor</b> <b>Dr. Lopamudra Haldar Associate Professor</b> <b>Mr. Amit Kumar Barman Assistant Professor</b>	Launching workshop Under the Aegis of ICAR-World Bank Sponsored National Agricultural Higher Education Project (Innovation Grant): Strengthening Post Graduate Education: Lab, Field & Self Employment-Integration and Strategy	Dairy Technology, WBUAFS, Mohanpur Campus, Nadia	26 December, 2019 1 day
	National Seminar on ‘Traditional Indian Dairy Products- Prospects of Commercialization’ Under the Aegis of ICAR-World Bank Sponsored National Agricultural Higher Education Project (Innovation Grant)	Dairy Technology, WBUAFS, Mohanpur Campus, Nadia	13 March, 2020 1 day
<b>Mr. Amit Kumar Barman Assistant Professor</b>	International Conference on Animal Nutrition 2019 (INCAN 2019) on ‘Nutritional Strategies for Improving Farm Profitability and Clean Animal Production’	Biswa Bangla Convention Centre, Kolkata	17-19Dec, 2019 3 days
<b>Dr. LopamudraHaldar AssociateProfessor</b>	Acted as Resource person in ASCI and ICAR-ATARI, Kolkata Sponsored Training Programme on Dairy Farmer/ Entrepreneur, Organized by DREF, WBUAFS	Farmer’s Hostel, DREF, WBUAFS, Belgachia,	8-27January, 2020 1 day
	IISF-Agricultural Scientists’meet	Biswa Bangla Convention Centre, Kolkata	05-08November, 2019 3 days
<b>Dr. Anindita Debnath, Assistant Professor (As Assistant</b>	National Training Programme on “Milk Products Development for augmenting income”	Faculty of Dairy Technology, WBUAFS, Mohanpur	10-15th February,2020 6 days



Co-ordinator) Sri Goutam Kumar Das, Assistant Professor (As expert) Sri ParthaPratimDebnath, Assistant Professor (As expert)			
Dr. Anindita Debnath, Assistant Professor Sri Kuntal Roy, Assistant Professor Sri ParthaPratimDebnath, Assistant Professor	National seminar on “Traditional Dairy Products- Prospects & Commercialization”	WBUAFS, Mohanpur	13 March, 2020 1 day
Sri Kuntal Roy, Assistant Professor	Hands on training on Processing, Analysis and Packaging of cheese	ICAR-NDRI, Karnal	5 – 19 February, 2020 15 days
	48th Dairy Industry Conference on “Dairying for health and wealth”	Jaipur	20-22 February, 2020 3 days
Sri Kuntal Roy, Assistant Professor Sri ParthaPratimDebnath, Assistant Professor	Regional workshop on “Efficient operation and maintenance of boilers and energy conservation”	Kolkata	18 January, 2020 1 day

#### 6.6.5.3. Incentives for Excellence/Faculty Recognition:

Does the University is offering Best Teacher Award (ICAR) or any other means of recognition to promote excellence in faculty and other staff ? Give the list and selection procedure (in brief).

The university introduced the Best Teacher Award in the year 2017. The university has also introduced Best Teacher Award at the Faculty level. Similarly Best Staff Award, Best Student Award etc have also been introduced and has been continuing since 2017. The list of recipients of Best Teacher Awards is mentioned below:-

##### Best teachers:-

- 1) Prof. T J Abraham - 2017
- 2) Prof. Samit Kumar Nandi - 2018
- 3) Dr. Paresh Nath Chatterjee - 2019
- 4) Dr. Indranil Samanta - 2020

##### Best Student:-

- 1) Dr. Chayana Singha Mahapatra - 2017
- 2) Mr. Amrik Hazra - 2018
- 3) Dr. Achinta Mahata - 2019
- 4) Mr. Sayantan Bhattacharjee - 2020

##### Best Employee:-

- 1) Mr. Sandip Gupta - 2017
- 2) Mr. Sankar Ghosh - 2018
- 3) Mr. Ramesh Baske - 2019
- 4) Mr. Ansuman Gupta - 2020



### Selection procedure:

The award is bestowed to the eligible teacher / staff / student on the basis of recommendation of a Selection Committee comprising of Internal and External Experts and assessment.

#### 6.6.5.4. Capacity Building and Training:

*How many programme have been initiated towards developing and strengthening skills, instincts, abilities, processes and resources that the University and its stakeholders need to survive, adapt, and thrive in the fast-changing agricultural scenario?*

1599 nos. of Farmers' training have been organized by WBUAFS through KVK, Directorate of Research, Extension and Farms, different projects for making a suitable plan for effective capacity building of these farmers for their better livelihood. A total 78812 nos. of farmer have been trained. The impact of training programme has been assessed and found a tremendous impact on the farmers on adoption of scientific method of animal husbandry practices, Fishery and Dairy practices. The farmers' Knowledge scores at pre and post training programme was also observed that most of the farmers were fully satisfied with major instructors (75.9%), relevance to the trainee's need (72.40%), programme in general (70.1%). It was also found that some of the trainees were not at all satisfied with lodging facilities (46.91%), availability of reading materials (39.4%), physical facilities in classroom (25.3%) and programme content (21.26%). Among the farmers trained 82.2% of the respondents had medium to high favorable opinion regarding the training. Major suggestion given by trainees include provision of more off-campus training preferably in their villages during summer season in the afternoon. It is concluded that, the training program had a significant positive impact in terms of knowledge gain and adaption on scientific practices of Animal Husbandry, Fishery and Dairy sectors through effective capacity building of these farmers with a need based suitable curriculum. In future day livestock sector has to meet huge demand of meat and its other products in local, national and international markets. This needs propagation of scientific and recent technologies in to Livestock, Fishery and Dairy farmers. Such training programme has certainly provided a suitable alternative solution for their better livelihood of these farmers. The training program had a significant positive impact in terms of knowledge gain and adaption on scientific practices of Livestock, Fishery and Dairy farming through effective capacity building of these farmers. 69 nos. of scientists' training have also been organized and a total of 2208 nos. of scientists mainly from ICAR including KVK, Extension workers from the line departments, Research Personal and other field level Extension workers including Panchayet, SHGs, NGOs, Para vet, Pranibondhu, Pranimitras, ATM/BTM etc are being trained.

Programme		2016-17	2017-18	2018-19	2019-20	2020-21*
Capacity building programme	No of farmers training programme organized	347	389	397	344	122
	No. of farmers trained	16656	18283	19453	16856	7564
	No of Scientist raining programme organized	14	15	18	15	7
	No. of Scientist trained	448	480	576	480	224

\* As on 31.12.2020



## Entrepreneurship Development

Entrepreneurship development is the prime moto of the university for better livelihoods of the farming community. The primary objective of mobilising these farmers into member-owned producer organisations, or Farmers' Producer Organization ie FPOs, is to enhance production, productivity and profitability of agriculture in general and Animal Husbandry, Fishery and Dairy in particular, especially for the small and marginal farmers of the State. The participant farmers have been provided the necessary support to identify appropriate agricultural crops relevant to their context provided access to modern technology through community-based processes including Farmer Field Schools. Their capacities have been strengthened to access forward linkages with regard to technology for enhanced productivity, value addition of feasible products and market tie-ups. Total 23 nos. of FPOs have been formed. Till now 243 nos. of Farmers' Interest Group (FIG) have been formed which are fully functional. More or less 1800 number of entrepreneurs have been emerged in the field of agriculture.

### 6.6.6. STUDENT DEVELOPMENT

#### 6.6.6.1. Scholarships/Stipend:

*Is the University offering any scholarship programme for meritorious students? How many students are receiving competitive scholarships/fellowships for each College? How many passed out students have been selected for scholarships/fellowships in other universities.*

**Is the University offering any scholarship programme for meritorious students? YES**

**How many students are receiving competitive scholarships/fellowships for each College?**

University Scholarship received by the UG Students (Faculty wise)

Sl No	Name of the Faculty	(Rupees in Lakh)									
		2016-17		2017-18		2018-19		2019-20		2020-21*	
		No of Student	Scholarship Received	No of Student	Scholarship Received	No of Student	Scholarship Received	No of Student	Scholarship Received	No of Student	Scholarship Received
1	Faculty of Veterinary & Animal Sciences	71	2.41	58	1.96	51	1.58	54	0.97	84	1.05
2	Faculty of Fishery Sciences	35	1.14	35	1.14	38	1.29	-	-	-	-
3	Faculty of Dairy Technology	26	0.83	22	0.72	28	0.89	32	1.04	35	1.18

\* As on 31.12.2020

University Scholarship received by the PG Students (Faculty wise)

Sl No	Name of the Faculty	(Rupees in Lakh)									
		2016-17		2017-18		2018-19		2019-20		2020-21*	
		No of Student	Scholarship Received	No of Student	Scholarship Received	No of Student	Scholarship Received	No of Student	Scholarship Received	No of Student	Scholarship Received
1	Faculty of Veterinary & Animal Sciences	105	6.68	29	1.86	75	5.32	44	2.78	43	2.74



2	Faculty of Fishery Sciences	36	2.41	127	7.44	105	6.46	49	3.04	3	0.20
3	Faculty of Dairy Technology	17	1.44	10	0.72	19	1.31	5	0.34	6	0.38

\* As on 31.12.2020

University Scholarship received by the PhD Students (Faculty wise)

(Rupees in Lakh)

Sl No	Name of the Faculty	2016-17		2017-18		2018-19		2019-20		2020-21	
		No of Student	Scholarship Received	No of Student	Scholarship Received	No of Student	Scholarship Received	No of Student	Scholarship Received	No of Student	Scholarship Received
1	Faculty of Veterinary & Animal Sciences	21	14.38	50	35.24	63	38.31	29	16.80	2	0.96
2	Faculty of Fishery Sciences	22	13.24	25	16.07	34	20.67	28	15.87	13	6.64

How many passed out students have been selected for scholarships/fellowships in other universities:-

Sl No	Name of the Faculty	2016-17		2017-18		2018-19		2019-20		2020-21	
		JRF	SRF	JRF	SRF	JRF	SRF	JRF	SRF	JRF	SRF
1	Faculty of Veterinary & Animal Sciences	6	1	2	Nil	1	1	3	Nil	2	3
2	Faculty of Fishery Sciences	3	0	3	0	4	0	2	0	0	0
3	Faculty of Dairy Technology	4	Nil	1	Nil	1	1	2	1	5	4

#### 6.6.6.2. Extra and Co-Curricular Activities:

Whether the sports/games/cultural activities/NSS/NCC/ programmes are being organized? If yes, then give the list of events in last five years in tabular form. Participation of students in ICAR sponsored events (Agri-unifest/ Agri-sports/ any other) and award/medals received in last five years may be given in Tabular form. How the students practice sports and games daily?

Whether the sports/games/cultural activities/NSS/NCC/ programmes are being organized? YES

List of events in last five years:

Sl No	Particulars	2016-17	2017-18	2018-19	2019-20	2020-21*
1	Annual Sports / Games	1	1	1	1	-
2	Annual Cultural Meet	3	2	5	3	-
3	NSS Camp	15	13	17	11	-
4	NCC**	N/A	N/A	N/A	N/A	N/A

\* Due to pandemic situation events could not be organized.

\*\* The NCC unit will be established shortly.



**Participation of students in ICAR sponsored events (Agri-unifest/ Agri-sports/ any other) and award/medals received in last five years**

Year	Annual Cultural & Sports meet	ICAR sponsored Agri-unifest/ Agri-sports	
		Participation	Recognition
2016-17	March 9-10	34	-
2017-18	March 9-10	28	4 <sup>th</sup> prize in vocal solo song in 2018
2018-19	March 9-10	17	
2019-20	March 9-10	22	2 <sup>nd</sup> prize in painting in 2020
2020-21	-	-	-

### 6.6.6.3. Health Facilities:

*Provide the brief information about medical facilities available in the head quarter and off-campuses. A brief about Health Insurance scheme being implemented at the University may be provided.*

The University has outdoor medical facilities in its three campuses for the stakeholders. Medical Officers and Staff Members extend the facilities to the stakeholders. Govt. hospitals cater facilities for indoor treatment of students, teachers and staff members. Introduction of Health insurance of students is under active consideration and negotiation with the National Insurance Company Pvt. Ltd. is underway. The Govt. of West Bengal has already introduced Health Scheme for the teachers and Officers which will be implemented within a short span of time.

### 6.6.6.4. Sports and Cultural Facilities:

*Give detailed report of sports and games facilities and auditoriums available for cultural events.*

The university has two big playgrounds, one at the headquarters at Kolkata where the faculty of Veterinary & Animal Sciences is located and the other at the Mohanpur campus where the faculty of Dairy Technology is located. These playgrounds cater to the need of the students for playing the outdoor games like football, volleyball and cricket. These playgrounds need to develop as composite Sports Complexes in future. For badminton and the indoor games like table tennis and carom necessary facilities are available in all the hostels. All necessary appliances for both outdoor and indoor games are provided through the In-charge of Students' Welfare, who looks after all co and extra curricular activities of the students. In order to inculcate the spirit of competitiveness, goodwill and discipline among the students interclass competition in all the games and sports events are held every year.

Cultural activities are also encouraged by holding different cultural programmes like hall day, freshers' welcome & farewell, annual social function, reunion programme etc wherein the students get ideal platform for performing various cultural activities including drama, skits, dance, music etc.

SL. No.	Games & Sports	Equipment & Infrastructure available
1.	Out door games	2 Play grounds, cricket, football, volley ball equipments
2.	Indoor games	TT, Carom, badminton in all hostels
3.	Gymnasium	One Medium size Gymnasium



4.	Badminton	Court with appliances
5.	Table Tennis	Board with appliances
6.	Football	Ground with appliances
7.	Cricket	Ground with appliances
8.	Volley Ball	Ground with appliances

#### 6.6.6.5. Student Counseling and Placement Cell:

*Give detailed report on placement cell and provide the report for recruitment of students by firms in last five years. What is the mode and mechanism of counseling being followed at the University level?*

The In-charge, Students' Welfare, deals with the matters regarding students counseling and placement at the university level. However, as the three constituent faculties are located at three separate places the faculty level Students' Counseling & Placement Cells have been created for better monitoring of the matters related to counseling and placement of the students of the individual faculties. The details of placements of the students awarded degrees of this university in last five years are furnished below:-

Category of placement	Faculty of VAS	Faculty of DT	Faculty of FS
Government Services including Scientists (ARS), Assistant Professor.	123	10	103
PSU's (Bank & Insurance)	09	19	31
Private sectors	29	75	32
Self employment (Farming/Business)	09	08	11
Further education	41	11	07
Others (Research Projects etc.)	11	01	05
<b>TOTAL</b>	<b>222</b>	<b>124</b>	<b>189</b>

#### 6.6.6.6. Disabled Friendly Facilities:

*What kind of facilities is available for differently abled persons in the campus? Give a brief report.*

As per Govt of West Bengal guidelines, the university has reservation of seats at UG, PG and PhD level on horizontal basis for Persons with Disabilities (PWD). Wheel Chair facilities are available. A proposal has been submitted to the Govt. of West Bengal for development of facilities viz. Special Seating arrangements, separate Lavatory etc. which is under active consideration.



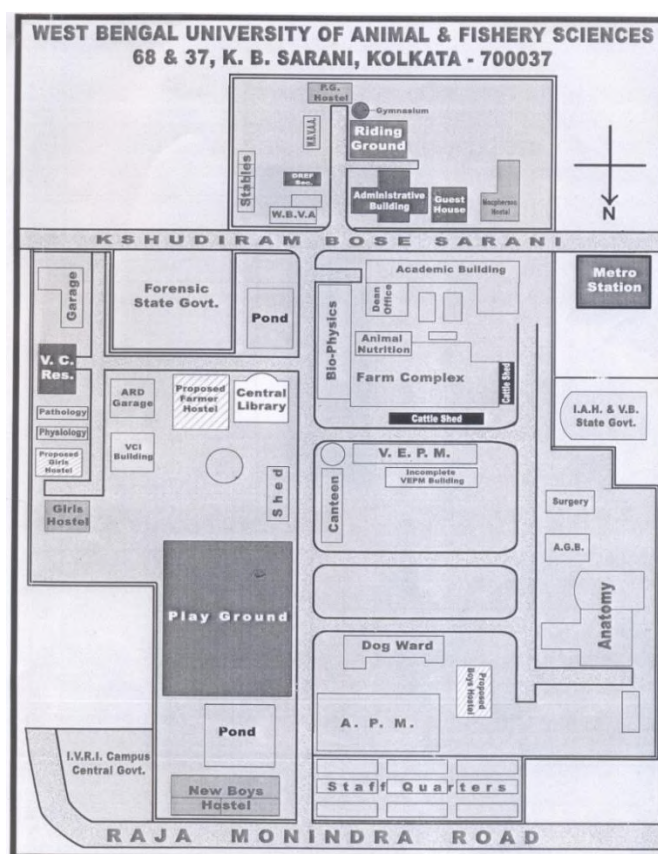
## 6.6.7. INFRASTRUCTURE

### 6.6.7.1. Physical Facilities including Administrative Building and Lands:

*Give comprehensive report on the administrative buildings, academic blocks, Colleges research units instructional farms, seed production units etc. for each College and University Head Quarter.*

#### Administrative building/block/space

Details of Administrative building / block/ space are shown below. However, the diagrams given below are not to the scale.



Site plan of the university headquarters including the Faculty of VAS and the CLINS at Belgachia, Kolkata – 37.

#### Institutional area and farm land

The university with its headquarters at Belgachia, Kolkata has its three faculties at three different locations. The faculty of VAS is at the university headquarter till August, 2014 afterwards the undergraduate programme under faculty of VAS has been shifted to the renovated campus at Mohanpur, Dist. Nadia. The P.G and Ph.D under faculty of VAS is continuing at headquarter. The faculty of DT is at Mohanpur, Dist. Nadia, about 50 Km away from Kolkata and the faculty of FS is at Chakgaria, Kolkata, about 15 Km away from the headquarters. Besides, the Directorate of Research, Extension & Farms has its units like the KVKs, training unit and farms at the outstations. The details of institutional area of the university in respect of its three faculties are tabulated below.

Sl. No.	Particulars	Availability			
		No. of unit	Plinth area (Sq.m.)	Capacity applicable	Adequate Yes / No
1.	Administrative Offices	4	1540	N.A.	No
2.	Classrooms	61	2,214	30 - 100	Yes



3.	Laboratories	102	4706	15 - 30	
4.	Library	4	1765	Reading - 50	<b>No</b>
5.	Housing for staff	10	2850	N.A.	<b>No</b>
6.	Boy's hostel	7	10850	50 - 300	<b>No</b>
7.	Girls hostel	3	1850	50-100	<b>No</b>
8.	Sports complex	2	9260	N.A.	<b>Yes</b>
9.	Guest house	3	586	16 - 20	<b>No</b>
10.	Canteen	3	885	20 - 40	<b>No</b>
11.	Health clinics	2	55	No indoor facility	<b>No</b>
12.	Workshops	-	350	N.A.	<b>-</b>
13.	Auditorium	3	890	500	<b>No</b>
14.	Farmers' Hostel	1	1020	60	<b>No.</b>
15.	<b>Others (Specify)</b>	<b>1(Gymnasium)</b>	<b>140</b>	<b>15</b>	<b>No</b>

#### **Students' hostel for men and woman**

Boys' hostel – 7 (Belgachia – 3, Mohanpur – 2 and Chakgaria – 2).

Girls' hostel – 4 (Belgachia-1, Mohanpur – 2 (One Newly Constructed) and Chakgaria -1)

#### **Farm land:**

There is a Livestock Farm complex, Fish farm complex at Mohanpur campus of this university. Details of farm land apart from Krishi Vigyan Kendras are appended below:-

SL No.	Name of the Unit	Land
1	Large ruminant unit	12,000 Sq.ft
2	Pig unit	12,000 Sq.ft
3	Goat /Sheep unit	12,000 Sq.ft
4	Poultry unit	10,000 Sq.ft
5	Hatchery unit	1,500 Sq.ft
6	Ornamental fish farming	10,000 Sq.ft
7	Duck cum fish farming	300 Sq.ft
8	Water bodies and general areas etc.	2500 Sq. ft
9	Fodder cultivation	6 Acres

#### **Instructional farm (agriculture/horticulture/animal/poultry/sericulture/fishery etc.)**

During the period, the university has modernized the livestock and fish farms in order to enhance the quality of education, training and research for the students. It is the era of advancement of science and technology, farm practice cannot be done with age old method. The idea of the modern livestock farm practice is nothing but achieve more production with minimum effort and at the same time it is hygienic, environmental friendly, humane and less expensive. The farm complex of the University is not only able to demonstrate the young professionals the advance technology will better husbandry practice, but also able to increase the revenue of the university by increasing the production of the farm. It also serves as demonstration farm for the farmers and the entrepreneurs. Sheep unit, Goat unit and Cattle unit are modernized within a campus for better care and management. Modernized drainage system with proper waste management, bio-security measures, regular grooming of the animals are taken care properly. A complete automatic feed plant with pellet feed production facility is developed for getting maximum return with minimum manpower utilization. A computerized weight recording system is arranged to take daily body weight of all the farm animals in shortest possible time and without human error. All



modern facilities of disease diagnosis are available in our disease diagnostics unit for early and easy detection of diseases of farm animals. Detection of soil and water quality is done in our laboratory and in field to give benefit to the university as well as farmers for agricultural and fishery farming. There is a Laboratory animal house from where laboratory animals will be easily available to the students for research purpose.

Development of one campus integrated duck cum fishery with ornamental fishery using modern technology will certainly give a new dimension in livestock farming. Fodder demonstration field is being used for demonstration to the students as well as for production of fodder. Sprinkler Irrigation system for fodder production minimizes the manpower requirement and in term benefit the university. The university was established with the following objectives

1. To undertake improved husbandry practices without adversely affecting the environment for quality teaching and research.
2. To promote improved breeding programme through use of superior breeding stocks.
3. To promote the use of sound valuation parameters for better price realization.
4. To build the capacities of the communities to liaise with the Government and the traders for availing the services for livestock development.
5. Extension as well as exhibition of improved husbandry practices.

#### **Infrastructure Facilities**

- ✓ Demonstration Farm at KVK, Ramshai, Dist. Jalpaiguri.
- ✓ Fish Seed production Hatchery.
- ✓ Ornamental Fish Farm (under construction)
- ✓ Students' Demonstration – cum – Instructional Livestock Farms at DREF Farm complex at Mohanpur

#### **Any other important facility**

Most of the university employees have their own residences at approachable distances from their faculties/ offices. However, there are at present six residential units for the teaching staff and supporting staff at Mohanpur Campus and Chakgaria Campus in addition to a few very small units for the Group-D employees at Belgachia Campus. The university is expecting Govt. sanction for construction of quarters for teaching and non-teaching employees both at Belgachia and Mohanpur campus.

#### **Communication and Connectivity facilities:**

Quick and easy means of communication is the key to effective administration of an institution like a university. For that the university has EPABX facility, which provides a complete network of intra-institutional communication in all its three faculties. This facility also provides for extra-institutional communication. Besides, the university also maintains a Telephone Directory in respect of all its Officers, Teachers and the administrative staff for communication on holidays and in case of urgency. The office of the Vice Chancellor, the Deans of the three faculties and other Officers have direct Telephone and Facsimile facilities for quick extra institutional communication.



The university also provides wider national and global connectivity through electronic devices like LAN and Internet facility. The Internet facility is provided through the Internet Server as well as through Wi-Fi. The teachers, students and the non-teaching staff avail of these facilities through the computers provided in adequate numbers to all the departments/ sections of the university.

#### **6.6.7.2. IT Infrastructure:**

*A brief report on University ARIS Cell shall be given. Give the information on LAN connectivity, Wi-Fi/internet facilities in campus and hostels; Computer based library management, videoconferencing facilities, smart class rooms and workshops etc.*

##### **ARIS Cell**

At present there is no ARIS cell in the university. However, there is a Technology Display and Information Center under the Directorate of Research, extension and Farms having its branches in the three Krishi Vigyan Kendras of the university from where the stakeholders can avail the latest technological information as per the different agroecological zone. Number of models, documentary films, extension literatures and relevant materials are displayed in all the centers which can readily be used by the farmers.

##### **LAN , Internet & Wi-Fi :**

All the important establishments of the University have been made connected through campus LAN. Members of all academic departments can access computers and internet facilities through campus LAN apart from those available at library and elsewhere. Internet browsing facilities to the users have also been extended to Students , Research Scholars & Faculty Members with 1 gbps lease line at main Campus through National Knowledge Network (NKN) funded by The Ministry of Human Resource Development (MHRD), Government of India . Provisions have also been made to provide steady Broadband Internet Connectivity to other three campuses of the University.

A separate unit like information hub has been developed with computer on latest configuration in all campus Libraries where the Students, Faculties, Scientists and Research Scholars can access the internet. Internet surfing for academic purpose is free of cost to the U.G. & P.G. students, Teachers and Research Scholars.

The Wi-Fi facility has also been introduced to all the Departments & Administrative offices at all campuses of the University.

##### **Smart Class Rooms:**

In order to facilitate high quality education, the classrooms of all campuses are well equipped with comfortable sitting arrangements with OHP, LCD and other interactive media facilities. Almost all the departments have modern infrastructure and up to-date equipment for teaching and research.

##### **Computer Based Library Management System:**

The Library of a modern Institute is now a day is not only a house of knowledge but also a rich source of relevant information in the concerned disciplines. After receiving a steady support from the ICAR



Development Grant, University undertook the library management with a view for proper functioning of the library for its better utilization of resources. The resources of the Library in terms of printed accessioned books have been entered, catalogued and classified into the Koha-Library Management Software. Electronic circulation control system through Koha has also been developed through bar coding of library books. Provisions have also been made to provide Electronic ID cards for all library users through Koha-Library Management Software. Electronic surveillance system through CCTV has also been installed in the all four campus libraries of the University.

#### **Videoconferencing:**

Video conferencing are carried out on virtual mode through different software's like Google Meet, Team Link, Microsoft Team, Cisco WebEx etc. on academic and administrative purposes of the University.

#### **6.6.7.3. Students and Staff Amenities:**

*Give brief report on the sporting and recreational activities, employment and career advice, child care, financial advice and food services, entertainment avenues etc. available in the campus.*

The following facilities sporting and recreational activities, employment and career advice, child care, financial advice and food services, entertainment avenues etc. available in the campus.

- 1) Play grounds
- 2) Indoor Sports facilities
- 3) Recreational Clubs for Staff members and Teachers
- 4) Gymnasium
- 5) Canteen
- 6) Auditorium
- 7) Placement Cell

**N.B: The university has earmarked three rooms in three campuses to develop Child Care facilities for the Lady Staff members which will be available very shortly. Moreover, as per Govt of West Bengal order, Paternity Leave and Child Care Leave are available for the faculty and administrative staff members. Time to time financial experts from the Income Tax Dept. and Dept. of Finance, Govt. of West Bengal delivers lectures on financial norms and investment policies for stakeholders.**

### **6.6.8. FINANCIAL RESOURCE MANAGEMENT:**

#### **6.6.8.1. Budget allocation:**

*Give the budget allocation (College wise) for salary, contingency and amount received through the ICAR development grant during last five years. Give a note on the sufficiency of the fund to meet the academic requirement in last five years.*

<b>(Rupees in Lakh)</b>						
<b>Sl No.</b>	<b>Particulars</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-20</b>	<b>2020-21*</b>
<b>1</b>	Salary (State Govt.)	2901.00	3323.00	3222.00	3631.00	4087.00
<b>2</b>	Contingency (State Govt.)	802.00	688.00	917.00	830.00	455.00
<b>3</b>	ICAR Development Grant	367.00	491.00	448.00	315.00	0.00

**\* As on 31.12.2020**

**The grants received from the State Govt. under Contingency Head where from all contingency expenditures related to academic activities and administrative establishments met out, need to be enhanced for strengthening the academic and research activities.**



### 6.6.8.2. Finance Committee Meetings:

*Provide the schedule of the meetings of the financial committee held in last five years.*

SL NO	YEAR	FINANCE COMMITTEE	DATE
1	2016-17	37 <sup>TH</sup> FINANCE COMMITTEE	03.03.2017
2	2017-18	38 <sup>TH</sup> FINANCE COMMITTEE	28.07.2017
3	2018-19	39 <sup>TH</sup> FINANCE COMMITTEE	25.04.2018
		40 <sup>TH</sup> FINANCE COMMITTEE	26.09.2018
4	2019-20	41 <sup>ST</sup> FINANCE COMMITTEE	26.04.2019
		42 <sup>ND</sup> FINANCE COMMITTEE	17.09.2019
5	2020-21*	43 <sup>RD</sup> FINANCE COMMITTEE	27.11.2020

\* As on 31.12.2020

### 6.6.8.3. Internal Resources Generation:

*Give a comprehensive report (College wise) internal resource generation through different sources for last five years. How this money is being utilized for the academic programmes and research work of students? Give a brief note.*

(Rupees in Crore)						
Sl No.	Total Revenue generated (A)	2016-17	2017-18	2018-19	2019-20	2020-21*
1.	Consultancies	0.09	0.15	0.18	0.19	0.00
2.	Certification	0.02	0.03	0.02	0.01	0.00
3.	Testing	0.11	0.21	0.56	0.55	0.00
4.	Tuition Fees	1.02	1.25	1.36	1.34	0.14
5.	Licensing	0.01	0.01	0.09	0.02	0.00
6.	Sale of Inputs	0.06	0.09	0.16	0.15	0.00
7.	Commercialization of Technologies	0.04	0.03	0.06	0.14	0.00
8.	Collection from Guest House	0.06	0.14	0.13	0.12	0.00
9.	Collection From Clinic	0.35	0.78	0.95	0.82	0.15
10.	Institutional Charges	0.15	0.14	0.13	0.21	0.08
11.	Misc. Receipts	0.25	0.30	0.65	0.40	0.10
	<b>TOTAL (A)</b>	<b>2.16</b>	<b>3.13</b>	<b>4.29</b>	<b>3.95</b>	<b>0.47</b>

\* As on 31.12.2020

#### Purpose of utilization of Internal Resources:

- 1) Purchase of chemicals, glasswares etc for laboratories.
- 2) Printing of academic reports and manuals etc.
- 3) Stationeries for the academic departments.
- 4) Supply of accessories / utility items to the hostels.
- 5) Purchase of items for extending other student welfare facilities including sports, educational tour etc.
- 6) Research grants on competitive mode to the Post Graduate and PhD. Students
- 7) Research grants on competitive mode to the teachers.



#### 6.6.8.4. External Funding:

*How much resources the University has mobilized from the external sources (give the list) based on the competitive mode in last five year?*

(Rupees in Lakh)						
SL NO	HEAD OF ACCOUNT	2016-17	2017-18	2018-19	2019-20	2020-21*
1	P-AICRP-GOAT IMPROVEMENT	37.91	23.70	33.85	37.13	11.48
2	P-ARD-HEAT SYNCRO	2.10	0.00	0.35	0.00	0.00
3	P-ASCI-TRAINING PROGRAMME	0.50	0.00	3.79	0.00	0.00
4	P-CIBA-AINP-FH	9.97	12.00	14.00	18.00	0.00
5	P-DANISCO-COMPARE EFFICACY	4.14	0.00	0.00	0.00	0.00
6	P-DBT-BIOFILM	17.45	0.00	4.13	0.00	0.00
7	P-DBT-CORNEA IN DOGS	0.00	0.00	25.50	0.00	0.00
8	P-DBT-DUCK BREED	0.00	0.00	9.30	0.00	0.00
9	P-DBT-MY DAN	0.00	0.00	62.58	22.60	0.00
10	P-DBT-DEV OF NOVEL TISSUE	4.50	0.00	0.00	0.00	0.00
11	P-DBT-MOLECULAR.. SHEEP	12.82	7.86	0.00	0.00	0.00
12	P-DBT-MULTI LAYER ..WOUND	0.48	0.00	0.00	0.00	0.00
13	P-DBT-SILK	9.94	6.23	0.00	0.00	0.00
14	P-DBT-TWINNING NE SILK	9.10	0.00	0.00	0.00	0.00
15	P-DBT-TWINNING PRO NER	1.86	0.00	0.00	0.00	0.00
16	P-DBT-TRANSC...CATTLE	0.00	0.00	0.00	0.00	9.22
17	P-DBT-BIOTECH KISHAN HUB	0.00	73.53	0.00	186.43	1.60
18	P-DBT-DEV OF FISH..HEALING	0.00	0.00	0.00	9.00	0.00
19	P-DBT-ENGINEERING.. HEALING	0.00	0.00	0.00	8.47	8.97
20	P-DBT-NE-VASCULAR	0.00	2.94	1.13	0.00	0.00
21	P-DBT-STRATEGIC INCLUSION	0.00	8.10	0.00	0.00	0.00
22	P-DEE WBUAFS	6.74	19.67	10.60	11.82	2.00
23	P-DEE-PPV&FR	0.00	0.00	5.00	0.00	0.00
24	P-DST-INFLU CORNEAL	5.98	8.00	0.00	0.00	0.00
25	P-DST-CORNEA & RETINA	0.00	39.84	0.00	6.00	0.00
26	P-DST-DUCK	0.00	5.78	0.00	4.51	0.00
27	P-GWB-DST-GENERATION..	0.00	0.00	4.77	0.00	0.00
28	P-GWB-IMPROVED HEALTH	0.00	0.00	4.73	0.00	0.00
29	P-GWB-POTE..ANTIBIOTICS	0.00	0.00	1.62	0.00	0.00
30	P-GWB-PHYTOBIOTICS	7.79	0.00	0.00	0.00	0.00
31	P-GWB-TILAPIA FARMING	3.27	0.00	0.00	0.00	0.00
32	P-GWB-DIETARY FORFICATION	0.00	3.77	0.00	0.00	0.00
33	P-ICAR-AINP MARICULTURE	8.90	13.50	21.95	13.70	0.00
34	P-ICAR-NAHEP	0.00	0.00	0.00	39.40	185.60
35	P-ICAR-ATARI-ORIENT TRG PROG	0.00	1.58	0.00	0.00	0.00
36	P-ICAR-AINP PARA	13.50	0.00	0.00	0.00	0.00
37	P-ICAR-BLUE TONGUE	10.35	0.00	0.00	0.00	0.00
38	P-ICAR-CONSER .RUMINANTS	0.00	3.19	0.00	0.00	0.00
39	P-ICAR-NBFGR-HARINGHATA	6.50	8.52	0.00	0.00	0.00
40	P-ICAR-NSPAAD	14.12	0.00	14.14	14.97	0.00
41	P-ICAR-POULTRY SEED	17.21	43.40	49.50	48.00	1.92
42	P-ICAR-TRIBAL SUB PLAN	46.00	70.22	142.72	99.39	0.00
43	P-ICAR-TOT TRG PROGRAMME	0.00	0.00	0.00	0.60	0.00
44	P-ICAR-SPONSORED WINTER TRG	0.00	0.00	0.00	5.26	0.00
45	P-ICMR-CANINE	5.56	0.00	0.00	9.82	0.00
46	P-IFB-NEWGEN DDGS	9.72	0.00	0.00	0.00	0.00
47	P-IVRI-ZOONOTICS	10.63	6.75	5.22	8.68	0.00



48	P-MANAGE-TRAINING PROGRAMME	0.00	1.83	0.00	8.64	0.00
49	P-MANAGE-AQUA CLINICS	0.00	0.00	0.00	0.00	0.00
50	P-MILAN PROGRAMME	0.00	1.99	0.00	0.00	0.00
51	P-NEWS-TRAINING..FISH FARMING	0.00	0.00	0.00	0.83	0.00
52	P-NFDB-AQUA	0.00	0.00	0.00	0.95	0.00
53	P-NCSCM-ASS ESA ODHISA	3.19	0.00	0.00	0.00	0.00
54	P-NFDB- ENHA LIVELIHOOD	1.00	0.00	0.00	0.00	0.00
55	P-NFDB TRAINING PROGRAMME	0.00	4.50	13.50	7.50	0.00
56	P-NFDB-FISH FESTIVAL	0.00	0.00	6.03	0.00	0.00
57	P-OUTREACH-MONI OF DRG RESIDUE	6.75	6.17	7.05	7.21	3.75
58	P-RKVY-JHARGRAM	150.00	226.00	0.00	0.00	0.00
59	P-RKVY-MVC	72.28	168.52	35.00	0.00	0.00
60	P-SERB-GENETIC..INFLUENZA	0.00	0.00	17.00	0.00	0.00
61	P-SERB-TECHNO NUTRITION	0.00	0.00	2.00	0.00	0.00
62	P-UNIQUE-SELENIUM YEAST	0.00	0.00	0.00	5.96	0.00
63	P-IIT HYB-INVIVO STUDY	0.00	0.00	0.00	0.00	0.50
64	P-LSHTM	0.00	0.00	0.00	0.00	20.24
65	P-SERB-INCAN 2019	0.00	0.00	0.00	0.00	1.48
	<b>TOTAL</b>	510.26	767.59	495.45	574.87	246.76

\* As on 31.12.2020

#### 6.6.8.5. Financial Powers Delegation to Deans/Heads:

*Give a report on the financial autonomy to College Deans, University officers and Head of the Departments.*

As per order of the Govt. of West Bengal and Statutory provisions, the Finance Officer (Comptroller) is the Drawing and Disbursing Officer of the university. Deans of Faculties and Heads of the Departments have financial power related to contingency expenditures for the faculties and departments.

#### 6.6.8.6. Finance Utilization:

*Mention in brief about per cent finance utilization in last five years.*

Sl No.	Particulars	2016-17	2017-18	2018-19	2019-20	2020-21*
1	Percentage of Utilization of Fund	99.52%	94.89%	98.26%	94.79%	99.92%

\* As on 31.12.2020

### 6.6.9. ACCOMPLISHMENTS

#### 6.6.9.1. Awards for the University:

*Provide the detailed list of Regional, National and International Awards received by the University in last five years.*

The University received UGC recognition under section 12B of UGC Act in the year 2019.



### 6.6.9.2. Accreditation Report from ICAR/Other Agencies:

*Whether the University and its Colleges were accredited by the ICAR and other agencies in the past? What was the recommendation of the accreditation agencies? Whether the University has taken the action taken report and submitted the reply to the accreditation agencies? Provide the detailed action taken report for each observation.*

Sl No	Recommendation of the Board	Action Taken
1	The West Bengal University of Animal & Fishery Sciences, Kolkata was approved for accreditation for a period of 5 years (2016-17 to 2020-21)	Noted
2	The Faculty of Fishery Sciences and its programme viz. Bachelor of Fishery Science (BFSc), Master in Fishery Science (MFSc) in seven departments and PhD in three departments were approved for accreditation for a period of five years (2016-17 to 2020-21)	MFSc course in Fishery Engineering was introduced before inspection of ICAR accreditation team in the year 2016 but the 1st batch passed out 2018. Doctoral course in Aquaculture, Fisheries Resource Management, Fishery Economics and Aquatic Animal Health started in 2016 but the 1st batch passed out after 2018. Therefore, MFSc and Doctoral programmes in the said subjects need to be accredited apart from the existing accredited programmes. The university has already planned to start MFSc course in newly opened department i.e. Fish Nutrition.
3	The Faculty of Dairy Technology and its programmes were not considered for accreditation in the XVIIth meeting of the NAEAB on 26.10.2016. Subsequently, the university submitted an Action Taken Report on the basis of recommendations & observations and a special inspection team of the NAEAB paid a visit to the Faculty of Dairy Technology at Mohanpur Campus on 20.08.2018. The Report of the Special Inspection Committee was placed in the XXIIth Meeting of the NAEAB held on 08.09.2018 wherein the Faculty of Dairy Technology and its BTech (DT) and MTech programme in Dairy Technology, Dairy Chemistry, Dairy Microbiology and Dairy Engineering were approved along with PhD programme in Dairy Technology, Dairy Chemistry and Dairy Microbiology.	The University has a plan to start Doctoral Programme in Dairy Engineering. A new department under the nomenclature "Dairy Business Management" at the UG level has been started.
4	The Faculty of Veterinary & Animal Sciences and its academic programmes viz. Bachelor of Veterinary and Animal Sciences (BVSc & AH) and Master in Veterinary Science (MVSc) in 16 departments along with Doctoral course in 16 departments were approved for accreditation for a period of five years (2016-17 to 2020-21). The MVSc and PhD programmes in Veterinary Public Health were for consider for accreditation since the faculty in inadequate and the 1st batch of students is yet to pass out.	The number of faculty members has been increased in the Department of Veterinary Public Health and 1st batch of MVSc and PhD students has already passed out, the MVSc and Doctoral programme in the said department needs accreditation. Four new departments under the faculty of Veterinary & Animal Sciences has already been opened viz. Livestock Farm Complex, Veterinary Clinical Complex, Animal Biotechnology and Avian Science as per 5th Deans' Committee Report of ICAR. The university has a plan to start PG and PhD course in Animal Biotechnology and Avian Science in near future



### 6.6.9.3. Inter Institutional Standings:

*Status of the University in the ranking announced by agencies for academics, research, extension, sports/games, cultural events etc.*

#### ICAR Ranking from 2016 to 2020

2016-17	- 28
2018	- 39
2019	- 46

Students has achieved 4<sup>th</sup> prize in vocal solo song in 2018, 2<sup>nd</sup> prize in painting in 2020 in the ICAR sponsored Agri-unifest.

### 6.6.9.4. Socio-Economic Impact:

*Elaborate data based impact of various activities/recommendation on upliftment of the economics and social status of the farmers.*

During last five years, the university initiated different programmes in the selected villages as the target population for economic development and livelihood improvement as an objective of the various projects on Animal Husbandry, Fisheries and Agriculture as a whole. The Krishi Vigyan Kendars under the aigies of this university also took initiative for upliftment of economic condition of the farmers and villagers of selected districts through various extension programmes. The RKVY project was also undertaken by the university on the same objective through location specific and farmers-centric activities like rearing of Blank Bengal Goat, Backyard Poultry, Ghoongroo Pig, Garole Sheep and quality fish seed.

A Tribal Sub Plan Project has been sanctioned by ICAR which has been continuing since 2016 with the aforesaid objectives. From the project itself, direct 1235 number of tribal farmers have received the training on modern scientific rearing of pigs, goat and poultry birds and integrated farming with livestock, horticulture and nutrition gardening. It has obviously improved their knowledge and skill to the extent of 50-60%. Scientific rearing has not only increased the production trait of the individual animal to at least 30-40% but augment the additional income level of the tribal families from the animal husbandry sectors. The conservation of superior germplasm of the distributed animals is also be maintained at the household level of the tribal communities and the phenomenon of inbreeding depression has been reduced to a great extent. Scientific feeding management by distributing the concentrate feed to a limited time period has induced the habit of the tribal farmers so that they are able to prepare the feed from the locally available ingredients which ultimately reduced the feed cost to the tune of 20-30% and increased the profitability to at least 30-35%. Periodical health and vaccination camp including the distribution of medicine and mineral mixture has improved the animal health status and reduced the disease incidence to the tune of 70-80% and thereby the mortality to less than 5%. Through this project much more emphasis has been given to the women farmer of the tribal communities to make them the economic partner of the family. Effective utilization of backyard fallow land is achieved through nutritional gardening and year round production improved the nutritional security and reduced the hidden hunger to the extent of 50-60%.



- Weight gain in Pig and Goat has been increased to the tune of 32% to 35% due to superior germplasms, feed and health management which has been found very much profit oriented.
- Birth weight of Piglets and Kids are substantially increased following scientific management of breed able does and sows which has been found very much profit oriented.
- Disease incidence reduced to 70-80% found to be very much economical to the farmers.
- Kidding and farrowing percentage has been increased due to better management, superior germplasms and reduced inbreeding phenomenon leading to higher farm profit particularly for the small and marginal farmers.
- 50-60% additional income achieved from the household goat, pig and backyard poultry farming.
- Meat and Egg production through improved Dual purpose poultry bird has been increased to the tune of additional 20-30%.
- Effective utilization of Backyard Nutrition Garden with year around production augmenting nutritional security and reduction of hidden hunger.
- Judicious utilization of water resources through scientific fish farming has been increased which provides 20%-25% additional income of the farmers.
- Overall additional income per year is increased to the tune of 30-35% yearly.
- Engagement of farmers in their own farming avoiding seasonal migration from 30% to 8% in the adopted villages of the university.

Economic gain among the 4250 selected beneficiaries to whom 8500 nos. of quality inputs distributed which have been assessed. Primary economic impact (or direct effects) are generally defined as the initial, immediate economic output generated by distribution of inputs among the farmers especially farm women.

**Monthly Economic return (in rupees) (Mean  $\pm$  SEM) of the Farmers' before and after distribution of inputs during 2016-17 to 2020-21**

Factors	From agriculture (Rs)	From animal(Rs)	From other service or business (Rs)	Total income (Rs)
<b>Before Initiation</b>	5632.84 $\pm$ 1.422	3075.23 $\pm$ 12.24	13567.84 $\pm$ 12.48	24316.49 $\pm$ 17.25
<b>After implementation</b>	7829.65 $\pm$ 16.24	5289.40 $\pm$ 15.12	18994.98 $\pm$ 18.88	36093.15 $\pm$ 19.35
<b>Improvement (Rs)</b>	2196.81 $\pm$ 21.25	2214.17 $\pm$ 10.20	5427.14 $\pm$ 14.54	11776.66 $\pm$ 14.26
<b>% improvement</b>	<b>39.00</b>	<b>72.00</b>	<b>40.00</b>	<b>48.43</b>

**6.6.9.5. International Collaboration:**

*Mention the list of collaboration taken place during last five years with international agencies/universities /institutes for academic, research and others.*

Sl. No.	Names of Collaborating Universities / Institutes	Nature of Collaboration
1	Chittagong Veterinary and Animal Sciences University, Khulshi, Chittagong, Bangladesh (2018-19)	d) Joint Research project development and execution e) Staff and faculty exchange for advanced training and human resource development



		f) Sharing research infrastructure between researchers between two universities
2	Sher-e-Bangla Agricultural University, Dhaka, Bangladesh (2018-19)	d) Joint Research project development and execution e) Staff and faculty exchange for advanced training and human resource development f) Sharing research infrastructure between researchers between two universities

#### 6.6.9.6. Fund Raising through CSR:

*How much fund the university has collected from corporate sector for on- farm research and extension and other related activities in last five years?*

Sl No.	Name of the Firms / Companies / Agencies	Knowledge transfer and others	Fund received (Rs. in lakh)
1	AB Vista (3 Woodstock Court, Mariborough Business Park, Blenheim Rd., Mariborough, Wiltshire, UK, SN84AN).	Effect of yeast cell wall products on broiler performance.	4.20
2	Danisco UK Ltd. Trading as Danisco Animal Nutrition (Market House, Ailesbury Court, High Street, Marlborough, Wiltshire, SN81AA, UK).	Compare efficacy of two phytases in broiler	4.14
3	Dex iberica, s.a. Poligon Industrial Estacio num. 2443480 VILASECA Tarragona (Spain)	Antibacterial and nutrient spearing effects of AMARIL in broiler chicken	3.15
4	Alivira Animal Health Limited. No. 301, 3 <sup>rd</sup> Floor, Dosti Pinnacle, Plot No. E7, Road No. 22, Wagle Industrial Estate, Thane (West), Mumbai-400604.	Antibacterial Effects of Lysozyme (Entegard <sup>TM</sup> ) in Broiler Chicken	3.00
5	M/S Chigurupati Technologies Private Ltd. Hyderabad.	Hepato-protective efficacy of different formulations (approx 20 groups) in Wistar Rats	2.50
6	M/S Granules India Ltd. Hyderabad.	Efficacy and toxicity study of alcoholic preparation in Wistar Rats	2.50
7	South DumDum Municipality. Nagerbazar, Dum Dum Road, Kolkata-700074.	Animal Birth Control Programme for stray Dogs.	3.00
8	DuPoint Industrial Biosciences Danisco Animal Nutrition, UK.	Comparison of Different Phytase form in Broilers	6.42
9	Unique Biotech Ltd., Hyderabad	Supplementation of Selenium yeast on growth performance, immunity and meat quality in Broiler Chickens	5.96

#### 6.6.9.7. Alumni Support:

*Does the University have the active alumni association. How much fund the Association has raised for the development of the University? What the other areas where the Association is supporting to the University?*

#### Alumni Association, Funds raised and Supporting Areas:

The university has Alumni Associations separately in the Faculty of Veterinary & Animal Sciences, Faculty Dairy Technology and Faculty of Fishery Sciences. During last five years, the Alumni Associations extended financial assistance to the university for various activities amounting to Rs.43.55 Lakh (Approx). The Alumni Associations every year arrange Re-Union, Seminar, Symposium and



Workshops and take initiatives in organizing different events like Foundation Day Celebration, farmers meet, entrepreneurship meet, interface meet with the industries, exhibition, display of different proven technologies for the farming community etc. The Alumni also sponsors conferment of Gold and Silver Medals to the students during Convocations in recognition of their academic performance.

#### 6.6.10. Certificate

I, Dr. Sourav Chandra, the Registrar of the West Bengal University of Animal & Fishery Sciences, 37 & 68, Kshudiram Bose Sarani, Kolkata-700037 hereby certify that the information contained in the sections 6.4, 6.5 and 6.6.1 to 6.6.9.7 are furnished as per the records available in the University.

Place: Kolkata

Date: 29.01.2021

  
Registrar 29/1/21  
West Bengal University of  
Animal and Fishery Sciences  
68, K.B. Sarani, Kolkata-37





# **SELF STUDY REPORT FOR UNDER GRADUATE PROGRAMMES**



## Self Study Report for the Bachelor in Fishery Science (B.F.Sc.)

### 6.4.1. Brief History of the Degree Programme:

*Clearly mention in which year the degree program was initiated along with its objective and accomplishments.*

The Bachelor of Fishery Science (BFSc) is a 4 years degree course presently run under the Faculty of Fishery Sciences, West Bengal University of Animal & Fishery Sciences, Kolkata was initially started in 1995. The Faculty of Fishery Sciences is presently located at 5, Budherhat Road, P.O. Panchasayar, Chakgaria Campus Kolkata-700 094. The Faculty was established in the year 1995 and the course was started from the said Academic Year. The Degree programme of the faculty has been accredited by the ICAR in the year 2016 and duly recognized by the University Grants Commission. The Degree programme is catered through 9 (nine) Departments details of which are mentioned below:-

- 1) Department of Aquaculture
- 2) Department of Fisheries Resource Management
- 3) Department of Aquatic Environment Management
- 4) Department of Aquatic Animal Health
- 5) Department of Fish Processing Technology
- 6) Department of Fishery Engineering
- 7) Department of Fishery Economics & Statistics
- 8) Department of Fishery Extension
- 9) Department of Fish Nutrition (Newly established Department not accredited as yet by ICAR )

#### **Objectives:**

1. To generate skilled human resources specialized in Fishery Sciences to judiciously exploit and manage the fishery resources
2. To produce professionally qualified Fishery Graduates.
3. To carry out need-based applied, advanced research work in the fishing sector.
4. To transfer the technologies generated by need-based applied research work to the fishermen/fish farmers and the entrepreneur through an extension programme.

#### **Intake Capacity:**

B.F.Sc. – 44 (SC-22%, ST-6%, OBC-A-10%, OBC-B-7%, and ICAR Nominee-15%, Person with Disability (PwD)-5% on horizontal basis)

#### **Admission Procedure:**

The selection of students for admission is made as per merit list without any Entrance Examination. The merit list is prepared according to percentage of total marks obtained in the subjects of Higher Secondary Examination (10+2) or its equivalent examinations.



**Duration of Course:**

4 years integrated programme as per 5th Deans' Committee curriculum approved by Agricultural Education Division, ICAR, New Delhi.

**Syllabus:**

The syllabus and Course Curricula is as per 5<sup>th</sup> Deans' Committee Report of ICAR.

**Accomplishments:**

Systematic teaching has developed knowledge skill and attitude of students. It help the student to identify the problem and make necessary scientific solution of it. Teaching makes all round development of students so that they can suitably address different issues of the society and thereby meet the objectives of it. Teachers also make progressive evaluation of their teaching in order to take corrective measures to achieve the terminal objectives of curriculum. A new Department named as **Department of Fish Nutrition** has already been established and faculty members have also been selected to strengthen the academic activities. Quantification (both objective and subjective) of pedagogic process and its progressive review leads towards refinement of curriculum and to enhance efficiency of graduates. The graduates are technically sound enough to compete at national level not only in securing scholarships, fellowships, and admission for higher studies but also finding suitable employment in government and private sectors, and starting entrepreneurship. The Faculty has produced significant number of B.F.Sc. graduates, post-graduates (M.F.Sc.) and Ph.D. scholars till 2020. During these years about **73 graduates** have been **qualified ICAR-JRF**, **30** are in **banking sector**, **416 graduates** are serving as **Fishery Extension Officers, Govt. of west Bengal** and another **15 students** are engaged as the cadre of **Fishery Extension Officer** in **other states of the country** till date. **Six graduates** have also pursued their Masters and / or Doctoral programme in reputed foreign Universities.

**6.4.2. Faculty Strength (as on 31.12.2020):**

*The faculty strength of the Degree Programme need to be given cadre-wise, both sanctioned and in-place (under the table mentioned below).*

Departments	Faculty Position Sanctioned by the Govt. as per ICAR/UGC/VCI			Faculty Position filled		
	Professor	Associate Professor	Assistant Professor	Professor	Associate Professor	Assistant Professor
Aquaculture	1	1	2	1	0	2*
Fisheries Resource Management	1	1	2	1	1*	2*
Aquatic Environment Management	1	1	2	1	1*	2*
Aquatic Animal Health	1	1	2	1	1*	1
Fish Processing Technology	1	1	2	1	1*	2*
Fishery Engineering	1	1	2	1	0	1
Fishery Economics & Statistics	1	1	2	1	0	1
Fishery Extension	1	1	2	1	1	1



Fish Nutrition	1	1	2	0	1	1
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**\* Teachers promoted to Professor through CAS**

The university has submitted proposal to the State Govt. for sanction of more posts and the said proposal is under active consideration. The university also engaged contractual / guest / adjunct faculty in the academic interest. Vacant teaching post will be advertised shortly.

**Faculty Responsibility:**

The Faculty members have been assigned to take part in teaching, research and extension activities. The teachers are also responsible to undertake duties / responsibilities assigned to them in connection with examinations, admission, counseling and guiding the Master Degree and PhD students for research work.

**6.4.3. Technical and Supporting staff :**

*The position of the technical and supporting staff of the Degree Programme including farm and field workers need to be mentioned for both sanctioned and in-place.*

Sl. No.	Name of Department/ Establishment	Group	Sanctioned of post	Man in position
<b>1</b>	Dean, Faculty of Fishery Sciences	Junior Assistant	C	0
		Junior Store Keeper	C	1
		Office Attendant Gr. II	D	4
		Durwan	D	0
		Driver-cum-Mechanic	D	0
		Mali	D	1
		Sweeper	D	2
<b>2</b>	Aquaculture	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Fisherman	D	2
<b>3</b>	Fish Processing Technology	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	0
		Fisherman	D	0
<b>4</b>	Fisheries Resource Management	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	0
		Field Worker	D	0
<b>5</b>	Fishery Economics, Statistics & Marketing	Technical Assistant	C	0
		Junior Assistant	C	0
		Office Attendant Gr. II	D	2
		Laboratory Attendant	D	0
		Field Worker	D	0
<b>6</b>	Fishery Engineering	Technical Assistant	C	0
		Junior Assistant	C	1
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	1
		Field Worker	D	0
<b>7</b>	Fishery Extension	Technical Assistant	C	0
		Junior Assistant	C	0



		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Fisherman	D	1
8	Aquatic Environment Management	Junior Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	1
		Field Worker	D	0
9	Aquatic Animal Health	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Field Worker	D	0
10	Fish Nutrition	Group C	C	0
		Group D	D	0

**NB: Vacancy arisen due to retirement / death will be filled up shortly.**

#### **Responsibilities of Technical / Supporting Staff:**

- The Technical Staff assists the teachers by extending technical help in the laboratories and operation of machines and equipment.
- Other category of Staff members undertake ministerial works.
- The menial staff takes care of washing / cleaning etc.

#### **6.4.4. Classrooms and Laboratories:**

*Mention the number of class rooms and functional laboratories available for the degree programme and justify if it is sufficient to meet the course curricula requirement. Lists major equipments, laboratories, farm facilities, workshops and other instructional units being utilized for the award of the Degree Programme may be given.*

#### **Department-wise UG laboratories established**

Sl. No.	Department	Name of laboratories/farm	Numbers	Remarks
1.	Aquaculture	Ornamental Fish Rearing Unit; Carp Hatchery Unit and Aqua Farm including nursery; Feed Formulation Laboratory	4	Sufficient
2.	Fisheries Resource Management	Physiology; Taxonomy-cum-Museum; Anatomy and Biology; Stock Assessment	4	Sufficient
3.	Aquatic Environment Management	Ecotoxicology; Water and Soil Chemistry; Limnology & Oceanography; Instrumentation	4	Sufficient
4.	Aquatic Animal Health	Bacteriology; Parasitology; Immunology; Histopathology; Instrumentation	5	Sufficient
5.	Fish Processing Technology	Modern Fish Processing Unit; Biochemistry; Microbiology; Instrumentation	4	Sufficient
6.	Fishery Engineering	Craft & Gear Engineering; Refrigeration Engineering; Navigation and Seamanship.	3	One more needed
7.	Fishery Economics and Statistics	Computer Centre	1	Sufficient
8.	Fishery Extension	Audio-visual; Cyber-extension	2	One more needed
9.	Fish Nutrition	Analytical Lab.	1	Sufficient

#### **Instruments available in the Laboratories:**



A part from common equipment, the Faculty has the following equipment to cater the UG course:-

Sl. No.	Name of the Equipment	Make
1	High Performance Liquid Chromatography	Jasco, Japan
2	Analytical Balance	Sartorius
3	Atomic Absorption Spectrophotometer	Varian, Netherlands
4	Inverted Microscope	Hunt, Germany
5	Carbon di-oxide Incubator	Thermo Fisher, USA
6	Water purification system	Millipore, India
7	Thermal cycler	Eppendorff, Germany
8	Micro-centrifuge	Eppendorff, Germany
9	U-V Trans-illuminator	Bangalore Genei, India
10	Gas chromatography	Varian, Netherlands
11	UV-Vis Spectrophotometer	

**UG Classrooms:** 4 (four)

The University has drawn a Plan and Estimate for construction of two more classrooms since with the increased number of students, classroom facilities to be augmented. The State Govt. is considering the proposal for allotment of fund in this respect.

#### 6.4.5. Conduct of Practical and Hands-on-Training:

*It is important to have a sound grasp of the theory that underlies any professional degree. But there are some skills that can only be learned through hands-on -practice. It is important that much of the learning material in any given course should be provided in a way that allows students to get as involved as possible to increase their knowledge and abilities. Clearly mention how far students are getting desired practical and hands-on-training as per the curriculum and meeting above mentioned requirements.*

The undergraduate course involves conduct of practical's as per credits allotted to the specific courses and hands on training and field / lab practical's for courses as per ICAR course curricula in the following ways:-

1. The Students of BFSc course participate in the Student READY programme every year under the course number IPT-411 (In-plant Training Programme) had obtained different field experience through several exposures to various technologies and other functional areas related to fisheries during their entire 1<sup>st</sup> Semester of 4<sup>th</sup> Year course.
2. A part from Student READY programme the following aspects are related to conduct of Practical and Hands-on-Training :-
  1. The students are regularly been involved in these programmes actively in the farm facilities of the Faculty as per the curriculum. They are involved in breeding and seed production of carps and ornamental fish, farming of carps, ornamental fish and cat fishes.
  2. Each student gets the chance to perform the design and fabrication of fishing materials with its operational procedure, technique, or task for simple scale-wise experiments
  3. Make small groups of students and provide them with the chance to perform the mending and repairing of fishing nets and procedure, technique, or task for simple experiments



4. Make small groups of students and provide them with the chance to perform the nautical chart work and procedure, technique, or task for simple experiments
5. Demonstration on how to perform the procedure, technique, or task as far as possible for the practical involving in onboard vessel activities during fishing activities
6. Providing exposure visits to fish netting yards, boat building yard, interaction with fishermen and seafarers, farms and field estimation of water parameters and water and soil sample collection or interaction with fish farmers, different fish markets, fish landing centres for market survey and make them learn themselves.

#### 6.4.6. Supervision of students in UG Programmes:

*Number of students being supervised by Faculty in case of Masters/PhD Programme (as per ICAR/UGC guidelines). Mention the realistic figure number of qualified faculty in relation to the intake of students, as per the guidelines in the matter.*

There is regular monthly counseling meeting are conducted to discuss regarding overall academic progress of undergraduate students, behavior, economical and personality development. In emergency / complaints (If any) for misbehavior, poor academic performance, prolonged illness etc parents are informed / called by the Dean of the Faculty.

#### 6.4.7. Feedback of stakeholders (Students, parents, industries, employers, farmers etc.):

*Mention the feedback mechanism (duly supported by the documents) from different stakeholders of the degree programme. What action the University has taken in last five years to address the issues raised in the feed back?*

The students of the faculty are mostly with rural background as such the entire arrangement in the faculty has been made feel them comfortable and to be acquainted with urban atmosphere. Students who have passed out from the faculty have excelled in the professional career in various Govt. and private agencies and expressed their full satisfactions about the academic activities of the faculty. The faculty also received satisfactory feedback from the parents, industries and employers. Graduates of the faculty who are in the Govt. / Private Sector and engaged in extension activities at the village level have earned great applause from the farmers.

#### 6.4.8. Student intake and attrition in the programme for last five years:

*Year wise information on sanctioned strength, actual intake and attrition in the last five years of the Degree Programme, in the tabular form, shall be provided.*

Name of the Degree Programme	Actual Student Enrolled in last five years					Attrition(%)				
	2016-17	2017-18	2018-19	2019-20	2020-21	2016-17	2017-18	2018-19	2019-20	2020-21
B. F. Sc.	38	43	44	44	44	6.25	2.65	2.86	2.11	N/A



#### 6.4.9. ICT Application in Curricula Delivery:

*The ICT is now integral part of the teaching programme. ICAR has also been promoting the use of ICT in teaching and practical. Mention whether the Degree Programme is meeting the expectations. If there is any shortfall, it shall be clearly mentioned.*

Modern class room facilities have been developed in the Faculty of Fishery Sciences. During the last five years, most of the faculties have developed ICT enabled teaching material and practical manuals. The Faculty has audio visual teaching aid facilities in the class rooms. Practical / project work centered courses have been developed. The Faculty of Fishery Sciences gives due weightage to innovative teaching method. As ICT is now being a part of teaching programme, application of the said technology in curricula delivery is satisfactory. The faculty has adopted ICT application in theory by power point presentation and practical through digital presentation.

#### 6.4.12. Certificate

I, Prof. Bipul Kumar Das, Dean, Faculty of Fishery Sciences, West Bengal University of Animal & Fishery Sciences, Kolkata, hereby certify that the information contained in the Section 6.4.1 to 6.4.9 are furnished as per the records available in the college, and degree awarding university.

Place: Kolkata

Date: 29.01.2021

  
29/01/2021  
Prof. BIPUL KUMAR DAS  
Dean  
Faculty of Fishery Sciences  
W. B. University of Animal & Fishery Sciences  
Chakgaria, Kolkata-700 094



## Self Study Report for the Bachelor of Dairy Technology (BTech)

### 6.4.1. Brief History of the Degree Programme:

*Clearly mention in which year the degree program was initiated along with its objective and accomplishments.*

The Bachelor programme in Dairy Technology was started in the year 1977 under the Faculty of Veterinary & Animal Sciences in Bidhan Chandra Krishi Viswavidyalaya (BCKV). Consequent up on the bifurcation of BCKV and establishment of West Bengal University of Animal and Fishery Sciences (WBUAFS) in 1995, the Faculty of Dairy Technology was established as a constituent Faculty under WBUAFS for providing excellent academic and research support base in Dairy Technology and allied fields.

The Faculty of Dairy Technology is the only institute in the State of West Bengal offering undergraduate education in the field of Dairy Technology and related subjects since its inception which has a legacy of 33 years including its tenure with Bidhan Chandra Krishi Viswavidyalaya. The Faculty of Dairy Technology, with its unique model of education, has been churning out quality Dairy Technocrats who have used their technical acumen to help their organization climb never heights of excellence in food, dairy and allied sectors of the industry in India and abroad.

The Faculty of Dairy Technology presently has 5(five) Departments including the newly established department Dairy Business Management.

- Department of Dairy Technology
- Department of Dairy Engineering
- Department of Dairy Chemistry
- Department of Dairy Microbiology
- Department of Dairy Business Management

#### **Intake Capacity:**

BTech – 44 (SC-22%, ST-6%, OBC-A-10%, OBC-B-7%, and ICAR Nominee-15%, Person with Disability (PwD)-5% on horizontal basis)

#### **Admission Procedure:**

1. The candidates must qualify in the West Bengal Joint Entrance Examination for Engineering/ Technology (WBJEE) conducted by WBJEEB.
2. The candidate must pass Higher Secondary (10+2) Examination of the West Bengal Council of Higher Secondary Education or its equivalent examination in science stream from any recognized Board/ Council from any institution within West Bengal.
3. The candidate must pass the Higher Secondary (10+2) or its equivalent examinations with Physics, Chemistry, Mathematics and English as compulsory subjects with individual pass marks (in both theory and practical wherever applicable) in all the above four subjects in regular class mode.
4. The Candidate must be a domicile of West Bengal.

#### **Duration of Course:**



The duration of BTech course including 'Student READY In-Plant Training/ Student READY Programme/ Student READY experiential Module' is 4 (four) academic years or eight semesters. However, a student is allowed to complete the degree programme within a maximum period of seven academic years from the date of registration under certain circumstance.

#### Syllabus:

The syllabus and Course Curricula is as per 5<sup>th</sup> Deans' Committee Report of ICAR.

#### Accomplishments:

Systematic teaching has developed knowledge skill and attitude of students. Teaching methodology help the student to identify the problem and make necessary scientific solution of it. Teaching makes all round development of students so that they can suitably address different issues of the society and thereby meet the objectives of it. Teachers also make progressive evaluation of their teaching in order to take corrective measures to achieve the terminal objectives of curriculum. A new Department named as Department of Dairy Business Management has already been established and faculty members have also been selected to strengthen the academic activities. Quantification (both objective and subjective) of pedagogic process and its progressive review leads towards refinement of curriculum and to enhance efficiency of graduates. The graduates are technically sound enough to compete at national level not only in securing scholarships, fellowships, and admission for higher studies but also finding suitable employment in government and private sectors, and starting entrepreneurship. The Faculty has produced 1250 BTech graduates, 200 post-graduates (MTech) till 2020. So far about 63 graduates have been qualified ICAR-JRF, 53 are in banking sector, 652 graduates are serving to the Private Companies till date.

#### 6.4.2 Faculty Strength:

*The faculty strength of the Degree Programme need to be given cadre-wise, both sanctioned and in-place (under the table mentioned below).*

Departments	Faculty Position Sanctioned by the Govt as per ICAR/UGC/VCI			Faculty Position filled		
	Professor	Associate Professor	Assistant Professor	Professor	Associate Professor	Assistant Professor
Department of Dairy Microbiology	1	1	2	1	1	2
Department of Dairy Chemistry	1	1	2	1	1	0
Department of Dairy Engineering	1	1	4	1	1	2
Department of Dairy Technology	1	1	3	0	0	3
Department of Dairy Business Management	1	1	2	1	1	1

**NB: A part from the teaching posts mentioned above Guest Teachers / Adjunct Faculty / Contractual Teachers also take part in the academic programmes. The university is exploring the possibility to initiate the recruitment process of more teachers against sanctioned posts.**

#### Faculty Responsibility:



The Faculty members have been assigned to take part in teaching, research and extension activities. The teachers are also responsible to undertake duties / responsibilities assigned to them in connection with examinations, admission, counseling and guiding the Master Degree and PhD students for research work.

#### 6.4.3. Technical and Supporting Staff:

*The position of the technical and supporting staff of the Degree Programme including farm and field workers need to be mentioned for both sanctioned and in-place.*

The college has been provided with technical / Laboratory to cater to the need of practical and filed experiments. Department wise distribution of technical, supporting and field staff are provided as under:

Sl. No.	Name of Department / Establishment	Designation	Group	Man in position
01.	Dean, Faculty of Dairy Technology	Junior Assistant	C	1
		Cash Assistant	C	1
		Dairy Overseer	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Driver-cum-Mechanic	D	0
		Farash	D	1
		Durwan	D	0
		Mali	D	0
		Sweeper	D	2
02.	Dairy Chemistry	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	0
		Durwan	D	0
03.	Dairy Engineering	Technical Assistant	C	1
		Junior Assistant	C	1
		Office Attendant Gr. II	D	1
04.	Dairy Microbiology	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	0
05.	Dairy Technology	Junior Assistant	C	1
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	1
		Skilled Labour, Gr. II	D	0
06.	Dairy Business Management	Group C	C	0
		Group D	D	0

**NB: Vacancy arisen due to retirement / death will be filled up shortly.**

#### Responsibilities of Technical / Supporting Staff:

- The Technical Staff assists the teachers by extending technical help in the laboratories and operation of machines and equipment.
- Other category of Staff members undertake ministerial works.
- The menial staff takes care of washing / cleaning etc.



#### 6.4.4. Classrooms and Laboratories

*Mention the number of class rooms and functional laboratories available for the degree programme and justify if it is sufficient to meet the course curricula requirement. Lists major equipments, laboratories, farm facilities, workshops and other instructional units being utilized for the award of the Degree Programme may be given.*

##### Classroom Facilities

Sl. No.	Class room No.	Area (sq. m)	Seating capacity	Other facilities (LCD Projectors, Computers, Laptops, Smart board etc.)
01.	UG Class Room -1	50	44	LCD Projectors, Laptop
02.	UG Class Room -1	50	44	LCD Projectors, Laptop
03.	UG Class Room -1	50	44	LCD Projectors
04.	UG Class Room -1	50	44	LCD Projectors

##### Other Facilities

Sl. No.	Class room No.	Area (sq.m.)	Seating capacity	Other facilities (LCD, Projectors, Computers, Laptops, Smart board etc.)
01.	Seminar Hall	150	200	LCD Projectors
02.	Conference Hall	60	25	LCD Projectors
03.	Examination Hall	200	80	LCD Projectors
04.	Smart UG Class Room	200	40	LCD Projectors
05.	Smart PG Class Room	50	30	LCD projector, smart board, audio system, digital podium, Computer
06.	Training Hall	90	50	Audio system, LCD Projector

##### Laboratories for Undergraduate Programme

###### (A) Department of Dairy Microbiology

Sl.No.	Name of Laboratory/ teaching room	Number
01.	Research Laboratory	01- Sufficient
02.	U.G. Laboratory	01- Sufficient
03.	Media preparation room	01- Sufficient
04.	Instrument room	01- Sufficient
05.	A.V. Class Room/ Seminar Room	01- Sufficient

##### Laboratory instruments/equipment:

Sl. No.	Name of the Instrument	Number
01.	Refrigerated Centrifuge	01
02.	Thermocycler	01
03.	Electrophoresis Apparatus – Slab Gel	01
04.	Small spin Centrifuge	01
05.	UV transilluminator	01
06.	Geldoc system	01
07.	BOD incubator	02
08.	Air incubator	04
09.	Hot air oven	02
10.	Autoclave	01
11.	Microscope	10
12.	Water bath	01
13.	Refrigerator	05
14.	Shaker	01
15.	Microwave Oven	01



16.	Laminar air flow system	03
17.	Deep freeze	01

(B) Department of Dairy Chemistry

Sr. No.	Name of the laboratory	Number	Area (sq.m.)
01.	U.G. Laboratory-I	01 – Sufficient	54
02.	U.G.Laboratory-II	01 – Sufficient	54
03.	Research Laboratory	01 – Sufficient	36
04.	Quality Control Laboratory	01 – Sufficient	36
05.	Instrumentation Lab/Functional Protein Laboratory	01 – Sufficient	36
06.	Kjeldahl Room	01 – Sufficient	12
07.	Computer Lab. with one Terminal	01 – Sufficient	12

*\* Common Central laboratory for all the departments in the faculty*

**Laboratory instruments/equipment:**

Sl. No.	Name of the equipment	Quantity
01.	Automatic Milk analyser	1
02.	Automatic Nitrogen analyzer	1
03.	BOD Incubator	2
04.	Butyro Refractometer	1
05.	Deep Freezer	1
06.	Digital Balance	3
07.	Digital PH meter	2
08.	Digital Photoelectric Colorimeter	1
09.	Double Beam UV-Visible Spectrophotometer	1
10.	Electric Cream separator	1
11.	Electrophoresis Apparatus- Rod Gel	1
12.	Electrophoresis Apparatus- Slab Gel	1
13.	Flame photometer	1
14.	Gerber Centrifuge	1
15.	High Speed Centrifuge	1
16.	Hot air oven	3
17.	Microwave Oven	1
18.	Muffle Furnace	2
19.	Refrigerator	2
20.	RM value aparatus	1
21.	Soxhlet Apparatus	1
22.	Temperature Controller Water Bath	1
23.	Thin layer Chromatography kit	1

(C.) Department of Dairy Engineering

**Laboratory Facilities:**

Sr. No.	Name of the laboratory	Number	Area (sq.m.)
01.	Workshop	01 – Sufficient	1200
02.	Processing Lab	01 – Sufficient	400
03.	Food Engineering Lab	01 – Sufficient	400
04.	Electrical Lab	01 – Sufficient	400

*\* Common Central laboratory for all the departments in the faculty*



**Major Laboratory instruments/equipment:**

Sr. No.	Name of the equipment	Quantity
01.	BOD Incubator	1
02.	Cold water Bath	1
03.	Centrifuge	3
04.	Cold store model (Test Rig)	1
05.	IBT model (Test Rig)	1
06.	Eclectic power, energy measuring test Rig	1 set

(D) Department of Dairy Technology:**Laboratory Facilities:**

Sr. No.	Name of the Laboratory	Number	Area (sq.m.)
01.	UG Lab	01 – Sufficient	50
02.	Analytical Lab -I	01 – Sufficient	50
03.	Analytical lab-II	01 – Sufficient	50
04.	Sensory Lab	01 – Sufficient	50

*\*Common Seminar Hall for all the departments in the faculty*

**Major Laboratory instruments/equipment:**

Sl. No	Name of the equipment	Quantity
01.	Muffle furnace	3
02.	Hot air oven	4
03.	Incubator	2
04.	BOD Incubator	1
05.	OTG	1
06.	Cake Oven	1
07.	Tray Dryer	1
08.	Autoclave	1
09.	Hot water bath	1
10.	Hot plate (12" x 12" hot plate with thermostat control)	1
11.	Water distillation assembly (All glass double distillation unit with borosilicate boiler, condenser and quartz heater-capacity 1.5 lit/hr)	1
12.	Weighing balance (4 digit) Sartorius	3
13.	Cream separator	1
14.	Ph meter/redox meter with electrode (2 no)	1
15.	Milk Analyzer	1
16.	Gerber centrifuge	1
17.	Remi centrifuge	1
18.	Ultrasonic homogenizer	1
19.	Digital Colony Counting machine	1

(E) Department of Dairy Business Management**Laboratory Facilities:**

Name of the Lab.	Area (sq.m.)	Seating Capacity
Computer Lab - 1	100	30

(F) Central Instrumentation Laboratory

Sr. No.	Name of the Instrument	Quantity
01.	Automatic Nitrogen Analyzer	01



02.	Viscometer	01
03.	Freeze Dryer	01
04.	Research Microscope	01
05.	Colour Meter	01
06.	Infra Red Moisture Analyzer	01
07.	BOD incubator	02
08.	pH Meter	04
09.	Ion Meter	02
10.	Water Activity Meter	01
11.	Gel Doc System	10
12.	Sonicator	01
13.	Digital Weighing Balance	05

#### 6.4.5. Conduct of Practical and Hands –On-Training

*It is important to have a sound grasp of the theory that underlies any professional degree. But there are some skills that can only be learned through hands-on -practice. It is important that much of the learning material in any given course should be provided in a way that allows students to get as involved as possible to increase their knowledge and abilities. Clearly mention how far students are getting desired practical and hands-on-training as per the curriculum and meeting above mentioned requirements.*

Adequate facilities are available to conduct regular practical for various courses of Dairy Microbiology, Dairy Chemistry, Dairy Engineering, Dairy Technology and Dairy Business Management and also hands-on-training for teaching, research and various training programme related to dairy processing. Further as a part of their course curriculum, the UG students are allowed for exposure visits to different research institutes and private industries for better understanding of the subject and to enrich their practical knowledge. The following are the various hands- on- training:

- Preparation of special milks; toned, double toned, standardized, flavoured, sterilised. cleaning of storage tanks, cream separators.
- Preparation of Khoa from cow, buffalo and concentrated milk.
- Preparation of Burfi, Peda, Kalakand, Milkcake and Gulabjamun.
- Preparation of Paneer from cow, buffalo and mixed milk.
- Preparation of Chhana from cow and buffalo milk and mixed milk.
- Preparation of Sandesh and Rasogolla.
- Preparation of kheer. Preparation of Rabri, Misti Dahi, Chhaka and Shrikhand.
- Manufacture of Cheddar cheese.
- Manufacture Gouda cheese. Manufacture of Mozzarella cheese. Manufacture of Swiss cheese
- Hands-on-experience on preparation of media, chemicals etc, sterilization of microbiological media, chemicals, glassware's, plastic wares etc used in regular practical and research work.
- Regular activation, propagation and maintenance of microbial cultures used in practical and research.
- Microscopic observation of microbes: preparation of stained slide of microbial cultures, examination of morphological and staining characteristics.
- Enumeration of composite micro-flora in milk and milk products – sampling, sample preparation, plating and observation and calculation.



- Differentiation of microbes based on morphology, physiology and biochemical profiles.
- Isolation and characterization of microbes from milk and milk products.
- Quality analysis of milk products, dairy equipments, personnel and environmental hygiene.

#### 6.4.6. Supervision of Students in UG programmes

*Number of students being supervised by Faculty in case of Masters/PhD Programme (as per ICAR/UGC guidelines). Mention the realistic figure number of qualified faculty in relation to the intake of students, as per the guidelines in the matter.*

There is regular monthly counseling meeting are conducted to discuss regarding overall academic progress of undergraduate students, behavior, economical and personality development. In emergency / complaints (If any) for misbehavior, poor academic performance, prolonged illness etc parents are informed / called by the Dean of the Faculty.

#### 6.4.7. Feedback of Stakeholders (Students, Parents, Industries, Employers, Farmers Etc.)

*Mention the feedback mechanism (duly supported by the documents) from different stakeholders of the degree programme. What action the University has taken in last five years to address the issues raised in the feed back?*

Sl. No.	Feed back	Action taken/ attended
01.	Enhancement of university 'Merit cum Mean Scholarship' for UG students	Provision for 'Merit cum Mean Scholarship' has been made for 30% UG students in each year. The Enhancement of Scholarship under consideration.
02.	Up-gradation of laboratory facilities for conducting regular practical and hands on training.	Facilities of the laboratories have been upgraded by – Repairing of existing non-functioning equipment/instruments and Purchasing of new equipments/ instruments

#### 6.4.8 Students Intake and Attrition in the UG Programme in the Last Five Years:-

*Year wise information on sanctioned strength, actual intake and attrition in the last five years of the Degree Programme, in the tabular form, shall be provided.*

Admission to 4 years B.Tech.. (Dairy Technology) degree programme is done on the basis of merit list published by the West Bengal Joint Entrance Examination Board. ICAR syllabus and guidelines are followed to conduct B.Tech (Dairy Technology) degree programme.

Name of the Degree Programme	Actual Student Enrolled in last five years					Attrition(%)				
	2016-17	2017-18	2018-19	2019-20	2020-21	2016-17	2017-18	2018-19	2019-20	2020-21
B.Tech	43	34	44	35	40	18	43	10	33	N/A

#### 6.4.9 ICT Application in Curricula Delivery



*The ICT is now integral part of the teaching programme. ICAR has also been promoting the use of ICT in teaching and practical. Mention whether the Degree Programme is meeting the expectations. If there is any shortfall, it shall be clearly mentioned.*

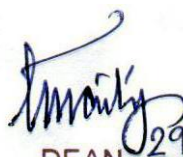
The Faculty of Dairy Technology facilitates the use of Information and Communication Technology (ICT) for effective delivery content for which the college has made available the smart class room with smart board . The addition to this, classrooms have the facilities of projectors for teaching through power Point Presentation of theory and practical classes along with podium of inbuilt speakers and amplifiers to make audible to the students. Seminar rooms have the facility of multimedia projectors for student's seminar delivery and practical classes. Department also have the multimedia projectors for practical classes. Beside this all the Faculty members are taking classes on online mode by using google meet, google class room, what's app, E-mail etc

The Faculty use a combination of lectures and power point presentations to make the concepts/techniques clearly understandable to the students. The important lectures are taught with videos. The students are also trained to make use of the facility for presentation of term papers and assignments. Sufficient furniture, ventilation and lighting facilities are provided in all the class rooms for comfortable listening and writing of the students. A table, podium, whiteboards/screen, black board with duster are available in each class room for the use of teachers. A common generator facility supplies power to all the classrooms to avoid interruption of the class during power failure. All communications to the students regarding academic calendar, time table for the courses registered, schedule of examinations, internal marks scored by the students, semester results, etc. are sent to the students only in the e-notice board of the college. Internet access of 4 Mbps with static IP is used to give access to e-communication portal across the world. Also, the students register the courses to be taken up in a semester in on-line mode. Regular updates are sent through Whatsapp, Email and Telephone regarding the class schedule and other academic related matter for the benefit of the students. The teaching faculty is well updated with the usage of IT enabling gadgets. All the classrooms are well equipped with Wi-Fi facility to help in proficient delivery of the course contents.

#### **6.4.12. Certificate**

I Prof. Tarun Kanti Maity, Dean, Faculty of Dairy Technology, West Bengal University of Animal & Fishery Sciences hereby certify that the information contained in the Section 6.4.1 to 6.4.9 are furnished as per the records available in the college and degree awarding university.

Place: Mohanpur, Nadia  
Date: 29.01.2021

  
29.01.2021  
DEAN  
Faculty of Dairy Technology  
W. B. University of Animal & Fishery Sciences  
Mohanpur-741252 Nadia (W.B.)

### **Self Study Report**



## for the Bachelor of Veterinary Science And Animal Husbandry (BVSc & AH)

### 6.4.1. Brief History of the Degree Programme:

*Clearly mention in which year the degree program was initiated along with its objective and accomplishments.*

The undergraduate programme, BVSc & AH is being offered by the Faculty of Veterinary and Animal Sciences under West Bengal University of Animal & Fishery Sciences since its inception from 2<sup>nd</sup> January, 1995. The Faculty has a long history and carries the legacy of century old Bengal Veterinary College. The degree programme was originally initiated in the year 1957-58 session under the erstwhile Bengal Veterinary College affiliated by the University of Calcutta. The college was subsequently transferred to Bidhan Chandra Krishi Viswavidyalaya (BCKV) in 1974 as a constituent Faculty and the BVSc & AH course was undertaken in the said Faculty. Consequent upon establishment of West Bengal University of Animal & Fishery Sciences in the year 1995 in pursuance of WBUAFS Act 1995, the Faculty of Veterinary and Animal Sciences stood automatically transferred to the new university after being bifurcated from BCKV and the degree programme since then has been continuing under the Faculty of Veterinary & Animal Sciences, West Bengal University of Animal & Fishery Sciences.

The Faculty of Veterinary and Animal Sciences presently has 21 (twenty one) Departments including two newly established Departments i.e. Department of Avian Science and Animal Biotechnology.

- Animal Nutrition
- Livestock Farm Complex
- Livestock Production Management
- Livestock Products Technology
- Veterinary Clinical Complex
- Veterinary Anatomy & Histology
- Animal Genetics and Breeding
- Veterinary Biochemistry
- Veterinary Epidemiology & Preventive Medicine
- Veterinary Gynaecology & Obstetrics
- Veterinary Medicine, Ethics & Jurisprudence
- Veterinary Microbiology
- Veterinary Parasitology
- Veterinary Pathology
- Veterinary Pharmacology & Toxicology
- Veterinary Physiology
- Veterinary Public Health
- Veterinary Surgery & Radiology
- Veterinary & Animal Husbandry Extension Education
- Avian Science
- Animal Biotechnology

#### Objectives:

1. To generate skilled human resources specialized in Veterinary & Animal Sciences to judiciously exploit and manage the Livestock resources
2. To produce professionally qualified Veterinary Graduates.
3. To carry out need-based applied, advanced research work in the Livestock Sector.



4. To transfer the technologies generated by need-based applied research work to the Livestock farmers and the entrepreneurs through extension programmes.

**Intake Capacity:**

BVSc & AH – 83 (SC-22%, ST-6%, OBC-A-10%, OBC-B-7%, and ICAR Nominee-15%, Person with Disability (PwD)-5% on horizontal basis).

**Admission Procedure:**

1. The candidate must qualify and obtain a rank in the NEET-UG conducted by NTA.
2. The candidate must be a domicile of West Bengal.
3. The candidate must pass Higher Secondary (10+2) Examination of the West Bengal Council of Higher Secondary Education or its equivalent examination in science stream from any recognized Board/ Council from any institution within West Bengal.
4. The candidate must pass the Higher Secondary (10+2) or its equivalent examinations from any recognized Board/ Council with Physics, Chemistry, Biology or Biotechnology and English as compulsory subject with individual pass marks (in both theory and practical wherever applicable) in all the above four subjects in regular class mode.
5. The candidate must obtain 50 % marks in Physics, Chemistry, Biology or Biotechnology and English taken together for unreserved category and 47.5 % in case of reserved category candidates.

**Duration of Course:**

**BVSc & AH Course** - 5 yrs (5½ yrs *w.e.f.* 2016-17 batch)

**Syllabus:**

The syllabus and Course Curricula is as per **Veterinary Council of India** (MSVE Regulations, 2016).

**Accomplishments:**

Systematic teaching has developed knowledge skill and attitude of students. It helped the students to identify the problem and make necessary scientific solution for the same. Systematic teaching has been designed for all round development of students so that they can suitably address different issues of the society and thereby meet the challenges ahead. Teachers also make progressive evaluation of their teaching in order to take corrective measures to achieve the terminal objectives of curriculum. Two new Departments named as **Department of Avian Science** and **Department of Animal Biotechnology** have already been established and new faculty members have also been joined to strengthen the academic activities. Quantification (both objective and subjective) of pedagogic process and its progressive review leads towards refinement of curriculum and to enhance efficiency of graduates. The graduates are technically sound enough to compete at national level not only in securing scholarships, fellowships, and admission for higher studies but also finding suitable employment in government and private sectors, and starting entrepreneurship. The Faculty has produced significant number of Veterinary Doctors, Scientists till 2020.



#### 6.4.2. Faculty Strength (as on 31.12.2020):

*The faculty strength of the Degree Programme need to be given cadre-wise, both sanctioned and in-place (under the table mentioned below).*

Sl. No.	Dept.	Faculty Position sanctioned by the Govt. as per ICAR/UGC/VCI			Faculty actually available		
		Prof.	Asso. Prof.	Asst. Prof.	Prof.	Asso. Prof.	Asst. Prof.
1	Animal Nutrition	1	2	5	1	1	3
2	Livestock Farm Complex	1	1	4	1	0	4
3	Livestock Production Management	1	2	5	2*	0	1
4	Livestock Products Technology	1	1	2	1	0	2
5	Veterinary Clinical Complex	1	1	4	1	1	7
6	Veterinary Anatomy & Histology	2	1	4	2*	1	1
7	Animal Genetics and Breeding	1	2	5	1*	2	3
8	Veterinary Biochemistry	1	1	3	1	1	2
9	Veterinary Epidemiology & Preventive Medicine	1	0	2	2*	0	1
10	Veterinary Gynaecology & Obstetrics	1	1	5	2*	0	4
11	Veterinary Medicine, Ethics & Jurisprudence	1	1	3	2*	1	0
12	Veterinary Microbiology	1	2	5	1	0	4
13	Veterinary Parasitology	1	1	3	1	1	3
14	Veterinary Pathology	1	2	5	1*	0	4
15	Veterinary Pharmacology & Toxicology	0	2	2	1	0	1
16	Veterinary Physiology	1	1	5	1	1	3
17	Veterinary Public Health	1	1	2	0	1	2
18	Veterinary Surgery & Radiology	1	2	6	4*	0	1
19	Veterinary & Animal Husbandry Extension Education	1	1	1	1	1	2
20	Avian Science	1	2	4	-	1	4
21	Animal Biotechnology	1	1	3	-	-	2

\* Promoted as Professor / Associate Professor under Career Advancement Scheme.

NB: The University is going to publish advertisement for filling up vacant positions.

#### Faculty Responsibility:

The Faculty members have been assigned to take part in teaching, research and extension activities. The teachers are also responsible to undertake duties / responsibilities assigned to them in connection with examinations, admission, counseling and guiding the Master Degree and PhD students for research work.



### 6.4.3. Technical and Supporting Staff :

*The position of the technical and supporting staff of the Degree Programme including farm and field workers need to be mentioned for both sanctioned and in-place.*

Sl. No.	Name of Department / Establishment	Designation	Group	Man in position
01.	Dean, Faculty of Veterinary & Animal Sciences	Senior Assistant	C	2
		Cash Assistant	C	1
		Office Attendant Gr. I	D	4
		Driver-cum-Mechanic	D	1
		Farash	D	1
		Senior Sweeper	D	1
02.	Animal Nutrition	Technical Assistant	C	0
		Junior Assistant	C	1
		Office Attendant Gr. I	D	1
		Laboratory Attendant	D	0
		Animal Attendant	D	1
03.	Livestock Farm Complex	Senior Assistant	C	1
		Technical Assistant	C	1
		Junior Animal Keeper	D	2
		Senior Animal Keeper	D	2
		Office Attendant Gr. II	D	0
04.	Livestock Production Management	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. I	D	1
		Laboratory Attendant	D	1
05.	Livestock Products Technology	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	0
		Senior Animal Keeper	D	1
06.	Veterinary Clinical Complex	Senior Assistant	C	1
		Store Keeper	C	1
		Senior Compounder	C	1
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	0
		Senior Animal Keeper	D	9
		Record Supplier	D	1
		Sweeper	D	2
07.	Veterinary Anatomy & Histology	Senior Assistant	C	1
		Technical Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	2
08.	Animal Genetics and Breeding	Technical Assistant	C	1
		Senior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Sweeper	D	1
09.	Veterinary Biochemistry	Technical Assistant	C	1
		Senior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Sweeper	D	0
10.	Veterinary Epidemiology &	Technical Assistant	C	0



	Preventive Medicine	Senior Assistant	C	1
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	1
		Sweeper	D	0
11.	Veterinary Gynaecology & Obstetrics	Technical Assistant	C	0
		Senior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Sweeper	D	1
		Senior Animal Keeper	D	1
12.	Veterinary Medicine, Ethics & Jurisprudence	Technical Assistant	C	0
		Senior Assistant	C	1
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Sweeper	D	0
13.	Veterinary Microbiology	Technical Assistant	C	0
		Senior Assistant	C	1
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	1
		Sweeper	D	0
14.	Veterinary Parasitology	Technical Assistant	C	1
		Senior Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	0
		Sweeper	D	0
15.	Veterinary Pathology	Technical Assistant	C	0
		Senior Assistant	C	1
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	0
		Sweeper	D	1
16.	Veterinary Pharmacology & Toxicology	Technical Assistant	C	1
		Senior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	0
		Sweeper	D	1
		Senior Animal Keeper	D	1
17.	Veterinary Physiology	Technical Assistant	C	1
		Senior Assistant	C	1
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	0
		Sweeper	D	0
		Senior Animal Keeper	D	0
18.	Veterinary Public Health	Technical Assistant	C	0
		Senior Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	0
		Sweeper	D	0
		Senior Animal Keeper	D	0
19.	Veterinary Surgery & Radiology	Technical Assistant	C	1
		Senior Assistant	C	1
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	0
		Sweeper	D	1



		Senior Animal Keeper	D	0
20.	Veterinary & Animal Husbandry Extension Education	Technical Assistant	C	0
		Senior Assistant	C	1
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	1
		Sweeper	D	0
		Senior Animal Keeper	D	0
21.	Avian Science	Technical Assistant	C	0
		Senior Assistant	C	1
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	0
		Sweeper	D	0
		Senior Animal Keeper	D	0
22.	Animal Biotechnology	Technical Assistant	C	0
		Senior Assistant	C	1
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Sweeper	D	1
		Senior Animal Keeper	D	0

**NB: Vacancy arisen due to retirement / death will be filled up shortly.**

#### **Responsibilities of Technical / Supporting Staff:**

- The Technical Staff assists the teachers by extending technical help in the laboratories and operation of machines and equipment.
- Other category of Staff members undertake ministerial works.
- The menial staff takes care of washing / cleaning etc.

#### **6.4.4. Classrooms and Laboratories**

Mention the number of class rooms and functional laboratories available for the degree programme and justify if it is sufficient to meet the course curricula requirement. Lists major equipments, laboratories, farm facilities, workshops and other instructional units being utilized for the award of the Degree Programme may be given.

#### **UG Classrooms:**

Sl No	Class Room (for UG)	Type of class room with Facility available	Floor Space (sq ft)	Seating capacity
1	Hall 1	Fully air conditioned, equipped with projection facility and microphone, wooden platform and Dias	1200	100
2	Hall 2	Fully air conditioned, equipped with projection facility and microphone, and Dias	1250	100
3	Hall 3	Fully air conditioned, equipped with projection facility and microphone, wooden platform and Dias	1300	100
4	Hall 4	Fully air conditioned, equipped with projection facility and microphone, and Dias	1250	100
5	Hall 5	Fully air conditioned, equipped with projection facility and microphone, and Dias	1200	100



6	Hall 6	Fully air conditioned, equipped with projection facility and microphone, and Dias	1350	100
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**Department-wise laboratories established:**

Sl. No.	Departments	Names of laboratories	Number	Remarks
1	Veterinary Anatomy	Osteology, Arthology, Splanchnology, Neuro and Angiology, Histology and Embryology	7	Sufficient
2	Veterinary Physiology	Haematology and respiratory physiology laboratory, Reproductive, environmental and experimental physiology laboratory,	3	Sufficient
3	Veterinary Biochemistry	Clinical Biochemistry, Analytical Biochemistry, Immuno Biochemistry and Reproductive biochemistry laboratory	4	Sufficient
4	Animal Genetics & Breeding	Computer and statistical analysis lab., molecular biology lab.	2	Sufficient
5	Animal Nutrition	Feed processing and mixing lab., feed/fodder analysis lab., energy metabolism lab.	3	Sufficient
6	Livestock Production Management	Small animal handling room, large animal handling room, museum for breed	3	Sufficient
7	Animal Husbandry Extension & Education	Audio visual technology laboratory, photography cum graphic unit, projection unit	3	Sufficient
8	Veterinary Pathology	Histopathology lab., Clinical pathology, Immunopathology lab., Necropsy unit and Pathology museum facilities	4	Sufficient
9	Veterinary Parasitology	Helminthological lab., Entomology and Protozoology lab.	2	Sufficient
10	Veterinary Microbiology	Bacteriology, virology and immunology laboratory	2	Sufficient
11	Veterinary Pharmacology and Toxicology	CPCSEA approved large animals house facility CPCSEA approved laboratory animal facility, Research laboratory (2 nos.), Sophisticated instrument laboratory, Pharmacy laboratory, Pharmacology museum	3	Sufficient
12	Veterinary Medicine, Ethics and Jurisprudence	Clinical medicine lab.	1	Sufficient
13	Veterinary Gynaecology and Obstetrics	Semen/Andrology lab., Phantom hall and palpation room, AI centre with semen storage facility.	4	Sufficient
14	Veterinary Surgery & Radiology	Ophthalmology lab, Bone research laboratory and imaging unit (X-ray facility, Colour dropler, C-Arm facility, Operation theatre both small and large animal), Stem Cell Laboratory	3	Sufficient
15	Veterinary Epidemiology & Preventive Medicine	Preventive lab for Virology, bacteriology and Parasitology	2	Sufficient
16	Veterinary Public Health	Milk hygiene and meat hygiene lab, zoonosis cum epidemiology lab.	2	Sufficient
17	Livestock Products Technology	Small scale poultry processing unit, Microbiology lab	2	Sufficient



18	Livestock Complex	Farm	Farm both small and large animals, fodder production unit, Hydroponics etc.	4	Sufficient
19	Veterinary Complex	Clinical	Operation theatre both small and large animals, Veterinary diagnosis lab.	3	Sufficient

#### List of Scientific Equipment:

Name of the Department	List of instrument
<b>Animal Genetics &amp; Breeding</b>	Microscope-13, Deep fridge-1, Refrigerator-2, Autoclave-1, Bacteriological hood-1, Centrifuge machine-2, Dancing shaker-1, Water distillation plant-1, Horizontal electrophoresis system with power supply-1, Vertical electrophoresis system with power supply-1, Hot air oven-1, Micro Centrifuge machine-1, Microwave oven-1, Neubauer's chamber-1, Thermal cycler with UPS (PCR Machine)-1, pH meter-1, Photoplan microscope with monitor-1, Vortex-1, Spinwin-1, UV transilluminator-1, Digital weighing balance-1, Waterbath-1
<b>Veterinary Anatomy &amp; Histology</b>	Animal Embalming equipment, Bones of different animals, Microtome, Hot air Woven, Microscopes, Trinocular microscope with video camera and monitor for displaying histological slides, Specimens of different animals, Animal Embalming equipment, Bones of different animals, Leica Microtome, Leica DM 2000 , Trinocular phase contrast and fluorescence microscope, Olympus, Inverted Microscope, Refrigerator (-40) and (-10), Cryostat, Elisa Rider, Monopan Electronic balance, automatic tissue processor
<b>Animal Nutrition</b>	Socs plus, Kel plus, Fibertake, socsolate aparator (Manual), Micro kjelal (Manual), Hot air oven – 2, Muffle Furnace, Hot plate-1, Hot plate magnetic stirrer, Electronic Balance-2, Refrigerator=1
<b>Veterinary Biochemistry</b>	pH meter, hot air oven, incubator, centrifuge, colorimeter, UV/VIS Spectrophotometer, PCR, PCR, Gel Doc, Spectrophotometer, high precision microscope, cooling centrifuge
<b>Veterinary Microbiology</b>	Hot Air Oven (Old) (1 no.), Incubator (Old) (1 no.), Refrigerator (Old) (1 no.), Wooden Tool (32 nos.), Magnetic Stirrer (1 no.), Desiccator (1 no.), Wooden Shelf (1 no.), Aqua Guard (1 no.), Window AC (1 no.), Metal Distillation Plant (1 no.), Glass Double Distillation Plant (1 no.), Water bath (Lunar) (1 no.), Laminar Air Flow (Horizontal) (Cleanair) (1 no.)
<b>Veterinary Parasitology</b>	Autoclave (2), Hot air Oven (2), Incubator (3), Refrigerator (2), Microscope with HP 1 oil immersion (30), Binocular Microscope -8 (1, Attachment/Projection/CCV), Microscope phase contrast (1), Microtome rotary and blade sharpener (1), Centrifuge machine (6), Sterilizer Unit, Distillation set, Slide cabinet, Slide boxes, Desiccator, Research microscope trinocular with photographic arrangement, Overhead projector, Pestle mortar, Dissection set, Dissection microscope , Water bath, McMaster Chamber, Bearman's Apparatus Real Time PCR (RT - PCR), Gradient PCR, Duo Flow Chromatography System Nano drop Spectrophotometer, Microscopes, Autoclave & Hot-air Oven, Deep Freezer (-40C), Refrigerator, Gel Documentation System, Electro-elution Machine, HPLC, ELISA Reader
<b>Veterinary Pathology</b>	Hot Air Oven (2 no), Deep Freezer (-20°C)-1, Rotary Microtome-1, Student Microscope-5, Binocular Microscope-1, Desktop Computer-3, Incubator (1 no), Ph. Meter (2 no.) Distillation plant-1, Ice Flaker-1, Refreegerator-3, Water Bath-2, Camera-1 for Histopathology, Centrifuge machine-2, PM Set-1, PM Table-2, Bone cutter saw-1, Staining set-2
<b>Veterinary Pharmacology &amp; Toxicology</b>	Atomic Absorption Spectrophotometer (Varian make), Ultra Homoginizer with probe Distillation apparatus, Soxhelt apparatus, Photoactometer Analgesimeter, Millipore Water Purifier System, Rota-rod apparatus, Pole climbing apparatus, Addys hot plate Hot air oven, Inqubeter, Gas Chromatography with ECD and FID (Varian make), Ultra HPLC (Water make) HPLC with DAD (Shimadzu make), UV Spectrophotometer (Agilent make), Floride meter, Micro Homoginizer, Cooling Centrifuge machine, Ultra cooling centrifuge machine, Centrifuge machine (Remi



	make)
<b>Veterinary Physiology</b>	ECG machine, USG machine, Multi para monitor, Pluse oximeter, Foetal heart beat monitor, Programmable bio-freezer, Water bath with Shaker, Inverted Fluorescent Microscope , Zoom Stereo microscope, Homogenizer, Vortex, pH meter, Refrigerated Centrifuge, Biosafety cabinet (BS II), Laminar flow, CO <sub>2</sub> incubator, Hot air oven, Autoclave, Distilled water apparatus -20° C freezer, Ultra low temp freezer (- 80 ° C), Master cyler, PCR workstation, Electrophoresis apparatus, Gel Documentation system, 0°C Mini cooler Lab top, Atomic Absorption Spectrophotometer, Elisa plate reader, UV Spectrometer, Automatic ELISA Plate washer, Spectrophotometry Lab
<b>Animal Husbandry Extension &amp; Education</b>	Display Board, LCD Projector, Kaleidoscope, Slide Projector, Large screen TV & other necessary equipment's as per VCI recommendation. AV Aids such as- LCD Projector, Kaleidoscope, Slide Projector, Video Camera, Large screen TV, Dark room & others relevant Lab. instruments etc. Extension education related various Models, specimen, all kind of Farm literatures & other relevant equipment's etc.
<b>Veterinary Epidemiology &amp; Preventive Medicine</b>	Monocular Microscope-15 nos.; Monocular Microscope inclined- 2 nos.; Binocular Microscope- 2 nos.; Overhead projector- 1 no.; LCD projector- 1 no.; Refrigerator- 1 no., Bacteriological incubator- 1no.; Digital weighing balance- 1 no.; Mechanical balance- 1no.; Digital pH meter- 1 no.; Water bath- 1 no.; Centrifuge machine- 1 no.; Autoclave- 1 no.; Hot Air Oven- 1no.; Distillation unit- 1 no. , Laminar Air Flow- 1 no.; Deep Freezer (—20°C) - 1 no., Distillation unit- 1 no.; BOD incubator- 1 no.; Autoclave- 1 no.; Hot Air Oven- 1 no.; Digital pH meter- 1 no.; Micropipette- 5 nos.; Laminar Air Flow- 1 no.; Binocular Microscope- 2 nos.; Monocular Microscope-2 nos.; Digital weighing balance- 1 no. , Refrigerator- 3 nos., Deep Freezer (—20°C) - 1 no.; Deep Freezer (—80°C) - 1 no.; Digital pH meter- 1 no.; Digital weighing balance- 1 no.; Centrifuge Machine- 1 no.; Cooling Centrifuge Machine- 1 no.; ELISA Reader- 1 no.; Laminar Air Flow- 1 no.; BOD incubator- 1 no.; Egg Incubator- 3 nos.; Bacteriological incubator- 1 no.; , Autoclave- 1 no.; Hot Air Oven- 1 no.; Water bath- 1 no.; Micropipette- 7 nos.; Freeze Dryer- 1 no. Biosafety cabinet, Class-II- 1 no.; Thermocycler- 1 no.; Gel Doc.- 1 no.; Spectrophotometer- 1 no.; BOD with shaker- 1 no.; Deep freezer {-80°C)- 1 no.; Refrigerator- 2 nos.; Autoclave- 1 no.; Hot Air Oven- 1 no., Distillation unit- 1no.
<b>Veterinary Gynaecology and Obstetrics</b>	Distillation Plant , Deep Freezer, Autoclave, Hot air oven, Phantom Box, Thygesen's Embryotome, Obstetrical set, Vaginal Speculum, Semen Analyser, Spectrocolorimeter, Stereozoom Microscope, Electronic Balance
<b>Veterinary Public Health</b>	Bacteriological Incubator, Phase Contract Microscope, Refrigerator, Monopan Blance, Thermal Cyler, Refrigerated Micro Centrifuge, Turbidity Meter, -80° C Freezer, Kern Precision Balance, Homogeniser, Shaker Incubator, Micro Centrifuge, Laminar airflow system, BOD incubator, Gel electrophoresis, Rotary evaporator., Bacteriological Incubator, Refrigerator, Monopan Blance, -20° C Freezer, Tissue Homogeniser, Laminar airflow system, BOD incubator, Autoclave, Hot air oven, Digital Colony counter, Laboratory centrifuge, Water distillation plant
<b>Veterinary Surgery &amp; Radiology</b>	Surgical instruments Operation table, Boyles apparatus instruments for PG and PhD
<b>Livestock Farm Complex</b>	Sprayer – 1, Shearing and clipping equipment – 1 set, Debeaking equipment – 1 set, Tatooing set tags etc – 1, Egg Candler – 1, Incubator (Hatechery) -1, Battery Brooder – 1, Trap nest – 5, Egg Grading Machine – 1, Automatic scalding -1, Milking machine set -1, Chick sexing machine -1, Vernier Callipers – 5, Screw Gauge – 5, Maximum-Minimum Thermometer – 2, Psychro-meter, Hair Hygrometer -1, Milking cans -2, Milking piles -2, Milk measures – 1, Cream separator – 1, Butter churns -1, Branding set – 1, Castrator -1, Electrator – 1, Tractor, Farm equipment and Implement, Machinery as per requirement.
<b>Livestock Production Management</b>	Sprayer – 3, Shearing and clipping equipment – 1, Tatooing set tags etc -1, Incubator (Hatchery) -1, Trap nest -2, Vernier Callipers -4, Screw Gauge -2, Maximum-Minimum thermometer – 2, Hair Hygrometer -1, Milking cans -2, Milking piles -2, Milk measures – 1, Branding set -1, Castrator – 1 for each species, Electric



	clipper -1, Gerber's centrifuge -1
<b>Livestock Products Technology</b>	Refrigerator – 2, Deepfreeze -1, Electronic monopan balance -1, Balance for weighing birds -2, Bone cutting machine -1, Incubator -1, Hot air oven -2, Stunning machine -1, Automatic scaler -1, Feather plucking machine -1, Student's microscope -1, Meat mincing machine -1, sausage maker -1, Smoking unit -1, Salting instruments -1, Butchering sets -1, Packing unit – 1, Lactometer -5, Gerber's centrifuge -1, Gerber's tubes – 20, Vacuum pump – 1, pH meter -1, Microscope binocular – 1, Spectrophotometer -1, Hand sealing machine for bottles, cans, plastic, bags -1
<b>Veterinary Clinical Complex</b>	Pleximeters and percussion hummers – 5 set, Electronic stethoscope -1, Ophthalmoscopes -1, Electrocardiograms – 1, Blood pressure monitors -2, Otoscopes -1, Haemocytometers -12, Haemoglobinometers -15, Glass-ware, Small animal examination table -4, Instrument Trolleys – 4, Travis – 2, Travis (examination) -1, Microscope – 2
<b>Veterinary Medicine, Ethics and Jurisprudence</b>	Black board cum display board – 4, Lab stools – 24, Microscopes -18, Electronic monopan balance – 1, Distillation units -5, Digital pH meters -2, Spectrophotometers -1, Microhaematocrits – 4 set, Incubators -4, Hot-air ovens -1, Water baths -1, Autoclave (vertical) -1, Microscope with attachment for microphotographs -1, Stethoscopes with multiple ear-pieces – 3 set, Glass-ware

#### 6.4.5 Conduct of Practical and Hands-on-Training:

*It is important to have a sound grasp of the theory that underlies any professional degree. But there are some skills that can only be learned through hands-on -practice. It is important that much of the learning material in any given course should be provided in a way that allows students to get as involved as possible to increase their knowledge and abilities. Clearly mention how far students are getting desired practical and hands-on-training as per the curriculum and meeting above mentioned requirements.*

Sl No	Name of Degree Programme	Batch of Students in theory	Batch of students in Practical
1	BVSc & AH	<p>*Single batch from 1<sup>st</sup> to 4<sup>th</sup> professional year (Max. number of students in a batch 83)</p> <p>*Rotational internship – 5<sup>th</sup> professional year with small batch of max. 5 per batch</p>	<p>*Three batches per class (having 25 to 28 students per batch) for all subjects except VCP</p> <p>*Five batches in VCP</p>

**NB: The students are getting hands-on-training in Veterinary Clinical Complex and Livestock Farm Complex. Besides, Govt. Composite Livestock Farm (Haringhata Farm, Dist. Nadia, West Bengal) located adjacent to the university campus and nearby Govt. Animal Health Centres are fully utilized for providing hands on training to the BVSc & AH students.**

#### 6.4.6. Supervision of students in UG Programmes:

*Number of students being supervised by Faculty in case of Masters/PhD Programme (as per ICAR/UGC guidelines). Mention the realistic figure number of qualified faculty in relation to the intake of students, as per the guidelines in the matter.*

Monthly counseling meetings are conducted regularly to discuss regarding overall academic progress of undergraduate students, behavior, economical and personality development. In emergency / complaints (If any) for misbehavior, poor academic performance, prolonged illness etc parents are informed / called by the Dean of the Faculty.

#### 6.4.7. Feedback of stakeholders (Students, parents, industries, employers, farmers etc.):



*Mention the feedback mechanism (duly supported by the documents) from different stakeholders of the degree programme. What action the University has taken in last five years to address the issues raised in the feed back?*

The students of the faculty are mostly with rural background as such the entire arrangement in the faculty has been made feel them comfortable and to be acquainted with urban atmosphere. Students who have passed out from the faculty have excelled in their professional career in various Govt. and private agencies and expressed their full satisfaction about the academic activities of the faculty. The faculty also received satisfactory feedback from the parents, industries and employers. Graduates of the faculty who are in the Govt. / Private Sector and engaged in extension activities at the village level have earned great applause from the farmers.

#### 6.4.8. Student Intake and Attrition in the programme for last five years:

*Year wise information on sanctioned strength, actual intake and attrition in the last five years of the Degree Programme, in the tabular form, shall be provided.*

Name of the Degree Programme	Actual Student Enrolled in last five years					Attrition(%)				
	2016-17	2017-18	2018-19	2019-20	2020-21	2016-17	2017-18	2018-19	2019-20	2020-21
BVSc & AH	78	77	82	80	83	11	17	11	09	N/A

#### 6.4.9. ICT Application in Curricula Delivery:

*The ICT is now integral part of the teaching programme. ICAR has also been promoting the use of ICT in teaching and practical. Mention whether the Degree Programme is meeting the expectations. If there is any shortfall, it shall be clearly mentioned.*

Modern class room facilities have been developed in the Faculty of Veterinary & Animal Sciences. During the last five years, most of the departments have developed ICT enabled teaching material and practical manuals. The Faculty has audio visual teaching aid facilities in the class rooms. Practical / project work centered courses have been developed. The Faculty of Veterinary & Animal Sciences gives due weightage to innovative teaching method. As ICT is now being a part of teaching programme, application of the said technology in curricula delivery is satisfactory. The faculty has adopted ICT application in theory by power point presentation and practical through digital presentation.

#### 6.4.12. Certificate :

I, Prof. (Dr.) Nilotpal Ghosh, Dean, Faculty of Veterinary & Animal Sciences hereby certify that the information contained in Section 6.4.1 to 6.4.9 are furnished as per the records available in the Faculty and degree awarding university.

Place: Mohanpur, Nadia

Date: 29.01.2021

*Nilotpal.*  
29.01.2021  
DEAN (Actg.)  
F/o Veterinary & Animal Sciences  
West Bengal University of Animal & Fishery Sciences  
Kolkata - 37 & Mohanpur, Nadia-741252





# **SELF STUDY REPORT FOR POST GRADUATE PROGRAMMES**



## Self Study Report for the Masters in Fishery Science (M.F.Sc.)

### 6.4.1. Brief History of the Degree Programme:

*Clearly mention in which year the degree program was initiated along with its objective and accomplishments.*

The Master of Fishery Science (MFSc) is a 2 years full time Post Graduate course presently run under the Faculty of Fishery Sciences, West Bengal University of Animal & Fishery Sciences, Kolkata was initially started in 1995. The Faculty of Fishery Sciences under WBUAFS is presently located at 5, Budherhat Road, P.O. Panchasayar, Chakgaria Campus Kolkata-700 094. The Faculty was established in the year 1995 and the course was started from the said Academic Year. The Master Degree programme of the faculty has been accredited by the ICAR in the year 2016 for the 7 (seven) Departments which are mentioned below:-

- 1) Department of Aquaculture
- 2) Department of Fisheries Resource Management
- 3) Department of Aquatic Environment Management
- 4) Department of Aquatic Animal Health
- 5) Department of Fish Processing Technology
- 6) Department of Fishery Economics & Statistics
- 7) Department of Fishery Extension

**N.B.: MFSc course in Department of Fishery Engineering was introduced before inspection of ICAR accreditation team in the year 2016 but the 1st batch passed out in 2018. Therefore, MFSc in the Department of Fishery Engineering needs to be accredited apart from the existing accredited programmes. The university has already planned to start MFSc course in newly opened department i.e. Fish Nutrition.**

#### **Objectives:**

1. To generate skilled human resources in Fishery Sciences specialized in Aquaculture, Fisheries Resource Management, Aquatic Environment Management, Aquatic Animal Health, Fish Processing Technology, Fishery Economics & Statistics, Fishery Extension and Fishery Engineering.
2. To carry out advance research and extension activities in Fishery Sciences and its specialised branches.

#### **Intake Capacity:**

M.F.Sc. – Maximum 6 (six) numbers of seats in each department. The Total number varies with the attainment of eligibility of the teachers of the departments as per Academic Rules in vague. Seats reserved for ICAR Nominee – 25% at least one in each department. Other reservations are as per Govt. of West Bengal rules.



**Admission Procedure:**

The selection of candidates is made strictly on the basis of merit and performance in the personal interview. The merit shall be decided on the basis of percentage of marks in aggregate or O.G.P.A. in Bachelor's Degree Examination as well as marks or O.G.P.A. in subject concerned in which admission is sought. The total marks for preparation of merit list is 100 out of which 80% on merit (the relative weightage on the overall performance in the Bachelor's Degree and in the subject concerned i.e. 50 marks from OGPA obtained in UG level and 30 marks from the subject concern) and 20% on personal interview(online mode).

The candidate shall have to score a minimum of 50% in aggregate of merit and interview altogether (i.e. 50 out of 100) to qualify for admission into Postgraduate Programme.

The candidates selected through ICAR all India Examination for admission to Master's Degree course shall be exempted from aforesaid selection process. However, they should have minimum qualification.

**Duration of Course:**

2 years integrated programme as per 5th Deans' Committee curriculum approved by Agricultural Education Division, ICAR, New Delhi.

**Syllabus:**

**The curricula and syllabi of various Masters and Doctoral programmes (M. F. Sc. & Ph. D.) are as per the recommendation of BSMA (Broad Subject Matter Area)-2009 constituted by ICAR approved by Agricultural Education Division, ICAR, New Delhi.**

**Accomplishments:**

Systematic teaching has developed knowledge skill and attitude of students. It help the student to identify the problem and make necessary scientific solution of it. Teaching makes all round development of students so that they can suitably address different issues of the society and thereby meet the objectives of it. Teachers also make progressive evaluation of their teaching in order to take corrective measures to achieve the terminal objectives of curriculum. A new Department named as **Department of Fish Nutrition** has already been established and faculty members have also been selected to strengthen the academic activities. Quantification (both objective and subjective) of pedagogic process and its progressive review leads towards refinement of curriculum and to enhance efficiency of graduates. The Post Graduates are technically sound enough to compete at national level not only in securing scholarships, fellowships, and admission for higher studies but also finding suitable employment in government and private sectors, and starting entrepreneurship. The Faculty has produced significant post-graduates (M.F.Sc.) till 2020. Who are serving the State / Central Govt. Establishments / ICAR Institutes / Agricultural Universities and Banking Sectors etc.



#### 6.4.2. Faculty Strength (as on 31.12.2020):

*The faculty strength of the Degree Programme need to be given cadre-wise, both sanctioned and in-place (under the table mentioned below).*

Departments	Faculty Position Sanctioned by the Govt as per ICAR/UGC/VCI			Faculty Position filled		
	Professor	Associate Professor	Assistant Professor	Professor	Associate Professor	Assistant Professor
Aquaculture	1	1	2	1	0	2*
Fisheries Resource Management	1	1	2	1	1*	2*
Aquatic Environment Management	1	1	2	1	1*	2*
Aquatic Animal Health	1	1	2	1	1*	1
Fish Processing Technology	1	1	2	1	1*	2*
Fishery Engineering	1	1	2	1	0	1
Fishery Economics & Statistics	1	1	2	1	0	1
Fishery Extension	1	1	2	1	1	1

#### \* Teachers promoted to Professor through CAS

The university has submitted proposal to the State Govt. for sanction of more posts and the said proposal is under active consideration. The university also engaged contractual / guest / adjunct faculty in the academic interest. The vacant teaching posts will be advertised shortly.

#### Faculty Responsibility:

The Faculty members have been assigned to take part in teaching, research and extension activities. The teachers are also responsible to undertake duties / responsibilities assigned to them in connection with examinations, admission, counseling and guiding the Master Degree and PhD students for research work.

#### 6.4.3. Technical and Supporting staff :

*The position of the technical and supporting staff of the Degree Programme including farm and field workers need to be mentioned for both sanctioned and in-place.*

Sl. No.	Name of Department/ Establishment	Group	Sanctioned of post	Man in position
1	Dean, Faculty of Fishery Sciences	Junior Assistant	C	0
		Junior Store Keeper	C	1
		Office Attendant Gr. II	D	4
		Durwan	D	0
		Driver-cum-Mechanic	D	0
		Mali	D	1
		Sweeper	D	2
2	Aquaculture	Technical Assistant	C	1
		Junior Assistant	C	0



		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Fisherman	D	2
3	Fish Processing Technology	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	0
		Fisherman	D	0
4	Fisheries Resource Management	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	0
		Field Worker	D	0
5	Fishery Economics, Statistics & Marketing	Technical Assistant	C	0
		Junior Assistant	C	0
		Office Attendant Gr. II	D	2
		Laboratory Attendant	D	0
		Field Worker	D	0
6	Fishery Engineering	Technical Assistant	C	0
		Junior Assistant	C	1
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	1
		Field Worker	D	0
7	Fishery Extension	Technical Assistant	C	0
		Junior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Fisherman	D	1
8	Aquatic Environment Management	Junior Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	1
		Field Worker	D	0
9	Aquatic Animal Health	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Field Worker	D	0

**NB: Vacancy arisen due to retirement / death will be filled up shortly.**

**Responsibilities of Technical / Supporting Staff:**

- The Technical Staff assists the teachers by extending technical help in the laboratories and operation of machines and equipment.
- Other category of Staff members undertake ministerial works.
- The menial staff takes care of washing / cleaning etc.



#### 6.4.4. Classrooms and Laboratories:

*Mention the number of class rooms and functional laboratories available for the degree programme and justify if it is sufficient to meet the course curricula requirement. Lists major equipments, laboratories, farm facilities, workshops and other instructional units being utilized for the award of the Degree Programme may be given.*

##### Department-wise PG laboratories established

Sl. No.	Department	Name of laboratories/farm	Numbers	Remarks
1.	Aquaculture	Ornamental Fish Rearing Unit; Carp Hatchery Unit and Aqua Farm including nursery; Feed Formulation Laboratory	4	Sufficient
2.	Fisheries Resource Management	Physiology; Taxonomy-cum-Museum; Anatomy and Biology; Stock Assessment	4	Sufficient
3.	Aquatic Environment Management	Ecotoxicology; Water and Soil Chemistry; Limnology & Oceanography; Instrumentation	4	Sufficient
4.	Aquatic Animal Health	Bacteriology; Parasitology; Immunology; Histopathology; Instrumentation	5	Sufficient
5.	Fish Processing Technology	Modern Fish Processing Unit; Biochemistry; Microbiology; Instrumentation	4	Sufficient
6.	Fishery Engineering	Craft & Gear Engineering; Refrigeration Engineering; Navigation and Seamanship.	3	One more needed
7.	Fishery Economics and Statistics	Computer Centre	1	Sufficient
8.	Fishery Extension	Audio-visual; Cyber-extension	2	One more needed
9.	Fish Nutrition	Analytical Lab.	1	Sufficient

##### Instruments available in the Laboratories:

A part from common equipment, the Faculty has the following equipment to cater the PG course:-

Sl. No.	Name of the Equipment	Make
1	High Performance Liquid Chromatography	Jasco, Japan
2	Analytical Balance	Sartorius
3	Atomic Absorption Spectrophotometer	Varian, Netherlands
4	Inverted Microscope	Hunt, Germany
5	Carbon di-oxide Incubator	Thermo Fisher, USA
6	Water purification system	Millipore, India
7	Thermal cycler	Eppendorff, Germany
8	Micro-centrifuge	Eppendorff, Germany
9	U-V Trans-illuminator	Bangalore Genei, India
10	Gas chromatography	Varian, Netherlands
11	UV-Vis Spectrophotometer	

##### PG Classrooms: 8 (Eight)

Sl. No.	Department	No of Classrooms for PG Students	Whether classrooms are sufficient for the programme	Equipped with Audio Visual Arrangements
1.	Aquaculture	1	Presently yes but further extension / construction is	Yes
2.	Fisheries Resource Management	1		Yes
3.	Aquatic Environment Management	1		Yes



4.	Aquatic Animal Health	1	needed	Yes
5.	Fish Processing Technology	1		Yes
6.	Fishery Engineering	1		Yes
7.	Fishery Economics and Statistics	1		Yes
8.	Fishery Extension	1		Yes

The University has drawn a Plan and Estimate for construction of two more classroom since with the increased number of students, classroom facilities need to be augmented. The State Govt. is considering the proposal for allotment of fund in this respect.

#### 6.4.5. Conduct of Practical and Hands-on-Training:

*It is important to have a sound grasp of the theory that underlies any professional degree. But there are some skills that can only be learned through hands-on -practice. It is important that much of the learning material in any given course should be provided in a way that allows students to get as involved as possible to increase their knowledge and abilities. Clearly mention how far students are getting desired practical and hands-on-training as per the curriculum and meeting above mentioned requirements.*

The Post Graduate course involves conduct of practical's as per credits allotted to the specific courses and hands on training and field / lab practical's for courses as per ICAR course curricula in the following ways:-

1. The students are regularly been involved in these programmes actively in the farm facilities of the Faculty as per the curriculum. They are involved in breeding and seed production of carps and ornamental fish, farming of carps, ornamental fish and cat fishes.
2. Each student gets the chance to perform the design and fabrication of fishing materials with its operational procedure, technique, or task for simple scale-wise experiments
3. Make small groups of students and provide them with the chance to perform the mending and repairing of fishing nets and procedure, technique, or task for simple experiments
4. Make small groups of students and provide them with the chance to perform the nautical chart work and procedure, technique, or task for simple experiments
5. Demonstration on how to perform the procedure, technique, or task as far as possible for the practical involving in onboard vessel activities during fishing activities
6. Providing exposure visits to fish netting yards, boat building yard, interaction with fishermen and seafarers, farms and field estimation of water parameters and water and soil sample collection or interaction with fish farmers, different fish markets, fish landing centres for market survey and make them learn themselves.

#### 6.4.6. Supervision of students in PG Programmes:

*Number of students being supervised by Faculty in case of Masters/PhD Programme (as per ICAR/UGC guidelines). Mention the realistic figure number of qualified faculty in relation to the intake of students, as per the guidelines in the matter.*

Name of the Department	No. of eligible teacher to teach for the Master degree programme	No. of eligible teacher to supervise for the Master degree programme	No. of student intake/Y ear*	Whether ICAR/UGC guidelines are followed for student supervision?
Aquaculture	3+1 (Guest Teacher)	3+1 (Guest Teacher)	6/Year	YES



Fisheries Resource Management	4	4	6/Year	YES
Aquatic Environment Management	3	2	4/Year	YES
Aquatic Animal Health	3	2	4/Year	YES
Fish Processing Technology	4	4	6/Year	YES
Fishery Engineering	1	1	2/Year	YES
Fishery Economics and Statistics	2 + 1(Guest Faculty)	1	1/Year	YES
Fishery Extension	3	2	6/Year	YES

#### 6.4.7. Feedback of stakeholders (Students, parents, industries, employers, farmers etc.):

*Mention the feedback mechanism (duly supported by the documents) from different stakeholders of the degree programme. What action the University has taken in last five years to address the issues raised in the feed back?*

The students of the faculty are mostly with rural background as such the entire arrangement in the faculty has been made feel them comfortable and to be acquainted with urban atmosphere. Students who have passed out from the faculty have excelled in the professional career in various Govt. and private agencies and expressed their full satisfactions about the academic activities of the faculty. The faculty also received satisfactory feedback from the National / International Institutes parents, industries and employers. Graduates of the faculty who are in the Govt. / Private Sector and engaged in extension activities at the village level have earned great applause from the farmers.

#### 6.4.8. Student intake and attrition in the programme for last five years:

*Year wise information on sanctioned strength, actual intake and attrition in the last five years of the Degree Programme, in the tabular form, shall be provided.*

Name of the Degree Programme	Actual Student Enrolled in last five years					Attrition(%)				
	2016-17	2017-18	2018-19	2019-20	2020-21	2016-17	2017-18	2018-19	2019-20	2020-21
Aquaculture	04	02	05	04	05*	0	0	0	0	0
Fisheries Resource Management	02	05	06	06	-	50	20	0	0	-
Aquatic Environment Management	04	03	04	02	02*	25	0	0	0	-
Aquatic Animal Health	02	03	03	05	-	0	0	0	20	-
Fish Processing Technology	05	03	04	04	04*	0	0	0	0	0
Fishery Engineering	01	02	02	1	01*	0	0	0	0	0
Fishery Economics and Statistics	03	03	02	02	-	0	67	0	0	-
Fishery Extension	02	03	04	04	03*	0	0	0	0	0



#### 6.4.9. ICT Application in Curricula Delivery:

*The ICT is now integral part of the teaching programme. ICAR has also been promoting the use of ICT in teaching and practical. Mention whether the Degree Programme is meeting the expectations. If there is any shortfall, it shall be clearly mentioned.*

Use of ICT in teaching and practical: All the Department have dedicated classrooms for teaching M.F.Sc. students with Audio Visual Aids, Projectors, WiFi connectivity for online content demonstration. During the COVID-19 Pandemic lock down the Department continued the teaching and learning process through application of online platforms like Google Meet and Zoom. Practical demonstrations were conducted online through web content demonstrations and videos to the best of the efforts.

#### 6.4.12. Certificate

I, Prof. Bipul Kumar Das, Dean, Faculty of Fishery Sciences, West Bengal University of Animal & Fishery Sciences, Kolkata, hereby certify that the information contained in the Section 6.4.1 to 6.4.9 are furnished as per the records available in the college, and degree awarding university.

Place: Kolkata

Date: 29.01.2021

  
29/01/2021  
Prof. BIPUL KUMAR DAS  
Dean  
Faculty of Fishery Sciences  
W. B. University of Animal & Fishery Sciences  
Chakgaria, Kolkata-700 094



## Self Study Report for the Master of Technology (MTech, DT)

### 6.4.1. Brief History of the Degree Programme:

*Clearly mention in which year the degree program was initiated along with its objective and accomplishments.*

The Master Degree (MTech) programmes under Faculty of Dairy Technology was started in the year 1977 under the Faculty of Veterinary & Animal Sciences in Bidhan Chandra Krishi Viswavidyalaya (BCKV). Consequent up on the bifurcation of BCKV and establishment of West Bengal University of Animal and Fishery Sciences (WBUAFS) in 1995, the Faculty of Dairy Technology was established as a constituent Faculty under WBUAFS for providing excellent academic and research support base in Dairy Technology and allied fields.

The Faculty of Dairy Technology is the only institute in the State of West Bengal offering Post Graduate education in the field of Dairy Technology and related subjects since its inception which has a legacy of 33 years including its tenure with Bidhan Chandra Krishi Viswavidyalaya. The Faculty of Dairy Technology, with its unique model of education, has been churning out quality Dairy Technocrats who have used their technical acumen to help their organization climb never heights of excellence in food, dairy and allied sectors of the industry in India and abroad.

The Master Degree programme of the faculty has been accredited by the ICAR in the year 2018 for the 4 (four) Departments which are mentioned below:-

- Department of Dairy Technology
- Department of Dairy Engineering
- Department of Dairy Chemistry
- Department of Dairy Microbiology

#### **Intake Capacity:**

MTech – Maximum 6 (six) numbers of seats in each department. The Total number varies with the attainment of eligibility of the teachers of the departments as per Academic Rules in vague. Seats reserved for ICAR Nominee – 25% at least one in each department. Other reservations are as per Govt. of West Bengal rules.

#### **Admission Procedure:**

The selection of candidates is made strictly on the basis of merit and performance in the personal interview. The merit shall be decided on the basis of percentage of marks in aggregate or O.G.P.A. in Bachelor's Degree Examination as well as marks or O.G.P.A. in subject concerned in which admission is sought. The total marks for preparation of merit list shall be 100 out of which 80% on merit (the relative weightage on the overall performance in the Bachelor's Degree and in the subject concerned i.e. 50 marks from OGPA obtained in UG level and 30 marks from the subject concern) and 20% on personal interview(online mode).

The candidate must score a minimum of 50% in aggregate of merit and interview altogether (i.e. 50 out of 100) to qualify for admission into Postgraduate Programme.



The candidates selected through ICAR all India Examination for admission to Master's Degree course shall be exempted from aforesaid selection process. However, they should fulfill the basic qualification.

**Duration of Course:**

Name of the Departments offered Master Degree Programme		
Name Department	Degree awarded	Duration
Dairy Microbiology	M.Tech in Dairy Microbiology	4 Semesters
Dairy Chemistry	M.Tech in Dairy Chemistry	
Dairy Engineering	M.Tech in Dairy Engineering	
Dairy Technology	M.Tech in Dairy Technology	

**Syllabus:**

The syllabus and Course Curricula is as per 5<sup>th</sup> Deans' Committee Report of ICAR.

**Accomplishments:**

Systematic teaching has developed knowledge skill and attitude of students. It help the student to identify the problem and make necessary scientific solution of it. Teaching makes all round development of students so that they can suitably address different issues of the society and thereby meet the objectives of it. Teachers also make progressive evaluation of their teaching in order to take corrective measures to achieve the terminal objectives of curriculum. Quantification (both objective and subjective) of pedagogic process and its progressive review leads towards refinement of curriculum and to enhance efficiency of graduates. The graduates are technically sound enough to compete at national level not only in securing scholarships, fellowships, and admission for higher studies but also finding suitable employment in government and private sectors, and starting entrepreneurship. The Faculty has produced 200 post-graduates (MTech) till 2020 who have excelled in professional fields in the Industry and Research Institutes both at the National and International level.

**6.4.2 Faculty Strength:**

*The faculty strength of the Degree Programme need to be given cadre-wise, both sanctioned and in-place (under the table mentioned below).*

Departments	Faculty Position Sanctioned by the Govt as per ICAR/UGC/VCI			Faculty Position filled		
	Professor	Associate Professor	Assistant Professor	Professor	Associate Professor	Assistant Professor
Department of Dairy Microbiology	1	1	2	1	1	2
Department of Dairy Chemistry	1	1	2	1	1	0
Department of Dairy Engineering	1	1	4	1	1	2
Department of Dairy Technology	1	1	3	0	0	3

**NB: A part from the teaching posts mentioned above Guest Teachers / Adjunct Faculty / Contractual Teachers also take part in the academic programmes. The university is exploring the possibility to initiate the recruitment process of more teachers against sanctioned posts.**



### Faculty Responsibility:

The Faculty members have been assigned to take part in teaching, research and extension activities. The teachers are also responsible to undertake duties / responsibilities assigned to them in connection with examinations, admission, counseling and guiding the Master Degree and PhD students for research work.

### 6.4.3. Technical and Supporting Staff:

*The position of the technical and supporting staff of the Degree Programme including farm and field workers need to be mentioned for both sanctioned and in-place.*

The college has been provided with technical / Laboratory to cater to the need of practical and filed experiments. Department wise distribution of technical, supporting and field staff are provided as under:

Sl. No.	Name of Department / Establishment	Designation	Group	Man in position
01.	Dean, Faculty of Dairy Technology	Junior Assistant	C	1
		Cash Assistant	C	1
		Dairy Overseer	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Driver-cum-Mechanic	D	0
		Farash	D	1
		Durwan	D	0
		Mali	D	0
		Sweeper	D	2
02.	Dairy Chemistry	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	0
		Durwan	D	0
03.	Dairy Engineering	Technical Assistant	C	1
		Junior Assistant	C	1
		Office Attendant Gr. II	D	1
04.	Dairy Microbiology	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	0
05.	Dairy Technology	Junior Assistant	C	1
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	1
		Skilled Labour, Gr. II	D	0

**NB: Vacancy arisen due to retirement / death will be filled up shortly.**

### Responsibilities of Technical / Supporting Staff:

- The Technical Staff assists the teachers by extending technical help in the laboratories and operation of machines and equipment.
- Other category of Staff members undertake ministerial works.
- The menial staff takes care of washing / cleaning etc.



#### 6.4.4. Classrooms and Laboratories

*Mention the number of class rooms and functional laboratories available for the degree programme and justify if it is sufficient to meet the course curricula requirement. Lists major equipments, laboratories, farm facilities, workshops and other instructional units being utilized for the award of the Degree Programme may be given.*

##### Classroom Facilities

Sl. No.	Class room No.		Area (ft2)	Seating capacity	Other facilities (LCD, Projectors, Computers, Smart board etc.)
	Department	Number			
01	Microbiology	one	250	10	LCD Projectors, Computers
02	Chemistry	one	250	10	LCD Projectors, Computers
03	Technology	one	250	10	LCD Projectors, Computers
04	Engineering	one	250	10	LCD Projectors, Computers

##### PG Laboratories and Other facilities:

Sr No.	Name of Laboratory/ Teaching room	No of Laboratory / Classrooms			
		Dairy Microbiology	Dairy Chemistry	Dairy Engineering	Dairy Technology
1	Research Laboratory	01	-	-	-
2	P.G. Laboratory	01	01	01	02
3	Media preparation room	01	-	-	-
4	Instrument room	01	-	-	-
5	Quality Control Laboratory	-	01	-	-
6	Instrumentation Lab	-	01	-	-
7	Computer Lab.	-	01	-	-
8	Seminar Room	01	01	01	-
9	Workshop	-	-	01	-
10	Processing / Production Lab	-	-	01	01
11	Food Engineering Lab	-	-	01	-
12	Electrical Lab	-	-	01	-
13	Analytical Lab -I	-	-	-	01
14	Analytical lab-II	-	-	-	01
15	Sensory Lab	-	-	-	01

##### Laboratory instruments/equipment:

###### (A) Department of Dairy Microbiology

Sl. No.	Name of the Instrument	Number
01.	Refrigerated Centrifuge	01
02.	Thermocycler	01
03.	Electrophoresis Apparatus – Slab Gel	01
04.	Small spin Centrifuge	01
05.	UV transilluminator	01
06.	Geldoc system	01
07.	BOD incubator	02
08.	Air incubator	04
09.	Hot air oven	02
10-	Autoclave	01
11.	Microscope	10
12.	Water bath	01
13.	Refrigerator	05
14.	Shaker	01



15.	Microwave Oven	01
16.	Laminar air flow system	03
17.	Deep freeze	01

(B) Department of Dairy Chemistry

Sl. No.	Name of the equipment	Quantity
01.	Automatic Milk analyser	1
02.	Automatic Nitrogen analyzer	1
03.	BOD Incubator	2
04.	Butyro Refractometer	1
05.	Deep Freezer	1
06.	Digital Balance	3
07.	Digital PH meter	2
08.	Digital Photoelectric Colorimeter	1
09.	Double Beam UV-Visible Spectrophotometer	1
10.	Electric Cream separator	1
11.	Electrophoresis Apparatus- Rod Gel	1
12.	Electrophoresis Apparatus- Slab Gel	1
13.	Flame photometer	1
14.	Gerber Centrifuge	1
15.	High Speed Centrifuge	1
16.	Hot air oven	3
17.	Microwave Oven	1
18.	Muffle Furnace	2
19.	Refrigerator	2
20.	RM value aparatus	1
21.	Soxhlet Apparatus	1
22.	Temperature Controller Water Bath	1
23.	Thin layer Chromatography kit	1

(C ) Department of Dairy Engineering

Sr. No.	Name of the equipment	Quantity
01.	BOD Incubator	1
02.	Cold water Bath	1
03.	Centrifuge	3
04.	Cold store model (Test Rig)	1
05.	IBT model (Test Rig)	1
06.	Eclectic power, energy measuring test Rig	1 set

(D) Department of Dairy Technology:

Sl. No	Name of the equipment	Quantity
01.	Muffle furnace	3
02.	Hot air oven	4
03.	Incubator	2
04.	BOD Incubator	1
05.	OTG	1
06.	Cake Oven	1
07.	Tray Dryer	1
08.	Autoclave	1
09.	Hot water bath	1
10.	Hot plate (12" x 12" hot plate with thermostat control)	1



11.	Water distillation assembly (All glass double distillation unit with borosilicate boiler, condenser and quartz heater-capacity 1.5 lit/hr)	1
12.	Weighing balance (4 digit) Sartorius	3
13.	Cream separator	1
14.	Ph meter/redox meter with electrode (2 no)	1
15.	Milk Analyzer	1
16.	Gerber centrifuge	1
17.	Remi centrifuge	1
18.	Ultrasonic homogenizer	1
19.	Digital Colony Counting machine	1

(E) Central Instrumentation Laboratory

Sr. No.	Name of the Instrument	Quantity
01.	Automatic Nitrogen Analyzer	01
02.	Viscometer	01
03.	Freeze Dryer	01
04.	Research Microscope	01
05.	Colour Meter	01
06.	Infra Red Moisture Analyzer	01
07.	BOD incubator	02
08.	pH Meter	04
09.	Ion Meter	02
10.	Water Activity Meter	01
11.	Gel Doc System	10
12.	Sonicator	01
13.	Digital Weighing Balance	05

#### 6.4.5. Conduct of Practical and Hands –On-Training

*It is important to have a sound grasp of the theory that underlies any professional degree. But there are some skills that can only be learned through hands-on -practice. It is important that much of the learning material in any given course should be provided in a way that allows students to get as involved as possible to increase their knowledge and abilities. Clearly mention how far students are getting desired practical and hands-on-training as per the curriculum and meeting above mentioned requirements.*

Adequate facilities are available to conduct regular practical for Master Degree course of Dairy Microbiology, Dairy Chemistry, Dairy Engineering, Dairy Technology and also hands-on-training for teaching, research and various training programme related to dairy processing. Further as a part of their course curriculum, the UG students are taken to exposure visits to different research institutes and private industries for better understanding of the subject and to enrich their practical knowledge. The following are the various hands- on- training:

- Preparation of special milks; toned, double toned, standardized, flavoured, sterilised. cleaning of storage tanks, cream separators.
- Preparation of Khoa from cow, buffalo and concentrated milk.
- Preparation of Burfi, Peda, Kalakand, Milkcake and Gulabjamun.
- Preparation of Paneer from cow, buffalo and mixed milk.
- Preparation of Chhana from cow and buffalo milk and mixed milk.
- Preparation of Sandesh and Rasogolla.
- Preparation of kheer. Preparation of Rabri, Misti Dahi, Chhaka and Shrikhand.



- Manufacture of Cheddar cheese.
- Manufacture Gouda cheese. Manufacture of Mozzarella cheese. Manufacture of Swiss cheese
- Hands-on-experience on preparation of media, chemicals etc, sterilization of microbiological media, chemicals, glassware's, plastic wares etc used in regular practical and research work.
- Regular activation, propagation and maintenance of microbial cultures used in practical and research.
- Microscopic observation of microbes: preparation of stained slide of microbial cultures, examination of morphological and staining characteristics.
- Enumeration of composite micro-flora in milk and milk products – sampling, sample preparation, plating and observation and calculation.
- Differentiation of microbes based on morphology, physiology and biochemical profiles.
- Isolation and characterization of microbes from milk and milk products.
- Quality analysis of milk products, dairy equipments, personnel and environmental hygiene.

#### 6.4.6. Supervision of Students in PG programmes

*Number of students being supervised by Faculty in case of Masters/PhD Programme (as per ICAR/UGC guidelines). Mention the realistic figure number of qualified faculty in relation to the intake of students, as per the guidelines in the matter.*

The PG students are carried out their research work under the supervision of advisory committee. The advisory committee consists of a major advisor and at least four members among whom two members are from other than major field of specialization.

#### 6.4.7. Feedback of Stakeholders (Students, Parents, Industries, Employers, Farmers Etc.)

*Mention the feedback mechanism (duly supported by the documents) from different stakeholders of the degree programme. What action the University has taken in last five years to address the issues raised in the feed back?*

Sl. No.	Feed back	Action taken/ attended
01.	Enhancement of university 'Merit cum Mean Scholarship' for PG students	Provision for 'Merit cum Mean Scholarship' has been introduced for 30% PG students in each year. The Enhancement of Scholarship under consideration.
02.	Up-gradation of laboratory facilities for conducting regular practical and hands on training.	Facilities of the laboratories have been upgraded by – Repairing of existing non-functioning equipment/instruments and Purchasing of new equipments/ instruments



#### 6.4.8 Students Intake and Attrition in the PG Programme in the Last Five Years:-

*Year wise information on sanctioned strength, actual intake and attrition in the last five years of the Degree Programme, in the tabular form, shall be provided.*

Name of the Departments	Actual Student Enrolled in last five years					Attrition(%)				
	2016-17	2017-18	2018-19	2019-20	2020-21	2016-17	2017-18	2018-19	2019-20	2020-21
Dairy Technology	1	3	1	2	5	0	1	1	0	N/A
Dairy Engineering	1	1	2	3	2	0	0	0	0	N/A
Dairy Chemistry	1	2	2	2	2	1	0	0	0	N/A
Dairy Microbiology	2	1	1	2	2	0	0	0	0	N/A

#### 6.4.9 ICT Application in Curricula Delivery


*The ICT is now integral part of the teaching programme. ICAR has also been promoting the use of ICT in teaching and practical. Mention whether the Degree Programme is meeting the expectations. If there is any shortfall, it shall be clearly mentioned.*

- For effective teaching and learning, teachers participate in selection and critical evaluation of digital content and resources. For this each individual staff allotted with high configured computer system and connected with high speed Internet facilities for sharing digital contents.
- The Class presentation, PPT, seminar is delivered during course work of PG students through projector system.
- Library:- Digitalized college library KOHA, CeRA, e- books, e-Journals, Krishikosh
- The KOHA (library management) open wear software is implemented to automate the library activities. The charging and discharging of documents is automated and e-mail reminder facility has been introduced.
- CeRA is the ICAR Consortium of e-resources in Agriculture. This covers more than 3500 scholarly journals pertaining to the Agriculture and allied sciences which are available in full text.
- The library is provided with separate internet link line with speed of 100mbps. There is a separate digital library section made in the library which is equipped with 10 computers with facility of internet connected to all computers.

#### 6.4.12. Certificate

I Prof. Tarun Kanti Maity, Dean, Faculty of Dairy Technology, West Bengal University of Animal & Fishery Sciences hereby certify that the information contained in the Section 6.4.1 to 6.4.9 are furnished as per the records available in the college and degree awarding university.

Place: Mohanpur, Nadia  
Date: 29.01.2021

  
29.01.2021  
DEAN  
Faculty of Dairy Technology  
W. B. University of Animal & Fishery Sciences  
Mohanpur-741252 Nadia (W.B.)



## Self Study Report for the Master of Veterinary Science (MVSc)

### 6.4.1. Brief History of the Degree Programme:

*Clearly mention in which year the degree program was initiated along with its objective and accomplishments.*

The postgraduate programme, MVSc is being offered by the Faculty of Veterinary and Animal Sciences under West Bengal University of Animal & Fishery Sciences since its inception from 2<sup>nd</sup> January, 1995. The Faculty has a long history and carries the legacy of century old Bengal Veterinary College. The Master Degree programme was initiated when the Bengal Veterinary College was merged with the Bidhan Chandra Krishi Viswavidyalaya (BCKV) as a constituent Faculty of Veterinary & Animal Sciences in the year 1974. Consequent upon establishment of the West Bengal University of Animal & Fishery Sciences in the year 1995 in pursuance of WBUAFS Act 1995, the Faculty of Veterinary and Animal Sciences stood automatically transferred to the new university after being bifurcated from BCKV and the Master Degree programme since then has been continuing under the Faculty of Veterinary & Animal Sciences, West Bengal University of Animal & Fishery Sciences.

The Master Degree programme (MVSc) is presently offered under 17(Seventeen) Departments of the Faculty of Veterinary and Animal Sciences including the Department of Veterinary Public Health details of which are mentioned below:

- Animal Nutrition
- Livestock Production Management
- Livestock Products Technology
- Veterinary Anatomy & Histology
- Animal Genetics and Breeding
- Veterinary Biochemistry
- Veterinary Epidemiology & Preventive Medicine
- Veterinary Gynaecology & Obstetrics
- Veterinary Medicine, Ethics & Jurisprudence
- Veterinary Microbiology
- Veterinary Parasitology
- Veterinary Pathology
- Veterinary Pharmacology & Toxicology
- Veterinary Physiology
- Veterinary Surgery & Radiology
- Veterinary & Animal Husbandry Extension Education
- Veterinary Public Health\*

**\* NB: The MVSc programme under the Department of Veterinary Public Health was not accredited in the year 2016 since the teaching strength was less. Now, consequent upon recruitment of teachers in the said department, it is proposed that the MVSc programme under the Department of Veterinary Public Health now be accredited since the programme has been running in the said department from 2003 onwards. A list of students received MVSc passed students in Veterinary Public Health is enclosed as Annexure – IV.**



**Objectives:**

1. To generate skilled human resources specialized in Veterinary & Animal Sciences to judicially exploit and manage the Livestock Resources
2. To produce professionally qualified Veterinary Professionals.
3. To carry out need-based applied, advanced research work in the Livestock Sector.
4. To transfer the technologies generated by need-based applied research work to the Livestock farmers and the entrepreneurs through an extension programme.

**Intake Capacity:**

MVSc – Maximum 6 (six) numbers of seats in each department. The Total number varies with the attainment of eligibility of the teachers of the departments as per Academic Rules in vogue. Seats reserved for ICAR Nominee – 25% (at least one in each department). Other reservations are as per Govt. of West Bengal rules.

**Admission Procedure:**

The selection of candidates is made strictly on the basis of merit and performance in the personal interview. The merit shall be decided on the basis of percentage of marks in aggregate or O.G.P.A. in Bachelor's Degree Examination as well as marks or O.G.P.A. in subject concerned in which admission is sought for. The total marks for preparation of merit list is 100 out of which 80% on merit (the relative weightage on the overall performance in the Bachelor's Degree and in the subject concerned i.e. 50 marks from OGPA obtained in UG level and 30 marks from the subject concern) and 20% on personal interview(online mode).

The candidate shall have to score a minimum of 50% in aggregate of merit and interview altogether (i.e. 50 out of 100) to qualify for admission into Postgraduate Programme.

The candidates selected through ICAR all India Examination for admission to Master's Degree course shall be exempted from aforesaid selection process. However, they should have the minimum qualification as stated above.

**Duration of Course:** 2 yrs

**Syllabus:**

The syllabus and Course Curricula is as per **Indian Council of Agricultural Research – BSMA (Broad Subject Matter Area Committee) Report.**

**Accomplishments:**

Systematic teaching has developed knowledge, skill and attitude of students. It helps the student to identify the problem and make necessary scientific solution for the same. Systematically designed teaching makes all round development of students so that they can suitably address different issues of the society and thereby meet the objectives of it. Teachers also make progressive evaluation of their teaching in order to take corrective measures to achieve the terminal objectives of curriculum. Quantification (both objective and subjective) of pedagogic process and its progressive review leads



towards refinement of curriculum and to enhance efficiency of graduates. The Post Graduates are technically sound enough to compete at national level not only in securing scholarships, fellowships, and admission for higher studies but also finding suitable employment in government and private sectors, and starting entrepreneurship. The Faculty has produced significant number of Veterinary Professionals and Scientists till 2020.

#### 6.4.2. Faculty Strength (as on 31.12.2020):

*The faculty strength of the Degree Programme need to be given cadre-wise, both sanctioned and in-place (under the table mentioned below).*

Sl. No.	Name of Department / Establishment	Faculty Position Sanctioned by the Govt as per ICAR/VCI/UGC			Faculty Position filled		
		Prof.	Asso. Prof.	Asst. Prof.	Prof.	Asso. Prof.	Asst. Prof.
1	Animal Nutrition	1	2	5	1	1	3
2	Livestock Production Management	1	2	5	2*	0	1
3	Livestock Products Technology	1	1	2	1	0	2
4	Veterinary Anatomy & Histology	2	1	4	2*	1	1
5	Animal Genetics and Breeding	1	2	5	1*	2	3
6	Veterinary Biochemistry	1	1	3	1	1	2
7	Veterinary Epidemiology & Preventive Medicine	1	0	2	2*	0	1
8	Veterinary Gynaecology & Obstetrics	1	1	5	2*	0	4
9	Veterinary Medicine, Ethics & Jurisprudence	1	1	3	2*	1	0
10	Veterinary Microbiology	1	2	5	1	0	4
11	Veterinary Parasitology	1	1	3	1	1	3
12	Veterinary Pathology	1	2	5	1*	0	4
13	Veterinary Pharmacology & Toxicology	0	2	2	1	0	1
14	Veterinary Physiology	1	1	5	1	1	3
15	Veterinary Public Health	1	1	2	0	1	2
16	Veterinary Surgery & Radiology	1	2	6	4*	0	1
17	Veterinary & Animal Husbandry Extension Education	1	1	1	1	1	2

\* Promoted as Professor / Associate Professor under Career Advancement Scheme.

NB: The University has already initiated the process to advertisement for filling up vacant posts.

#### Faculty Responsibility:

The Faculty members have been assigned to take part in teaching, research and extension activities. The teachers are also responsible to undertake duties / responsibilities assigned to them in connection with examinations, admission, counseling and guiding the Master Degree and PhD students for research work.



### 6.4.3. Technical and Supporting Staff :

*The position of the technical and supporting staff of the Degree Programme including farm and field workers need to be mentioned for both sanctioned and in-place.*

Sl. No.	Name of Department / Establishment	Designation	Group	Man in position
01.	Dean, Faculty of Veterinary & Animal Sciences	Senior Assistant	C	2
		Cash Assistant	C	1
		Office Attendant Gr. I	D	4
		Driver-cum-Mechanic	D	1
		Farash	D	1
		Senior Sweeper	D	1
02.	Animal Nutrition	Technical Assistant	C	0
		Junior Assistant	C	1
		Office Attendant Gr. I	D	1
		Laboratory Attendant	D	0
		Animal Attendant	D	1
03.	Livestock Production Management	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. I	D	1
		Laboratory Attendant	D	1
04.	Livestock Products Technology	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	0
		Senior Animal Keeper	D	1
05.	Veterinary Anatomy & Histology	Senior Assistant	C	1
		Technical Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	2
06.	Animal Genetics and Breeding	Technical Assistant	C	1
		Senior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Sweeper	D	1
07.	Veterinary Biochemistry	Technical Assistant	C	1
		Senior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Sweeper	D	0
08.	Veterinary Epidemiology & Preventive Medicine	Technical Assistant	C	0
		Senior Assistant	C	1
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	1
		Sweeper	D	0
09.	Veterinary Gynaecology & Obstetrics	Technical Assistant	C	0
		Senior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Sweeper	D	1
		Senior Animal Keeper	D	1
10.	Veterinary Medicine, Ethics & Jurisprudence	Technical Assistant	C	0
		Senior Assistant	C	1



		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Sweeper	D	0
11.	Veterinary Microbiology	Technical Assistant	C	0
		Senior Assistant	C	1
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	1
		Sweeper	D	0
12.	Veterinary Parasitology	Technical Assistant	C	1
		Senior Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	0
		Sweeper	D	0
13.	Veterinary Pathology	Technical Assistant	C	0
		Senior Assistant	C	1
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	0
		Sweeper	D	1
14.	Veterinary Pharmacology & Toxicology	Technical Assistant	C	1
		Senior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	0
		Sweeper	D	1
		Senior Animal Keeper	D	1
15.	Veterinary Physiology	Technical Assistant	C	1
		Senior Assistant	C	1
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	0
		Sweeper	D	0
		Senior Animal Keeper	D	0
16.	Veterinary Public Health	Technical Assistant	C	0
		Senior Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	0
		Sweeper	D	0
		Senior Animal Keeper	D	0
17.	Veterinary Surgery & Radiology	Technical Assistant	C	1
		Senior Assistant	C	1
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	0
		Sweeper	D	1
		Senior Animal Keeper	D	0
18.	Veterinary & Animal Husbandry Extension Education	Technical Assistant	C	0
		Senior Assistant	C	1
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	1
		Sweeper	D	0
		Senior Animal Keeper	D	0

**NB: Vacancy arisen due to retirement / death will be filled up shortly.**

#### **Responsibilities of Technical / Supporting Staff:**

- The Technical Staff assists the teachers by extending technical help in the laboratories and operation of machines and equipment.



- Other category of Staff members undertake ministerial works.
- The menial staff members take care of washing / cleaning etc.

#### 6.4.4. Classrooms and Laboratories

*Mention the number of class rooms and functional laboratories available for the degree programme and justify if it is sufficient to meet the course curricula requirement. Lists major equipments, laboratories, farm facilities, workshops and other instructional units being utilized for the award of the Degree Programme may be given.*

##### PG Classrooms:

Sl. No.	Department	No of Classrooms for PG Students	Whether classrooms are sufficient for the programme	Equipped with Audio Visual Arrangements
1.	Animal Nutrition	1	Presently yes but further extension / construction is needed	Yes
2.	Livestock Production Management	1		Yes
3.	Livestock Products Technology	1		Yes
4.	Veterinary Anatomy & Histology	1		Yes
5.	Animal Genetics and Breeding	1		Yes
6.	Veterinary Biochemistry	1		Yes
7.	Veterinary Epidemiology & Preventive Medicine	1		Yes
8.	Veterinary Gynaecology & Obstetrics	1		Yes
9.	Veterinary Medicine, Ethics & Jurisprudence	1		Yes
10.	Veterinary Microbiology	1		Yes
11.	Veterinary Parasitology	1		Yes
12.	Veterinary Pathology	1		Yes
13.	Veterinary Pharmacology & Toxicology	1		Yes
14.	Veterinary Physiology	1		Yes
15.	Veterinary Public Health	1		Yes
16.	Veterinary Surgery & Radiology	1		Yes
17.	Veterinary & Animal Husbandry Extension Education	1		Yes

##### Department-wise laboratories established:

Sl. No.	Departments	Name of laboratories	Numbers	Remarks
1	Veterinary Anatomy	Osteology, Arthology, Splanchnology, Neuro and Angiology, Histology and Embryology	7	Sufficient
2	Veterinary Physiology	Molecular Biology and Bioinformatics, Immuno-physiology, Spectrophotometry, Cell Physiology, Electrophysiology & Ultrasonography lab	3	Sufficient



3	Veterinary Biochemistry	Clinical Biochemistry, Analytical Biochemistry, Immuno Biochemistry and Reproductive biochemistry laboratory	4	Sufficient
4	Animal Genetics & Breeding	Computer and statistical analysis lab., molecular biology lab.	2	Sufficient
5	Animal Nutrition	Feed processing and mixing lab., feed/fodder analysis lab., energy metabolism lab.	3	Sufficient
6	Livestock Production Management	Small animal handling room, large animal handling room, museum for breed	3	Sufficient
7	Animal Husbandry Extension & Education	Audio visual technology laboratory, photography cum graphic unit, projection unit	3	Sufficient
8	Veterinary Pathology	Histopathology lab., Clinical pathology, Immunopathology lab., Necropsy unit and Pathology museum facilities	4	Sufficient
9	Veterinary Parasitology	Immuno and molecular Parasitology lab (for Pg & PhD)	2	Sufficient
10	Veterinary Microbiology	Bacteriology, virology and immunology laboratory	2	Sufficient
11	Veterinary Pharmacology and Toxicology	CPCSEA approved large animals house facility CPCSEA approved laboratory animal facility, Research laboratory (2 nos.), Sophisticated instrument laboratory, Pharmacy laboratory, Pharmacology museum	3	Sufficient
12	Veterinary Medicine, Ethics and Jurisprudence	Clinical medicine lab.	1	Sufficient
13	Veterinary Gynaecology and Obstetrics	Semen/Andrology lab., Phantom hall and palpation room, AI centre with semen storage facility.	4	Sufficient
14	Veterinary Surgery & Radiology	Ophthalmology lab, Bone research laboratory and imaging unit (X-ray facility, Colour dropler, C-Arm facility, Operation theatre both small and large animal), Stem Cell Laboratory	3	Sufficient
15	Veterinary Epidemiology & Preventive Medicine	Preventive lab for Virology, bacteriology and Parasitology	2	Sufficient
16	Veterinary Public Health	Milk hygiene and meat hygiene lab, zoonosis cum epidemiology lab.	2	Sufficient
17	Livestock Products Technology	Poultry Quality Control Unit (for PG & PhD), Poultry processing & meat exam lab (for PG & PhD)	2	Sufficient



**List of Scientific Equipment:**

Name of the Department	List of instrument
<b>Animal Genetics &amp; Breeding</b>	Microscope-13, Deep fridge-1, Refrigerator-2, Autoclave-1, Bacteriological hood-1, Centrifuge machine-2, Dancing shaker-1, Water distillation plant-1, Horizontal electrophoresis system with power supply-1, Vertical electrophoresis system with power supply-1, Hot air oven-1, Micro Centrifuge machine-1, Microwave oven-1, Neubauer's chamber-1, Thermal cycler with UPS (PCR Machine)-1, pH meter-1, Photoplan microscope with monitor-1, Vortex-1, Spinwin-1, UV transilluminator-1, Digital weighing balance-1, Waterbath-1
<b>Veterinary Anatomy &amp; Histology</b>	Animal Embalming equipment, Bones of different animals, Microtome, Hot air Woven, Microscopes, Trinocular microscope with video camera and monitor for displaying histological slides, Specimens of different animals, Animal Embalming equipment, Bones of different animals, Leica Microtome, Leica DM 2000 , Trinocular phase contrast and fluorescence microscope, Olympus, Inverted Microscope, Refrigerator (-40) and (-10), Cryostat, Elisa Rider, Monopan Electronic balance, automatic tissue processor
<b>Animal Nutrition</b>	Socs plus, Kel plus, Fibertake, socsolate aparator (Manual), Micro kjelal (Manual), Hot air oven – 2, Muffle Furnace, Hot plate-1, Hot plate magnetic stirrer, Electronic Balance-2, Refrigerator=1
<b>Veterinary Biochemistry</b>	pH meter, hot air oven, incubator, centrifuge, colorimeter, UV/VIS Spectrophotometer, PCR, PCR, Gel Doc, Spectrophotometer, high precision microscope, cooling centrifuge
<b>Veterinary Microbiology</b>	Hot Air Oven (Old) (1 no.), Incubator (Old) (1 no.), Refrigerator (Old ) (1 no.), Wooden Tool (32 nos.), Magnetic Stirrer (1 no.), Desiccator (1 no.), Wooden Shelf (1 no.), Aqua Guard (1 no.), Window AC (1 no.), Metal Distillation Plant (1 no.), Glass Double Distillation Plant (1 no.), Water bath (Lunar) (1 no.), Laminar Air Flow (Horizontal) (Cleanair) (1 no.)
<b>Veterinary Parasitology</b>	Autoclave (2), Hot air Oven (2), Incubator (3), Refrigerator (2), Microscope with HP 1 oil immersion (30), Binocular Microscope -8 (1, Attachment/Projection/CCV), Microscope phase contrast (1), Microtome rotary and blade sharpener (1), Centrifuge machine (6), Sterilizer Unit, Distillation set, Slide cabinet, Slide boxes, Desiccator, Research microscope trinocular with photographic arrangement, Overhead projector, Pestle mortar, Dissection set, Dissection microscope , Water bath, McMaster Chamber, Bearman's Apparatus Real Time PCR (RT - PCR), Gradient PCR, Duo Flow Chromatography System Nano drop Spectrophotometer, Microscopes, Autoclave & Hot-air Oven, Deep Freezer (-40C), Refrigerator, Gel Documentation System, Electro-elution Machine, HPLC, ELISA Reader
<b>Veterinary Pathology</b>	Hot Air Oven (2 no), Deep Freezer (-20°C)-1, Rotary Microtome-1, Student Microscope-5, Binocular Microscope-1, Desktop Computer-3, Incubator (1 no), Ph. Meter (2 no.) Distillation plant-1, Ice Flaker-1, Refreegerator-3, Water Bath-2, Camera-1 for Histopathology, Centrifuge machine-2, PM Set-1, PM Table-2, Bone cutter saw-1, Staining set-2
<b>Veterinary Pharmacology &amp; Toxicology</b>	Atomic Absorption Spectrophotometer (Varian make), Ultra Homoginizer with probe Distillation apparatus, Soxhelt apparatus, Photoactometer Analgesiometer, Millipore Water Purifier System, Rota-rod apparatus, Pole climbing apparatus, Addys hot plate Hot air oven, Inqubeter, Gas Chromatography with ECD and FID (Varian make), Ultra HPLC (Water make) HPLC with DAD (Shimadzu make), UV Spectrophotometer (Agilent make), Floride meter, Micro Homoginizer, Cooling Centrifuge machine, Ultra cooling centrifuge machine, Centrifuge machine (Remi make)
<b>Veterinary Physiology</b>	ECG machine, USG machine, Multi para monitor, Pluse oximeter, Foetal heart beat monitor, Programmable bio-freezer, Water bath with Shaker, Inverted Fluorescent Microscope , Zoom Stereo microscope, Homogenizer, Vortex, pH meter, Refrigerated Centrifuge, Biosafety cabinet (BS II), Laminar flow, CO <sub>2</sub> incubator, Hot air oven, Autoclave, Distilled water apparatus -20° C freezer, Ultra low temp freezer (- 80 ° C), Master cycler, PCR workstation, Electrophoresis



	apparatus, Gel Documentation system, 0°C Mini cooler Lab top, Atomic Absorption Spectrophotometer, Elisa plate reader, UV Spectrometer, Automatic ELISA Plate washer, Spectrophotometry Lab
<b>Animal Husbandry Extension &amp; Education</b>	Display Board, LCD Projector, Kaleidoscope, Slide Projector, Large screen TV & other necessary equipment's as per VCI recommendation. AV Aids such as- LCD Projector, Kaleidoscope, Slide Projector, Video Camera, Large screen TV, Dark room & others relevant Lab. instruments etc. Extension education related various Models, specimen, all kind of Farm literatures & other relevant equipment's etc.
<b>Veterinary Epidemiology &amp; Preventive Medicine</b>	Monocular Microscope-15 nos.; Monocular Microscope inclined- 2 nos.; Binocular Microscope- 2 nos.; Overhead projector- 1 no.; LCD projector- 1 no.; Refrigerator- 1 no., Bacteriological incubator- 1no.; Digital weighing balance- 1 no.; Mechanical balance- 1no.; Digital pH meter- 1 no.; Water bath- 1 no.; Centrifuge machine- 1 no.; Autoclave- 1 no.; Hot Air Oven- 1no.; Distillation unit- 1 no. , Laminar Air Flow- 1 no.; Deep Freezer (—20°C) - 1 no., Distillation unit- 1 no.; BOD incubator- 1 no.; Autoclave- 1 no.; Hot Air Oven- 1 no.; Digital pH meter- 1 no.; Micropipette- 5 nos.; Laminar Air Flow- 1 no.; Binocular Microscope- 2 nos.; Monocular Microscope-2 nos.; Digital weighing balance- 1 no. , Refrigerator- 3 nos., Deep Freezer (—20°C) - 1 no.; Deep Freezer (—80°C) - 1 no.; Digital pH meter- 1 no.; Digital weighing balance- 1 no.; Centrifuge Machine- 1 no.; Cooling Centrifuge Machine- 1 no.; ELISA Reader- 1 no.; Laminar Air Flow- 1 no.; BOD incubator- 1 no.; Egg Incubator- 3 nos.; Bacteriological incubator- 1 no.; .; Autoclave- 1 no.; Hot Air Oven- 1 no.; Water bath- 1 no.; Micropipette- 7 nos.; Freeze Dryer- 1 no. Biosafety cabinet, Class-II- 1 no.; Thermocycler- 1 no.; Gel Doc.- 1 no.; Spectrophotometer- 1 no.; BOD with shaker- 1 no.; Deep freezer {-80°C)- 1 no.; Refrigerator- 2 nos.; Autoclave- 1 no.; Hot Air Oven- 1 no., Distillation unit- 1no.
<b>Veterinary Gynaecology and Obstetrics</b>	Distillation Plant , Deep Freezer, Autoclave, Hot air oven, Phantom Box, Thygesen's Embryotome, Obstetrical set, Vaginal Speculum, Semen Analyser, Spectrocolorimeter, Stereozoom Microscope, Electronic Balance
<b>Veterinary Public Health</b>	Bacteriological Incubator, Phase Contract Microscope, Refrigerator, Monopan Blance, Thermal Cycler, Refrigerated Micro Centrifuge, Turbidity Meter, -80° C Freezer, Kern Precision Balance, Homogeniser, Shaker Incubator, Micro Centrifuge, Laminar airflow system, BOD incubator, Gel electrophoresis, Rotary evaporator., Bacteriological Incubator, Refrigerator, Monopan Blance, -20° C Freezer, Tissue Homogeniser, Laminar airflow system, BOD incubator, Autoclave, Hot air oven, Digital Colony counter, Laboratory centrifuge, Water distillation plant
<b>Veterinary Surgery &amp; Radiology</b>	Surgical instruments Operation table, Boyles apparatus instruments for PG and PhD
<b>Livestock Farm Complex</b>	Sprayer – 1, Shearing and clipping equipment – 1 set, Debeaking equipment – 1 set, Tatooing set tags etc – 1, Egg Candler – 1, Incubator (Hatchery) -1, Battery Brooder – 1, Trap nest – 5, Egg Grading Machine – 1, Automatic scalding -1, Milking machine set -1, Chick sexing machine -1, Vernier Callipers – 5, Screw Gauge – 5, Maximum-Minimum Thermometer – 2, Psychro-meter, Hair Hygrometer -1, Milking cans -2, Milking piles -2, Milk measures – 1, Cream separator – 1, Butter churns -1, Branding set – 1, Castrator -1, Electrator – 1, Tractor, Farm equipment and Implement, Machinery as per requirement.
<b>Livestock Production Management</b>	Sprayer – 3, Shearing and clipping equipment – 1, Tatooing set tags etc -1, Incubator (Hatchery) -1, Trap nest -2, Vernier Callipers -4, Screw Gauge -2, Maximum-Minimum thermometer – 2, Hair Hygrometer -1, Milking cans -2, Milking piles -2, Milk measures – 1, Branding set -1, Castrator – 1 for each species, Electric clipper -1, Gerber's centrifuge -1
<b>Livestock Products Technology</b>	Refrigerator – 2, Deepfreeze -1, Electronic monopan balance -1, Balance for weighing birds -2, Bone cutting machine -1, Incubator -1, Hot air oven -2, Stunning machine -1, Automatic scaler -1, Feather plucking machine -1, Student's microscope -1, Meat mincing machine -1, sausage maker -1, Smoking unit -1, Salting instruments -1, Butchering sets -1, Packing unit – 1, Lactometer -5, Gerber's centrifuge -1, Gerber's tubes – 20, Vacuum pump – 1, pH meter -1, Microscope binocular – 1, Spectrophotometer -1, Hand sealing machine for



	bottles, cans, plastic, bags -1
<b>Veterinary Clinical Complex</b>	Pleximeters and percussion hummers – 5 set, Electronic stethoscope -1, Ophthalmoscopes -1, Electrocardiograms – 1, Blood pressure monitors -2, Otoscopes -1, Haemocytometers -12, Haemoglobinometers -15, Glass-ware, Small animal examination table -4, Instrument Trolleys – 4, Travis – 2, Travis (examination) -1, Microscope – 2
<b>Veterinary Medicine, Ethics and Jurisprudence</b>	Black board cum display board – 4, Lab stools – 24, Microscopes -18, Electronic monopan balance – 1, Distillation units -5, Digital pH meters -2, Spectrophotometers -1, Microhaematocrits – 4 set, Incubators -1, Hot-air ovens -1, Water baths -1, Autoclave (vertical) -1, Microscope with attachment for microphotographs -1, Stethoscopes with multiple ear-pieces – 3 set, Glass-ware

#### 6.4.5 Conduct of Practical and Hands-on-Training:

*It is important to have a sound grasp of the theory that underlies any professional degree. But there are some skills that can only be learned through hands-on -practice. It is important that much of the learning material in any given course should be provided in a way that allows students to get as involved as possible to increase their knowledge and abilities. Clearly mention how far students are getting desired practical and hands-on-training as per the curriculum and meeting above mentioned requirements.*

Degree Programme	Theory	Practical
MVSc	Single batch of each semester (class)  Maximum number of students in each class is 6 + few students from Supporting fields	Single batch of each semester (class) Maximum number of students in each class is 6 + few students from Supporting fields

The students of clinical and para-clinical subjects are getting hands-on-training in Veterinary Clinical complex, and students of animal husbandry are getting hands-on-training in Livestock Farm Complex, besides in nearby Govt. livestock farms. In addition to this, the students do their practical and hands-on-training in the concerned Department or laboratory of nearby institutes (belongs to State Govt. or Central Govt.).

#### 6.4.6. Supervision of students in PG Programmes:

*Number of students being supervised by Faculty in case of Masters/PhD Programme (as per ICAR/UGC guidelines). Mention the realistic figure number of qualified faculty in relation to the intake of students, as per the guidelines in the matter.*

The Board of Studies of the concerned department propose the name of advisor and the advisory committee for every student within 2<sup>nd</sup> semester to the Controller of \examinations for approval.

The composition of the Advisory Committee for PG student is

- (i) Advisory from major discipline as Chairman
- (ii) Maximum two members from major department
- (iii) One member from minor department

However, other teachers may be included as members of the Advisory Committee from any supporting field, at the discretion of the Chairman, Advisory Committee. Outside member may also be included in the Advisory Committee after formal approval from the Controller of Examinations. Biodata of outside member may be submitted to the Controller of Examinations for approval. However, the total number of members of the Advisory Committee is kept five.



The committee is proposed taking consent of all the members, and approved by the Chairman, HoD and finally Controller of Examinations. The student is informed accordingly.

The PG student undertakes a compulsory research work of 20 credit hours (5 credit hours at 3<sup>rd</sup> semester and 15 credit hours at 4<sup>th</sup> semester) for a thesis. However, this credit hours is not considered for calculation of final transcript.

#### 6.4.7. Feedback of stakeholders (Students, parents, industries, employers, farmers etc.):

*Mention the feedback mechanism (duly supported by the documents) from different stakeholders of the degree programme. What action the University has taken in last five years to address the issues raised in the feed back?*

The students of the faculty are mostly with rural background as such the entire arrangement in the faculty has been made feel them comfortable and to be acquainted with urban atmosphere. Students who have passed out from the faculty have excelled in the professional career in various Govt. and private agencies and expressed their full satisfactions about the academic activities of the faculty. The faculty also received satisfactory feedback from the National Institutes parents, industries and employers. Post Graduates of the faculty who are in the Govt. / Private Sector and engaged in extension activities at the village level have earned great applause from the farmers. Research efficiency of the students have also been applauded by National Institutes.

#### 6.4.8. Student Intake and Attrition in the programme for last five years: (as on 31.12.2020)

*Year wise information on sanctioned strength, actual intake and attrition in the last five years of the Degree Programme, in the tabular form, shall be provided.*

Name of the Department	Actual Student Enrolled in last five years					Attrition(%)				
	2016-17	2017-18	2018-19	2019-20	2020-21	2016-17	2017-18	2018-19	2019-20	2020-21
Veterinary Anatomy	01	01	03	02	01	0	0	33	50	N/A
Veterinary Physiology	0	02	01	04	03	0	0	0	50	N/A
Veterinary Biochemistry	0	02	02	01	0	0	0	0	0	N/A
Animal Genetics & Breeding	0	02	02	02	01	0	0	0	0	N/A
Animal Nutrition	03	04	06	04	03	0	33	33	50	N/A
Livestock Production Management	01	05	05	02	04	0	50	0	20	N/A
Animal Husbandry Extension & Education	02	01	01	01	04	50	0	50	0	N/A
Veterinary Pathology	0	02	05	05	04	0	34	0	0	N/A
Veterinary Parasitology	01	01	05	03	02	0	0	0	0	N/A
Veterinary Microbiology	01	01	05	01	03	0	0	0	0	N/A
Veterinary Pharmacology and Toxicology	0	01	0	0	05	0	50	0	0	N/A
Veterinary Medicine, Ethics and Jurisprudence	03	03	05	06	06	20	0	67	0	N/A
Veterinary Gynaecology and Obstetrics	0	03	06	04	05	0	0	0	0	N/A



Veterinary Surgery & Radiology	06	03	05	06	06	20	20	67	0	N/A
Veterinary Epidemiology & Preventive Medicine	0	03	04	02	05	0	0	0	0	N/A
Veterinary Public Health	02	01	01	01	02	50	0	50	0	N/A
Livestock Products Technology	01	04	05	04	04	0	0	0	50	N/A

#### 6.4.9. ICT Application in Curricula Delivery:

*The ICT is now integral part of the teaching programme. ICAR has also been promoting the use of ICT in teaching and practical. Mention whether the Degree Programme is meeting the expectations. If there is any shortfall, it shall be clearly mentioned.*


Modern class room facilities have been developed in the Faculty of Veterinary & Animal Sciences. During the last five years, most of the departments have developed ICT enabled teaching material and practical manuals. The Faculty has audio visual teaching aid facilities in the class rooms. Practical / project work centered courses have been developed. The Faculty of Veterinary & Animal Sciences gives due weightage to innovative teaching method. As ICT is now being a part of teaching programme, application of the said technology in curricula delivery is satisfactory. The faculty has adopted ICT application in theory by power point presentation and practical through digital presentation.

#### 6.4.12. Certificate :

I, Prof. (Dr.) Nilotpal Ghosh, Dean, Faculty of Veterinary & Animal Sciences hereby certify that the information contained in Section 6.4.1 to 6.4.9 are furnished as per the records available in the Faculty and degree awarding university.

Place: Mohanpur, Nadia

Date: 29.01.2021

  
 29.01.2021  
 DEAN (Actg.)  
 F/o Veterinary & Animal Sciences  
 West Bengal University of Animal & Fishery Sciences  
 Kolkata - 37 & Mohanpur, Nadia-741252





# **SELF STUDY REPORT FOR DOCTORAL OF PHILOSOPHY PROGRAMMES**



## Self Study Report for the Doctor of Philosophy (PhD) Programme under Faculty of Fishery Sciences

### 6.4.1. Brief History of the Degree Programme:

*Clearly mention in which year the degree program was initiated along with its objective and accomplishments.*

The PhD in Fishery Sciences is a 3 years full time course presently runs under the Faculty of Fishery Sciences, West Bengal University of Animal & Fishery Sciences, Kolkata was initially started in 1995. The Faculty of Fishery Sciences is presently located at 5, Budherhat Road, P.O. Panchasayar, Chakgaria Campus Kolkata-700 094. The Faculty was established in the year 1995 and the course was started from the said Academic Year. The Doctoral Degree programme of the faculty has been accredited by the ICAR in the year 2016 for the 3 (three) Departments which are mentioned below:-

- 1) Department of Aquatic Environment Management
- 2) Department of Fish Processing Technology
- 3) Department of Fishery Extension

**N.B.: PhD course in Department of Aquaculture, Fisheries Resource Management, Aquatic Animal Health, and Fishery Economics and Statistics was introduced before inspection of ICAR accreditation team in the year 2016 but the 1st batch passed out 2019. Therefore, PhD course in the said departments needs to be accredited apart from the existing accredited programmes making the total number of PhD course in the Departments / Disciplines to be accredited is 7(seven).**

#### **Objectives:**

1. To generate skilled human resources in Fishery Sciences specialized in Aquaculture, Fisheries Resource Management, Aquatic Environment Management, Aquatic Animal Health, Fish Processing Technology, Fishery Economics & Statistics, Fishery Extension and Fishery Engineering.
2. To carry out advance research and extension activities in Fishery Sciences and its specialised branches.

#### **Intake Capacity:**

PhD – Maximum 3 (three) numbers of seats in each department. The Total number varies with the attainment of eligibility of the teachers of the departments as per Academic Rules in vague. Seats reserved for ICAR Nominee – 25% at least one in each department. Other reservations are as per Govt. of West Bengal rules.

#### **Admission Procedure:**

Admission to Ph.D. course is open to candidates holding a two years Master's degree in Fishery Sciences and securing at least 55% marks in aggregate or 2.75 OGPA in 4.00 point scale or 6.75 in 10 point scale following a Bachelor's Degree in Fishery Sciences (4 years) from a recognized University or National Institute.



Candidates seeking admission to Ph.D. course in a subject shall have the Master's Degree in the same subject and also have done sufficient courses in the proposed major field of specialization within the subject.

The selection of candidates is strictly on the basis of academic score in Master's Degree level and performance in the written test and personal interview. The academic score is decided on the basis of percentage of marks in aggregate or OGPA in Master's Degree Examination. The total marks for preparation of merit list is 100, out of which 40% on academic score, 40% on of written test and 20% on personal interview.

Qualifying marks for admission is minimum 50% in aggregate in Academic Score, Written Test and Personal Interview.

Controller of Examinations publishes the list of candidates recommended for admission in the notice board/ website before the date of admission.

The candidates selected through ICAR all India Examination for admission to Ph.D. programme are exempted from aforesaid selection process. However, they should possess the minimum qualification as stated above.

#### **Duration of Course:**

3 years integrated programme as per **the recommendation of BSMA (Broad Subject Matter Area)-2009 constituted by ICAR** approved by Agricultural Education Division, ICAR, New Delhi.

#### **Syllabus:**

The syllabus and Course Curricula are also as per **the recommendation of BSMA (Broad Subject Matter Area)-2009 constituted by ICAR** approved by Agricultural Education Division, ICAR, New Delhi.

#### **Accomplishments:**

Systematic teaching has developed knowledge skill and attitude of students. It helps the student to identify the problem and make necessary scientific solution of it. Teaching makes all round development of students so that they can suitably address different issues of the society and thereby meet the objectives of it. Teachers also make progressive evaluation of their teaching in order to take corrective measures to achieve the terminal objectives of curriculum. Quantification (both objective and subjective) of pedagogic process and its progressive review leads towards refinement of curriculum and to enhance efficiency of students. The Doctorates from the Faculty are technically sound enough to compete at national level not only in securing scholarships, fellowships, and admission for higher studies but also finding suitable employment in the National / International Institute, Government and private sectors, and starting entrepreneurship.



#### 6.4.2. Faculty Strength (as on 31.12.2020):

*The faculty strength of the Degree Programme need to be given cadre-wise, both sanctioned and in-place (under the table mentioned below).*

Departments	Faculty Position Sanctioned by the Govt as per ICAR/VCI/UGC			Faculty Position filled		
	Professor	Associate Professor	Assistant Professor	Professor	Associate Professor	Assistant Professor
Aquaculture	1	1	2	1	0	2*
Fisheries Resource Management	1	1	2	1	1*	2*
Aquatic Environment Management	1	1	2	1	1*	2*
Aquatic Animal Health	1	1	2	1	1*	1
Fish Processing Technology	1	1	2	1	1*	2*
Fishery Economics & Statistics	1	1	2	1	0	1
Fishery Extension	1	1	2	1	1	1

#### \* Teachers promoted to Professor through CAS

The university has submitted proposal to the State Govt. for sanction of more posts and the said proposal is under active consideration. The university also engaged contractual / guest / adjunct faculty in the academic interest. Vacant posts are likely to be advertised shortly.

#### Faculty Responsibility:

The Faculty members have been assigned to take part in teaching, research and extension activities. The teachers are also responsible to undertake duties / responsibilities assigned to them in connection with examinations, admission, counseling and guiding the Master Degree and PhD students for research work.

#### 6.4.3. Technical and Supporting staff :

*The position of the technical and supporting staff of the Degree Programme including farm and field workers need to be mentioned for both sanctioned and in-place.*

Sl. No.	Name of Department/ Establishment	Group	Sanctioned of post	Man in position
1	Dean, Faculty of Fishery Sciences	Junior Assistant	C	0
		Junior Store Keeper	C	1
		Office Attendant Gr. II	D	4
		Durwan	D	0
		Driver-cum-Mechanic	D	0
		Mali	D	1
		Sweeper	D	2
2	Aquaculture	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Fisherman	D	2



3	Fish Processing Technology	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	0
		Fisherman	D	0
4	Fisheries Resource Management	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	0
		Field Worker	D	0
5	Fishery Economics, Statistics & Marketing	Technical Assistant	C	0
		Junior Assistant	C	0
		Office Attendant Gr. II	D	2
		Laboratory Attendant	D	0
		Field Worker	D	0
6	Fishery Extension	Technical Assistant	C	0
		Junior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Fisherman	D	1
7	Aquatic Environment Management	Junior Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	1
		Field Worker	D	0
8	Aquatic Animal Health	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Field Worker	D	0

**NB: Vacancy arisen due to retirement / death will be filled up shortly.**

#### **Responsibilities of Technical / Supporting Staff:**

- The Technical Staff assists the teachers by extending technical help in the laboratories and operation of machines and equipment.
- Other category of Staff members undertake ministerial works.
- The menial staff takes care of washing / cleaning etc.

#### **6.4.4. Classrooms and Laboratories:**

*Mention the number of class rooms and functional laboratories available for the degree programme and justify if it is sufficient to meet the course curricula requirement. Lists major equipments, laboratories, farm facilities, workshops and other instructional units being utilized for the award of the Degree Programme may be given.*

#### **Department-wise laboratories established**

Sl. No.	Department	Name of laboratories/farm	Numbers	Remarks
1.	Aquaculture	Ornamental Fish Rearing Unit; Carp Hatchery Unit and Aqua Farm including nursery; Feed Formulation Laboratory	4	Sufficient
2.	Fisheries Resource Management	Physiology; Taxonomy-cum-Museum; Anatomy and Biology; Stock Assessment	4	Sufficient
3.	Aquatic Environment	Ecotoxicology; Water and Soil Chemistry;	4	Sufficient



	Management	Limnology & Oceanography; Instrumentation		
4.	Aquatic Animal Health	Bacteriology; Parasitology; Immunology; Histopathology; Instrumentation	5	Sufficient
5.	Fish Processing Technology	Modern Fish Processing Unit; Biochemistry; Microbiology; Instrumentation	4	Sufficient
6.	Fishery Engineering	Craft & Gear Engineering; Refrigeration Engineering; Navigation and Seamanship.	3	Sufficient
7.	Fishery Economics and Statistics	Computer Centre	1	Sufficient
8.	Fishery Extension	Audio-visual; Cyber-extension	2	Sufficient
9.	Fish Nutrition	Analytical Lab.	1	Sufficient

#### Instruments available in the Laboratories:

A part from common equipment, the Faculty has the following equipment to cater the UG course:-

Sl. No.	Name of the Equipment	Make
1	High Performance Liquid Chromatography	Jasco, Japan
2	Analytical Balance	Sartorius
3	Atomic Absorption Spectrophotometer	Varian, Netherlands
4	Inverted Microscope	Hunt, Germany
5	Carbon di-oxide Incubator	Thermo Fisher, USA
6	Water purification system	Millipore, India
7	Thermal cycler	Eppendorff, Germany
8	Micro-centrifuge	Eppendorff, Germany
9	U-V Trans-illuminator	Bangalore Genei, India
10	Gas chromatography	Varian, Netherlands
11	UV-Vis Spectrophotometer	

#### PhD Classrooms: 8 (Eight)

Sl. No.	Department	No of Classrooms for PG Students	Whether classrooms are sufficient for the programme	Equipped with Audio Visual Arrangements
1.	Aquaculture	1	Presently yes but further extension / construction is needed	Yes
2.	Fisheries Resource Management	1		Yes
3.	Aquatic Environment Management	1		Yes
4.	Aquatic Animal Health	1		Yes
5.	Fish Processing Technology	1		Yes
6.	Fishery Economics and Statistics	1		Yes
7.	Fishery Extension	1		Yes

The University has drawn a Plan and Estimate for construction of two more classroom since with the increased number of students, classroom facilities to be augmented. The State Govt. is considering the proposal for allotment of fund in this respect.



#### 6.4.5. Conduct of Practical and Hands-on-Training:

*It is important to have a sound grasp of the theory that underlies any professional degree. But there are some skills that can only be learned through hands-on -practice. It is important that much of the learning material in any given course should be provided in a way that allows students to get as involved as possible to increase their knowledge and abilities. Clearly mention how far students are getting desired practical and hands-on-training as per the curriculum and meeting above mentioned requirements.*

The doctoral course involves conduct of practical's as per credits allotted to the specific courses and hands on training and field / lab practical's for courses as per ICAR course curricula in the following ways:-

1. The students are regularly been involved in these programmes actively in the farm facilities of the Faculty as per the curriculum. They are involved in breeding and seed production of carps and ornamental fish, farming of carps, ornamental fish and cat fishes.
2. Each student gets the chance to perform the design and fabrication of fishing materials with its operational procedure, technique, or task for simple scale-wise experiments
3. Make small groups of students and provide them with the chance to perform the mending and repairing of fishing nets and procedure, technique, or task for simple experiments
4. Make small groups of students and provide them with the chance to perform the nautical chart work and procedure, technique, or task for simple experiments
5. Demonstration on how to perform the procedure, technique, or task as far as possible for the practical involving in onboard vessel activities during fishing activities
6. Providing exposure visits to fish netting yards, boat building yard, interaction with fishermen and seafarers, farms and field estimation of water parameters and water and soil sample collection or interaction with fish farmers, different fish markets, fish landing centres for market survey and make them learn themselves.

#### 6.4.6. Supervision of students in Doctoral Programmes:

*Number of students being supervised by Faculty in case of Masters/PhD Programme (as per ICAR/UGC guidelines). Mention the realistic figure number of qualified faculty in relation to the intake of students, as per the guidelines in the matter.*

Name of the Department	No. of eligible teacher to teach for the Doctoral degree programme	No. of eligible teacher to supervise for the Doctoral degree programme	No. of student intake/Year*	Whether ICAR/UGC guidelines are followed for student supervision?
Aquaculture	3+1 (Guest Teacher)	2	2/Year	YES
Fisheries Resource Management	3	3	3/Year	YES
Aquatic Environment Management	2	2	2/Year	YES
Aquatic Animal Health	2	2	2/Year	YES
Fish Processing Technology	4	2	2/Year	YES
Fishery Economics and Statistics	2	1	2/Year	YES
Fishery Extension	1+1 (Guest Teacher)	01	1/Year	YES



#### 6.4.7. Feedback of stakeholders (Students, parents, industries, employers, farmers etc.):

*Mention the feedback mechanism (duly supported by the documents) from different stakeholders of the degree programme. What action the University has taken in last five years to address the issues raised in the feed back?*

The students of the faculty are mostly with rural background as such the entire arrangement in the faculty has been made feel them comfortable and to be acquainted with urban atmosphere. Students who have passed out from the faculty have excelled in the professional career in various Govt. and private agencies and expressed their full satisfactions about the academic activities of the faculty. The faculty also received satisfactory feedback from the parents, industries and employers. Doctorates from the faculty who are in the National / International Institutes /Govt. / Private Sector and engaged in extension activities at the village level have earned great applause from the farmers.

#### 6.4.8. Student intake and attrition in the programme for last five years:

*Year wise information on sanctioned strength, actual intake and attrition in the last five years of the Degree Programme, in the tabular form, shall be provided.*

Name of the Degree Programme	Actual Student Enrolled in last five years					Attrition(%)				
	2016-17	2017-18	2018-19	2019-20	2020-21	2016-17	2017-18	2018-19	2019-20	2020-21
Aquaculture	02	02	02	02	-	0	0	0	0	0
Fisheries Resource Management	01	02	02	03	-	0	0	0	0	-
Aquatic Environment Management	01	03	01	02	-	0	0	0	0	-
Aquatic Animal Health	01	02	00	02	-	0	50	0	0	-
Fish Processing Technology	01	02	02	02	-	0	0	0	0	-
Fishery Economics and Statistics	01	02	01	02	-	0	50	0	0	-
Fishery Extension	02	03	04	04	-	0	0	0	0	0

#### 6.4.9. ICT Application in Curricula Delivery:

*The ICT is now integral part of the teaching programme. ICAR has also been promoting the use of ICT in teaching and practical. Mention whether the Degree Programme is meeting the expectations. If there is any shortfall, it shall be clearly mentioned.*

Use of ICT in teaching and practical: All the Department have dedicated classrooms for teaching M.F.Sc. students with Audio Visual Aids, Projectors, WiFi connectivity for online content demonstration. During the COVID-19 Pandemic lock down the Department continued the teaching and learning process through application of online platforms like Google Meet and Zoom. Practical demonstrations were conducted online through web content demonstrations and videos to the best of the efforts.



#### 6.4.12. Certificate

I, Prof. Bipul Kumar Das, Dean, Faculty of Fishery Sciences, West Bengal University of Animal & Fishery Sciences, Kolkata, hereby certify that the information contained in the Section 6.4.1 to 6.4.9 are furnished as per the records available in the college, and degree awarding university.

Place: Kolkata

Date: 29.01.2021

  
29/01/2021  
Prof. BIPUL KUMAR DAS  
Dean  
Faculty of Fishery Sciences  
W. B. University of Animal & Fishery Sciences  
Chakgaria, Kolkata-700 094



## Self Study Report for the Doctor Philosophy (PhD) Programme under Faculty of Dairy Technology

### 6.4.1. Brief History of the Degree Programme:

*Clearly mention in which year the degree program was initiated along with its objective and accomplishments.*

The Doctor of Philosophy (PhD) programme in Dairy Technology was started in the year 1977 under the Faculty of Veterinary & Animal Sciences in Bidhan Chandra Krishi Viswavidyalaya (BCKV). Consequent upon the bifurcation of BCKV and establishment of West Bengal University of Animal and Fishery Sciences (WBUAFS) in 1995, the Faculty of Dairy Technology was established as a constituent Faculty under WBUAFS for providing excellent academic and research support base in Dairy Technology and allied fields.

The Faculty of Dairy Technology is the only institute in the State of West Bengal offering undergraduate education in the field of Dairy Technology and related subjects since its inception which has a legacy of 33 years including its tenure with Bidhan Chandra Krishi Viswavidyalaya. The Faculty of Dairy Technology, with its unique model of education, has been churning out quality Dairy Technocrats who have used their technical acumen to help their organization climb never heights of excellence in food, dairy and allied sectors of the industry in India and abroad.

The Doctoral Degree programme (PhD) of the faculty has been accredited by the ICAR in the year 2018 for the 3 (three) Departments which are mentioned below:-

- Department of Dairy Technology
- Department of Dairy Chemistry
- Department of Dairy Microbiology

### **Intake Capacity:**

PhD – Maximum 3 (three) numbers of seats in each department. The Total number varies with the attainment of eligibility of the teachers of the departments as per Academic Rules in vague. Seats reserved for ICAR Nominee – 25% at least one in each department. Other reservations are as per Govt. of West Bengal rules.

### **Admission Procedure:**

Admission to Ph.D. course is open to candidates holding a two years Master's degree in Fishery Sciences and securing at least 55% marks in aggregate or 2.75 OGPA in 4.00 point scale or 6.75 in 10 point scale following a Bachelor's Degree in Fishery Sciences (4 years) from a recognized University or National Institute.

Candidates seeking admission to Ph.D. course in a subject shall have the Master's Degree in the same subject and also have done sufficient courses in the proposed major field of specialization within the subject.



The selection of candidates is strictly on the basis of academic score in Master's Degree level and performance in the written test and personal interview. The academic score is decided on the basis of percentage of marks in aggregate or OGPA in Master's Degree Examination. The total marks for preparation of merit list is 100, out of which 40% on academic score, 40% on of written test and 20% on personal interview.

Qualifying marks for admission is minimum 50% in aggregate in Academic Score, Written Test and Personal Interview.

Controller of Examinations publishes the list of candidates recommended for admission in the notice board/ website before the date of admission.

The candidates selected through ICAR all India Examination for admission to Ph.D. programme are exempted from aforesaid selection process. However, they should possess the minimum qualification as stated above. However, they should have the minimum qualification.

#### **Duration of Course:**

2 years integrated programme as per 5th Deans' Committee curriculum approved by Agricultural Education Division, ICAR, New Delhi.

#### **Syllabus:**

The syllabus and Course Curricula are also as per **the recommendation of BSMA (Broad Subject Matter Area)-2009 constituted by ICAR** approved by Agricultural Education Division, ICAR, New Delhi.

#### **Accomplishments:**

Systematic teaching has developed knowledge skill and attitude of students. It help the student to identify the problem and make necessary scientific solution of it. Teaching makes all round development of students so that they can suitably address different issues of the society and thereby meet the objectives of it. Teachers also make progressive evaluation of their teaching in order to take corrective measures to achieve the terminal objectives of curriculum. Quantification (both objective and subjective) of pedagogic process and its progressive review leads towards refinement of curriculum and to enhance efficiency of graduates. The graduates are technically sound enough to compete at national level not only in securing scholarships, fellowships, and admission for higher studies but also finding suitable employment in government and private sectors, National / International Research & Academic Institute and starting entrepreneurship.

#### **6.4.2 Faculty Strength:**

*The faculty strength of the Degree Programme need to be given cadre-wise, both sanctioned and in-place (under the table mentioned below).*

Departments	Faculty Position Sanctioned by the Govt as per ICAR/UGC/VCI			Faculty Position filled		
	Professor	Associate Professor	Assistant Professor	Professor	Associate Professor	Assistant Professor
Department of Dairy	1	1	2	1	1	2



Microbiology						
Department of Dairy Chemistry	1	1	2	1	1	0
Department of Dairy Technology	1	1	3	0	0	3

**NB: A part from the teaching posts mentioned above Guest Teachers / Adjunct Faculty / Contractual Teachers also take part in the academic programmes. The university is exploring the possibility to initiate the recruitment process of more teachers against sanctioned posts.**

#### **Faculty Responsibility:**

The Faculty members have been assigned to take part in teaching, research and extension activities. The teachers are also responsible to undertake duties / responsibilities assigned to them in connection with examinations, admission, counseling and guiding the Master Degree and PhD students for research work.

#### **6.4.3. Technical and Supporting Staff:**

*The position of the technical and supporting staff of the Degree Programme including farm and field workers need to be mentioned for both sanctioned and in-place.*

The college has been provided with technical / Laboratory to cater to the need of practical and filed experiments. Department wise distribution of technical, supporting and field staff are provided as under:

Sl. No.	Name of Department / Establishment	Designation	Group	Man in position
01.	Dean, Faculty of Dairy Technology	Junior Assistant	C	1
		Cash Assistant	C	1
		Dairy Overseer	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Driver-cum-Mechanic	D	0
		Farash	D	1
		Durwan	D	0
		Mali	D	0
		Sweeper	D	2
02.	Dairy Chemistry	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	0
		Durwan	D	0
03.	Dairy Microbiology	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	0
04.	Dairy Technology	Junior Assistant	C	1
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	1
		Skilled Labour, Gr. II	D	0

**NB: Vacancy arisen due to retirement / death will be filled up shortly.**



**Responsibilities of Technical / Supporting Staff:**

- The Technical Staff assists the teachers by extending technical help in the laboratories and operation of machines and equipment.
- Other category of Staff members undertake ministerial works.
- The menial staff takes care of washing / cleaning etc.

**6.4.4. Classrooms and Laboratories****Classroom Facilities**

Sl. No.	Class room No.		Area (ft2)	Seating capacity	Other facilities (LCD, Projectors, Computers, Smart board etc.)
	Department	Number			
01	Microbiology	one	250	10	LCD Projectors
02	Chemistry	one	250	10	LCD Projectors
03	Technology	one	250	10	LCD Projectors

**PG Laboratories and Other facilities:**

Sr No.	Name of Laboratory/ Teaching room	No of Laboratory / Classrooms			
		Dairy Microbiology	Dairy Chemistry	Dairy Engineering	Dairy Technology
1	Research Laboratory	01	-	-	-
2	P.G. Laboratory	01	01	01	02
3	Media preparation room	01	-	-	-
4	Instrument room	01	-	-	-
5	Quality Control Laboratory	-	01	-	-
6	Instrumentation Lab	-	01	-	-
7	Computer Lab.	-	01	-	-
8	Seminar Room	01	01	01	-
9	Workshop	-	-	01	-
10	Processing / Production Lab	-	-	01	01
11	Food Engineering Lab	-	-	01	-
12	Electrical Lab	-	-	01	-
13	Analytical Lab -I	-	-	-	01
14	Analytical lab-II	-	-	-	01
15	Sensory Lab	-	-	-	01

**Laboratory instruments/equipment:**(A) Department of Dairy Microbiology

Sl. No.	Name of the Instrument	Number
01.	Refrigerated Centrifuge	01
02.	Thermocycler	01
03.	Electrophoresis Apparatus – Slab Gel	01
04.	Small spin Centrifuge	01
05.	UV transilluminator	01
06.	Geldoc system	01
07.	BOD incubator	02
08.	Air incubator	04
09.	Hot air oven	02
10-	Autoclave	01
11.	Microscope	10
12.	Water bath	01



13.	Refrigerator	05
14.	Shaker	01
15.	Microwave Oven	01
16.	Laminar air flow system	03
17.	Deep freeze	01

(B) Department of Dairy Chemistry

Sl. No.	Name of the equipment	Quantity
01.	Automatic Milk analyser	1
02.	Automatic Nitrogen analyzer	1
03.	BOD Incubator	2
04.	Butyro Refractometer	1
05.	Deep Freezer	1
06.	Digital Balance	3
07.	Digital PH meter	2
08.	Digital Photoelectric Colorimeter	1
09.	Double Beam UV-Visible Spectrophotometer	1
10.	Electric Cream separator	1
11.	Electrophoresis Apparatus- Rod Gel	1
12.	Electrophoresis Apparatus- Slab Gel	1
13.	Flame photometer	1
14.	Gerber Centrifuge	1
15.	High Speed Centrifuge	1
16.	Hot air oven	3
17.	Microwave Oven	1
18.	Muffle Furnace	2
19.	Refrigerator	2
20.	RM value apparatus	1
21.	Soxhlet Apparatus	1
22.	Temperature Controller Water Bath	1
23.	Thin layer Chromatography kit	1

(C) Department of Dairy Technology:

Sl. No	Name of the equipment	Quantity
01.	Muffle furnace	3
02.	Hot air oven	4
03.	Incubator	2
04.	BOD Incubator	1
05.	OTG	1
06.	Cake Oven	1
07.	Tray Dryer	1
08.	Autoclave	1
09.	Hot water bath	1
10.	Hot plate (12" x 12" hot plate with thermostat control)	1
11.	Water distillation assembly (All glass double distillation unit with borosilicate boiler, condenser and quartz heater-capacity 1.5 lit/hr)	1
12.	Weighing balance (4 digit) Sartorius	3
13.	Cream separator	1
14.	Ph meter/redox meter with electrode (2 no)	1
15.	Milk Analyzer	1
16.	Gerber centrifuge	1
17.	Remi centrifuge	1



18.	Ultrasonic homogenizer	1
19.	Digital Colony Counting machine	1

**(D) Central Instrumentation Laboratory**

Sr. No.	Name of the Instrument	Quantity
01.	Automatic Nitrogen Analyzer	01
02.	Viscometer	01
03.	Freeze Dryer	01
04.	Research Microscope	01
05.	Colour Meter	01
06.	Infra Red Moisture Analyzer	01
07.	BOD incubator	02
08.	pH Meter	04
09.	Ion Meter	02
10.	Water Activity Meter	01
11.	Gel Doc System	10
12.	Sonicator	01
13.	Digital Weighing Balance	05

#### 6.4.5. Conduct of Practical and Hands –On-Training

*It is important to have a sound grasp of the theory that underlies any professional degree. But there are some skills that can only be learned through hands-on -practice. It is important that much of the learning material in any given course should be provided in a way that allows students to get as involved as possible to increase their knowledge and abilities. Clearly mention how far students are getting desired practical and hands-on-training as per the curriculum and meeting above mentioned requirements.*

Adequate facilities are available to conduct regular practical for various courses of Dairy Microbiology, Dairy Chemistry, Dairy Engineering, Dairy Technology and Dairy Business Management and also hands-on-training for teaching, research and various training programme related to dairy processing. Further as a part of their course curriculum, the Doctoral students are taken for exposure visits to different research institutes and private industries for better understanding of the subject and to enrich their practical knowledge. The following are the various hands- on- training:

- Preparation of special milks; toned, double toned, standardized, flavoured, sterilised. cleaning of storage tanks, cream separators.
- Preparation of Khoa from cow, buffalo and concentrated milk.
- Preparation of Burfi, Peda, Kalakand, Milkcake and Gulabjamun.
- Preparation of Paneer from cow, buffalo and mixed milk.
- Preparation of Chhana from cow and buffalo milk and mixed milk.
- Preparation of Sandesh and Rasogolla.
- Preparation of kheer. Preparation of Rabri, Misti Dahi, Chhaka and Shrikhand.
- Manufacture of Cheddar cheese.
- Manufacture Gouda cheese. Manufacture of Mozzarella cheese. Manufacture of Swiss cheese
- Hands-on-experience on preparation of media, chemicals etc, sterilization of microbiological media, chemicals, glassware's, plastic wares etc used in regular practical and research work.
- Regular activation, propagation and maintenance of microbial cultures used in practical and research.



- Microscopic observation of microbes: preparation of stained slide of microbial cultures, examination of morphological and staining characteristics.
- Enumeration of composite micro-flora in milk and milk products – sampling, sample preparation, plating and observation and calculation.
- Differentiation of microbes based on morphology, physiology and biochemical profiles.
- Isolation and characterization of microbes from milk and milk products.
- Quality analysis of milk products, dairy equipments, personnel and environmental hygiene.

#### 6.4.6. Supervision of Students in Doctoral programme

*Number of students being supervised by Faculty in case of Masters/PhD Programme (as per ICAR/UGC guidelines). Mention the realistic figure number of qualified faculty in relation to the intake of students, as per the guidelines in the matter.*

The PhD students are carried out their research work under the supervision of an Advisory Committee. The advisory committee consists of a major advisor and at least four members among whom two members are from other than major field of specialization.

#### 6.4.7. Feedback of Stakeholders (Students, Parents, Industries, Employers, Farmers Etc.)

*Mention the feedback mechanism (duly supported by the documents) from different stakeholders of the degree programme. What action the University has taken in last five years to address the issues raised in the feed back?*

Sl. No.	Feed back	Action taken/ attended
01.	Enhancement of university 'Merit cum Mean Scholarship' for PhD students	Provision for 'Merit cum Mean Scholarship' has been made for 30% PG students in each year. The Enhancement of Scholarship under consideration.
02.	Up-gradation of laboratory facilities for conducting regular practical and hands on training.	Facilities of the laboratories have been upgraded by – Repairing of existing non-functioning equipment/instruments and Purchasing of new equipments/ instruments

#### 6.4.8 Students Intake and Attrition in the PhD Programme in the Last Five Years:-

*Year wise information on sanctioned strength, actual intake and attrition in the last five years of the Degree Programme, in the tabular form, shall be provided.*

Name of the Departments	Actual Student Enrolled in last five years					Attrition(%)				
	2016-17	2017-18	2018-19	2019-20	2020-21	2016-17	2017-18	2018-19	2019-20	2020-21
Dairy Technology	0	0	0	0	0	0	0	0	0	N/A
Dairy Chemistry	0	0	0	0	0	0	0	0	0	N/A
Dairy Microbiology	0	0	0	1	-	0	0	0	0	N/A



#### 6.4.9 ICT Application in Curricula Delivery

*The ICT is now integral part of the teaching programme. ICAR has also been promoting the use of ICT in teaching and practical. Mention whether the Degree Programme is meeting the expectations. If there is any shortfall, it shall be clearly mentioned.*


- For effective teaching and learning, teachers participate in selection and critical evaluation of digital content and resources. For this each individual staff allotted with high configured computer system and connected with high speed Internet facilities for sharing digital contents.
- The Class presentation, PPT, seminar is delivered during course work of PhD students through projector system.
- Library:- Digitalized college library KOHA, CeRA, e- books, e-Journals, Krishikosh
- The KOHA (library management) open wear software is implemented to automate the library activities. The charging and discharging of documents is automated and e-mail reminder facility has been introduced.
- CeRA is the ICAR Consortium of e-resources in Agriculture. This covers more than 3500 scholarly journals pertaining to the Agriculture and allied sciences which are available in full text.
- The library is provided with separate internet link line with speed of 100mbps. There is a separate digital library section made in the library which is equipped with 10 computers with facility of internet connected to all computers.

#### 6.4.12. Certificate

I Prof. Tarun Kanti Maity, Dean, Faculty of Dairy Technology, West Bengal University of Animal & Fishery Sciences hereby certify that the information contained in the Section 6.4.1 to 6.4.9 are furnished as per the records available in the college and degree awarding university.

Place: Mohanpur, Nadia

Date: 29.01.2021

  
29.01.2021  
DEAN  
Faculty of Dairy Technology  
W. B. University of Animal & Fishery Sciences  
Mohanpur-741252 Nadia (W.B.)



## Self Study Report for the Doctor of Philosophy (PhD) Programme under Faculty of Veterinary & Animal Sciences

### 6.4.1. Brief History of the Degree Programme:

*Clearly mention in which year the degree program was initiated along with its objective and accomplishments.*

The Doctoral programme, PhD is being offered by the Faculty of Veterinary and Animal Sciences under West Bengal University of Animal & Fishery Sciences since its inception from 2<sup>nd</sup> January, 1995. The Faculty has a long history and carries the legacy of century old Bengal Veterinary College. The Doctoral Degree programme was initiated when the Bengal Veterinary College was merged with the Bidhan Chandra Krishi Viswavidyalaya (BCKV) as a constituent Faculty of Veterinary & Animal Sciences in the year 1974. Consequent upon establishment of the West Bengal University of Animal & Fishery Sciences in the year 1995 in pursuance of WBUAFS Act 1995, the Faculty of Veterinary and Animal Sciences stood automatically transferred to the new university after being bifurcated from BCKV and the PhD programme since then has been continuing under the Faculty of Veterinary & Animal Sciences, West Bengal University of Animal & Fishery Sciences.

The Doctoral Degree programme (PhD) is presently offered under 17(Seventeen) Departments of the Faculty of Veterinary and Animal Sciences including the Department of Veterinary Public Health details of which are mentioned below:

- Animal Nutrition
- Livestock Production Management
- Livestock Products Technology
- Veterinary Anatomy & Histology
- Animal Genetics and Breeding
- Veterinary Biochemistry
- Veterinary Epidemiology & Preventive Medicine
- Veterinary Gynaecology & Obstetrics
- Veterinary Medicine, Ethics & Jurisprudence
- Veterinary Microbiology
- Veterinary Parasitology
- Veterinary Pathology
- Veterinary Pharmacology & Toxicology
- Veterinary Physiology
- Veterinary Public Health\*
- Veterinary Surgery & Radiology
- Veterinary & Animal Husbandry Extension Education

**\* NB: The Doctoral programme under the Department of Veterinary Public Health was not accredited in the year 2016 since the teaching strength was less. Now, consequent upon recruitment of teachers in the said department, it is proposed that the Doctoral programme under the Department of Veterinary Public Health now be accredited since the programme has**



**been running in the said department from 2003 onwards. A list of students received Doctoral Degrees in Veterinary Public Health is enclosed as Annexure – V.**

**Objectives:**

1. To carry out need-based applied, advanced research work in the Livestock Sector.
2. To generate skilled human resources specialized in Veterinary & Animal Sciences with special emphasis to the particular departments of study and manage the Livestock Resources
3. To produce professionally qualified Doctorate personnel in Veterinary and Animal Sciences with particular emphasis in the subject concerned.
4. To transfer the technologies generated by need-based applied research work to the Livestock farmers and the entrepreneurs through an extension programme.

**Intake Capacity:**

PhD Programme – Maximum 3 (three) numbers of seats in each department. The Total number varies with the attainment of eligibility of the teachers of the departments as per Academic Rules in vague. Seats reserved for ICAR Nominee – 25% at least one in each department. Other reservations are as per Govt. of West Bengal rules.

**Admission Procedure:**

Admission to Ph.D. course is open to candidates holding a two years Master's degree in Veterinary & Animal Sciences and securing at least 55% marks in aggregate or 2.75 OGPA in 4.00 point scale or 6.75 in 10 point scale following a Bachelor's Degree in Veterinary & Animal Sciences (5½ years) from a recognized University or National Institute.

Candidates seeking admission to Ph.D. course in a subject shall have the Master's Degree in the same subject and also have done sufficient courses in the proposed major field of specialization within the subject.

The selection of candidates is strictly on the basis of academic score in Master's Degree level and performance in the written test and personal interview. The academic score is decided on the basis of percentage of marks in aggregate or OGPA in Master's Degree Examination. The total marks for preparation of merit list is 100, out of which 40% on academic score, 40% on of written test and 20% on personal interview.

Qualifying marks for admission is minimum 50% in aggregate in Academic Score, Written Test and Personal Interview.

Controller of Examinations publishes the list of candidates recommended for admission in the notice board/ website before the date of admission.

The candidates selected through ICAR all India Examination for admission to Ph.D. programme are exempted from aforesaid selection process. However, they should possess the minimum qualification as stated above.

**Duration of Course:** 3 years (One year course curriculum)

**Syllabus:**



The syllabus and Course Curricula is as per **Indian Council of Agricultural Research – BSMA (Broad Subject Matter Area Committee) Report.**

#### **Accomplishments:**

Systematic teaching has developed knowledge, skill and attitude of students. It helps the student to identify the problem and make necessary scientific solution for the same. Systematically designed teaching makes all round development of students so that they can suitably address different issues of the society and thereby meet the objectives of it. Teachers also make progressive evaluation of their teaching in order to take corrective measures to achieve the terminal objectives of curriculum. Quantification (both objective and subjective) of pedagogic process and its progressive review leads towards refinement of curriculum and to enhance efficiency of graduates. The students are technically sound enough to compete at National / International level not only in securing scholarships, fellowships, and admission for higher studies but also finding suitable employment in government, private sectors, and National / International Institutes. The Faculty has produced significant number of Veterinary Scientists till 2020.

#### **6.4.2. Faculty Strength (as on 31.12.2020):**

*The faculty strength of the Degree Programme need to be given cadre-wise, both sanctioned and in-place (under the table mentioned below).*

Sl. No.	Dept.	Faculty Position Sanctioned by the Govt as per ICAR/VCI/UGC			Faculty Position filled		
		Prof.	Asso. Prof.	Asst. Prof.	Prof.	Asso. Prof.	Asst. Prof.
1	Animal Nutrition	1	2	5	1	1	3
2	Livestock Production Management	1	2	5	2*	0	1
3	Livestock Products Technology	1	1	2	1	0	2
4	Veterinary Anatomy & Histology	2	1	4	2*	1	1
5	Animal Genetics and Breeding	1	2	5	1*	2	3
6	Veterinary Biochemistry	1	1	3	1	1	2
7	Veterinary Epidemiology & Preventive Medicine	1	0	2	2*	0	1
8	Veterinary Gynaecology & Obstetrics	1	1	5	2*	0	4
9	Veterinary Medicine, Ethics & Jurisprudence	1	1	3	2*	1	0
10	Veterinary Microbiology	1	2	5	1	0	4
11	Veterinary Parasitology	1	1	3	1	1	3
12	Veterinary Pathology	1	2	5	1*	0	4
13	Veterinary Pharmacology & Toxicology	0	2	2	1	0	1
14	Veterinary Physiology	1	1	5	1	1	3
15	Veterinary Public Health	1	1	2	0	1	2



16	Veterinary Surgery & Radiology	1	2	6	4*	0	1
17	Veterinary & Animal Husbandry Extension Education	1	1	1	1	1	2

\* **Teachers promoted to Professor through CAS.** The University has submitted proposal to the State Govt. for sanction of more posts and the said proposal is under active consideration. The university also engaged contractual / guest / adjunct faculty in the academic interest. The vacant posts will be advertised very shortly.

#### Faculty Responsibility:

The Faculty members have been assigned to take part in teaching, research and extension activities. The teachers are also responsible to undertake duties / responsibilities assigned to them in connection with examinations, admission, counseling and guiding the Master Degree and PhD students for research work.

#### 6.4.3. Technical and Supporting staff :

*The position of the technical and supporting staff of the Degree Programme including farm and field workers need to be mentioned for both sanctioned and in-place.*

Sl. No.	Name of Department / Establishment / Subject / Disciplines	Designation	Group	Man in position
01.	Dean, Faculty of Veterinary & Animal Sciences	Senior Assistant	C	2
		Cash Assistant	C	1
		Office Attendant Gr. I	D	4
		Driver-cum-Mechanic	D	1
		Farash	D	1
		Senior Sweeper	D	1
02.	Animal Nutrition	Technical Assistant	C	0
		Junior Assistant	C	1
		Office Attendant Gr. I	D	1
		Laboratory Attendant	D	0
		Animal Attendant	D	1
03.	Livestock Production Management	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. I	D	1
		Laboratory Attendant	D	1
04.	Livestock Products Technology	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	0
		Senior Animal Keeper	D	1
05.	Veterinary Anatomy & Histology	Senior Assistant	C	1
		Technical Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	2
06.	Animal Genetics and Breeding	Technical Assistant	C	1
		Senior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Sweeper	D	1



07.	Veterinary Biochemistry	Technical Assistant	C	1
		Senior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Sweeper	D	0
08.	Veterinary Epidemiology & Preventive Medicine	Technical Assistant	C	0
		Senior Assistant	C	1
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	1
		Sweeper	D	0
09.	Veterinary Gynaecology & Obstetrics	Technical Assistant	C	0
		Senior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Sweeper	D	1
		Senior Animal Keeper	D	1
10.	Veterinary Medicine, Ethics & Jurisprudence	Technical Assistant	C	0
		Senior Assistant	C	1
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Sweeper	D	0
11.	Veterinary Microbiology	Technical Assistant	C	0
		Senior Assistant	C	1
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	1
		Sweeper	D	0
12.	Veterinary Parasitology	Technical Assistant	C	1
		Senior Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	0
		Sweeper	D	0
13.	Veterinary Pathology	Technical Assistant	C	0
		Senior Assistant	C	1
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	0
		Sweeper	D	1
14.	Veterinary Pharmacology & Toxicology	Technical Assistant	C	1
		Senior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	0
		Sweeper	D	1
		Senior Animal Keeper	D	1
15.	Veterinary Physiology	Technical Assistant	C	1
		Senior Assistant	C	1
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	0
		Sweeper	D	0
		Senior Animal Keeper	D	0
16.	Veterinary Public Health	Technical Assistant	C	0
		Senior Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	0
		Sweeper	D	0



17.	Veterinary Surgery & Radiology	Senior Animal Keeper	D	0
		Technical Assistant	C	1
		Senior Assistant	C	1
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	0
		Sweeper	D	1
		Senior Animal Keeper	D	0
18.	Veterinary & Animal Husbandry Extension Education	Technical Assistant	C	0
		Senior Assistant	C	1
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	1
		Sweeper	D	0
		Senior Animal Keeper	D	0

**NB: Vacancy arisen due to retirement / death will be filled up shortly.**

#### **Responsibilities of Technical / Supporting Staff:**

- The Technical Staff assists the teachers by extending technical help in the laboratories and operation of machines and equipment.
- Other category of Staff members undertake ministerial works.
- The menial staff members take care of washing / cleaning etc.

#### **6.4.4. Classrooms and Laboratories:**

*Mention the number of class rooms and functional laboratories available for the degree programme and justify if it is sufficient to meet the course curricula requirement. Lists major equipments, laboratories, farm facilities, workshops and other instructional units being utilized for the award of the Degree Programme may be given.*

#### **PhD Classrooms:**

Sl. No.	Department	No of Classrooms for PG Students	Whether classrooms are sufficient for the programme	Equipped with Audio Visual Arrangements
1.	Animal Nutrition	1	Presently yes but further extension / construction is needed	Yes
2.	Livestock Production Management	1		Yes
3.	Livestock Products Technology	1		Yes
4.	Veterinary Anatomy & Histology	1		Yes
5.	Animal Genetics and Breeding	1		Yes
6.	Veterinary Biochemistry	1		Yes
7.	Veterinary Epidemiology & Preventive Medicine	1		Yes
8.	Veterinary Gynaecology & Obstetrics	1		Yes
9.	Veterinary Medicine, Ethics & Jurisprudence	1		Yes
10.	Veterinary Microbiology	1		Yes
11.	Veterinary Parasitology	1		Yes
12.	Veterinary Pathology	1		Yes
13.	Veterinary Pharmacology &	1		Yes



	Toxicology			
14.	Veterinary Physiology	1		Yes
15.	Veterinary Public Health	1		Yes
16.	Veterinary Surgery & Radiology	1		Yes
17.	Veterinary & Animal Husbandry Extension Education	1		Yes

#### Department-wise laboratories established:

Sl. No.	Departments	Name of laboratories
1	Veterinary Anatomy	Osteology, Arthology, Splanchnology, Neuro and Angiology, Histology and Embryology
2	Veterinary Physiology	Haematology and respiratory physiology laboratory, Reproductive, environmental and experimental physiology laboratory, PG Laboratories -- Molecular Biology and Bioinformatics, Immunophysiology, Spectrophotometry, Cell Physiology, Electrophysiology & Ultrasonography lab
3	Veterinary Biochemistry	Clinical Biochemistry, Analytical Biochemistry, Immuno Biochemistry and Reproductive biochemistry laboratory
4	Animal Genetics & Breeding	Computer and statistical analysis lab., molecular biology lab.
5	Animal Nutrition	Feed processing and mixing lab., feed/fodder analysis lab., energy metabolism lab.
6	Livestock Production Management	Small animal handling room, large animal handling room, museum for breed
7	Animal Husbandry Extension & Education	Audio visual technology laboratory, photography cum graphic unit, projection unit
8	Veterinary Pathology	Histopathology lab., Clinical pathology, Immunopathology lab., Necropsy unit and Pathology museum facilities
9	Veterinary Parasitology	Helminthological lab., Entomology and Protozoology lab., Immuno and molecular Parasitology lab (for Pg & PhD)
10	Veterinary Microbiology	Bacteriology, virology and immunology laboratory
11	Veterinary Pharmacology and Toxicology	CPCSEA approved large animals house facility CPCSEA approved laboratory animal facility, Research laboratory (2 nos.), Sophisticated instrument laboratory, Pharmacy laboratory, Pharmacology museum
12	Veterinary Medicine, Ethics and Jurisprudence	Clinical medicine lab.
13	Veterinary Gynaecology and Obstetrics	Semen/Andrology lab., Phantom hall and palpation room, AI centre with semen storage facility.
14	Veterinary Surgery & Radiology	Ophthalmology lab, Bone research laboratory and imaging unit (X-ray facility, Colour dropler, C-Arm facility, Operation theatre both small and large animal), Stem Cell Laboratory
15	Veterinary Epidemiology & Preventive Medicine	Preventive lab for Virology, bacteriology and Parasitology
16	Veterinary Public Health	Milk hygiene and meat hygiene lab, zoonosis cum epidemiology lab.
17	Livestock Products Technology	Small scale poultry processing unit, Microbiology lab, Meat, Egg & Poultry Quality Control Unit (for PG & PhD), Poultry processing & meat



#### 6.4.5. Conduct of Practical and Hands-on-Training:

*It is important to have a sound grasp of the theory that underlies any professional degree. But there are some skills that can only be learned through hands-on -practice. It is important that much of the learning material in any given course should be provided in a way that allows students to get as involved as possible to increase their knowledge and abilities. Clearly mention how far students are getting desired practical and hands-on-training as per the curriculum and meeting above mentioned requirements.*

Degree Programme	Theory	Practical
PhD	Single batch of each semester (class)	Single batch of each semester (class)

The students of clinical and para-clinical subjects are getting hands-on-training in Veterinary Clinical complex, and students of animal husbandry are getting hands-on-training in Livestock Farm Complex, besides in nearby Govt. livestock farms. In addition to this, the students do their practical and hands-on-training in the concerned Department or laboratory of nearby institutes (belongs to State Govt. or Central Govt.).

#### 6.4.6. Supervision of students in PhD Programmes:

*Number of students being supervised by Faculty in case of Masters/PhD Programme (as per ICAR/UGC guidelines). Mention the realistic figure number of qualified faculty in relation to the intake of students, as per the guidelines in the matter.*

The Board of Studies of the concerned department propose the name of advisor and the advisory committee for every student within 2<sup>nd</sup> semester to the Controller of \examinations for approval.

The composition of the Advisory Committee for PG student is

- (i) Supervisor from the concerned department – Chairman
- (ii) Minimum one member from major discipline/concerned department – Member
- (iii) Minimum one member from minor department-Member
- (iv) Head of the Department-Ex-officio Member

However, one or two more members may be included as member of the Advisory Committee from any supporting field, at the discretion of the Supervisor, Advisory Committee (maximum 6 members). The supervisor alongwith any two of the members would form the quorum

The committee is proposed taking consent of all the members, and approved by the Chairman, HoD and finally Controller of Examinations. The student is informed accordingly.

The PhD student undertakes a compulsory research work of 45 credit hours spread over a minimum 4 semesters for a thesis. Grade obtained is not considered for calculation of final grading.



#### 6.4.7. Feedback of stakeholders (Students, parents, industries, employers, farmers etc.):

*Mention the feedback mechanism (duly supported by the documents) from different stakeholders of the degree programme. What action the University has taken in last five years to address the issues raised in the feed back?*

The students of the faculty are mostly with rural background as such the entire arrangement in the faculty has been made feel them comfortable and to be acquainted with urban atmosphere. Students who have passed out from the faculty have excelled in the professional career in various Govt. and private agencies and expressed their full satisfactions about the academic activities of the faculty. The faculty also received satisfactory feedback from the National Institutes parents, industries and employers. Students with doctoral degree of the faculty who are in the Govt. / Private Sector and engaged in extension activities at the village level have earned great applause from the farmers. Research efficiency of the students have also been applauded by National Institutes.

#### 6.4.8. Student intake and attrition in the programme for last five years: (as on 31.12.2020)

*Year wise information on sanctioned strength, actual intake and attrition in the last five years of the Degree Programme, in the tabular form, shall be provided.*

Name of the Department	Actual Student Enrolled in last five years					Attrition(%)				
	2016-17	2017-18	2018-19	2019-20	2020-21	2016-17	2017-18	2018-19	2019-20	2020-21
Veterinary Anatomy	0	01	02	01	-	0	0	0	0	N/A
Veterinary Physiology	0	01	01	01	-	0	0	100	0	N/A
Veterinary Biochemistry	0	01	0	01	-	0	0	100	0	N/A
Animal Genetics & Breeding	01	0	0	01	-	0	0	100	0	N/A
Animal Nutrition	01	02	01	01	-	0	0	100	0	N/A
Livestock Production Management	02	02	01	01	-	100	50	100	50	N/A
Animal Husbandry Extension & Education	01	0	01	0	-	0	0	0	0	N/A
Veterinary Pathology	0	02	02	0	-	0	0	100	0	N/A
Veterinary Parasitology	01	0	01	01	-	50	0	50	0	N/A
Veterinary Microbiology	02	01	0	0	-	50	0	0	50	N/A
Veterinary Pharmacology and Toxicology	0	02	0	0	-	50	0	100	0	N/A
Veterinary Medicine, Ethics and Jurisprudence	01	0	02	0	-	33	50	0	0	N/A
Veterinary Gynaecology and Obstetrics	02	01	0	02	-	50	0	100	50	N/A
Veterinary Surgery & Radiology	02	02	01	02	-	33	33	0	50	N/A
Veterinary Epidemiology & Preventive Medicine	0	01	0	0	-	0	0	0	0	N/A



Veterinary Health*	Public	0	01	0	01	-	0	0	0	0	N/A
Livestock Technology	Products	02	02	02	01	-	50	50	100	0	N/A

\* Viva examination of one student could not be arranged due to lock down. The same will be held within next four months.

#### 6.4.9. ICT Application in Curricula Delivery:

*The ICT is now integral part of the teaching programme. ICAR has also been promoting the use of ICT in teaching and practical. Mention whether the Degree Programme is meeting the expectations. If there is any shortfall, it shall be clearly mentioned.*


Use of ICT in teaching and practical: All the Department have dedicated classrooms for teaching M.F.Sc. students with Audio Visual Aids, Projectors, WiFi connectivity for online content demonstration. During the COVID-19 Pandemic lock down the Department continued the teaching and learning process through application of online platforms like Google Meet and Zoom. Practical demonstrations were conducted online through web content demonstrations and videos to the best of the efforts.

#### 6.4.12. Certificate

I, Prof. (Dr.) Nilotpal Ghosh, Dean, Faculty of Veterinary & Animal Sciences hereby certify that the information contained in Section 6.4.1 to 6.4.9 are furnished as per the records available in the Faculty and degree awarding university.

Place: Mohanpur, Nadia

Date: 29.01.2021

  
 29.01.2021  
 DEAN (Actg.)  
 F/o Veterinary & Animal Sciences  
 West Bengal University of Animal & Fishery Sciences  
 Kolkata - 37 & Mohanpur, Nadia-741252





# **SELF STUDY REPORT FOR FACULTIES**



# Self Study Report for the Faculty of Fishery Sciences

## 6.5.1. COLLEGE / FACULTY ADMINISTRATION

### 6.5.1.1. Faculty Dean's Office Establishment:

*Whether Dean's post has been sanctioned by the appropriate authority as per ICAR Model Act/UGC guidelines? Date of selection of present Dean, mode of selection, tenure etc. shall be mentioned. Clearly mention the staff and infrastructure/facilities available in the Dean's Secretariat.*

Whether Dean's post has been sanctioned by the appropriate authority as per ICAR Model Act/UGC guidelines?	The post of Dean, Faculty of Fishery Sciences has been sanctioned by the Govt. of West Bengal which is in consonance with the ICAR Model Act / UGC guidelines.
Date of selection of present Dean	05-09-2016
Mode of selection of Dean	Direct recruitment
Tenure of Dean	Four (4) years

#### Dean's Secretariat

##### Infrastructure/ facilities available in the Dean's Secretariat

The secretariat is well equipped & furnished. All staff is having computers along with internet connection. Printers, scanners, photocopier machines, and vehicles are available for office use.

##### Staff of Dean's Secretariat

Sl. No.	Name of Department/ Establishment	Group	Man in position
1	Dean's Secretariat	Assistant Registrar	1
		Medical Officer	1
		Junior Store Keeper	1
		Office Attendant Gr. II	4
		Junior Assistant	0
		Driver-cum-Mechanic	0
		Mali	1
		Sweeper	2
		Durwan	0

**NB: Vacancy arisen due to retirement / death and will be filled up shortly**

### 6.5.1.2. Monitoring Mechanism for Quality Education (on-line):

*Whether the College is having an internal quality assurance system, with appropriate structure and processes, and with enough flexibility to meet the diverse needs of the stakeholders which is required for planning, guiding and monitoring quality assurance and quality enhancement activities of the Colleges. How effectively monitoring of teaching, research and extension across the departments is being conducted, and mention the impact of monitoring on the outcome of the College with reference to students' excelling in academics, research and extracurricular activities.*

#### **Whether the Faculty / College is having an internal quality assurance system?**

The university has an internal quality assurance system, with appropriate structure and processes, and with enough flexibility to meet the diverse needs of the stakeholders which is required for planning, guiding and monitoring quality assurance and quality enhancement activities of the Faculty.



## **How effectively monitoring of teaching, research and extension across the departments is being conducted?**

### **Teaching :**

The registration of courses for each semester is undertaken through online mode. The conduct of theory and practical class are time to time reviewed by the Heads of the Departments and the Dean of the Faculty.

### **Undergraduate degree programme:**

- 1) Mid semester, Practical and Theory examinations are conducted to assess the students.
- 2) Assignments are given to the students in each course related to the curriculum.
- 3) Mock examinations are conducted for the students during the 1<sup>st</sup> year.
- 4) Feedback on course content and teaching is taken from students and the same is acted upon.
- 5) Academic Counselling is extended for a group of students in batches by the teachers.
- 6) Heads of the Departments meet the respective batches students time to time to coordinate the activities.

### **Postgraduate and Doctoral degree programme:**

- 1) Periodic assignments, term paper, presentation of advancements in a particular course curriculum is done by the students.
- 2) The qualifying examination is conducted at the end of the course work to evaluate students understanding about the various courses.
- 3) The theses submitted by the Master Degree and PhD students are also evaluated by external experts.
- 4) The final thesis viva-voce for the Doctoral programme is also conducted through public defence mode as and when required.
- 5) Each registered course of Master Degree and Doctoral programme is evaluated by the students of a particular batch about the content and its delivery.

### **Research**

#### **Student Research:**

- 1) Presentation for outline of research work and finalization is done by the Advisory Committee with the inputs from the Heads of the Departments and Dean.
- 2) The Student Research work is monitored by the Chairman of the Advisory Committee / Supervisor.
- 3) The periodical review of the research work of all Master Degree and Doctoral students by the Dean of the faculty.
- 4) Publications of Master Degree and Doctoral research work in well rated journals is appreciated.

#### **Faculty Research**

- 1) The research projects are submitted to the Directorate of Research, Extension and Farms for initial scrutiny and recommendation before final submission.
- 2) The progress of each research project is periodically monitored and reviewed.



- 3) The final submission of report on project is also reviewed.

### **Extension**

It is mandatory for the teachers to take part in the extension activities as and when organized by the Dean of the Faculty and the Directorate of Research, Extension and Farms.

Field visit by the teachers on need basis as and when asked for by the university / State Govt. to diagnose the problem and provide appropriate recommendations.

Participation in training programme organized by the university for the farmers as experts is mandatory and review of such participation is done especially during the submission of the Self Assessment Report for promotion under Career Advancement.

### **Impact of monitoring on students excellence in academic, research, and extracurricular activities**

#### **Academic**

- 1) Higher academic performance of students with improved OGPA
- 2) Improved enrolment of students in post graduate programme
- 3) Participation and selection for higher education in National and International Institute.
- 4) Participation in competitive examinations for jobs and success thereof.

#### **Research**

- 1) Publication of research articles in reputed journals by the students and faculty members.
- 2) Receipt the sanction of research projects from the Govt. / Private Agencies.
- 3) Facilitated receipt of Best Student Award.

#### **Extracurricular**

- 1) Participation in the NSS programmes.
- 2) Participation and excelling in the Agri Sports / Agricultural Meets organised by ICAR.
- 3) Participation and excelling in the Cultural Meets / Sports Meets organised by AIU.

### **6.5.1.3. CC/Board of Studies:**

*Whether the CC in the Department level and Board of Studies at the College is in place? The composition of the BoS and date of conduct of meetings for last five years and major recommendations made by the BoS should be given in tabular form.*

There is a separate board of studies for each Department Viz Department of Aquaculture, Fisheries Resource Management, Aquatic Environment Management, Aquatic Animal Health, Fish Processing Technology, Fishery Engineering, Fishery Economics & Statistics, Fishery Extension and Fish Nutrition (Newly established Department not accredited as yet by ICAR) for Under Graduate and Post Graduate and Ph.D. level. The composition, powers and functions of the board of studies as prescribed in the Statutes are detailed below.

#### **1. Composition of the Board of Studies for each Department**

- The Head of the Department is the Chairman and Convener of the Board of Studies.
- Each Board of Studies consists of all whole-time teachers of the Department concerned.



## 2. The functions of Board of Studies

- To propose to the Faculty concerned the courses of study and curriculum for various programmes of instructions offered by the concerned Faculty.
- To make proposal to Faculty Council for Post-Graduate and Under-graduate studies for the programme for inter-disciplinary study and research.
- To review the academic programme of the Department from time to time and to propose the method of redressal of the problems if any, to the Faculty Council for approval.
- To consider any other matter referred to it by the Faculty Council, the Executive Council or Vice- Chancellor, as the case may be.

### Details of meetings of BoS and Major Recommendations:

Sr. No.	Year	Date	Major Recommendations
<b>Department of Aquaculture</b>			
1	2016-17	09.02.2016 27.06.2016 11.11.2016 21.02.2017	<ol style="list-style-type: none"> <li>Allotment of UG, PG and Ph. D. courses to the teachers was done.</li> <li>Engagement of the Guest Teacher was justified.</li> <li>List of External Examiners for evaluation of Ph. D. Thesis of Amit Mondal was finalized.</li> <li>Allotment of M. F. Sc. Students to the teachers of the Department for dissertation work was done.</li> <li>Advisory Committee for Dissertation work of the M. F. Sc. Students was finalized.</li> <li>List of External Examiners for evaluation of Ph. D. Thesis of Bhanu Ch. Prakash was finalized.</li> </ol>
2	2017-18	27.06.2017 10.10.2017 02.02.2018 27.03.2018	<ol style="list-style-type: none"> <li>List of External Examiners of M. F. Sc. Students (6) for evaluation of Dissertation was made.</li> <li>Allotment of UG, PG and Ph. D. courses to the teachers was done.</li> <li>Sitting arrangement of newly appointed teacher Dr. A. Mandal was discussed and finalized.</li> <li>On-Farm Training programme was discussed and formatted.</li> <li>Advisory Committee for Dissertation work of the M. F. Sc. Students was finalized.</li> <li>List of Examiners for examination of M. F. Sc. Dissertation was finalized.</li> </ol>
3	2018-19	16.08.2018 06.09.2018 05.03.2019	<ol style="list-style-type: none"> <li>Matters related to Handing over of Charges from Prof. S. K. Das to Prof. T. K. Ghosh was discussed and resolved</li> <li>Renewal of Guest Teacher was discussed and resolved.</li> <li>Selection of Supervisor of M. F. Sc. And Ph. D. Students was done.</li> <li>Purchase of essential chemicals and glass wares out of ICAR Development grant was discussed.</li> <li>Formation of Admission Committee for Ph. D. Admission was done.</li> <li>Extension of Guest Teacher was discussed.</li> </ol>
4	2019-20	29.07.2019 07.08.2019 17.10.2019	<ol style="list-style-type: none"> <li>Selection of advisory committee members and external examiner for the Ph. D students (Amrita Rani) for the academic year 2015-16 and 2017-18 was done.</li> <li>List of External Examiners of M. F. Sc. Students (2) for evaluation of Dissertation was made.</li> </ol>



			<ol style="list-style-type: none"> <li>3. Selection of Supervisor of Ph. D. Students (2) was made.</li> <li>4. Allotment of Advisor and Advisory Committee for M. F. Sc. Students (5) for 2018-19 was done</li> <li>5. Allotment of UG, PG and Ph. D. courses to the teachers was done.</li> <li>6. Re-allotment of Advisor for M. F. Sc Dissertation work of Anindya Sinha Maha Patra due to sudden demise of Dr. A. Mandal.</li> </ol>
5	2020-21	22.04.2020 01.10.2020 14.01.2021	<ol style="list-style-type: none"> <li>1. Starting of On-Line classes of UG, PG and Ph. D. students was discussed.</li> <li>2. List of Examiners for examination of M. F. Sc. Dissertation was finalized.</li> <li>3. Selection of Supervisor of P. G. Students (3) was made.</li> <li>4. Status of UG, PG, and Ph. D. Classes was discussed.</li> </ol>
<b>Department Aquatic Environment Management</b>			
1	2016-17	17.05.2016 05.07.2016 04.08.2016 05.08.2016 02.09.2016 17.10.2016 09.11.2016 16.12.2016 25.01.2017 15.02.2017 30.03.2017	<ol style="list-style-type: none"> <li>1. Regarding disbursement of junk materials of the department.</li> <li>2. Reported to the Dean, faculty of fishery sciences</li> <li>3. Distribution of classes (Theory and Practical) among the guest teacher.</li> <li>4. Proposal for the financial year 2016-2017 submitted to the Dean.</li> <li>5. The Ph.D. students of the department will help the course teacher in practical classes of UG.</li> <li>6. Visit of ICAR Accreditation team of the faculty,</li> <li>7. Implementation of the 5<sup>th</sup> Deans committee syllabus and the recommendation with modification.</li> <li>8. About application for release order of Prof, B. K. Das for the post of Dean, faculty was considered.</li> <li>9. Nomination of one teacher from other department Dr. T. K. Ghosh for Ph.D admission committee(Academic session 2016-2017).</li> <li>10. Distribution of UG,PG and Ph.D courses for 2016-17.</li> <li>11. Guide selection of M.F.Sc students (Academic session 2016-2017).</li> <li>12. Inclusion of Dr. Srikanta Samanta Principal scientist CIFRI Barracpore as a member in the advisory committee of one M.F.Sc students ( Academic session 2015-2016).</li> <li>13. Selection of membership of the advisory committee of M.F.Sc students ( Academic session 2015-2016).</li> <li>14. Inclusion of Dr. B.P.Mohanty,Head of Division FREM and Principal scientist CIFRI Barracpore as a co supervisor in the advisory committee of one Ph.D student ( Academic session 2015-2016).</li> <li>15. Selection of advisory committee member of the two Ph.D students of the department (Academic session 2015-2016).</li> </ol>
2	2017-18	27.06.2017 25.07.2017 16.08.2017 13.09.2017 10.10.2017	<ol style="list-style-type: none"> <li>1. Nomination of Dr.S.Chowdhury as the advisory committee member of Mis.Satarupa Ghosh student (2015-16) of the department in the place of late Prof.S.Sarkar.</li> <li>2. Distribution of UG,PG and Ph.D courses 2017-18.</li> <li>3. Selection of advisory committee member for the three M.F.Sc students of the department ( Academic session 2016-2017).</li> <li>4. Nomination of one teacher from other department for</li> </ol>



			Ph.D admission committee(Academic session 2017-2018). 5. Selection of advisory committee member of the one Ph.D student of the department ( Academic session 2016-2017). 6. Inclusion of Dr. S. Samanta Principal scientist CIFRI Barracpore as a co-supervisor in the advisory committee of one Ph.D student ( Academic session 2016-2017). 7. Allotment of students to different teachers for M.F.Sc programme (2017-2018).
3	2018-19	10.05.2018 01.06.2018 11.02.2019	1. Guide selection of Ph.D students (Academic session 2017-2018). 2. Distribution of UG,PG and Ph.D courses. 3. About application for release order of Prof. R. K. Trivedi selected for the post of DSW, BASU. 4. Engagement of another guest teacher in the department. 5. Guide selection for M.F.Sc. Students 2018-19
4	2019-20	16.12.2019 20.01.2020	1. Guide selection for M.F.Sc. Students 2019-20 2. Distribution of UG courses for both even and odd semester.
5	2020-21	06.01.2021	Distribution of PG courses.
<b>Department of Fisheries Resource Management</b>			
1	2016-17	13.02.2016 23.06.2016 13.11.2016 23.02.2017	1. Guide selection for M.F.Sc. Students 2016-17 2. Distribution of UG courses for both even and odd semester.
2	2017-18	15.06.2017 25.07.2017 23.09.2017 15.10.2017	1. Guide selection for M.F.Sc. Students 2017-18 2. Distribution of UG courses for both even and odd semester.
3	2018-19	28.12.2018 24.01.2019	1. PhD and MFSc students' allotment 2. Shifting of department to the new building.
4	2019-20	04.04.2019 16.08.2019 15.10.2019	1. Allotment of PG students. 2. PG and PhD scholars allotment
5	2020-21	-	-
<b>Department Aquatic Animal Health</b>			
1	2016-17	01.09.2016 22.11.2016	1. Approval of BFSc AAH course nomenclature and course number; MFSc students' allotment 2. Allotment of UG courses among the teachers
2	2017-18	14.09.2017	PhD admission committee - Nomination of member; MFSc students' allotment
3	2018-19	18.12.2018 04.01.2019	3. PhD and MFSc students' allotment 4. Shifting of department to the new building constructed under the NAE programme
4	2019-20	24.04.2019 26.08.2019 18.10.2019	3. Allotment of PG students to Mr. Prasenjit Mali 4. NOC of BOS for pursuance of PhD by Mr. P. Mali 5. PG and PhD scholars allotment
5	2020-21	-	-
<b>Department Fish Processing Technology</b>			
1	2016-17	22.09.2016 10.02.2017	1. Adoption and implementation of ICAR new syllabus. 2. Selection of supervisor for MFSc thesis work
2	2017-18	14.04.2017 07.04.2017 24.09.2017	1. Guide selection for M.F.Sc. Students 2017-18 2. Distribution of UG courses for both even and odd semester.



3	2018-19	22.09.2018	1. Guide selection for M.F.Sc. Students 2018-19 2. Distribution of UG courses for both even and odd semester.
4	2019-20	24.04.2019 10.08.2019 25.10.2019	1. Allotment of PG students. 2. PG and PhD scholars allotment
5	2020-21	-	-
<b>Department of Fishery Engineering</b>			
1	2016-17	20.04.2016 26.08.2016	1. Two (2) Courses namely FEG-223“Fishing Craft Technology” (2+2) and FEG-314 “Fishing Gear Technology”3(2+1) are assigned to the guest teacher for UG Programme. 2. Two (2) Courses namely FET-501 “Advanced Fishing Gear Technology”3(2+1) and FET-502 “Advanced Fishing Craft Technology”3(2+1) are assigned to the guest teacher for PG Programme. 3. Newly admitted only one postgraduate candidate is allowed to work under Dr N.A.Talwar
2	2017-18	06.09.2017	Newly admitted two postgraduate candidates are allowed to work under Dr N. A. Talwar
3	2018-19	12.09.2018	1. Three (3) Courses namely FEG-223“Fishing Craft Technology” (1+1), FEG-314 “Fishing Gear Technology” (1+1) and FEG-315 “Fishing Technology” (1+1) are assigned to the guest teacher for UG Programme 2. Newly admitted only one postgraduate candidate is allotted work under Dr N.A. Talwar
4	2019-20	28.08.2019	Newly admitted two postgraduate candidates are allowed work under Dr N.A. Talwar
5	2020-21	-	-
<b>Department of Fishery Economics &amp; Statistics</b>			
1	2016-17	02.09.2016 16.02.2017	3. Adoption and implementation of ICAR new syllabus. 4. Selection of supervisor for MFSc thesis work
2	2017-18	20.02.2017 04.04.2017 04.04.2017 07.04.2017 14.09.2017	1. Selection of advisory committee for MFSc thesis work 2. Finalization of advisory committee for MFSc thesis work 3. Extension of Guest Teacher (Miss. A Sanyal) 4. Selection of advisory committee for PhD thesis work 5. Constitute of PhD admission committee
3	2018-19	09.04.2018 16.05.2018	1. Extension of Guest Teacher (Miss. A Sanyal) 2. Extension of Guest Teacher (Dr. D. K. Sahoo)
4	2019-20	27.09.2019	Joining of S. Purkait as Assistant Professor to the Dept. and course distribution
5	2020-21	22.11.2020	Extension of Guest Teacher (Dr. D. K. Sahoo)
<b>Department of Fishery Extension</b>			
1	2016-17	27.05.2016 22.09.2016 12.12.2016 31.03.2017	1. Distribution of classes (Theory and Practical) among the guest teacher. 2. Proposal for the financial year 2016-2017 submitted to the Dean. 3. The Ph.D. students of the department will help the course teacher in practical classes of UG. 4. Visit of ICAR Accreditation team of the faculty, 5. Implementation of the 5 <sup>th</sup> Deans committee syllabus and the recommendation with modification.
2	2017-18	28.02.2017 14.04.2017 02.04.2017 14.09.2017	1. Selection of advisory committee for MFSc thesis work 2. Finalization of advisory committee for MFSc thesis work 3. Selection of advisory committee for PhD thesis work



			4. Constitute of PhD admission committee
3	2018-19	12.09.2018	1. Guide selection for M.F.Sc. Students 2018-19 2. Distribution of UG courses for both even and odd semester.
4	2019-20	17.09.2019	1. Selection of advisory committee for MFSc thesis work 2. Finalization of advisory committee for MFSc thesis work 3. Selection of advisory committee for PhD thesis work 4. Constitute of PhD admission committee
5	2020-21	22.11.2020	Extension of Guest Teacher
<b>Department of Fish Nutrition</b>			
1	2016-17	-	-
2	2017-18	-	-
3	2018-19	-	-
4	2019-20	-	-
5	2020-21	30-09-2020 17-10-2020 25-11-2020 11-12-2020 04-01-2021	1. Proposal will be placed to the Faculty Council for starting of MFSc in Fish Nutrition from the Academic Session of 2020-21. A letter will be addressed to the Secretary, Faculty Council through Dean, FFSc in this regard. 2. Assuming the charge of Head of the Dept. of Fish Nutrition by Dr P N Chatterjee vide order of the Registrar, WBUAFS 3. SOP has been framed for conducting online interview for admission to MFSc in Fish Nutrition. The name of Dr. Supratim Chowdhury (Associate Professor, FPT) and Dr. Golam Jiauddin (Asst. Professor, FRM) has been proposed for inclusion in the Evaluation Committee. 4. Modus operandi has been chalked for conducting online BFSc 4 <sup>th</sup> Semester Exam (Fish Nutrition and Feed Technology) 5. A proposal will be sent to the Registrar, WBUAFS through Dean, FFSc for establishment of a Feed evaluation Laboratory under the umbrella of Dept. of Fish Nutrition. A detailed list of instruments and of necessary chemicals will be placed before the authority for its earliest approval. 6. A proposal will be sent to Hon'ble Vice Chancellor regarding opening of PhD course from next session.

#### 6.5.1.4. Anti Ragging Cell:

*In pursuance to the Judgment of the Hon'ble Supreme Court of India dated 08.05.2009 in Civil Appeal No. 887/2009, the University Grants Commission has framed "UGC Regulations on curbing the menace of ragging in higher educational institutions, 2009" which have been notified on 4th July, 2009 in the Gazette of India. Does the College follow this regulation and subsequent guidelines issued in the matter in letter and spirit? Give details.*

The Anti Ragging Cell has been constituted as per guidelines of the University Grants Commission. Apart from the Anti Ragging Cell constituted by the university at the university level to curb the menace of ragging, there is a faculty level Anti Ragging Squad to assist the Anti Ragging Cell details of which are mentioned below:

#### **Anti-Ragging Squad for the Faculty of Fishery Sciences (Chakgaria Campus, Kolkata):**

- (i) In-Charge Students' Welfare, Faculty of Fishery Sciences as the Head of the Squad



- (ii) Provost of all the Students Hostels at Chakgaria campus,
- (iii) Teacher members – two members nominated by the Dean/Fishery Sciences amongst them one must be Women Teacher,
- (iv) Non-teaching members – two non-teaching members to be nominated by the Dean/Fishery Sciences, who are staying at the Chakgaria campus.

The above Squad is entrusted with the task of organizing surprise visits to hostels, canteens, library etc. with or without notice of the students to keep strict vigil and for on the spot disposal of ragging complaints, if any etc. The Squad members should meet the present students preferably in the hostels and also empowered to stay in the hostels at night for a period of 15-20 days or till Freshers' Welcome is over at the respective campuses as a part of anti-ragging campaign. The Squad Head alongwith other members takes all possible efforts in close liaison with the Anti-Ragging Monitoring Cell to prevent ragging activities inside the campuses and to sensitize the senior students as well. The Head of Squad submits the Action Taken Report (ATR) on anti-ragging activities undertaken in the Faculty of Fishery Sciences after one month of admission of students in each session to the Registrar and Chairman of Anti-Ragging Monitoring Cell and continue the strict vigil in this respect.

**Year wise date of the meetings:**

2016-17	2017-18	2018-19	2019-20	2020-21
06.09.2016	-	-	21.10.19	-
-	-	-	13.11.19	-

**Number of complaints**

S.N.	Subject	2016-17	2017-18	2018-19	2019-20	2020-21
1.	No. of complaint	-	-	-	01	-
2.	complaint disposed	-	-	-	01	-
3.	no of cases pending	-	-	-	-	-
4.	no of workshop	01	01	01	01	-

**6.5.1.5. Biological waste disposal facility:**

*Whether wastes (chemical, biological, radioactive, universal, and recyclable) are generated by a variety of research, clinical, service, maintenance, and cleaning operations at the College level? If yes, then mention the disposal mechanism being adopted as per the government guidelines.*

**Whether wastes (chemical, biological, radioactive, universal, and recyclable) are generated by a variety of research, clinical, service, maintenance, and cleaning operations at the College level?**

**YES.**

**If yes, then mention the disposal mechanism being adopted as per the government guidelines.**

1. The diseased fish clinical wastes are first sterilized by autoclave at 120°C for at least 15 min followed by burial. During burial, the contents are covered with slaked lime (CaO) at a rate of 85 kg/1,000 kg of aquatic animal waste to hasten decomposition and prevent scavenging.
2. Other Biological wastes / Chemical Waste etc. are disposed of with the help of Kolkata Municipal Corporation. Every day the Municipal personnel pay visit to the campus with vehicle and other



accessories to collect the waste materials which are disposed by them at the designated centres of the Municipality.

3. No radioactive waste is generated in the faculty.

#### 6.5.1.6. Institutional Ethics Committee for Experiment on Animals:

*Whether the institute/College is following CPCSEA guidelines and constituted an Institutional Animal Ethics Committee (IAEC), get their animals house facilities inspected and get their project cleared by CPCSEA and IAEC before commencing them? The College should make statement that it is adhering all guidelines in the matter.*

**Whether the institute/College is following CPCSEA guidelines and constituted an Institutional Animal Ethics Committee (IAEC), get their animals house facilities inspected and get their project cleared by CPCSEA and IAEC before commencing them?**

**Yes.**

**The College should make statement that it is adhering all guidelines in the matter:**

There is an Animal Ethics Committee at the university level duly registered with the Ministry of Environment, Forest and Climate Change (Animal Welfare Division), Govt. of India. The said committee takes care of relevant issues of all the three faculties of the university including the Faculty of Fishery Sciences. The Animal House facilities of the university are inspected from time to time and before commencement of a research work and the relevant issues are taken care of by the committee on the basis of referred cases. However, in case of Faculty of Fishery Sciences ethical issues are very minimal.

#### 6.5.1.7. Committee for Prevention of Sexual Harassment of Women at Work Places:

*Does the institution is adhering the sexual harassment of women at workplace (Prevention, Prohibition and Redressal Act, 2013) in letter and spirit. Mention the constitution of sexual harassment committees and date of proceedings conducted in last five years in tabular form.*

**Does the institution is adhering the sexual harassment of women at workplace (Prevention, Prohibition and Redressal Act, 2013) in letter and spirit.**

**YES.** Sexual Harassment at workplace violates the rights and opportunities of women to seek, obtain and hold employment without discrimination. West Bengal University of Animal & Fishery Sciences is always alert to provide a safe work environment to their women employees and include both preventive and remedial measures to make the work environment safe for women employees.

**Constitution of sexual harassment committees:**

There exists a committee for this purpose in the University since 2004 as per VISHAKHA guidelines promulgated by the Supreme Court of India, which is reconstituted from time-to-time. The latest committee was reconstituted vide Notification No. WBUAFS/Admn/ NC-2/768 dt. 27/03/2019 with 10 members as follows :

Name & Designation	
1. Smt. Aparajita Biswas, Computer Programmer, DREF, WBUAFS	Presiding Officer
2. Programme Officer, Sanhita (NGO)	Member
3. Dr. Satabdi Das, Scientist, DREF, WBUAFS	Member
4. Prof. Kalyani Roy, Professor, Dept. of Gynaecology & Obstetrics, F/VAS	Member



5. Mrs. Papri Pal, Lab Attndt.(Gr-III),Dept.of Aquaculture, F/FSc., WBUAFS	Member
6. Mrs.Koumari Chowdhuri, Tech. Asstt.,F/DT,WBUAFS	Member
7. Mr.Anuj Kumar Chakraborty,Secretary Faculty Council, WBUAFS	Member
8. Prof. S. Batabyal, Dean of Students Welfare,WBUAFS	Member
9. In-Charge Students' Welfare, Faculty of VAS,WBUAFS	Member
10.In-Charge Students' Welfare, Faculty of DT,WBUAFS	Member
11.In-Charge Students' Welfare, Faculty of F Sc., WBUAFS	Member

**NB: The above committee has been constituted centrally at the university level which caters the three faculties of the university.**

**Report of the committee constituted for Prevention of Sexual Harassment of Women at Work Places last five years starting from 2016-17 to 2020-21 (Case related to the Faculty of Fishery Sciences):**

Sl. No.	Year	No. of cases received	No. of Meetings held	Meeting Date	No. of cases pending
1	2016-17	Nil	Nil	NA	Nil
2.	2017-18	Nil	Nil	NA	Nil
3.	2018-19	Nil	Nil	NA	Nil
4.	2019-20	1	5	14/05/2019 27/05/2019 31/05/2019 19/06/2019 11/07/2019	Nil
5.	2020-21*	Nil	Nil	NA	Nil

\* As on 31.12.2020

## 6.5.2. FACULTY

### 6.5.2.1. Faculty Strength (as on 31.12.2020):

*Mention the Faculty position (both in sanctioned and in-position) at the College / Faculty.*

Departments	Faculty Position Sanctioned by the Govt. as per ICAR/UGC/VCI			Faculty Position filled		
	Professor	Associate Professor	Assistant Professor	Professor	Associate Professor	Assistant Professor
Aquaculture	1	1	2	1	0	2*
Fisheries Resource Management	1	1	2	1	1*	2*
Aquatic Environment Management	1	1	2	1	1*	2*
Aquatic Animal Health	1	1	2	1	1*	1
Fish Processing Technology	1	1	2	1	1*	2*
Fishery Engineering	1	1	2	1	0	1
Fishery Economics & Statistics	1	1	2	1	0	1
Fishery Extension	1	1	2	1	1	1
Fish Nutrition	1	1	2	0	1	1

**\* Teachers promoted to Professor through CAS**

The university has submitted proposal to the State Govt. for sanction of more posts and the said proposal is under active consideration. The university also engaged contractual / guest / adjunct faculty in the academic interest. Vacant teaching post will be advertised shortly.



### 6.5.2.2. Faculty Profile (Department wise):

*Mention department wise faculty profile in tabular form and mention whether present profile is sufficient to meet the academic requirement of the College*

Departments	Faculty strength	Ph. D.	M. F. Sc.	Others if any (Specify)	Sufficient for current academic programme?
Aquaculture	3	3	1	2 (M. Sc. in Zoology with Fisheries Specialization)	Yes
Fisheries Resource Management	4	4	4	-	Yes
Aquatic Environment Management	4	4	3	1 (M. Sc.in Zoology with Fisheries Specialization)	Yes
Aquatic Animal Health	3	2	3	-	Yes
Fish Processing Technology	4	3	4	-	Yes
Fishery Engineering	2	1	2	-	Yes
Fishery Economics and Statistics	2	1	1	1 (M. Sc. in Statistics)	Yes
Fishery Extension	3	2	1	1 (M.V.Sc.); 1 (M.Sc-Ag)	Yes
Fish Nutrition	2	1	0	2 (M.V.Sc.)	Yes

### 6.5.2.3. Credentials of the Faculty:

*Whether the institution has employed competent faculty members qualified to accomplish the mission and goals of the institution? Give the highest qualification received by each faculty, related work experiences in the field, professional licensure and certifications, honors and awards, continuous documented excellence in teaching, or other demonstrated competencies and achievements that contribute to effective teaching and student learning outcomes.*

**Whether the institution has employed competent faculty members qualified to accomplish the mission and goals of the institution?**

**YES.**

**Give the highest qualification received by each faculty, related work experiences in the field, professional licensure and certifications, honors and awards, continuous documented excellence in teaching, or other demonstrated competencies and achievements that contribute to effective teaching and student learning outcomes.**

**Details Mentioned below:-**

Department	Name of Teacher	Designation	Qualification	Experience (Yr)
Aquaculture	Prof. S. K. Das	Professor	M. Sc, Ph. D	26
	Prof. T. K. Ghosh	Professor	M. Sc, Ph. D	26
	Dr. Surya Kanta Sau	Assistant Professor	M.F. Sc, Ph.D.	01
Aquatic Animal Health	Prof. T. J. Abraham	Professor	M.F.Sc., Ph.D. (Microbiology)	26
	Prof. G. Dash	Professor	M.F.Sc., Ph.D.	21
	Sri Prasenjit Mali	Assistant Professor	M.F.Sc.	03
Aquatic Environment Management	Prof. R. K.Trivedi	Professor (On Lien)	M.F.Sc., Ph.D.	23
	Prof. B.K. Das & Dean	Professor	M.Sc., Ph.D.	27



	Prof. S. K. Rout	Professor	M.F.Sc., Ph.D.	23
	Mr. Sutanu Karmakar	Assistant Professor	M.F.Sc., PGDAEM	01
Fishery Economics & Statistics	Prof. S. Sahu	Professor & Head	M.Sc, M.B.A., Ph.D.	20
	Mr. Soumyadip Purkait	Assistant Professor	M.F.Sc., PGDAEM	01
Fishery Engineering	Prof. N.A.Talwar	Professor	M.F.Sc., Ph.D.	23
	Ms. Olipriya Biswas	Assistant Professor	M.F.Sc.	01
Fishery Extension	Prof. S. S. Dana	Professor	M.V. Sc., Ph.D. (Extension Edn.)	26
	Dr. B. Saha	Associate Professor	M.Sc.(Ag.), Ph.D. (Agril.Ext.)	12
	Mrs. M. Ray Sarkar	Assistant Professor	M.F.Sc.	03
Fish Processing Technology	Prof. K.C. Dora	Professor	M.F. Sc, Ph.D.	35
	Dr. S. Chowdhury	Associate Professor	M.F. Sc, Ph.D.	12
	Sri Prasanta Murmu	Assistant Professor	M.F.Sc.	03
	Dr. Swarnadyuti Nath	Assistant Professor	M.F.Sc., Ph.D.	01
Fishery Resources Management	Prof. Sudhir Kr. Das	Professor	M.F.Sc., Ph.D., D.D.E.	23
	Prof. S. Behera	Professor	M.F.Sc., Ph.D.	23
	Prof. T.S. Nagesh	Professor	M.F.Sc., Ph.D	23
	Dr. Golam Ziauddin	Assistant Professor	M.F.Sc., Ph.D	01
Fish Nutrition	Dr. P. N. Chatterjee	Associate Professor	M.V. Sc., Ph.D.	08
	Dr. Srinibas Das	Assistant Professor	M.V. Sc.	01

**Professional licensure and certifications, Honour and Awards received by faculty members:-**

Sl. No.	Name of the recipient	Name of the honour/ award/ fellowship/ scholarship etc.	Offering organization	Field of remarkable activity
1	Prof. S. K. Das, Professor, Dept. of Aquaculture	Felicitation	Organizing Committee of International Conference : AgriFish, 2017	Aquaculture
2	Dr. T. J. Abraham, Professor, Dept. of Aquatic Animal Health	Best Teacher Award-2016 (University level)	West Bengal University of Animal and Fishery Sciences, Kolkata	Teaching, research and extension
		Best Teacher Award-2016 (Faculty level)	West Bengal University of Animal and Fishery Sciences, Kolkata	Teaching, research and extension
		Best Parent Award-2016	West Bengal University of Animal and Fishery Sciences, Kolkata	Parenting
		Outstanding Faculty of the Year-2017	The Education Expo TV, Research and Branding Company, Noida	5 <sup>th</sup> Faculty Branding Awards 2017
		Fellow, Zoological Society of India (FZSI), Bodh Gaya, Bihar	Zoological Society of India (FZSI), Bodh Gaya, Bihar	Contribution in the Fishery Sciences
		Excellent Researcher Award in Fishery Sciences-2017	PEARL Foundation, Madurai	PEARL Foundation Educational Excellence Awards



				to Higher Education in India 2017
		Outstanding Paper Award-2017	University of Kalyani and Department of Higher Education, Science and Technology and Biotechnology, Govt of West Bengal, Kolkata	Best oral presentation during the 2 <sup>nd</sup> Regional Science and Technology Congress (Southern Region), 2017
3	Dr. G. Dash, Associate Professor, Deptt. of Aquatic Animal Health	Best Teacher Award	WBUAFS	Fishery Sciences
4	Prof. Somen Sahu	Life Time Achievement Award-2017 At Bengal Aqua Expo-2017	Surendranath Institute Of Aquaculture Training And Research.	Contribution in Fisheries Sciences-
		MatsyaSathi Samman-2018, At Bengal Aqua Expo-2018	Surendra Nath Institute of Aquaculture Training and Research, Contai Aqua Technicians Welfare Association, Dept. of Fisheries, Govt. of WB & Prawn farmers Association, WB.	Contribution towards the fish farmers community
		Marine Advisor	Department of Fisheries, Govt. of West Bengal	Development for the Marine fisheries of the state
		Expert Member	ICAR-CMFRI (Central Marine Fisheries Research Institute), Govt. of India	Establishment of Regional Research centre for the coastal people at Choddomile
		Expert Member	ESSO-INCOIS (Indian National Center for Ocean Information Services), Govt. of India	To develop forecasting system for Hilsa-shad fishery
5	Dr. Biswarup Saha, Associate Professor, Deptt. of Fishery Extension	Young Professional Award	Society of Community Mobilisation, Indian Agricultural Research Institute, New Delhi.	Extension Education
		ISEE Fellow Award	Indian Society of Extension Education, Indian Agricultural Research Institute, New Delhi.	Extension Education
6	Dr. Supratim	Best Teacher Award	WBUAFS	Teaching, Research,



	Chowdhury, Associate Professor, Deptt. of Fish Processing Technology	(2016) Faculty of Fishery Sciences (<45 years)		Extension
7	Dr. Samarendra Behera, Professor, Dept. of Fishery Resources Management	Outstanding Achievement award	Society for Scientific Development in Agriculture and Technology, Maharana Pratap University of Agriculture and Technology, Udaipur, Rajasthan	
8	Prof. S. K. Das, Professor, Dept. of Aquaculture	Best Teacher Gold Medal Award, Faculty of Fishery Sciences	West Bengal University of Animal and Fishery Sciences, Kolkata	Teaching and Research
		Recognition Award	Indian Society of Extension Education	Growth and development of Extension Education
9	Dr. T. J. Abraham, Professor, Dept. of Aquatic Animal Health	Aquatic Animal Health Specialist" under the Broad Subject Matter Area (BSMA) Committee	ICAR, New Delhi.	Fisheries Sciences to develop/ revise syllabi for the courses of masters and PhD degree in "Aquatic Animal Health"
10	Sri Prasenjit Mali, Assistant Professor	3rd Prize for best oral presentation in International Symposium and 8th Conference of Indian Meat Science Association (IMSACON-VIII)	Department of LPT, Faculty of Veterinary and Animal Sciences, WBUAFS, Kolkata,	Technological innovations in muscle food processing for nutritional security, quality and safety.
11	Dr. Biswarup Saha, Associate Professor, Deptt. of Fishery Extension	Recipient of Young Scientist Award in December, 2018 at 9th National Extension Education Congress-2018	Society of Extension Education, Agra on "Climate Smart Agricultural Technologies : Innovations and Interventions" held at CAPHET, Ranipool, Sikkim.	Extension Education
		Recipient of prestigious O.P. Dahma award for outstanding contribution in Extension education and research	Indian Society of Extension Education, Indian Agricultural Research Institute, New Delhi.	Extension Education
		Recipient of prestigious ISEE Recognition award for outstanding contribution in the fields of Extension Education	Indian Society of Extension Education, Indian Agricultural Research Institute, New Delhi.	Extension Education
12	Mr. Prasanta Murmu	Best Oral Presentation	Indian Meat Science	Best Oral



	Assistant Professor	Award (3rd) in International Symposium & 8th Conference of Indian Meat Science Association (IMSACON-VIII)	Association	Presentation (3rd) for "Fish filleting waste use as a potential source of protein"
13	Prof. S. K. Das, Professor, Dept. of Aquaculture	Felicitated as Chairman of a Session in the International Conference on Ecological Intensification	Institut De Recherche Pour Le Développement, France	Aquaculture
14	Prof. T. J. Abraham, Professor, Dept. of Aquatic Animal Health	Research Excellence Award-2020	The Institute of Scholars (InSc), Bengaluru - 560091, Karnataka	Research in Fisheries Science and Aquatic Animal Health
15	Prof. Gadadhar Dash, Professor, Dept. of Aquatic Animal Health	Best Parenting Award - 2019	West Bengal University of Animal and Fishery Sciences (WBUAFS)	Activity of the parenthood.
16	Dr. Swarnadyuti Nath, Assistant Professor, Dept. of Fish Processing Technology	Best Oral Presentation	National Conference on Doubling Farmers Income for Sustainable and Harmonious Agriculture 'DISHA 2019', Birsa Agriculture University, Ranchi, Jharkhand	Fish Processing Technology
		IASR Excellence Award – 2019	International Research Conference on 'Recent Trends in Life Sciences' held at Sidhu Kanhu Birsha University (SKBU), Purulia, West Bengal	Fish Processing Technology
		Best Oral Presentation Award	International Conference on Animal Nutrition 2019 (INCAN 2019) on 'Nutritional Strategies for Improving Farm Profitability and Clean Animal Production' held at Biswa Bangla Convention Centre, Kolkata.	Fish Processing Technology
		Excellence in Teaching Award (Young Teacher Award)	3rd National Conference on Promoting and Reinvigorating Agri-Horti, Technological	Teaching



			Innovations, 'PRAGATI 2019' held at Dhanbad, Jharkhand.	
17	Dr. P. N. Chatterjee, Assistant Professor, Deptt of Animal Nutrition	Outstanding Paper Presentation Award	DST, Govt. of West Bengal	Nano-materials in Animal Nutrition
		University Best Teacher Award	WBUAFS, Kolkata	Best Teacher of University
		Best Teacher Award F/O. VAS	WBUAFS, Kolkata	Best Teacher of F/O. VAS
		Outstanding Presentation Award	Dept. of Science, Technology and Biotechnology, Govt. of West Bengal	Research
		Dr. Rishendra Verma Young Scientist Award	Indian Association for Advancement of Veterinary Research, IVRI, Izatnagar	Research
		Best Oral Presentation Award	Animal Nutrition Association of India (BASU - Patna Chapter)	Research

#### 6.5.2.4. Technical and Supporting Staff:

*Whether the College has appointed (in place) sufficient technical/laboratory/farm staff to cater the need of practical and field experiments. Mention department wise distribution of technical, supporting and field staff in the tabular form.*

**Whether the College has appointed (in place) sufficient technical/laboratory/farm staff to cater the need of practical and field experiments?**

**Yes.**

Sl. No.	Name of Department/ Establishment	Group	Sanctioned of post	Man in position
1	Dean, Faculty of Fishery Sciences	Junior Assistant	C	0
		Junior Store Keeper	C	1
		Office Attendant Gr. II	D	4
		Durwan	D	0
		Driver-cum-Mechanic	D	0
		Mali	D	1
		Sweeper	D	2
2	Aquaculture	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Fisherman	D	2
3	Fish Processing Technology	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	0
		Fisherman	D	0
4	Fisheries Resource Management	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	1



		Laboratory Attendant	D	0
		Field Worker	D	0
5	Fishery Economics, Statistics & Marketing	Technical Assistant	C	0
		Junior Assistant	C	0
		Office Attendant Gr. II	D	2
		Laboratory Attendant	D	0
		Field Worker	D	0
6	Fishery Engineering	Technical Assistant	C	0
		Junior Assistant	C	1
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	1
		Field Worker	D	0
7	Fishery Extension	Technical Assistant	C	0
		Junior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Fisherman	D	1
8	Aquatic Environment Management	Junior Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	1
		Field Worker	D	0
9	Aquatic Animal Health	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Field Worker	D	0
10	Fish Nutrition	Group C	C	0
		Group D	D	0

**NB: Vacancy arisen due to retirement / death will be filled up shortly.**

### 6.5.3. LEARNING RESOURCES:

#### 6.5.3.1. College Library (digital):

*Mention the information about location of the library, present staff position (in place) and availability of Wi-Fi, sufficient books and other reading materials, periodicals and research journals, internet with sufficient number of computers, seating capacity, employing the latest technology in library sciences, stocking arrangements, collection of volumes on different subjects, latest publications in the fields of relevant subjects, automation and user services through computer, opening hours, subscription of journals of national and international repute, national dailies, magazines etc.*

Library type	Faculty level central Library
Number of books	2,587
Space	1500 Sqft
Number of periodicals subscribed annually	10
Number of professional journals and periodicals	National: 20 International: 05
Internet connectivity and Wi-Fi	Yes
Staff pattern	Assistant Librarian: 01 Supporting staff: 01



**List the various educational materials available in the library/media centre**

Type of material	Description of material	Application
Computer	Facility with internet and LAN (capacity: 05)	Used by students, teachers and technical staff
CD-ROMS	ASFA	Used by PG students/Ph.D. Scholars/ Research Scholars and teachers
Online journal subscription	Online journal subscription – Aquaculture	Used by PG students/Ph.D. Scholars/ Research Scholars and teachers
Electronic version thesis	Master /Doctoral Degree Thesis of the Faculty	Used by PG students/Ph.D. Scholars/Research Scholars and teachers
CeRA	Access to information to journals online	Used by PG students/Ph.D. Scholars/ Research Scholars and teachers
Xeroxing	-	Used by all

**6.5.3.2. Laboratories, Instructional farm, Workshops, Dairy Plant, Veterinary Clinic, Hatchery, Ponds etc.:**

*Clearly mention about laboratories, instructional farm, workshops, dairy plant, veterinary clinic, hatchery, ponds etc facilities available in the College with its numbers, space, specialty to conduct practical/hands on training.*

**Central Instrumentation facility**

Sl. No.	Name of the Equipment	Make	Year of purchase
1	High Performance Liquid Chromatography	Jasco, Japan	2006
2	Analytical Balance	Sartorius	2006
3	Atomic Absorption Spectrophotometer	Varian, Netherlands	2007
4	Inverted Microscope	Hunt, Germany	2007
5	Carbon di-oxide Incubator	Thermo Fisher, USA	2007
6	Water purification system	Millipore, India	2007
7	Thermal cycler	Eppendorff, Germany	2007
8	Micro-centrifuge	Eppendorff, Germany	2007
9	U-V Trans-illuminator	Bangalore Genei, India	2007
10	Gas chromatography	Varian, Netherlands	2008
11	UV-Vis Spectrophotometer		

**Department-wise laboratories established**

Sl. No.	Department	Name of laboratories/farm
1.	Aquaculture	Ornamental Fish Rearing Unit; Carp Hatchery Unit and Aqua Farm including nursery; Feed Formulation Laboratory
2.	Fisheries Resource Management	Physiology; Taxonomy-cum-Museum; Anatomy and Biology; Stock Assessment
3.	Aquatic Environment Management	Ecotoxicology; Water and Soil Chemistry; Limnology & Oceanography; Instrumentation
4.	Aquatic Animal Health	Bacteriology; Parasitology; Immunology; Histopathology; Instrumentation
5.	Fish Processing Technology	Modern Fish Processing Unit; Biochemistry; Microbiology; Instrumentation
6.	Fishery Engineering	Craft & Gear Engineering; Refrigeration Engineering; Navigation and Seamanship.
7.	Fishery Economics and Statistics	Computer Centre
8.	Fishery Extension	Audio-visual; Cyber-extension



### Hatchery Unit

There is a Hatchery Unit under the Department of Aquaculture comprising of Breathing Pool, Nursery Pond and Hatching Unit equipped with all relevant facilities for Indian Major Carps (IMC). The annual seed production capacity is five million seed.

#### 6.5.3.3. Student READY/ In-Plant Training / Internship / Experiential Learning Programmes:

*Clearly mention about the implementation of Student READY/ In-plant training/ Internship/ Experiential Learning programmes and learning outcomes as per the guidelines of ICAR. Profit sharing mechanism (amount) shall be mentioned for each ELP unit sanctioned by the ICAR for the college.*

Details of Student READY (Rural and Entrepreneurship Awareness Development Yojana) Programme are mentioned below:

- Student READY Program has been under taken during VII and VIII semesters of UG course
- Objectives: (Job providers instead of Job seekers)  
To reorient fisheries graduates for ensuring and assuring employability and develop entrepreneurs
- Conceptualized for building skills in project development and execution, decision-making, individual and team coordination, approach to problem solving, accounting, quality control, marketing and resolving conflicts, etc. with end to end approach in Student READY program.
- Components of Student READY programme
  - In plant attachment (8 weeks)
  - Rural Fisheries Work Experience (8 weeks)
  - Skill Development (1 week)
  - Experiential Learning Programme .....A step forward for earning while learning concept  
(Modules: Fish Post harvest Technology) Profit sharing

Year	No of Student Trained	No of Entrepreneur Developed	Total Income Generated	Total Profit earned	Profit shared per Student	Major Skill Imparted
2016-17	12	1	60000/-	13333/-	833.00	Developed skill to prepare fish products like Shrimp Chop, Fish Kachuri, Fish Burger, Fish Cutlet, Fish Ball, Fish Roll, Fish Sandwich, Fish Momo, Prawn pickle, Fish pickle
2017-18	19	1	20300/-	3293/-	130.00	
2018-19	14	Nil	62000/-	10640/-	570.00	
2019-20	17	-	-	-	-	
2020-21	19	-	-	-	-	

#### 6.5.3.4. Curricula Delivery through IT (smart class rooms/interactive board etc.):

*Whether the College is using smart class rooms/interactive board etc. for teaching and practicals. Number of class rooms upgraded as smart class rooms should be mentioned.*

The Faculty of Fishery Sciences facilitates the use of Information and Communication Technology (ICT) for effective delivery of content for which the faculty has made available the smart class room with



smart board. In addition to this, classrooms have the facilities of projectors for teaching through Power Point Presentation of theory and practical classes along with podium of inbuilt speakers and amplifiers to make audible to the students. Seminar room has the facility of multimedia projectors for student's seminar delivery and practical classes. Department also have the multimedia projectors for practical classes. Beside this all the Faculty members are taking classes on online mode by using Google meet, Google class room, WhatsApp, E-mail etc

#### 6.5.4. STUDENT DEVELOPMENT:

##### 6.5.4.1. Student Intake and Attrition:

*The information about student intake and attrition, for the College as a whole but separated in UG, PG and PhD categories shall be provided in tabular form for last five years.*

The information about student intake and attrition, for the College as a whole but separated in UG, PG and PhD categories shall be provided in tabular form for last five years.

Name of the Degree Programme	Actual Student Enrolled in last five years					Attrition(%)				
	2016-17	2017-18	2018-19	2019-20	2020-21	2016-17	2017-18	2018-19	2019-20	2020-21
B. F. Sc.	38	43	44	44	44	6	2.6	3	2.1	N/A
MFSc	23	25	32	29	30	31	13	22	28	N/A
PhD	6	14	9	12	9	54	57	50	57	N/A

##### 6.5.4.2. Number of Students in Theory and Practical Classes:

*Mention the Degree Programme wise number of students sitting in a class for theory and practical, separately in tabular form. Complete list of academic programmes (UG and discipline wise masters and Ph.D), for which accreditation is sought, need to be provided. The list should provide only programmes in which students are already passed out.*

Sl No.	Name of the Programme	Total Intake / Year	Batch of Students in Theory Class	Batch of Students in Practical Class
1	Under Graduate - BFSc	44	50	50
2	Post Graduate – MFSc			
	Aquaculture	6/Year	6-10	6-10
	Fisheries Resource Management	6/Year	6-10	6-10
	Aquatic Environment Management	4/Year	4-10	4-10
	Aquatic Animal Health	4/Year	4-10	4-10
	Fish Processing Technology	6/Year	6-10	6-10
	Fishery Engineering	2/Year	2-8	2-8
	Fishery Economics and Statistics	1/Year	2-30	2-30
	Fishery Extension	6/Year	6-10	6-10
3	Doctoral Programme – PhD			
	Aquaculture	2/Year	6-10	6-10
	Fisheries Resource Management	3/Year	6-10	6-10
	Aquatic Environment Management	2/Year	4-10	4-10
	Aquatic Animal Health	2/Year	4-10	4-10
	Fish Processing Technology	2/Year	6-10	6-10
	Fishery Economics and Statistics	2/Year	2-30	2-30
	Fishery Extension	1/Year	6-10	6-10



**List of academic programmes (UG and discipline wise masters and Ph.D), for which accreditation is sought, need:**

- 1) UG Programme – Bachelor of Fishery Science (BFSc)**
- 2) PG Programme – Master of Fishery Science (MFSc) in the following Departments / Disciplines:-**
  - Department of Aquaculture
  - Department of Fisheries Resource Management
  - Department of Aquatic Environment Management
  - Department of Aquatic Animal Health
  - Department of Fish Processing Technology
  - Department of Fishery Economics & Statistics
  - Department of Fishery Extension
  - Department of Fishery Engineering
- 3) Doctoral Programme : Ph.D in Fishery Sciences in the following Departments / Disciplines:-**
  - Department of Aquaculture
  - Department of Fisheries Resource Management
  - Department of Aquatic Environment Management
  - Department of Aquatic Animal Health
  - Department of Fish Processing Technology
  - Department of Fishery Economics & Statistics
  - Department of Fishery Extension

#### **6.5.4.3. Admission Process:**

*Clearly give complete mechanism of admission for UG, PG and PhD programmes, fee payment mechanism, registration procedure, academic schedule publication at the start of the semester etc. Write information in one page only.*

#### **Admission Mechanism for UG Programme:**

- 1) Advertisement in the News Papers and University website.
- 2) The selection of students for admission is made as per merit list without any Entrance Examination. The merit list is prepared according to percentage of total marks obtained in the subjects of Higher Secondary Examination (10+2) or it's equivalent examinations.
- 3) Final selection is made after counselling of students and the said counselling process is undertaken by the duly constituted Admission Committee approved by the Faculty Council.
- 4) Admission Fees are to be deposited through online mode.
- 5) Admission process generally starts after publication of H.S. results of West Bengal Council of Higher Secondary Education. Application forms are available as per notification of newspapers only for B.F.Sc. course.



**Admission Mechanism for Master Degree Programme:**

- 1) Advertisement in the News Papers and University website published by the Controller of Examination in the month of September every year.
- 2) The selection of candidates is made strictly on the basis of merit and performance in the personal interview. The merit shall be decided on the basis of percentage of marks in aggregate or O.G.P.A. in Bachelor's Degree Examination as well as marks or O.G.P.A. in subject concerned in which admission is sought. The total marks for preparation of merit list is 100 out of which 80% on merit (the relative weightage on the overall performance in the Bachelor's Degree and in the subject concerned i.e. 50 marks from OGPA obtained in UG level and 30 marks from the subject concern) and 20% on personal interview(online mode) .
- 3) The candidate shall have to score a minimum of 50% in aggregate of merit and interview altogether (i.e. 50 out of 100) to qualify for admission into Postgraduate Programme.
- 4) The candidates selected through ICAR all India Examination for admission to Master's Degree course shall be exempted from aforesaid selection process. However, they should have minimum qualification.
- 5) Final selection is made after counselling of students and the said counselling process is undertaken by the duly constituted Admission Committee as mentioned in the Regulations.
- 6) Admission Fees are to be deposited through online mode.
- 7) A selected candidate after payment of his/her fees for admission shall get himself/herself registered within the prescribed date. No candidate under any circumstances shall be permitted to register himself/herself after the expiry of date or stipulated time in first and subsequent semesters as notified from time to time. He/ She has to pay the fees before registration in any semester.

**Admission Mechanism for Doctoral Programme:**

- 1) Advertisement in the News Papers and University website published by the Controller of Examination in the month of October every year.
- 2) Admission to Ph.D. course is open to candidates holding a two years Master's degree in Fishery Sciences and securing at least 55% marks in aggregate or 2.75 OGPA in 4.00 point scale or 6.75 in 10 point scale following a Bachelor's Degree in Fishery Sciences (4 years) from a recognized University or National Institute.
- 3) Candidates seeking admission to Ph.D. course in a subject shall have the Master's Degree in the same subject and also have done sufficient courses in the proposed major field of specialization within the subject.
- 4) The selection of candidates is strictly on the basis of academic score in Master's Degree level and performance in the written test and personal interview. The academic score is decided on the basis of percentage of marks in aggregate or OGPA in Master's Degree Examination. The total marks for preparation of merit list is 100, out of which 40% on academic score, 40% on of written test and 20% on personal interview.



- 5) Qualifying marks for admission is minimum 50% in aggregate in Academic Score, Written Test and Personal Interview.
- 6) Controller of Examinations publishes the list of candidates recommended for admission in the notice board/ website before the date of admission.
- 7) The candidates selected through ICAR all India Examination for admission to Ph.D. programme are exempted from aforesaid selection process. However, they should possess the minimum qualification as stated above.
- 8) Final selection is made after counselling of students and the said counselling process is undertaken by the duly constituted Admission Committee as mentioned in the Regulations.
- 9) Admission Fees are to be deposited through online mode.

#### **6.5.4.4. Conduct of Practical and Hands on Training:**

*Mention the brief report on how the practical and hand-on-training is being conducted in different courses to meet the student satisfaction. Write information in one page only.*

The UG, PG and PhD courses involve conduct of practical's as per credits allotted to the specific courses and hands on training and field / lab practical's for courses as per ICAR course curricula in the following ways:-

1. The students are regularly been involved in these programmes actively in the farm facilities of the Faculty as per the curriculum.
2. Each student gets the chance to perform the design and fabrication of fishing materials with its operational procedure, technique, or task for simple scale-wise experiments.
3. Make small groups of students and provide them with the chance to perform the mending and repairing of fishing nets and procedure, technique, or task for simple experiments.
4. Make small groups of students and provide them with the chance to perform the nautical chart work and procedure, technique, or task for simple experiments
5. Demonstration on how to perform the procedure, technique, or task as far as possible for the practical involving in onboard vessel activities during fishing activities
6. Providing exposure visits to fish netting yards, boat building yard, interaction with fishermen and seafarers, farms and field estimation of water parameters and water and soil sample collection or interaction with fish farmers, different fish markets, fish landing centres for market survey and make them learn themselves.

#### **6.5.4.5. Examination and Evaluation Process:**

*The evaluation of students' performance is a central task of College administration. A brief report on examination and evaluation process for UG, PG and PhD be given separately mentioning external/internal components. System of evaluation should clearly be mentioned for UG, PG and PhD.*

- a) The theory and/or practical examination for each paper offered in a semester is normally held within that semester.
- b) The date(s) of examinations as notified cannot be changed at department level for any reason what so ever, without the concurrence of Controller of Examinations(COE).



- c) Absence of students in en-masse or due to walkout as the case may be cannot be permitted and allowed to be cited as a reason for non-holding of any examination. The matter has to be reported to the Faculty Council for taking further decision including penal measure, if required.
- d) A detailed examination schedule showing the course no., course title, day, date, time, venue etc. for each examination shall be prepared by the COE in consultation with the Dean of the Faculty and circulated at least two weeks before the end of instruction in a semester.
- e) The Controller of Examinations makes arrangements to print the question papers in requisite number depending on the number of students.
- f) During the 10<sup>th</sup> week of each semester, there is a midterm examination in each course for theory paper only before appearing the end term examination.
- g) End term theory paper is set by external examiner.
- h) Practical examination is conducted by course Instructor(s) and one teacher nominated by the HOD
- i) Evaluation of end term theory paper is done internally by the concern Course Instructor.
- j) A student who fails either in theory or practical or both in any course shall be treated as failed in that course.
- k) Student shall be promoted up to 6<sup>th</sup> semester as long as he/she carries a maximum backload of 3 (three) courses, however he/she shall have to clear all the courses before the Student Ready Programme (In -plant Training / In-plant attachment Rural Fisheries Work Experience Programme) commences in the 7<sup>th</sup> Semester
- l) In case a candidate is found to have answered question more number of questions than are actually required to do, the answer of the question(s) in which the candidate has secured less marks may be ignored. In other words, answers to the requisite number of questions for which the candidate has secured higher marks are to be taken into consideration.
- m) In exceptional cases, if a candidate suddenly falls sick during the course of examination and the sickness is of serious nature, he/she may be allowed to write compartmental examination(s) after producing medical certificate.
- n) Mark sheet should indicate "P" for pass, "P\*" for pass in compartmental examination and "A" for absenteeism in the scheduled/concerned examination.

### **Back Examination**

- i. A student may be allowed to continue with a maximum backload of 3 (three) courses at any given point of time in any semester, failing which the student shall not be promoted / allowed to the next semester.
- ii. The student who fails either in theory or practical or both in any course shall have to appear both theory and practical in the compartmental examination.
- iii. Separate compartmental examination will be conducted by the CoE within one month from the date of publication of results in the subsequent semester who have failed in one or more courses (i.e. upto three courses) in the previous semester.
- iv. If any student does not pass in any course for which compartmental examination was held, he/she will get further chance to clear that course when regular examination for that particular course will be held subsequently.



### Award of Grade Point

The marks obtained in each course by a candidate in a Semester shall be converted into Grade Point based on a ten-point scale in both theory and practical separately. The average of grade points secured by a candidate in all courses in the particular Semester shall be represented as Grade Point Average (GPA). The average of all GPA secured by a candidate during the entire duration of Under-graduate programme based on published results will be shown as Overall Grade Point Average (OGPA) which will be indicated up to three decimal places. In case of a student failing in one or more number of course(s), the result will be declared "Incomplete" and the grade point for such course(s) shall be computed only after passing of the respective course(s) by the concerned student. A student shall have to secure 50% in theory and practical separately and a minimum GPA as well as OGPA of 5.0 for passing a course and for obtaining the degree, respectively. Grade point and Grade Point average (GPA) shall be calculated taking the marks obtained in theory, practical and credits hours

#### 6.5.4.6. NCC/NSS/RVC Units:

*Clearly mention the existence and functioning of these units and how it is benefiting the student development. A brief report should be given (without photographs).*

NSS unit of the Faculty of Fishery sciences is functioning under the In-Charge of Students Welfare under the overall supervision of Dean, Students Welfare of the university.

Sl No.	Year	1 (NSS Day) 24 <sup>th</sup> September	2 (International Yoga Day) 21 <sup>st</sup> June	3 (Agriculture Education Day) 3 <sup>rd</sup> December	4 (Awareness Camp & Camus Cleaning Day) 17 <sup>th</sup> March
1	2016-17	72	76	68	75
2	2017-18	62	59	66	70
3	2018-19	88	85	90	92
4	2019-20	79	102 (Virtual Mode)	73	-
5	2020-21	98 (Virtual Mode)		112 (Virtual Mode)	

#### 6.5.4.7. Language Laboratory:

*It is required of any student to have a good command of the language for communication purposes, with clarity and accuracy being vital for effective and efficient communication. What helps one to acquire such proficiency in a language is the process and the method of learning that language. Mention which of these type of Conventional, Lingua Phone, Computer Assisted Language Laboratory and Multimedia Hi-Tech Language Laboratory are being used for language teaching in the college.*

The Faculty of Fishery Sciences has students from different districts of state of West Bengal and different states of India with different backgrounds and as such there is a need for English language proficiency for understanding the other subjects as the course is in English medium. In this context, teachers of Faculty of Fishery Sciences conducts English language classes to fulfill the requirement of learning English. Presently the language is basically taught by conventional methods along with usage of computer assisted laboratory. Learning is also being impacted by participatory approach and application of audio-visual aids. Further, keeping broader perspective in mind, the report writing, paragraph writing, precis writing, abstracting and summarizing are being taught to the students in a



conventional manner to enable the students to learn and to write notes of class lectures and writing the report of state and national tours as well as READY programme. Nevertheless, these are being required primarily to collect information of the programme and to report it to the course teacher/s. Lastly, to develop the career of students how to face interview, drafting of letters, cv and resume are being taught. These auras of teaching enable them to learn and write everything individually. More or less, the assignments are being designed in view of TOFEL and competitive based exams for the English language test.

#### 6.5.4.8. Cultural Center:

*Does the college has cultural center to empower student leaders to explore, celebrate, and educate the campus community about the diversity among them? Does the college offers an inclusive and reflective space, multicultural programming, and support services that encourage positive interaction, academic persistence, and growth among students, faculty, and staff?*

The Faculty of Fishery Sciences promotes for multicultural programmes and every year cultural programme is organized in the faculty auditorium under the leadership of the Students' Union / Students' Welfare Committee. The students of the Faculty also participate in the Agri Cultural Meet organized by ICAR every year. The faculty members, students and staff members participate in cultural events organized on 2<sup>nd</sup> January every year as a part of University Foundation Day Celebration. The Recreation Club established in the university arranges for different cultural programmes every year. "Taranga", a cultural group, hosts various literacy and cultural activities. A wide range of recreation, extra-curricular and sports activities is provided through the Student's Union. Different cultural program, sports, interactive and social programmes are being conducted by the In-Charge Students' Welfare and Dean Students' Welfare. University extends financial assistance for organizing the programmes to encourage positive interaction, academic persistence, and growth among students, faculty, and staff.

#### 6.5.4.9. Personality Development:

*Personality development programme is aimed at increasing employability of the students. Whether the college has provisions for inclusion of functional grammar in Standard English, speaking skills, reasoning, group discussions interview skills, personal interviews, quantitative ability, verbal ability, mock tests and some special sessions to promote the personality development in the students?*

**Whether the college has provisions for inclusion of functional grammar in Standard English, speaking skills, reasoning, group discussions interview skills, personal interviews, quantitative ability, verbal ability, mock tests and some special sessions to promote the personality development in the students?**

**YES. Details are mentioned below:**

Sl no	Year	Programme (number of participants)	
		Spoken English & Personality Development	Ignite your Mind- Personality Development programmes organised
1	2016-17	45	32
2	2017-18	42	31
3	2018-19	-	28
4	2019-20	-	33
5	2020-21	-	-



## 6.5.5. PHYSICAL FACILITIES:

### 6.5.5.1. Hostels:

*Clearly mention the number of hostels available for the College students for boys and girls, separately with its total capacity, students per room accommodated in each hostel, mess facility, drinking water, indoor games specially for girls, cleaning of hostel premises, transport facility, emergency medical facility etc.*

Hostel	Capacity	Student/room
UG Boys Hostel (Dolphin)	90	03
PG Boys Hostel (Piranha)	40	02
Girls Hostel (Matsyakanya)	60	03

- Common mess and drinking water facility is available for the students.
- Indoor games facilities is available for the students as well as inside the hostel premises for girls.
- Medical unit is functional within the campus.
- Transport facility available for academic purposes.

### 6.5.5.2. Examination Hall:

Mention the availability of number of examination halls, its capacity etc. for the College.

General classrooms are used for the purpose of Examinations with 50 nos of capacity in each room. But, construction of separate Examination hall is of top priority and a proposal has already been submitted to the Govt. of West Bengal for sanction of fund.

**However, there is Central Examination Hall at the main campus of the university at Belgachia, Kolkata of 200 capacity with all accessories.**

### Quarantine Centre:

A quarantine centre has been set up in the Faculty of Fishery Sciences in view of COVID-19 pandemic.

### 6.5.5.3. Sports and Recreation Facilities:

*Clearly mention the number of indoor and outdoor sports facilities available for the College students. A brief note on day to day management and use of these facilities shall be provided in the report.*

**Following details regarding status of Sports facilities:**

Sl. No.	Games and Sports	Equipment and infrastructure available	Remarks
1.	Cricket	Infrastructure and equipment available Bat, ball, wicket, mat,	Further development is needed
2.	Football	Ball,	
3.	Volleyball	Ball, net	
4.	Badminton	bat	
5.	Table tennis	Board, ball, bat	
6.	Carom	Board, striker, pawns	

**A brief note on day to day management and use of these facilities shall be provided in the report:**

Intramural cultural activities like singing, recitation, dance, drama, poetry etc are frequently conducted in the faculty cultural programmes like Fresher's Day, Farewell, Hall Day and Social Day, Annual cultural meet etc. Several musical instruments are also available for the students. **Every year Cricket, Football,**



Volleyball, Badminton, Table tennis, Carom etc tournaments are organized as a part of Annual Sports.

#### 6.5.5.4. Auditorium:

*Does the college has auditorium? Mention its year of construction, sitting capacity and how frequently being used for the College functions.*

**Does the college has auditorium?**

**Yes.**

**Year of construction, sitting capacity and how frequently being used for the College functions:**

The faculty has 150 seating capacity fully air-conditioned auditorium with audio-visual systems is available for organizing seminar, workshops and cultural programme which was established in the year 2005. Thereafter repair and renovation was done for effective utilization. Since inception the auditorium is frequently used for training, seminar, cultural program etc.

#### 6.5.5.5. Exhibition Hall/Museum:

*Does the college have the Exhibition Hall/Museum? Mention about its use and special events being conducted in these units.*

**Does the college have the Exhibition Hall/Museum?**

**Yes.**

**Use and special events being conducted in these units:**

A museum with 450 numbers of fish and shell fish species has developed in the Faculty of Fishery Sciences, WBUAFS for species identifications for our students. Audiovisual systems have been developed for the demonstration of each species of the fish and shell fish to the students for deep knowledge.

The museum is also used for leaning of general and professional UG and PG students of other university and colleges within the state and also from other states for fish identifications.

### 6.5.6. RESEARCH FACILITIES

#### 6.5.6.1. Postgraduate Laboratories and Equipment:

*Clearly mention the department wise PG laboratories and equipment housed in individual laboratory in the Colleges along with any other research unit.*

1.	Department Fish Processing Technology	05 Laboratories as stated below
Sl. No.	Name of the Laboratories	Instruments Facilities
1.	Laboratory – 1	<ul style="list-style-type: none"> <li>• Extruder</li> <li>• Kjeldahl Distillation Unit</li> <li>• Kjeldahl Nitrogen digestion Unit</li> <li>• Soxhlet apparatus</li> <li>• Hot Air oven</li> <li>• Mechanical dryer</li> </ul>
2.	Laboratory – 2	<ul style="list-style-type: none"> <li>• Fish Fermenter</li> <li>• Vacuum Dryer</li> <li>• Digital Water Bath</li> </ul>



3.	<b>Instrumentation Laboratory</b>	<ul style="list-style-type: none"> <li>• Automatic Canning Machine</li> <li>• Deep fridge</li> <li>• Hot Air Oven</li> <li>• Incubator</li> <li>• Autoclave – 2 qty</li> <li>• Smoking Kiln</li> <li>• Muffle Furnace</li> <li>• Can body Reformer</li> <li>• Hand Flanging Basic Machine</li> <li>• Flange Rectifier</li> <li>• Embossing Machine</li> </ul>
4.	<b>P.G. Laboratory</b>	<ul style="list-style-type: none"> <li>• Texture Analyser</li> <li>• Centrifuge</li> <li>• Double distillation Unit</li> <li>• Water activity meter</li> <li>• Moisture balance</li> <li>• Digital Balance</li> <li>• Vortex Mixture</li> <li>• UV Vis Spectrophotometer</li> </ul>
5.	<b>Microbiology Laboratory</b>	<ul style="list-style-type: none"> <li>• Incubator</li> <li>• Laminar Air Flow</li> <li>• Air Purifier</li> </ul>

2.	<b>Aquatic Animal Health</b>	<b>06 Laboratories as stated below</b>
Sl. No.	<b>Name of the Laboratories</b>	<b>Instruments Facilities</b>
1.	<b>Water Quality Testing Laboratory</b>	<ul style="list-style-type: none"> <li>• Advance Trinocular microscope</li> </ul>
2.	<b>Bacteriology Laboratory</b>	<ul style="list-style-type: none"> <li>• Cooling Centrifuge</li> </ul>
3.	<b>Parasitology Laboratory</b>	<ul style="list-style-type: none"> <li>• Stomacher 400 circular</li> <li>• Laminar flow chamber</li> </ul>
4.	<b>Histopathology Laboratory</b>	<ul style="list-style-type: none"> <li>• Flash evaporator</li> </ul>
5.	<b>Molecular Biology Laboratory</b>	<ul style="list-style-type: none"> <li>• Deep freeze (-20 C) 3 nos</li> <li>• Autoclaves, hot air ovens, incubators, Refrigerator, etc</li> </ul>
6.	<b>Instrumentation Laboratory</b>	<ul style="list-style-type: none"> <li>• Micro-haemocrit</li> <li>• Microwave oven</li> <li>• Stereomicroscope</li> <li>• Electrophoresis unit, minimodels and power pack</li> <li>• Centrifuge</li> <li>• Microbial safety cabinets - 2 nos</li> <li>• Master cycler Pro S,</li> <li>• ELISA reader</li> <li>• Fluorescent microscope</li> <li>• Automatic microbial identification system</li> <li>• Rotary microtome</li> <li>• Automatic tissue processor</li> <li>• U-V vis spectrophotometer</li> <li>• Microbial fermentor</li> <li>• Autoclave Horizontal</li> <li>• Ultra freeze, -86 °C</li> <li>• Nucleic acid electrophoresis</li> </ul>



		<ul style="list-style-type: none"> <li>• Protein electrophoresis</li> <li>• Gel documentation system</li> <li>• Blood enzyme analyzer</li> <li>• RT-PCR</li> <li>• Cooling centrifuge</li> <li>• Analytical balance</li> <li>• Micro Centrifuge (Refrigerated)</li> <li>• Precision balance</li> </ul>
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3.	Dept. of Fisheries Resources Management	02 Laboratories as stated below
Sl. No.	Name of the Laboratories	Instruments Facilities
1.	UG Laboratory	<ul style="list-style-type: none"> <li>• Dissecting Microscope</li> </ul>
2.	PG and Ph. D Laboratory	<ul style="list-style-type: none"> <li>• Monocular Microscope</li> <li>• Multiple Trinocular Research Microscope</li> <li>• Deep fridge</li> </ul>

4.	Dept. of Aquaculture	02 Laboratories as stated below
Sl. No.	Name of the Laboratories	Instruments Facilities
1.	UG, PG and Ph. D Laboratory	<ul style="list-style-type: none"> <li>• Autoclave</li> </ul>
2.	Laboratory of Ornamental fish breeding	<ul style="list-style-type: none"> <li>• Refrigerator</li> <li>• Refrigerator</li> <li>• Projector</li> <li>• Double Distillation Plant</li> <li>• Microscope (2)</li> <li>• Microscope (1)</li> <li>• Spectrophotometer</li> <li>• Micro Biological incubator</li> <li>• Laminar flow</li> </ul>

5.	Dept. of Aquatic Environment Management	03 Laboratories as stated below
Sl. No.	Name of the Laboratories	Instruments Facilities
1.	UG Laboratory	<ul style="list-style-type: none"> <li>• Hot Air Oven-2</li> </ul>
2.	PG and Ph. D Laboratory	<ul style="list-style-type: none"> <li>• Water Bath with Shaker</li> </ul>
3.	Instrumentation Laboratory	<ul style="list-style-type: none"> <li>• Glass Distillation Plant</li> <li>• Water Bath</li> <li>• Hot Plate Rectangular</li> <li>• BOD Cooling Incubator</li> <li>• Rotary Shaker</li> <li>• Research Centrifuge</li> <li>• Spectrophotometer</li> <li>• Magnetic Stirrer Microscope</li> <li>• Weighing Machine</li> <li>• Conductivity Meter</li> <li>• pH Meter</li> <li>• Compound Microscope</li> </ul>

6.	Dept. of Fishery Economics & Statistics	01 Laboratories as stated below
Sl. No.	Name of the Laboratories	Instruments Facilities
1.	Sample Analysis Laboratory for UG, PG and Ph. D.	<ul style="list-style-type: none"> <li>• Computer</li> <li>• Printer</li> <li>• Camera</li> <li>• Projection system</li> </ul>



7.	Dept. of Fishery Extension	03 Laboratories as stated below
Sl. No.	Name of the Laboratories	Instruments Facilities
1.	Audio-Visual Laboratory for UG, PG and Ph. D.	<ul style="list-style-type: none"> <li>• Computer</li> <li>• Printer</li> <li>• Camera</li> <li>• Television</li> <li>• Display Boards</li> <li>• Projection system</li> </ul>

8.	Dept. of Fishery Engineering	01 Laboratories as stated below
Sl. No.	Name of the Laboratories	Instruments Facilities
1.	Fishing Gear Technology Cum Drawing Laboratory	<ul style="list-style-type: none"> <li>• Survey Chain survey</li> <li>• Surveying plane table and compass</li> </ul>
2.	Fishing Craft Technology Cum Navigation Laboratory	<ul style="list-style-type: none"> <li>• GPS</li> </ul>
3.	Refrigeration Cum Marine Engineering Laboratory	<ul style="list-style-type: none"> <li>• Drawing board &amp; tables</li> <li>• Models of wooden boats</li> <li>• Models of different commercial and traditional fishing craft</li> <li>• Models of both commercial and domestic refrigeration systems</li> </ul>

9.	Dept. of Fish Nutrition	02 Laboratories as stated below
Sl. No.	Name of the Laboratories	Instruments Facilities
1.	Laboratories for feed formulation and preparation	<ul style="list-style-type: none"> <li>• Newly Established department</li> <li>• Instruments Facilities are developed shortly</li> </ul>
2.	Feed Trial Laboratory.	<ul style="list-style-type: none"> <li>• Newly established department only for the Master's Programme. 1<sup>st</sup> batch of 02 students are admitted in the department during 2020-21 academic session. Laboratory facilities are developing phase-wise.</li> </ul>

#### 6.5.6.2. Research Contingency:

*A note on amount of research contingency for each department shall be provided. Whether it meets the students' demand?*

Details of Research Contingencies are mentioned below:

- Sanction of Research Grant from the university's own fund to the faculty members through a selection process.
- Financial and Administrative support to the faculty members to participate in the Research oriented Workshops organized by different Institutes of repute.
- Sanction of Research Contingency Grant to the Post Graduate students through a selection process.
- Motivating the faculty members to submit research projects to different Govt and Private funding agencies.
- Promotion of collaborative research activities by the faculty members funded by external Govt. and Private Agencies.

The University is exploring the possibility to sanction more fund for Research Contingency to meet up the demands of the students.



## 6.5.7. OUTCOME/OUTPUT:

### 6.5.7.1. Student Performance in National Examinations:

Provide detailed information in tabular form about student performance in JRF/SRF/NET/ARS/and other national examinations for last five years. Only those students receiving fellowships should be mentioned here.

Sl No.	Year	No of JRF Exam qualifier			No of SRF	No of ARS	ICAR-NET
		JFR Fellowship	Non-JRF Fellowship				
			CIFE	Others University			
1	2016-17	3	5	5	0	5	5
2	2017-18	3	3	0	0	0	4
3	2018-19	4	3	3	0	1	5
4	2019-20	2	5	0	0	0	12
5	2020-21	10			2	NA	NA

### 6.5.7.2. Students Placement Profile:

Provide detailed information in tabular form about student performance in ARS/and other national examinations/State level examinations or equivalent. Year wise placement profile shall be provided.

Sl. No.	Year	ARS	National examination (other than ARS)	State Govt. Sector	Private Sector
1	2016-17	5	UGC-NET - 2	69	3
2	2017-18	-	1	10	8
3	2018-19	1	2	5	10
4	2019-20	-	2	6	6
5	2020-21	-	-	-	5

**NB: The Public Service Commission, West Bengal has recent taken initiate to fill up 100 nos of posts of Fishery Extension Officers.**

### 6.5.7.3. Awards/Recognition/Certificates:

Provide information on awards/recognitions/certificates in tabular form for last five years separately for students and faculty.

#### Professional licensure and certifications, Honour and Awards received by faculty members:-

Sl. No.	Name of the recipient	Name of the honour/ award/ fellowship/ scholarship etc.	Offering organization	Field of remarkable activity
1	Dr. G. Dash, Associate Professor, Deptt. of Aquatic Animal Health	Best Teacher Award	WBUAFS	Fishery Sciences
2	Prof. S. K. Das, Professor, Dept. of Aquaculture	Best Organizer	Organizing Committee of International Conference : AgriFish, 2017 organised by WBUAFS	Aquaculture
3	Dr. T. J. Abraham, Professor, Dept. of Aquatic Animal Health	Best Teacher Award-2016 (University level)	West Bengal University of Animal and Fishery Sciences, Kolkata	Teaching, research and extension
		Best Teacher Award-	West Bengal	Teaching, research



		2016 (Faculty level)	University of Animal and Fishery Sciences, Kolkata	and extension
		Best Parent Award-2016	West Bengal University of Animal and Fishery Sciences, Kolkata	Parenting
		Outstanding Faculty of the Year-2017	The Education Expo TV, Research and Branding Company, Noida	5 <sup>th</sup> Faculty Branding Awards 2017
		Fellow, Zoological Society of India (FZSI), Bodh Gaya, Bihar	Zoological Society of India (FZSI), Bodh Gaya, Bihar	Contribution in the Fishery Sciences
		Excellent Researcher Award in Fishery Sciences-2017	PEARL Foundation, Madurai	PEARL Foundation Educational Excellence Awards to Higher Education in India 2017
		Outstanding Paper Award-2017	University of Kalyani and Department of Higher Education, Science and Technology and Biotechnology, Govt of West Bengal, Kolkata	Best oral presentation during the 2 <sup>nd</sup> Regional Science and Technology Congress (Southern Region), 2017
4	Prof. Somen Sahu	Life Time Achievement Award-2017 At Bengal Aqua Expo-2017	Surendranath Institute Of Aquaculture Training And Research.	Contribution in Fisheries Sciences-
		MatsyaSathi Samman-2018, At Bengal Aqua Expo-2018	Surendra Nath Institute of Aquaculture Training and Research, Contai Aqua Technicians Welfare Association, Dept. of Fisheries, Govt. of WB & Prawn farmers Association, WB.	Contribution towards the fish farmers community
		Marine Advisor	Department of Fisheries, Govt. of West Bengal	Development for the Marine fisheries of the state
		Expert Member	ICAR-CMFRI (Central Marine Fisheries Research Institute), Govt. of India	Establishment of Regional Research centre for the coastal people at Choddomile
		Expert Member	ESSO-INCOIS (Indian National Center for Ocean Information Services), Govt. of India	To develop forecasting system for Hilsa-shad fishery



5	Dr. Biswarup Saha, Associate Professor, Deptt. of Fishery Extension	Young Professional Award	Society of Community Mobilisation, Indian Agricultural Research Institute, New Delhi.	Extension Education
		ISEE Fellow Award	Indian Society of Extension Education, Indian Agricultural Research Institute, New Delhi.	Extension Education
6	Dr. Supratim Chowdhury, Associate Professor, Deptt. of Fish Processing Technology	Best Teacher Award (2016) Faculty of Fishery Sciences (<45 years)	WBUAFS	Teaching, Research, Extension
7	Dr. Samarendra Behera, Professor, Dept. of Fishery Resources Management	Outstanding Achievement award	Society for Scientific Development in Agriculture and Technology, Maharana Pratap University of Agriculture and Technology, Udaipur, Rajasthan	
8	Prof. S. K. Das, Professor, Dept. of Aquaculture	Best Teacher Gold Medal Award, Faculty of Fishery Sciences	West Bengal University of Animal and Fishery Sciences, Kolkata	Teaching and Research
		Recognition Award	Indian Society of Extension Education	Growth and development of Extension Education
9	Dr. T. J. Abraham, Professor, Dept. of Aquatic Animal Health	Aquatic Animal Health Specialist" under the Broad Subject Matter Area (BSMA) Committee	ICAR, New Delhi.	Fisheries Sciences to develop/ revise syllabi for the courses of masters and PhD degree in "Aquatic Animal Health"
10	Sri Prasenjit Mali, Assistant Professor	3rd Prize for best oral presentation in International Symposium and 8th Conference of Indian Meat Science Association (IMSACON-VIII)	Department of LPT, Faculty of Veterinary and Animal Sciences, WBUAFS, Kolkata,	Technological innovations in muscle food processing for nutritional security, quality and safety.
11	Dr. Biswarup Saha, Associate Professor, Deptt. of Fishery Extension	Recipient of Young Scientist Award in December, 2018 at 9th National Extension Education Congress-2018	Society of Extension Education, Agra on "Climate Smart Agricultural Technologies : Innovations and Interventions" held at CAPHET, Ranipool, Sikkim.	Extension Education



		Recipient of prestigious O.P. Dahma award for outstanding contribution in Extension education and research	Indian Society of Extension Education, Indian Agricultural Research Institute, New Delhi.	Extension Education
		Recipient of prestigious ISEE Recognition award for outstanding contribution in the fields of Extension Education	Indian Society of Extension Education, Indian Agricultural Research Institute, New Delhi.	Extension Education
12	Mr. Prasanta Murmu Assistant Professor	Best Oral Presentation Award (3rd) in International Symposium & 8th Conference of Indian Meat Science Association (IMSACON-VIII)	Indian Meat Science Association	Best Oral Presentation (3rd) for "Fish filleting waste use as a potential source of protein"
13	Prof. S. K. Das, Professor, Dept. of Aquaculture	Felicitated as Chairman of a Session in the International Conference on Ecological Intensification	Institut De Recherche Pour Le Développement, France	Aquaculture
14	Prof. T. J. Abraham, Professor, Dept. of Aquatic Animal Health	Research Excellence Award-2020	The Institute of Scholars (InSc), Bengaluru - 560091, Karnataka	Research in Fisheries Science and Aquatic Animal Health
15	Prof. Gadadhar Dash, Professor, Dept. of Aquatic Animal Health	Best Parenting Award - 2019	West Bengal University of Animal and Fishery Sciences (WBUAFS)	Activity of the parenthood.
16	Dr. Swarnadyuti Nath, Assistant Professor, Dept. of Fish Processing Technology	Best Oral Presentation	National Conference on Doubling Farmers Income for Sustainable and Harmonious Agriculture 'DISHA 2019', Birsa Agriculture University, Ranchi, Jharkhand	Fish Processing Technology
		IASR Excellence Award – 2019	International Research Conference on 'Recent Trends in Life Sciences' held at Sidhu Kanhu Birsha University (SKBU), Purulia, West Bengal	Fish Processing Technology
		Best Oral Presentation Award	International Conference on Animal Nutrition 2019 (INCAN 2019)	Fish Processing Technology



			on 'Nutritional Strategies for Improving Farm Profitability and Clean Animal Production' held at Biswa Bangla Convention Centre, Kolkata.	
		Excellence in Teaching Award (Young Teacher Award)	3rd National Conference on Promoting and Reinvigorating Agri-Horti, Technological Innovations, 'PRAGATI 2019' held at Dhanbad, Jharkhand.	Teaching
17	Dr. P. N. Chatterjee, Assistant Professor, Deptt of Animal Nutrition	Outstanding Paper Presentation Award	DST, Govt. of West Bengal	Nano-materials in Animal Nutrition
		University Best Teacher Award	WBUAFS, Kolkata	Best Teacher of University
		Best Teacher Award F/O. VAS	WBUAFS, Kolkata	Best Teacher of F/O. VAS
		Outstanding Presentation Award	Dept. of Science, Technology and Biotechnology, Govt. of West Bengal	Research
		Dr. Rishendra Verma Young Scientist Award	Indian Association for Advancement of Veterinary Research, IVRI, Izatnagar	Research
		Best Oral Presentation Award	Animal Nutrition Association of India (BASU - Patna Chapter)	Research

#### Professional licensure and certifications, Honour and Awards received by the students:-

##### List of the students awarded Gold Medals:

##### **Year – 2017-18**

- **University's Gold Medal.**  
[for securing Highest Marks in B.F.Sc.]  
- **Arnab Bandyopadhyay**
- **Smt. Lakshmi Das & Sri Kasi Nath Das Gold Medal**  
[for securing Highest marks in B.F.Sc.]  
- **Arnab Bandyopadhyay**
- **Smt. Manju Biswas & K. P. Biswas Gold Medal**  
[for securing Highest marks in Fishery Engineering in B.F.Sc.]  
- **Tenji Pem Bhutia**



### **Year 2018-19**

- **University's Gold Medal.**  
[for securing Highest Marks in B.F.Sc.]
  - **Krishna Pada Singha**
- **Smt. Lakshmi Das & Sri Kasi Nath Das Gold Medal**  
[for securing Highest marks in B.F.Sc.]
  - **Krishna Pada Singha**
- **Smt. Manju Biswas & K. P. Biswas Gold Medal**  
[for securing Highest marks in Fishery Engineering in B.F.Sc.]
  - **Krishna Pada Singha**

### **Year 2019-20 and 2020-21**

Due. Since Convocation was not held.

#### **6.5.7.4. Employability:**

*What are the set of achievements such as skills, understandings and personal attributes that make College students more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy? Provide one page note on the subjects.*

The Achievements are:-

- 1) Professional skills of the students has been enhanced**
- 2) Logical understanding of the students in respect of relevant functional areas has been enhanced.**
- 3) Personality development of the Students has been made to make them confident, self reliant and presentable before recruitment boards.**

The ultimate goal of any student after graduation/post graduation is either engage in self-employment as entrepreneur or get employed in private or public sector industries or organizations. Imparting skills to learners based on above specific job needs is mandatory of any college/institution. Graduate students right from the beginning are taught theoretically and practical skills on different areas milk procurement, Processing, marketing and distribution, management, entrepreneurial development, interpersonal relationships, effective communications skills etc. till the end of the degree programme. Subject courses are designed in accordance with V Deans' committee report giving more importance to practical skills in all areas of Fishery Science.

Placement Cell of the Institute is taking all efforts to improve the employability skill of the students. The students are trained in various skill by the professional expert. One Faculty member conducts many sessions on preparation of Resume, participation in interview and group discussion. The Academic counselors also periodically interact with the students and motivate them to prepare for competitive exams- quantities analysis, reasoning ,language skill etc are invited to conduct special sessions to students to improve their skill. Alumni also regularly interact with students and share their experience. As a consequence of the sustained efforts of the faculty members in the college and the own initiate of



the students several alumni are successfully serving the various walks of life and brought good name to the Institution.

#### **6.5.9. CERTIFICATE :**

I, Prof. Bipul Kumar Das, Dean, Faculty of Fishery Sciences, hereby certify that the information contained in Sections 6.4 and Section 6.5.1 to 6.5.7.4 are furnished as per the records available in the college and degree awarding university.

Place: Kolkata  
Date: 29.01.2021

  
29/01/2021  
Prof. BIPUL KUMAR DAS  
Dean  
Faculty of Fishery Sciences  
W. B. University of Animal & Fishery Sciences  
Chakgaria, Kolkata-700 094



# Self Study Report for the Faculty of Dairy Technology

## 6.5.1. COLLEGE / FACULTY ADMINISTRATION

### 6.5.1.1. Faculty Dean's Office Establishment:

*Whether Dean's post has been sanctioned by the appropriate authority as per ICAR Model Act/UGC guidelines? Date of selection of present Dean, mode of selection, tenure etc. shall be mentioned. Clearly mention the staff and infrastructure/ facilities available in the Dean's Secretariat.*

Whether Dean's post has been sanctioned by the appropriate authority as per ICAR Model Act/UGC guidelines?	The post of Dean, Faculty of Dairy Technology has been sanctioned by the Govt. of West Bengal which is in consonance with the ICAR Model Act / UGC guidelines.
Date of selection of present Dean	01-04-2014 (on completion 4 years tenure, Prof. Maity has been functioning as Dean (Actg) till date)
Mode of selection of Dean	Direct recruitment
Tenure of Dean	Four (4) years

#### Dean's Secretariat

##### Infrastructure/ facilities available in the Dean's Secretariat

Sl. No.	Item	Qty (No)
1	Executive Revolving chair in conference hall	20
2	Cushions chair in seminar Hall	200
3	Still Chair in Examination Hall	70
4	Dean Table	1
5	Visitors Chair	12
6	Sofa set with tea-poy	1
7	Storage cabinet	4
8	AC (Fixed)	20
9	Wall side cabinet	4
10	RO water filter	4
11	Steel Almirah	12
12	'U' Shaped meeting table	1
13	LCD Projector	6
14	Computer Set	4
15	Hp printer cum fax	4
16	Canon Colour Xerox machine	1
17	Intercom telephone	12
18	CC TV	1
19	CC camera	12
20	Student Desk in UG Smart Class Room	44
21	Student Desk in UG-1 Class Room	44
22	Student Desk in UG-2 Class Room	44
23	Student Desk in UG-3Class Room	44

##### Staff of Dean's Secretariat

Sl. No.	Name of Department	Designation	Group	Man in position
1	Dean, Faculty of Dairy Technology	Junior Assistant	C	1
		Cash Assistant	C	1
		Dairy Overseer	C	0
		Office Attendant Gr. II	D	0



		Laboratory Attendant	D	1
		Driver-cum-Mechanic	D	0
		Farash	D	1
		Durwan	D	0
		Mali	D	0
		Sweeper	D	2

**NB: Vacancy arisen due to retirement / death will be filled up shortly.**

#### **6.5.1.2. Monitoring Mechanism for Quality Education (On-Line)**

*Whether the College is having an internal quality assurance system, with appropriate structure and processes, and with enough flexibility to meet the diverse needs of the stakeholders which is required for planning, guiding and monitoring quality assurance and quality enhancement activities of the Colleges. How effectively monitoring of teaching, research and extension across the departments is being conducted, and mention the impact of monitoring on the outcome of the College with reference to students' excelling in academics, research and extracurricular activities.*

#### **Whether the Faculty / College is having an internal quality assurance system?**

The university has an internal quality assurance system, with appropriate structure and processes, and with enough flexibility to meet the diverse needs of the stakeholders which is required for planning, guiding and monitoring quality assurance and quality enhancement activities of the Faculty.

#### **How effectively monitoring of teaching, research and extension across the departments is being conducted?**

##### **Teaching :**

The registration of courses for each semester is undertaken through online mode. The conduct of theory and practical class are time to time reviewed by the Heads of the Departments and the Dean of the Faculty.

##### **Undergraduate degree programme:**

- 1) Mid semester, Practical and Theory examinations are conducted to assess the students.
- 2) Assignments are given to the students in each course related to the curriculum.
- 3) Mock examinations are conducted for the students during the 1<sup>st</sup> year.
- 4) Feedback on course content and teaching is taken from students and the same is acted upon.
- 5) Academic Counselling is extended for a group of students in batches by the teachers.
- 6) Heads of the Departments meet the respective batches students time to time to coordinate the activities.

##### **Postgraduate and Doctoral degree programme:**

- 1) Periodic assignments, term paper, presentation of advancements in a particular course curriculum is done by the students.
- 2) The qualifying examination is conducted at the end of the course work to evaluate students understanding about the various courses.
- 3) The theses submitted by the Master Degree and PhD students are also evaluated by external experts.



- 4) The final thesis viva-voce for the Doctoral programme is also conducted through public defence mode as and when required.
- 5) Each registered course of Master Degree and Doctoral programme is evaluated by the students of a particular batch about the content and its delivery.

### **Research**

#### **Student Research:**

- 1) Presentation for outline of research work and finalization is done by the Advisory Committee with the inputs from the Heads of the Departments and Dean.
- 2) The Student Research work is monitored by the Chairman of the Advisory Committee / Supervisor.
- 3) The periodical review of the research work of all Master Degree and Doctoral students by the Dean of the faculty.
- 4) Publications of Master Degree and Doctoral research work in well rated journals is appreciated.

#### **Faculty Research**

- 1) The research projects are submitted to the Directorate of Research, Extension and Farms for initial scrutiny and recommendation before final submission.
- 2) The progress of each research project is periodically monitored and reviewed.
- 3) The final submission of report on project is also reviewed.

### **Extension**

It is mandatory for the teachers to take part in the extension activities as and when organized by the Dean of the Faculty and the Directorate of Research, Extension and Farms.

Field visit by the teachers on need basis as and when asked for by the university / State Govt. to diagnose the problem and provide appropriate recommendations.

Participation in training programme organized by the university for the farmers as experts is mandatory and review of such participation is done especially during the submission of the Self Assessment Report for promotion under Career Advancement.

### **Impact of monitoring on students excellence in academic, research, and extracurricular activities**

#### **Academic**

- 1) Higher academic performance of students with improved OGPA
- 2) Improved enrolment of students in post graduate programme
- 3) Participation and selection for higher education in National and International Institute.
- 4) Participation in competitive examinations for jobs and success thereof.

#### **Research**

- 1) Publication of research articles in reputed journals by the students and faculty members.
- 2) Receipt the sanction of research projects from the Govt. / Private Agencies.
- 3) Facilitated receipt of Best Student Award.



### Extracurricular

- 1) Participation in the NSS programmes.
- 2) Participation and excelling in the Agri Sports / Agricultural Meets organised by ICAR.
- 3) Participation and excelling in the Cultural Meets / Sports Meets organised by AIU.

#### **6.5.1.3. CC/Board of Studies:**

*Whether the CC in the Department level and Board of Studies at the College is in place? The composition of the BoS and date of conduct of meetings for last five years and major recommendations made by the BoS should be given in tabular form.*

There is a separate board of studies for each Department Viz Department of Dairy Technology, Department of Dairy Engineering, Department of Dairy Chemistry, Department of Dairy Microbiology and Department of Dairy Business Management for Under Graduate and post graduate and Ph. D level. The composition, powers and functions of the board of studies is prescribed in the statutes is detailed below.

#### **1. Composition of the Board of Studies for each Department**

- The Head of the Department is the Chairman and Convener of the Board of Studies.
- Each Board of Studies consists of all whole-time teachers of the Department concerned.

#### **2. The functions of Board of Studies**

- To propose to the Faculty concerned the courses of study and curriculum for various programmes of instructions offered by the concerned Faculty.
- To make proposal to Faculty Council for Post-Graduate and Under-graduate studies for the programme for inter-disciplinary study and research.
- To review the academic programme of the Department from time to time and to propose the method of redressal of the problems if any, to the Faculty Council for approval.
- To consider any other matter referred to it by the Faculty Council, the Executive Council or Vice- Chancellor, as the case may be.

#### **Date and recommendations of board of studies from 2016-17 to 2020-21**

##### **A. Department of Dairy Microbiology**

Sr. No.	Year	Date	Recommendations
1	2016-17	29.12.2017	<ol style="list-style-type: none"><li>1) Allotment of Dairy Microbiology courses of B. Tech (DT) and M. Tech. (DM)</li><li>2) Allotment of students will be based on option and merit list of the students in 1<sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation.</li><li>3) BOS has recommended the name of Prof. Surajit Mandal for inclusion in faculty list for guiding Master and Doctoral students from 2017-18.</li><li>4) All the Labs should be in open conditions starting from 11 a.m. to 5 p.m.</li><li>5) Allocation of work related to laboratory work amongst the member of the department.</li></ol>
2	2018-19	11.07.2019	<ol style="list-style-type: none"><li>1) Allotment of Dairy Microbiology courses of B. Tech (DT) and M. Tech. (DM)</li></ol>



			<p>2) or UG program, syllabus to be provided at the beginning of the session mentioning tentative time &amp; syllabus of the mid-term examination with text book references.</p> <p>3) For Master and Doctoral programme time table, attendance sheet, and detailed syllabus along with text book reference to be provided.</p> <p>4) Major, minor and supportive courses for Master and Doctoral Programme in Dairy Microbiology were suggested.</p>
3	2018-19	25.07.2019	1) The modification/ change title of M. Tech. Dissertation of Ms. Bhagyshree Das, Registration no. 5194 of 201718 modified/suggested by her advisory committee has been approved by the Divisional Board of Studies.
4	2020-21	28.08.2020	1) Allotment of M. Tech. students taken admission during 2019-2020 for dissertation work
5	2020-21	06.01.2021	<p>1) Allotment of Dairy Microbiology courses of B. Tech (DT) and M. Tech. (DM)</p> <p>2) Allotment of PhD students taken admission during 2019-2020 for dissertation work</p>

#### B. Department of Dairy Technology

Sl. No.	Academic Year	Date	Recommendations
1	2016-17	04.04.2016	1) Re-employment of Prof. M. K. Sanyal
		08.07.2016	<p>1) Discussion on the application of Sri Supriya Datta (Office Attendant Gr. II)</p> <p>2) Purchase of items during the year 2016-2017</p>
		12.09.2016	<p>1) Distribution of UG and PG courses</p> <p>2) Allotment of guide to PG student</p>
		23.12.2016	<p>1) Re-employment of Prof. D.C. Sen</p> <p>2) Distribution of UG and PG courses</p>
2	2017-18	03.08.2017	<p>1) Distribution of PG courses</p> <p>2) Selection of the chairperson</p> <p>3) Students Advisory Committee</p>
3	2018-19	16.04.2018	<p>1) Course distribution for odd semester at UG level</p> <p>2) Planning for the development of the department for the year 2018-2019</p>
		06.08.2018	<p>1) Selection of chairperson, students Advisory Committee</p> <p>2) ICAR Purchase of items for the year 2018-2019</p>
		16.01.2019	1) Distribution of UG and PG courses
4	2019-2020	12.04.2019	2) Consideration of Dr. Anindita Debnath as Ph.D. Guide
		16.08.2019	1) Selection of chairperson, students Advisory Committee
		24.10.2019	<p>1) Finalizing the evaluation method of experimental learning course</p> <p>2) Course distribution for odd semester at UG and PG level</p>
		06.01.2020	1) Course distribution for even semester at UG and PG level
5	2020-2021	14.07.2020	1) Course distribution for odd semester at UG and PG



			level
			2) Selection of chairperson, students Advisory Committee

### C. Department of Dairy Engineering

Sl. No.	Year	Date	Recommendations
1	2016-17	19.10.2016	<ol style="list-style-type: none"> <li>1) It is resolved that list of experts for both UG and PG was prepared in consultation with the members of B.O.S. and the same will be submitted to the Controller of Examination for necessary action</li> <li>2) Practical classes for Work Shop Technology will be conducted by Shri Swarup Mukherjee, Guest Teacher. He will be assisted by hired skilled technical person</li> </ol>
2	2018-19	29.08.2018	<ol style="list-style-type: none"> <li>1) Distribution of PG courses among teachers as follows: Dr. Prasun Maiti : DE-512;Dr. Subrata Kr. Bag : DE-513;Dr. Pradip Kr. Roy : DE-511, DE-511, DE-412;Mr. Kumaresh Halder: DE- 515;</li> <li>2) For course no DE-591 and DE-599, decision will be taken after declaration of result.</li> </ol>
		22.01.2019	<ol style="list-style-type: none"> <li>1) Miss BanashreeNaskar, PG student of 2017-18 will do her Master's research work under the supervision of Dr. Prasun Maiti. Mr. Abhilas Rai, PG student of 2017-18 is not needed any guide as he has not continued the course since 3<sup>rd</sup> sem.</li> <li>2) It is resolved that the Ph.D. programme may be inducted in the department as sufficient no of teachers are engaged in the department.</li> </ol>
3	2019-20	04.04.2019	<ol style="list-style-type: none"> <li>1) Distribution of UG courses among teachers as follows;;Dr. Prasun Maiti : DE-125, DE-126;Dr. Subrata Kr. Bag : DE-2410, DE-3613, DE-3614, DE-3615;Dr. Pradip Kr. Roy : DE-127, DE-124;Mr. Kumaresh Halder: DE-2410, DE-3613, DE-3614, DE-3615</li> <li>2) The complete work plan of Miss Banashree Naskar has to be discussed first in detail then the other financial matters such as expenses for procuring raw materials, lab. testing expenses etc. may be planned properly But all such planning has to be completed before 08<sup>th</sup> April, 2019 so that her thesis work will not be hampered.</li> <li>3) Class routine for M.Tech. students (2018-19) has to be prepared . Mr. Kumaresh Halder said a well set up PG class room is very much needed in the department. So, the office space in Computer Lab may be utilized.</li> </ol>
		20.08.2019	<ol style="list-style-type: none"> <li>1) It is resolved that the programme in the department may be inducted from next session (2020-21) as the sufficient no of teachers are engaged in this department. The said course syllabi has already been approved and printed in Academic rules &amp; Regulation (for PG and PhD) of the Faculty of Dairy Technology</li> <li>2) It is resolved that the name of Mr. Kumaresh Halder, Assistant Professor will have to include as the guide M.tech. Student.</li> <li>3) It is resolved that the following teachers will be the guide of M.Tech. (2018-19) students as follows:Dr. Subrata Kr. Bag , Professor: Sudipta Mondal;Dr. Pradip Kr. Roy, Assoc. Professor: Sagar Joshi</li> </ol>
4	2020-21	21.06.2020	<ol style="list-style-type: none"> <li>1) Due to maintain COVID protocol, the academic activities was hampered since March,2020. So for the well being of the students of UG, PG , the online classes are to be started.</li> </ol>



			<p>2) As per requirement of the Registrar, WBUAFS, the proposal of purchase, repairing requirements are being prepared and will be submitted through online.</p> <p>3) The computer Lab is to be handed over to the H.O.D., Department of Dairy Business Management and the hand over process will be held after restoration of physical activities</p>
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#### E. Department of Dairy Chemistry

Sl. No.	Year	Date	Recommendations
1	2016-17	12.4.16	1) The external list for UG examinations of the department has been finalized
		22.6.2016	1) Re-employment of Prof. P.K. Ghatak for one more term is approved (Third term)
2	2017-18	09.01.18	1) Distribution of UG Courses for the next semester
3	2018-19	09.01.19	<p>1) Distribution of UG Courses for the next even semester</p> <p>2) An appeal has been placed to Vice Chancellor, WBUAFS through proper channel to make necessary provision for adequate teachers in the department so that the classes can be conducted regularly and effectively as Dr. C. Chakraborty, Associate Professor presently enjoying Maternity Leave</p>
		19.03.19	1) Proposal may place to the Vice Chancellor, WBUAFS with a request to appoint a Guest Faculty for smooth functioning of the academic programmes of the department as Dr. C. Chakraborty, Associate Professor presently enjoying Maternity Leave
4	2019-20	02.07.19	1) Distribution of UG Courses for the next odd semester
		06.01.20	1) Distribution of UG Courses for the next even semester
		31.07.20	1) Distribution of UG Courses for the next odd semester

#### E. Department of Dairy Business Management

Sl. No.	Year	Date and time	Recommendations
1.	2019-20	01.11.2019	1) Purchasing of furniture, stationery items etc for newly established department. The Dairy Business Management department came into full fledged functioning after the recruitment of 1 Professor, 1 Associate Professor and 1 Assistant Professor since )October, 2019. Therefore, a proposal is placed before the Registrar for the purchase of furniture, stationery items etc for the smooth running of the newly established department.
		19.12.2019	1) Allotment of under-graduate courses: Distribution of UG courses among teachers has been finalized-Dr. Malay Kumar Mandal (Milk production Management and Dairy Development, DBM-111), Mr. Avijit Sarkar (Communication Skills,DBM-112; Marketing Management and International Trade, DBM-358), Dr. Reshma Sinha Ray ( Environmental Studies, DBM-114; ICT in dairy industry and operation research, DBM-357)
		07.01.2020	1) Submission of Research projects : A research project entitled "A study on the trade performance of Dairy sector and effects of multilateral trade agreement: Evidence from India" was submitted to the DREF, WBUAFS .
		12.02.2020	1) Handed over the computer Lab to the Department of



			Dairy Business Management: Presently, the computer laboratory of the Faculty is functioning under the supervision of Dairy Engineering department. As the computer course will be start very soon in the department therefore proposal has been given to the Head of the Department of Dairy Engineering to hand over the laboratory to the DBM department.
		02.03.2020	1) Engagement of Guest Teacher: As recommended by BOS members a proposal has been submitted to Hon'ble Vice-Chancellor of the University for the engagement of a guest teacher for the undergraduate course of Computer Application and software packages ( DBM-113).
6.	2020-21	17.05.2020	1) Allotment of under-graduate courses: Distribution of UG courses among teachers has been finalized-Dr. Malay Kumar Mandal ( Dairy Extension Education,DBM-246), Mr. Avijit Sarkar (Entrepreneurship development and industrial consultancy, DBM-489; Financial management and cost accounting, DBM-4810), Dr. Reshma Sinha Ray ( Industrial statistics, DBM- 4811), Dr. Nabanita Ganguli ( Computer application and software packages, DBM-113).

#### 6.5.1.4. Anti-Ragging Cell:

*In pursuance to the Judgment of the Hon'ble Supreme Court of India dated 08.05.2009 in Civil Appeal No. 887/2009, the University Grants Commission has framed "UGC Regulations on curbing the menace of ragging in higher educational institutions, 2009" which have been notified on 4th July, 2009 in the Gazette of India. Does the College follow this regulation and subsequent guidelines issued in the matter in letter and spirit? Give details.*

The Anti Ragging Cell has been constituted as per guidelines of the University Grants Commission. Apart from the Anti Ragging Cell constituted by the university at the university level to curve the menace of ragging, there is a faculty level Anti Ragging Squad to assist Anti Ragging Cell details of which are mentioned below:

#### **Anti-Ragging Squad for the Faculty of Dairy Technology (Mohanpur Campus, Nadia):**

- (i) In-Charge Students' Welfare, Faculty of Dairy Technology as the Head of the Squad
- (ii) Provost of all the Students Hostels at Mohanpur campus,
- (iii) Teacher members – two members nominated by the Dean, Faculty of Dairy Technology amongst them one must be Women Teacher,
- (iv) Non-teaching members – two non-teaching members to be nominated by the Dean, Faculty of Dairy Technology, who are staying at the Mohanpur campus.

The above Squad is entrusted with the task of organizing surprise visits to hostels, canteens, library etc. with or without notice of the students to keep strict vigil and for on the spot disposal of ragging complaints, if any etc. The Squad members should meet the present students preferably in the hostels and also empowered to stay in the hostels at night for a period of 15-20 days or till Freshers' Welcome is over at the respective campuses as a part of anti-ragging campaign. The Squad Head along with other members takes all possible efforts in close liaison with the Anti-Ragging Monitoring Cell to prevent ragging activities inside the campuses and to sensitize the senior students as well. The Head of Squad submits the Action Taken Report (ATR) on anti-ragging activities undertaken in the Faculty of



Fishery Sciences after one month of admission of students in each session to the Registrar and Chairman of Anti-Ragging Monitoring Cell and continue the strict vigil in this respect.

**Year wise date of the meetings:**

2016-17	2017-18	2018-19	2019-20	2020-21
06.09.2016	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

**Number of complaints**

S.N.	Subject	2016-17	2017-18	2018-19	2019-20	2020-21
1.	No. of complaint	-	-	-	-	-
2.	complaint disposed	-	-	-	-	-
3.	no of cases pending	-	-	-	-	-
4.	no of workshop	01	01	01	01	-

**6.5.1.5. Biological Waste Disposal Facility:**

*Whether wastes (chemical, biological, radioactive, universal, and recyclable) are generated by a variety of research, clinical, service, maintenance, and cleaning operations at the College level? If yes, then mention the disposal mechanism being adopted as per the government guidelines.*

**Whether wastes (chemical, biological, radioactive, universal, and recyclable) are generated by a variety of research, clinical, service, maintenance, and cleaning operations at the College level?**

**YES.**

**If yes, then mention the disposal mechanism being adopted as per the government guidelines.**

- Chemical, Biological and recyclable wastes generated through a variety of practical classes, research activities, maintenance and cleaning operation at the college level have been disposed of systematically with the help of Civic Bodies.
- Field wastes are converted to compost. Food waste is converted to compost.
- The laboratory chemical wastes are disposed of by burying deep into the soil.
- Waste bins and Dust bins are maintained at regularly.
- An Effluent Treatment Plant is under construction for the Dairy Plant of the Faculty which will be ready shortly.

**6.5.1.6. Institutional Ethics Committee For Experiment on Animals;**

*Whether the institute/College is following CPCSEA guidelines and constituted an Institutional Animal Ethics Committee (IAEC), get their animals house facilities inspected and get their project cleared by CPCSEA and IAEC before commencing them? The College should make statement that it is adhering all guidelines in the matter.*

Not applicable for faculty of Dairy Technology.



#### 6.5.1.7. Committee for Prevention of Sexual Harassment of Women at Work Places:

*Does the institution is adhering the sexual harassment of women at workplace (Prevention, Prohibition and Redressal Act, 2013) in letter and spirit. Mention the constitution of sexual harassment committees and date of proceedings conducted in last five years in tabular form.*

**Does the institution is adhering the sexual harassment of women at workplace (Prevention, Prohibition and Redressal Act, 2013) in letter and spirit.**

**YES.** Sexual Harassment at workplace violates the rights and opportunities of women to seek, obtain and hold employment without discrimination. West Bengal University of Animal & Fishery Sciences is always alert to provide a safe work environment to their women employees and include both preventive and remedial measures to make the work environment safe for women employees.

#### **Constitution of sexual harassment committees:**

There exists a committee for this purpose in the University since 2004 as per VISHAKHA guidelines promulgated by the Supreme Court of India, which is reconstituted from time-to-time. The latest committee was reconstituted vide Notification No. WBUAFS/Admn/ NC-2/768 dt. 27/03/2019 with 10 members as follows :

Name & Designation	
1. Smt. Aparajita Biswas, Computer Programmer, DREF, WBUAFS	Presiding Officer
2. Programme Officer, Sanhita (NGO)	Member
3. Dr. Satabdi Das, Scientist, DREF, WBUAFS	Member
4. Prof. Kalyani Roy, Professor, Dept. of Gynaecology & Obstetrics, F/VAS	Member
5. Mrs. Papri Pal, Lab Attndnt.(Gr-III),Dept.of Aquaculture, F/FSc., WBUAFS	Member
6. Mrs.Koumari Chowdhuri, Tech. Asstt.,F/DT,WBUAFS	Member
7. Mr.Anuj Kumar Chakraborty,Secretary Faculty Council, WBUAFS	Member
8. Prof. S. Batabyal, Dean of Students Welfare,WBUAFS	Member
9. In-Charge Students' Welfare, Faculty of VAS,WBUAFS	Member
10.In-Charge Students' Welfare, Faculty of DT,WBUAFS	Member
11.In-Charge Students' Welfare, Faculty of F Sc., WBUAFS	Member

**NB: The above committee has been constituted centrally at the university level which caters the three faculties of the university.**

#### **Report of the committee constituted for Prevention of Sexual Harassment of Women at Work Places last five years starting from 2016-17 to 2020-21 (Case related to the Faculty of Dairy Technology):**

Sl. No.	Year	No. of cases received	No. of Meetings held	Meeting Date	No. of cases pending
1.	2016-17	Nil	Nil	NA	Nil
2.	2017-18	Nil	Nil	NA	Nil
3.	2018-19	Nil	Nil	NA	Nil
4.	2019-20	Nil	Nil	NA	Nil
5.	2020-21*	Nil	Nil	NA	Nil

\* As on 31.12.2020



## 6.5.2. FACULTY

### 6.5.2.1. Faculty Strength (As on 31.12.2020)

*Mention the Faculty position (both in sanctioned and in-position) at the College / Faculty.*

Departments	Faculty Position Sanctioned by the Govt. as per ICAR/UGC/VCI			Faculty Position filled		
	Professor	Associate Professor	Assistant Professor	Professor	Associate Professor	Assistant Professor
Department of Dairy Microbiology	1	1	2	1	1	2
Department of Dairy Chemistry	1	1	2	1	1	0
Department of Dairy Engineering	1	1	4	1	1	2
Department of Dairy Technology	1	1	3	0	0	3
Department of Dairy Business Management	1	1	2	1	1	1

**NB:** A part from the teaching posts mentioned above Guest Teachers / Adjunct Faculty / Contractual Teachers also take part in the academic programmes. The university is exploring the possibility to initiate the recruitment process of more teachers against sanctioned posts.

### 6.5.2.2 Faculty Profile (Department Wise):

*Mention department wise faculty profile in tabular form and mention whether present profile is sufficient to meet the academic requirement of the College*

#### Faculty Profile (Department wise)

Department	Name of Teacher	Designation	Qualification	Sufficient for current academic programme?
Dairy Microbiology	Dr T. K. Maity	Professor & Dean (Actg)	M.Sc, Ph.D	Yes
	Dr. S. Mandal	Professor	M.Sc, Ph.D	
	Dr. L. Halder	Associate Professor	M.Sc, Ph.D	
	Sri A.K. Barman	Assistant Professor	M.Sc,	
Dairy Chemistry	Dr. P. R. Ray	Professor	M. Sc. Ph.D.	Yes
	Dr. C. Chakraborty	Associate Professor	M. Sc. Ph.D.	
	Dr Asitava Sur	Part Time Teacher	M.Sc, Ph.D	
Dairy Engineering	Dr. P. Maiti	Professor	M.Sc. Ph.D.	Yes
	Dr.S.K. Bag	Professor	M.Tech., Ph.D.	
	Dr. P. K. Roy	Associate Professor	M.Tech., Ph.D.	
	Dr. K. Halder	Assistant Professor	M.Tech.	
Dairy Technology	Dr Anindita Debnath	Assistant Professor	M.Tech., Ph.D.	Yes
	Dr Partha Pratim Debnath	Assistant Professor	M.Tech., Ph.D.	
	Sri Kunthal Roy	Assistant Professor	M.Tech.	
	Sri Goutam Kr Das	Full Time Teacher (Contractual)	M.Sc	
Dairy Business Management	Dr Malay Kr Mandal	Professor	M.Sc.,Ph.D	Yes
	Sri Avijit Sarkar	Associate Professor	M.Sc.,PGDM	
	Dr Reshma Sinharoy	Assistant Professor	M.Sc.,Ph.D	
	Dr Nabanita Ganguli	Part Time Teacher	M.Tech ,Ph.D	



### 6.5.2.3. Credentials of the Faculty

*Whether the institution has employed competent faculty members qualified to accomplish the mission and goals of the institution? Give the highest qualification received by each faculty, related work experiences in the field, professional licensure and certifications, honors and awards, continuous documented excellence in teaching, or other demonstrated competencies and achievements that contribute to effective teaching and student learning outcomes.*

**Whether the institution has employed competent faculty members qualified to accomplish the mission and goals of the institution?**

**YES.**

**Give the highest qualification received by each faculty, related work experiences in the field, professional licensure and certifications, honors and awards, continuous documented excellence in teaching, or other demonstrated competencies and achievements that contribute to effective teaching and student learning outcomes.**

**Details Mentioned below:-**

Sl. No	Name of the Faculty	Designation	Department	Highest Degree Obtained	Related work Experience ( in years)
01	Dr Tarun Kanti Maity	Dean & Professor	Dairy Microbiology	Ph.D	29
02	Dr Surajit Mandal	Professor	Dairy Microbiology	Ph.D	18
03	Dr. Lopamudra Halder	Associate Professor	Dairy Microbiology	Ph.D	12
04	Sri Amit Kr Barman	Assistant Professor	Dairy Microbiology	M.Sc	7
05	Dr. Prasun Maiti	Professor	Dairy Engineering	Ph.D	34
06	Dr. Subrata Bag	Professor	Dairy Engineering	Ph.D	21
07	Dr. Pradip Kr Roy	Associate Professor	Dairy Engineering	Ph.D	21
08	Sri Kumeresh Halder	Assistant Professor	Dairy Engineering	M.Tech	07
09	Dr. Anindita Debnath	Assistant Professor	Dairy Technology	Ph.D	03
10	Dr Parthapratiim Debnath	Assistant Professor	Dairy Technology	Ph.D	02
11	Sri Kuntal Roy	Assistant Professor	Dairy Technology	M.Tech	02
12	Sri Goutam Kr Das	Full Time Teacher (Contractual)	Dairy Technology	M.Sc	02
13	Dr. Chaitali Chakraborty	Associate Professor	Dairy Chemistry	Ph.D	07
14	Dr. Asitava Sur	Full Time Teacher (Contractual)		Ph.D	25
15	Dr. Malay Kr Mandal	Professor	Dairy Business Management	Ph.D	20
16	Sri Avijit Sarkar	Associate Professor	Dairy Business Management	PGDM	02
17	Dr. Reshma Sinharoy	Assistant Professor	Dairy Business Management	Ph.D	02



18	Dr. Nabanita Ganguli	Part Time Teacher	Dairy Business Management	Ph.D	07
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**Details of honours /awards /fellowships /scholarship/recognitions etc. offered by organization of State/National/International repute received by the teachers:**

**Department of Dairy Microbiology**

Sl. No.	Name of the recipient	Name of the honour/ award/ fellowship / scholarship etc.	Offering Organization	Field of achievement
1	Prof. Surajit Mandal, Professor, Dept. of Dairy Microbiology	Associate Fellow	National Academy of Dairy Science, India (NADSI)	Achievements in dairy science and technology
		Best Oral Presentation Award	College of Dairy Technology, Sri Venkateswara Veterinary University, Tirupati (Andhra Pradesh)	Oral Presentation in National Conference on "Challenges and Opportunities for the New Generation Dairy Foods in India", on 'Bioprocess for stable and active probiotic Lactobacillus spp.'
2	Dr. Lopamudra Halder Associate Professor, Dept. of Dairy Microbiology	Best Oral Presentation Award (1 <sup>st</sup> )	Jointly by Krishi Sanskriti and BCKV	Oral Presentation in International Conference on Agriculture and Allied Sciences on 'Efficacy of Probiotic Bacillus coagulans for production of milk based dried formulae'
		Best Oral Presentation Award (3 <sup>rd</sup> )	Indian Meat Science Association	Oral Presentation in IMSACON VIII-2018, on 'Prevalence of Antibiotic Resistant Coliform Organisms in Market Sarpuria, a Geographical Indication Sweetmeat of West Bengal, India'
		Invited Guest Speaker for Women in Agriculture Day in India on December, 4, 2018	ICAR-CIFRI, Barrackpore, Kolkata	
		Best Paper Award	Indian Society of Extension Education	Oral Presentation in ISEE National Seminar-2018 on "Skilled training on value added milk products' business: A way forward for income enhancement of the dairy farmers"
		Best Poster Presentation	Indian Dairy	Poster Presentation



		Award (1 <sup>st</sup> )	Association (EZ)	in 47th Dairy Industry Conference-2019, on 'Skill Development for Milk Based Entrepreneurship: A Way Forward for Transforming Livelihood onto a Path of Prosperity'
3	Mr. Amit Kumar Barman	Best Paper Award	Jointly by Krishi Sanskriti and BCKV	Oral Presentation in International Conference on Agriculture and Allied Sciences-20-19, on "Comparative Study On The Shelf Life Of Treated Paneer "

### Department of Dairy Chemistry

Sl. No.	Name of the recipient	Name of the honour/ award/ fellowship / scholarship etc.	Offering Organization	Field of achievement
1	Prof. Pikani Ranjan Roy	Best Teacher Award of the Faculty of Dairy Technology	WBUAFS	Dairy Technology
2	Dr. Chaitali Chakraborty and Prof. Pinaki Ranjan Roy	Best Poster Award	National Seminar on " Traditional Indian Dairy Products- Prospects of Commercialization" Organized by the National Agricultural Higher Education Project (NAHEP)- Innovation Grant, at the Faculty of Dairy Technology, WBUAFS, Nadia held on 13th March, 2020	on the topic "Enzymatic modification of Whey Protein Isolates using food grade enzymes and it's resulting functional properties"
3	Prof. Pinaki Ranjan Roy and Dr. Chaitali Chakraborty	Second for poster presentation	Organized by the National Agricultural Higher Education Project (NAHEP). Innovation Grant, at the Faculty of Dairy Technology, WBUAFS, Nadia held on 13th March, 2020	on the topic "Textural Quality of Paneer added with Nisin" in the National Seminar on " Traditional Indian Dairy Products- Prospects of Commercialization"
4	Dr. Chaitali Chakraborty	Best Paper Award	46th Dairy Industry Conference at Kochi, Kerala during 8-10 February, 2018	article published in Indian Dairyman 2016 entitled "Advancements in Packaging of Milk and Milk Products"



5	Dr. Chaitali Chakraborty	Best Paper Award	EDCT 2018, International Conference on Emerging Trends in Electronic Devices and Computational Techniques, Technically Co-Sponsored by IEEE Kolkata Section, organized by Guru Nanak Institute of Technology during 8-9 March, 2018	on the topic "Application of Optical Sensors in Determination of Light Absorbents of Purple Cabbage Fortified Lime Squash"
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#### Department of Dairy Technology

Sl. No.	Name of the recipient	Name of the honour/ award/ fellowship / scholarship etc.	Offering Organization
1.	Dr. Anindita Debnath	Second best paper award for " Sensory and colour profile of milk-coconut sweet as a function of ingredients" published in Indian Journal of Dairy Science.	Indian Dairy Association
2.	Dr. Anindita Debnath	Secure third position in poster presentation on "Rheological property of Inulin added low and reduced fat cream cheese" in 47th Dairy Industry Conference organised by Indian Dairy Association	Indian Dairy Association
3.	Dr. Anindita Debnath	Best paper award for "Effect of Processing Parameters on Quality Attributes of Cream Cheese" published in Indian Journal of Dairy Science.	Indian Dairy Association
4.	Mr. Kuntal Roy	Young Professional Award-2020	Vigyan Varta

#### 6.5.2.4. Technical and Supporting Staff

*Whether the College has appointed (in place) sufficient technical/laboratory/farm staff to cater the need of practical and field experiments. Mention department wise distribution of technical, supporting and field staff in the tabular form.*

**The college / faculty has been provided with technical / Laboratory/ Farm staff to cater to the need of practical and filed experiments. Department wise distribution of technical, supporting and field staff are provided as under:**

Sl. No.	Name of Department	Designation	Group	Man in position
1	Dean, Faculty of Dairy Technology	Junior Assistant	C	1
		Cash Assistant	C	1
		Dairy Overseer	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Driver-cum-Mechanic	D	0
		Farash	D	1
		Durwan	D	0
		Mali	D	0
		Sweeper	D	2
2	Dairy Chemistry	Technical Assistant	C	1



		Junior Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	0
		Durwan	D	0
3	Dairy Engineering	Technical Assistant	C	1
		Junior Assistant	C	1
		Office Attendant Gr. II	D	1
4	Dairy Microbiology	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	0
5	Dairy Technology	Junior Assistant	C	1
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	1
		Skilled Labour, Gr. II (P)	D	0
6	Dairy Business Management	Group C	C	0
		Group D	D	0

**NB: Vacancy arisen due to retirement / death will be filled up shortly.**

### 6.5.3. LEARNING RESOURCES

#### 6.5.3.1. College Library

*Mention the information about location of the library, present staff position (in place) and availability of Wi-Fi, sufficient books and other reading materials, periodicals and research journals, internet with sufficient number of computers, seating capacity, employing the latest technology in library sciences, stocking arrangements, collection of volumes on different subjects, latest publications in the fields of relevant subjects, automation and user services through computer, opening hours, subscription of journals of national and international repute, national dailies, magazines etc.*

The library is the Centre of academic activities of the Faculty of Dairy Technology. While classroom teaching provides a glimpse of knowledge, the library disseminates a wide range of knowledge to attain intellectual heights. Teachers and students of the Faculty of Dairy Technology as well University use the library to satisfy their need of knowledge. The collection of Library includes, various text books, Journals, magazines etc in the area of Dairy Technology, Food Technology, Dairy Chemistry, Food Chemistry, Biochemistry, Dairy Engineering, Food Engineering, Dairy Microbiology, Food Microbiology, Biotechnology, Management, accountancy allied subjects. The documents in the library are arranged in APUPA pattern with proper signage for different sections of the library and Open Access System for accessing library collections is implemented. The library is well equipped and fully computerized. The open-source software for library management system KOHA is used for automation of library management activities. Various e-Journals of National and International journals in the area of Dairy , food and allied sciences are subscribed.

**a. Total Area of the library:**

Carpet area of 2500 sq. ft and Reading space 1800 sq. ft and well equipped, comfortably furnished and has airy, spacious and well lit interiors.

**b. Location of the library**

The library is housed on the first floor of the college building. The college library can accommodate 60 users at any given time and follows the open access system. The system allows any student/staff to pick and choose any book they like. The Dewey decimal classification is the



system used for classifying the books in the library. The library provides services to the students, teachers and staffs.

**c. Staff position**

Sl. No.	Position	Number
01	Deputy Librarian	01
02	Library Assistant	02
03	Cleaner	01

**d. Wi-Fi facility**

College has the Wi-Fi facility campus wide for students and staff and they are making use of it effectively by using their login and password and through which students and faculty members can browse CeRA and e-resources of the library.

**e. Books and other reading materials**

The college library has got potential titles and has 2500 volumes of books comprising, general microbiology, food microbiology, dairy microbiology, food chemistry, dairy chemistry, dairy technology, dairy economics, management etc. The library also had 168 collections of bound volumes of journals. Library has rich sources of collection of references i.e. dictionaries, directories, encyclopedias, monographs, atlas, general studies, JRF/SRF and other competitive exams preparatory books. All thesis of Master degree and Ph.D are preserved in hard copy and soft copy.

**f. Periodicals and Research Journals**

Library has 10 computer systems with internet facility for searching online public access catalogue (OPAC) of the library where students can access CeRA and other online resources from ICAR and university.

**g. Seating Capacity**

Library has 50 seating capacity at a given point of time. Library is using KOHA Integrated Library System for its collection management and retrieval of documents with barcode facility and scanners. The stock is arranged in classified order according to the dewey decimal classification system in the library.

**h. Latest Publications**

As and when we get budget for purchase of books we usually prefer to purchase latest publications of Dairy Microbiology, Dairy Chemistry, Dairy Engineering, General Microbiology, Biotechnology, Dairy Economics, Dairy Extension , competition books for JRF/SRF, etc.

**j. Automation and User servers**

Library is installed KOHA Integrated Library System software for its collection management and retrieval of documents in the library with barcode facility, scanners for transaction with automated library borrower's cards.

**k. Opening Hours**

Library remains open from 9.00 am to 7.00 pm on Monday to Friday and on Saturday 9.00 am to 1.00 pm. We have been subscribing 4 dailies out of these two are in English language and rest are in Bengali languages.



### 6.5.3.2. Laboratories, instructional farm, workshops, dairy plant, veterinary clinic, hatchery, ponds etc.,

*Clearly mention about laboratories, instructional farm, workshops, dairy plant, veterinary clinic, hatchery, ponds etc facilities available in the College with its numbers, space, specialty to conduct practical/hands on training.*

#### (a) Laboratories for Undergraduate & Post Graduate Degree Programme

##### I. Department of Dairy Microbiology

Sr. No.	Name of Laboratory/ teaching room	Number
1	Research Laboratory	01
2	P.G. Laboratory	01
3	U.G. Laboratory	01
4	Media preparation room	01
5	Instrument room	01
6	A.V. Class Room/ Seminar Room	01

##### II. Department of Dairy Chemistry

Sr no	Name of the laboratory	Number
1.	P.G.Laboratory	01
2.	U.G. Laboratory-I	01
3.	U.G.Laboratory-II	01
4.	Research Laboratory	01
5.	Quality Control Laboratory	01
6.	Instrumentation Lab/Functional Protein Laboratory	01
7.	Kjeldahl Room	01
8.	Computer Lab. with one Terminal	01

##### III. Department of Dairy Engineering

Name of the Lab.	Area (M <sup>2</sup> )	Seating Capacity
Workshop	1200	50
Processing Lab	400	40
Food Engineering Lab	400	40
Electrical Lab	400	30

##### IV. Department of Dairy Technology

Sr. No.	Name of the Laboratory	Area (Ft 2)	Seating Capacity
1	UG Lab	29' x 19.5'	30
2.	PG Lab I– Production lab	29' x 19'	30
3.	PG Lab II-	29.5' x 23'	30
4.	Analytical Lab –I	29' x 19'	30
5.	Analytical lab-II	29' x 19.5'	30
6.	Sensory Lab	29' x 19.5'	30

##### V. Department of Dairy Business Management

Sr. No.	Name of the Laboratory	Area (Ft 2)	Seating Capacity
1	Computer Lab	29' x 19.5'	30



### Students Dairy Plant

The faculty has a Students' Dairy Plant to extend practical facilities and training to the students. The plant is equipped with modern machineries for production of Milk and Milk Products. Since the university received and fund amounting to Rs.2.97 Crores from the Govt. of West Bengal for renovation of the Dairy Plant, at present commercial production of Milk and Milk products have been temporarily suspended.

Particulars	Capacity per day	Capacity per annum
Pasteurized Milk in Pouches	10,000LPD	36.5 LLPA
Ice-cream	500KgPD	182.5 TKgPA
Dahi	500KgPD	182.5 TKgPA

### Other facilities

Sl. No.	Class room No.	Area (Ft <sup>2</sup> )	Seating capacity	Other facilities (LCD, Projectors, Computers, Smart board etc.)
01	Seminar Hall	950	200	LCD Projectors
02	Conference Hall	700	25	LCD Projectors
03	Examination Hall	990	80	LCD Projectors
04	Smart UG Class Room	660	40	LCD Projectors
05	Smart PG Class Room	560	30	LCD projector, smart board, Audio system, digital podium, Computer
06	Training Hall	975	50	Audio system, LCD, Projector

### 6.5.3.3. Student READY / In-Plant Training / Internship / Experiential Learning Programmes Experiential Learning Programme

*Clearly mention about the implementation of Student READY/ In-plant training/ Internship/ Experiential Learning programmes and learning outcomes as per the guidelines of ICAR. Profit sharing mechanism (amount) shall be mentioned for each ELP unit sanctioned by the ICAR for the college.*

Details of Student READY (Rural and Entrepreneurship Awareness Development Yojana) Programme are mentioned below:

- In plant Training of six months duration (One semester): 20 (0+20) credit hours
- Rural Dairy Work Experience programme of 10 weeks (0+10) (total 10 credit hours) during summer vacation (spread over 2 or 3 Semester breaks) to be introduced starting from first year.

#### Areas of internship:

#### **The areas of internship maybe:**

- First year: On Milk Production & Procurement to be taken up in State Dairy Federations/Dairy Development Departments/Private Dairies/Animal Husbandry Department/Cattle farm/Progressive dairy farmers
- Second Year: On Preliminary Dairy Operations to be taken up in Experimental Dairy/Referral lab/Dairy Plants
- Third year: Exposure to Product manufacturing operations in Dairy & Food Industry or Plant visits in each Dairy Technology course to have Industrial exposure in specialized products like Ice cream, Milk Powders, Cheese, By-products etc. should be made compulsory



- Experiential Learning Module of 10 (5+5) credit hours to run concurrently in the final semester along with the regular courses. This shall include development of Detailed Project Report on setting up of enterprise in the selected areas of product manufacture and Evaluation of the Module.

### **Evaluation of Student Ready Programme**

- i)** Student READY Rural Dairy Work Experience Programme – I : 100 marks ( Course Code: RDW-121)
  - i.** Report = 50 Marks
  - ii.** Viva-voce = 50 Marks
- ii)** Student READY Rural Dairy Work Experience Programme – II : 100 marks ( Course Code: RDW-242)
  - i.** Report = 50 Marks
  - ii.** Viva-voce = 50 Marks
- iii)** Student READY In-Plant Training: 100 marks ( Course Code: DT-4711)
  - i.** Report = 50 Marks
  - ii.** Viva-voce = 50 Marks
- iv).** Students READY Experiential Learning Module : 100 marks ( Course Code: DT-4815)
  - i.** Detailed Project Report : 50 marks
  - ii.** Seminar : :50 Marks

### **Details of Experiential Learning Unit Under Students Ready Experiential Learning Module ( Course Code : DT-4815)**

Although the Experiential Learning Unit was established in the year 2014, it was not functioning till 2018 due to the renovation and modernization of Students' Dairy Plant. However the Experiential Learning Unit was started at placed adjacent to the Students' Dairy Plant with the production of various milk products such as Ghee, Paneer, Khoa and Sweets (Rasogolla and Pantooa) produced under Experiential Learning Programme. The students of the 8th Semester of B.Tech.(Dairy Technology) degree programme are fully engaged in the manufacture of a variety of dairy products . These products are being sold regularly through the sales counter established in the Faculty and from time to time by putting up stalls in different Kishan melas, Science exhibitions and other occasions of mass congregation. The students of the Faculty have also taken trials successfully for the production of other milk products like Kalakand, Sandesh and Peda which are to be included in the product profile for marketing in the near future. The salient features of the Experiential Learning Unit established by the University are given below:

#### **I. Name of the Experiential Learning Unit**

Pilot Dairy Unit cum Business Process Development Centre

#### **II. Product Profile**

Paneer, Ghee, Khoa, Rosogolla and Pantooa

#### **III. Location with Address**



Pilot Dairy Unit cum Business process Development centre, Faculty of Dairy Technology, West Bengal University of Animal & Fishery Sciences, Mohanpur Campus, P.O. Krishi Viswavidyalaya – 741 252, Dist. Nadia, West Bengal

#### IV. Objectives

1. To impart Hands-on-Training/Experiential Learning on Processing of Milk and Milk Products in a commercial environment to sharpen the technical as well as managerial skills of the students thereby enhancing the professional expertise
2. To provide an opportunity to the students to develop a set of skills such as leadership, teamwork, interpersonal communication, analytical problem solving, entrepreneurial/business skills etc. which are difficult to achieve in a class room environment.

#### Economics

(i) Gross turnover/profit statement:-

Year	No. of Students trained under EL	Product being developed under EL	Total Sales	Revenue earned	% Share of income distributed to students*	Entrepreneurship Developed
2016-2017	16	1. Paneer 2. Khoa	169408/-	3425/-	Nil	Nil
2017-2018	23	3. Farm Fresh Milk	932443/-	202454/-	Nil	Nil
2018-2019	17	4. Lassi 5. Rosgulla	1590724/-	358645/-	Nil	Nil
2019-2020	29		1931091/-	225236/-	50% of profit	Nil
2020-2021	29		ELU Operation is not functioning due to Covid 19 from April, 2020 to till date			

\* Up to December, 2018 profit sharing with the students could not be implemented which was informed to the ICAR in the Action Taken Report submitted earlier for accreditation of the faculty of Dairy Technology on earlier occasion. At present during the year 2020-21 the production is stopped due COVID-19 Pandemic and will be resumed very shortly.

**Evaluation of the Experiential Learning Programme: The evaluation criteria shall be as under:**

Sr. No.	Evaluation parameter	Marks
1.	Preparation of Report by student	10
2.	Report evaluation	10
3.	Work performance in each module/industry	30
4.	Viva-voce examination	50
5.	Total	100

#### 6.5.3.4. Curricula Delivery through ICT (Smart Class Rooms/Interactive Board Etc.,)

*Whether the College is using smart class rooms/interactive board etc. for teaching and practicals. Number of class rooms upgraded as smart class rooms should be mentioned.*

The Faculty of Dairy Technology facilitates the use of Information and Communication Technology (ICT) for effective delivery of content for which the college has made available the smart class room with smart board. In addition to this, classrooms have the facilities of projectors for teaching through Power Point Presentation of theory and practical classes along with podium of inbuilt speakers and amplifiers



to make audible to the students. Seminar room has the facility of multimedia projectors for student's seminar delivery and practical classes. Department also have the multimedia projectors for practical classes. Beside this all the Faculty members are taking classes on online mode by using google meet, google class room, what's app, E-mail etc

#### 6.5.4. STUDENT DEVELOPMENT

Student Development at the College directs its educational efforts at fostering the intellect and character of students by integrating in-class and co-curricular experiences. To accomplish this, the College provides a wide range of educational experiences through programs and activities that complement and support the academic experience in the classroom.

##### 6.5.4.1. Student Intake and Attrition:

*The information about student intake and attrition, for the College as a whole but separated in UG, PG and PhD categories shall be provided in tabular form for last five years.*

FACULTY	DEGREE	Intake	Enrolled				
			2016-17	2017-18	2018-19	2019-20	2020-21
Dairy Technology	B.Tech(D.T.)	44	43	34	44	44	40
	M.Tech.	24	14	12	14	13	12
	Ph.D.	12	1	0	0	1	0

FACULTY	DEGREE	Intake	Attrition				
			2016-17	2017-18	2018-19	2019-20	2020-21
Dairy Technology	B.Tech(D.T.)	44	09	02	06	07	11
	M.Tech.	24	01	0	02	01	03
	Ph.D.	12	0	0	0	0	0

##### 6.5.4.2 Number of Students in theory and Practical Classes

*Mention the Degree Programme wise number of students sitting in a class for theory and practical, separately in tabular form. Complete list of academic programmes (UG and discipline wise masters and Ph.D), for which accreditation is sought, need to be provided. The list should provide only programmes in which students are already passed out.*

Sl No.	Name of the Programme	Total Intake / Year	Batch of Students in Theory Class	Batch of Students in Practical Class
1	Under Graduate – BTech	44	50	45
2	Post Graduate – Mtech			
	Department of Dairy Technology	6/Year	6-10	6-10
	Department of Dairy Engineering	6/Year	6-10	6-10
	Department of Dairy Chemistry	6/Year	6-10	6-10
	Department of Dairy Microbiology	6/Year	6-10	6-10
3	Doctoral Programme – PhD			
	Department of Dairy Technology	3/Year	3 - 5	3 - 5
	Department of Dairy Chemistry	3/Year	3 - 5	3 - 5
	Department of Dairy Microbiology	3/Year	3 - 5	3 - 5



**List of academic programmes (UG and discipline wise masters and Ph.D), for which accreditation is sought, need:**

- 1) UG Programme – Bachelor of Dairy Technology (BTech)**
- 2) PG Programme – Master of Technology (MTech) in the following Departments / disciplines:-**
  - Department of Dairy Technology
  - Department of Dairy Engineering
  - Department of Dairy Chemistry
  - Department of Dairy Microbiology
- 3) Doctoral Programme : Ph.D under the Faculty of Dairy Technology in the following Departments / disciplines:-**
  - Department of Dairy Technology
  - Department of Dairy Chemistry
  - Department of Dairy Microbiology

#### **6.5.4.3 Admission Process:**

*Clearly give complete mechanism of admission for UG, PG and PhD programmes, fee payment mechanism, registration procedure, academic schedule publication at the start of the semester etc. Write information in one page only.*

#### **Admission Mechanism for UG Programme:**

- 1) The candidates must qualify in the West Bengal Joint Entrance Examination for Engineering/ Technology (WBJEE) conducted by WBJEEB.
- 2) The candidate must pass Higher Secondary (10+2) Examination of the West Bengal Council of Higher Secondary Education or its equivalent examination in science stream from any recognized Board/ Council from any institution within West Bengal.
- 3) The candidate must pass the Higher Secondary (10+2) or its equivalent examinations with Physics, Chemistry, Mathematics and English as compulsory subjects with individual pass marks (in both theory and practical wherever applicable) in all the above four subjects in regular class mode.
- 4) The Candidate must be a domicile of West Bengal.
- 5) Final selection is made after counselling of students and the said counselling process is undertaken by the duly constituted Admission Committee approved by the Faculty Council.
- 6) Admission Fees are to be deposited through online mode.
- 7) Admission process generally starts after publication of H.S. results of West Bengal Council of Higher Secondary Education. Application forms are available as per notification of newspapers only for BTech course.

#### **Admission Mechanism for Master Degree Programme:**

- 1) Advertisement in the News Papers and University website published by the Controller of Examination in the month of September every year.
- 2) The selection of candidates is made strictly on the basis of merit and performance in the personal interview. The merit shall be decided on the basis of percentage of marks in aggregate



or O.G.P.A. in Bachelor's Degree Examination as well as marks or O.G.P.A. in subject concerned in which admission is sought. The total marks for preparation of merit list is 100 out of which 80% on merit (the relative weightage on the overall performance in the Bachelor's Degree and in the subject concerned i.e. 50 marks from OGPA obtained in UG level and 30 marks from the subject concern) and 20% on personal interview(online mode) .

- 3) The candidate shall have to score a minimum of 50% in aggregate of merit and interview altogether (i.e. 50 out of 100) to qualify for admission into Postgraduate Programme.
- 4) The candidates selected through ICAR all India Examination for admission to Master's Degree course shall be exempted from aforesaid selection process. However, they should have minimum qualification.
- 5) Final selection is made after counselling of students and the said counselling process is undertaken by the duly constituted Admission Committee as mentioned in the Regulations.
- 6) Admission Fees are to be deposited through online mode.
- 7) A selected candidate after payment of his/her fees for admission shall get himself/herself registered within the prescribed date. No candidate under any circumstances shall be permitted to register himself/herself after the expiry of date or stipulated time in first and subsequent semesters as notified from time to time. He/ She has to pay the fees before registration in any semester.

#### **Admission Mechanism for Doctoral Programme:**

- 1) Advertisement in the News Papers and University website published by the Controller of Examination in the month of October every year.
- 2) Admission to Ph.D. course is open to candidates holding a two years Master's degree in Technology specialised in Dairy Technology / Dairy Chemistry / Dairy Microbiology and securing at least 55% marks in aggregate or 2.75 OGPA in 4.00 point scale or 6.75 in 10 point scale following a Bachelor's Degree in Fishery Sciences (4 years) from a recognized University or National Institute.
- 3) Candidates seeking admission to Ph.D. course in a subject shall have the Master's Degree in the same subject and also have done sufficient courses in the proposed major field of specialization within the subject.
- 4) The selection of candidates is strictly on the basis of academic score in Master's Degree level and performance in the written test and personal interview. The academic score is decided on the basis of percentage of marks in aggregate or OGPA in Master's Degree Examination. The total marks for preparation of merit list is 100, out of which 40% on academic score, 40% on of written test and 20% on personal interview.
- 5) Qualifying marks for admission is minimum 50% in aggregate in Academic Score, Written Test and Personal Interview.
- 6) Controller of Examinations publishes the list of candidates recommended for admission in the notice board/ website before the date of admission.



- 7) The candidates selected through ICAR all India Examination for admission to Ph.D. programme are exempted from aforesaid selection process. However, they should possess the minimum qualification as stated above.
- 8) Final selection is made after counselling of students and the said counselling process is undertaken by the duly constituted Admission Committee as mentioned in the Regulations.
- 9) Admission Fees are to be deposited through online mode.

#### 6.5.4.4. Conduct of Practical and Hands on Training

*Mention the brief report on how the practical and hand-on-training is being conducted in different courses to meet the student satisfaction. Write information in one page only.*

##### **For UG Programme:**

The B.Tech. Dairy Technology degree programme is designed to undergo courses dairy sciences and allied fields. The entire degree programme is oriented towards more practical demonstrations as the course curriculum has 180 credit hours out of which 90 credit hours are dedicated for practical and hands on training. A special course on student READY (Students READY Experiential Modules) programme to impart special entrepreneurial skills among the graduates is offered during their final year. All these components are incorporated in the course curriculum

##### **For PG and PhD Programme:**

Facilities available to conduct regular practical classes for various Dairy Microbiology / Dairy Chemistry / Dairy Technology / Dairy Engineering courses and also hands-on-training for teaching, research and various training programme related to dairy processing.

- Hands-on-experience on preparation of media, chemicals etc, sterilization of microbiological media, chemicals, glassware's, plastic wares etc used in regular practical and research works.
- Regular activation, propagation and maintenance of microbial cultures used in practical and research.
- Microscopic observation of microbes: preparation of stained slide of microbial cultures, examination of morphological and staining characteristics.
- Enumeration of composite micro-flora in milk and milk products – sampling, sample preparation, plating and observation and calculation.
- Differentiation of microbes based on morphology, physiology and biochemical profiles.
- Isolation and characterization of microbes from milk and milk products.
- Quality analysis of milk products, dairy equipments, personnel and environmental hygiene.



#### 6.5.4.5. Examination and Evaluation Process

*The evaluation of students' performance is a central task of College administration. A brief report on examination and evaluation process for UG, PG and PhD be given separately mentioning external/internal components. System of evaluation should clearly be mentioned for UG, PG and PhD.*

- a) The theory and/or practical examination for each paper offered in a semester shall normally be held within that semester.
- b) The date(s) of examinations as notified cannot be changed at department level for any reason what so ever, without the concurrence of Controller of Examinations(COE).
- c) Absence of students in en-masse or due to walkout as the case may be cannot be permitted and allowed to be cited as a reason for non-holding of any examination. The matter has to be reported to the Faculty Council for taking further decision including penal measure, if required.
- d) A detailed examination schedule showing the course no., course title, day, date, time, venue etc. for each examination shall be prepared by the COE in consultation with the Dean of the Faculty and circulated at least two weeks before the end of instruction in a semester.
- e) The COE will arrange to print the question papers in requisite number depending on the number of students.
- f) During the 10<sup>th</sup> week of each semester, there shall be a midterm examination in each course for theory paper only before appearing the end term examination.
- g) End term theory paper to be set by external examiner.
- h) Practical examination shall be conducted by course Instructor(s) and one teacher nominated by the HOD
- i) Evaluation of end term theory paper will be done internally by the concern Course Instructor.
- j) A student who fails either in theory or practical or both in any course shall be treated as failed in that course.
- k) Student shall be promoted up to 6<sup>th</sup> semester as long as he/she carries a maximum backload of 3 (three) courses, however he/she shall have to clear all the courses before the Student Ready Programme (In -plant Training / In-plant attachment Rural Fisheries Work Experience Programme) commences in the 7<sup>th</sup> Semester
- l) In case a candidate is found to have answered question more number of questions than are actually required to do, the answer of the question(s) in which the candidate has secured less marks may be ignored. In other words, answers to the requisite number of questions for which the candidate has secured higher marks are to be taken into consideration.
- m) In exceptional cases, if a candidate suddenly falls sick during the course of examination and the sickness is of serious nature, he/she may be allowed to write compartmental examination(s) after producing medical certificate.
- n) Mark sheet should indicate "P" for pass, "P\*" for pass in compartmental examination and "A" for absenteeism in the scheduled/concerned examination.



## Back Examination

- i. A student may be allowed to continue with a maximum backload of 3 (three) courses at any given point of time in any semester, failing which the student shall not be promoted / allowed to the next semester.
- ii. The student who fails either in theory or practical or both in any course shall have to appear both theory and practical in the compartmental examination.
- iii. Separate compartmental examination will be conducted by the CoE within one month from the date of publication of results in the subsequent semester who have failed in one or more courses (i.e. upto three courses) in the previous semester.
- iv. If any student does not pass in any course for which compartmental examination was held, he/she will get further chance to clear that course when regular examination for that particular course will be held subsequently.

## Award of Grade Point

The marks obtained in each course by a candidate in a Semester shall be converted into Grade Point based on a ten-point scale in both theory and practical separately. The average of grade points secured by a candidate in all courses in the particular Semester shall be represented as Grade Point Average (GPA). The average of all GPA secured by a candidate during the entire duration of Under-graduate programme based on published results will be shown as Overall Grade Point Average (OGPA) which will be indicated up to three decimal places. In case of a student failing in one or more number of course(s), the result will be declared "Incomplete" and the grade point for such course(s) shall be computed only after passing of the respective course(s) by the concerned student. A student shall have to secure 50% in theory and practical separately and a minimum GPA as well as OGPA of 5.0 for passing a course and for obtaining the degree, respectively. Grade point and Grade Point average (GPA) shall be calculated taking the marks obtained in theory, practical and credits hours

## Distribution of Marks

### Courses with both Theory and Practical : 100 Marks

Theory		Practical
Internal (Midterm Examination)	External (End term examination)	Internal (End term Examination)
30 marks	50 marks	20 marks

### Courses with only Theory: 100 Marks

Theory		
Internal (Midterm Examination)	Assignment	External (End term examination)
40 marks	10 marks	50 marks

### Courses with only Practical: 100 Marks

Duration of examination: 3 hours

- |       |                       |            |
|-------|-----------------------|------------|
| (i)   | Practical note book   | = 10 marks |
| (ii)  | Assignment            | = 10 marks |
| (iii) | Practical Examination | = 60 marks |
| (iv)  | Viva-voce             | = 20 marks |



#### 6.5.4.6. NCC/NSS/RVC Units

*Clearly mention the existence and functioning of these units and how it is benefiting the student development. A brief report should be given (without photographs).*

Students of Faculty of Dairy Technology participated in University NSS programme conducted once in a year during 3<sup>rd</sup> and 4<sup>th</sup> semester. Dedicated staff is deputed to conduct various activities under this programme.

#### 6.5.4.7. Language Laboratory

*It is required of any student to have a good command of the language for communication purposes, with clarity and accuracy being vital for effective and efficient communication. What helps one to acquire such proficiency in a language is the process and the method of learning that language. Mention which of these type of Conventional, Lingua Phone, Computer Assisted Language Laboratory and Multimedia Hi-Tech Language Laboratory are being used for language teaching in the college.*

Faculty of Dairy Technology receives students from different districts of state and different states of India with different backgrounds and as such there is a need for English language proficiency for understanding the other subjects as the course is in English medium. In this context, teachers of Faculty of Dairy Technology conducts English language classes to fulfill the requirement of learning English. Presently the language is basically taught by conventional methods along with usage of computer assisted laboratory. Learning is also being impacted by participatory approach and application of audio-visual aids. Further, keeping broader perspective in mind, the report writing, paragraph writing, precis writing, abstracting and summarizing are being taught to the students in a conventional manner to enable the students to learn and to write notes of class lectures and writing the report of state and national tours as well as READY programme. Nevertheless, these are being required primarily to collect information of the programme and to report it to the course teacher/s. Lastly, to develop the career of students how to face interview, drafting of letters, cv and resume are being taught. These auras of teaching enable them to learn and write everything individually. More or less, the assignments are being designed in view of TOFEL and competitive based exams for the English language test.

#### 6.5.4.8. Cultural Center

*Does the college has cultural center to empower student leaders to explore, celebrate, and educate the campus community about the diversity among them? Does the college offers an inclusive and reflective space, multicultural programming, and support services that encourage positive interaction, academic persistence, and growth among students, faculty, and staff?*

The Faculty of Dairy Technology promotes for multicultural programmes and every year cultural programme is organized in the faculty auditorium under the leadership of the Students' Union / Students' Welfare Committee. The students of the Faculty also participate in the Agri Cultural Meet organized by ICAR every year. The faculty members, students and staff members participate in cultural events organized on 2<sup>nd</sup> January every year as a part of University Foundation Day Celebration. The Recreation Club established in the university arranges for different cultural programmes every year. The cultural group, hosts various literacy and cultural activities. A wide range of recreation, extra-curricular and sports activities is provided through the Student's Union. Different cultural program, sports,



interactive and social programmes are being conducted by the In-Charge Students' Welfare and Dean Students' Welfare. University extends financial assistance for organizing the programmes to encourage positive interaction, academic persistence, and growth among students, faculty, and staff.

#### 6.5.4.9. Personality Development

*Personality development programme is aimed at increasing employability of the students. Whether the college has provisions for inclusion of functional grammar in Standard English, speaking skills, reasoning, group discussions interview skills, personal interviews, quantitative ability, verbal ability, mock tests and some special sessions to promote the personality development in the students?*

**Whether the college has provisions for inclusion of functional grammar in Standard English, speaking skills, reasoning, group discussions interview skills, personal interviews, quantitative ability, verbal ability, mock tests and some special sessions to promote the personality development in the students?**

**YES. Details are mentioned below:**

Sl no	Year	Programme (number of participants)	
		Spoken English & Personality Development	Ignite your Mind- Personality Development programmes organised
1	2016-17	32	22
2	2017-18	35	30
3	2018-19	-	33
4	2019-20	-	31
5	2020-21	-	-

### 6.5.5. PHYSICAL FACILITIES

#### 6.5.5.1. Hostel Facilities for the Students of Faculty of Dairy Technology

*Clearly mention the number of hostels available for the College students for boys and girls, separately with its total capacity, students per room accommodated in each hostel, mess facility, drinking water, indoor games specially for girls, cleaning of hostel premises, transport facility, emergency medical facility etc.*

Hostel	Capacity	Student/room
UG Boys Hostel (S N Bose Hall)	150	03
PG Boys Hostel (S. N. Bose Hall – separate Wing)	40	02
Girls Hostel (Kadambini)	100	03

- Common mess and drinking water facility is available for the students.
- Indoor games facilities is available for the students as well as inside the hostel premises for girls.
- Medical unit is functional within the campus.
- Transport facility available for academic purposes.

#### 6.5.5.2. Examination hall

Mention the availability of number of examination halls, its capacity etc. for the College.

Particular	Details
No. Of exam halls	<b>01</b>
Capacity	<b>70 students at a time</b>
Measures for preventing mal practices	<b>CCTV Camera &amp; College invigilation committee</b>



### 6.5.5.3. Sports and Recreation facilities:

*Clearly mention the number of indoor and outdoor sports facilities available for the College students. A brief note on day to day management and use of these facilities shall be provided in the report.*

**The college is facilitated with both indoor and outdoor games.**

Particular	Details
<b>No. of indoor game facilities</b>	Available in the Hostel Common room for indoor game (Table tennis, treadmill, chess and carom)
<b>No. of outdoor games facilities</b>	Play Ground Established In 8000 M2 area (Shot-put, Volley ball, High jump stand, Cricket kit, Volley ball kit and court, Football, kho-kho etc.,
<b>A brief note on day to day activities</b>	Good facilities are available for sports and game. Students have option to participate in outdoor and indoor games. There is a separate department of Physical Education headed by a qualified sports Instructor of Physical Education.

**A brief note on day to day management and use of these facilities:-**

Intramural cultural activities like singing, recitation, dance, drama, poetry etc are frequently conducted in the faculty cultural programmes like Milk Day, Fresher's Day, Farewell, Hall Day and Social Day, Annual cultural meet etc. Several musical instruments are also available for the students. **Every year Cricket, Football, Volleyball, Badminton, Table tennis, Carrom etc tournaments are organized as a part of Annual Sports.**

### 6.5.5.4. Auditorium

*Does the college has auditorium? Mention its year of construction, sitting capacity and how frequently being used for the College functions.*

**Does the college has auditorium?**

**Yes.**

**Year of construction, sitting capacity and how frequently being used for the College functions:**

An auditorium facility is available at the Mohanpur campus of University having sitting capacity of 500 persons which was built in the year 1974 and inherited from BCKV. Since inception the auditorium is frequently used for training, seminar, cultural program etc. Besides this Students of Faculty of Dairy Technology are using seminar hall for organizing programmes and conducting various events.

### 6.5.5.5. Exhibition Hall/Museum

*Does the college have the Exhibition Hall/Museum? Mention about its use and special events being conducted in these units.*

**Does the college have the Exhibition Hall/Museum?**

**Yes.**

**Use and special events being conducted in these units:**

Exhibit materials / instruments / equipment and technology are displayed in the laboratories of the Academic Departments for information and guidance of the students and farmers.



## 6.5.6. RESEARCH FACILITIES

### 6.5.6.1. PG laboratories and Equipment

Clearly mention the department wise PG laboratories and equipment housed in individual laboratory in the Colleges along with any other research unit.

The Faculty has facilitated with well equipped laboratories in research units as well as central Instrument Facilities

#### Central Instrumentation Facility:

Sl. No.	Name of the Instrument	Number
1	Automatic Nitrogen Analyzer	01
2	Viscometer	01
3	Freeze Dryer	01
4	Research Microscope	01
5	Colour Meter	01
6	Infra Red Moisture Analyzer	01
7	BOD incubator	02
8	pH Meter	04
9	Ion Meter	02
10	Water Activity Meter	01
11	Gel Doc System	10
12	Sonicator	01
13	Digital Weighing Balance	05

#### PG Laboratories and Other facilities:

Sr No.	Name of Laboratory/ Teaching room	No of Laboratory / Classrooms			
		Dairy Microbiology	Dairy Chemistry	Dairy Engineering	Dairy Technology
1	Research Laboratory	01	-	-	-
2	P.G. Laboratory	01	01	01	02
3	Media preparation room	01	-	-	-
4	Instrument room	01	-	-	-
5	Quality Control Laboratory	-	01	-	-
6	Instrumentation Lab	-	01	-	-
7	Computer Lab.	-	01	-	-
8	Seminar Room	01	01	01	-
9	Workshop	-	-	01	-
10	Processing / Production Lab	-	-	01	01
11	Food Engineering Lab	-	-	01	-
12	Electrical Lab	-	-	01	-
13	Analytical Lab -I	-	-	-	01
14	Analytical lab-II	-	-	-	01
15	Sensory Lab	-	-	-	01

#### Major Laboratory instruments/equipment:

##### (A) Department of Dairy Microbiology

Sl. No.	Name of the Instrument	Number
01.	Refrigerated Centrifuge	01
02.	Thermocycler	01
03.	Electrophoresis Apparatus – Slab Gel	01



04.	Small spin Centrifuge	01
05.	UV transilluminator	01
06.	Geldoc system	01
07.	BOD incubator	02
08.	Air incubator	04
09.	Hot air oven	02
10.	Autoclave	01
11.	Microscope	10
12.	Water bath	01
13.	Refrigerator	05
14.	Shaker	01
15.	Microwave Oven	01
16.	Laminar air flow system	03
17.	Deep freeze	01

**(B) Department of Dairy Chemistry**

Sl. No.	Name of the equipment	Quantity
01.	Automatic Milk analyser	1
02.	Automatic Nitrogen analyzer	1
03.	BOD Incubator	2
04.	Butyro Refractometer	1
05.	Deep Freezer	1
06.	Digital Balance	3
07.	Digital PH meter	2
08.	Digital Photoelectric Colorimeter	1
09.	Double Beam UV-Visible Spectrophotometer	1
10.	Electric Cream separator	1
11.	Electrophoresis Apparatus- Rod Gel	1
12.	Electrophoresis Apparatus- Slab Gel	1
13.	Flame photometer	1
14.	Gerber Centrifuge	1
15.	High Speed Centrifuge	1
16.	Hot air oven	3
17.	Microwave Oven	1
18.	Muffle Furnace	2
19.	Refrigerator	2
20.	RM value apparatus	1
21.	Soxhlet Apparatus	1
22.	Temperature Controller Water Bath	1
23.	Thin layer Chromatography kit	1

**(C.) Department of Dairy Engineering**

Sr. No.	Name of the equipment	Quantity
01.	BOD Incubator	1
02.	Cold water Bath	1
03.	Centrifuge	3
04.	Cold store model (Test Rig)	1
05.	IBT model (Test Rig)	1
06.	Eclectic power, energy measuring test Rig	1 set



**(D) Department of Dairy Technology:**

Sl. No	Name of the equipment	Quantity
01.	Muffle furnace	3
02.	Hot air oven	4
03.	Incubator	2
04.	BOD Incubator	1
05.	OTG	1
06.	Cake Oven	1
07.	Tray Dryer	1
08.	Autoclave	1
09.	Hot water bath	1
10.	Hot plate (12" x 12" hot plate with thermostat control)	1
11.	Water distillation assembly (All glass double distillation unit with borosilicate boiler, condenser and quartz heater-capacity 1.5 lit/hr)	1
12.	Weighing balance (4 digit) Sartorius	3
13.	Cream separator	1
14.	Ph meter/redox meter with electrode (2 no)	1
15.	Milk Analyzer	1
16.	Gerber centrifuge	1
17.	Remi centrifuge	1
18.	Ultrasonic homogenizer	1
19.	Digital Colony Counting machine	1

**6.5.6.2. Research Contingency**

*A note on amount of research contingency for each department shall be provided. Whether it meets the students' demand?*

- i) Sanction of Research Grant from the university's own fund to the faculty members through a selection process.
- ii) Financial and Administrative support to the faculty members to participate in the Research oriented Workshops organized by different Institutes of repute.
- iii) Sanction of Research Contingency Grant to the Post Graduate students through a selection process.
- iv) Motivating the faculty members to submit research projects to different Govt and Private funding agencies.
- v) Promotion of collaborative research activities by the faculty members funded by external Govt. and Private Agencies.

The University is exploring the possibility to sanction more fund for Research Contingency to meet up the demands of the students.



## 6.5.7. OUTCOME/OUTPUT

### 6.5.7.2. Student Performance in National Examinations:

*Provide detailed information in tabular form about student performance in JRF/SRF/NET/ARS/and other national examinations for last five years. Only those students receiving fellowships should be mentioned here.*

#### (a) Performance of students of Faculty of Dairy Technology in National Examinations

Sl. No	Year	Number of students achieved				
		NTS	JRF	SRF	NET	ARS
1	2016-17	1	4	Nil	Nil	NIL
2	2017-18	1	1	Nil	Nil	NIL
3	2018-19	Nil	1	1	1	NIL
4	2019-20	Nil	2	1	Nil	NIL
5	2020-21	3	5	4	Nil	NIL

#### (b) Faculty students successful in different competitive examination

Sr. No.	Name	Course	Batch	Achievement
PG Students				
1.	Moumita Adhikary	M. Tech. (DT)	2016 - 2018	Qualified WBHRB Recruitment 2017: Food Safety Officer
B.Tech. Students				
2.	Abhilash Rai	B. Tech. (DT)	2013 - 2017	CAT exam with 96 Perce
3.	Aishwarya Nath	B. Tech. (DT)	2014 - 2018	CAT exam
4.	Antarip Chatterjee	B. Tech. (DT)	2014 - 2018	Got admission in National Institute of Bank Management PGDM BKFS (Banking and Financial Services)
5.	AbhilashBasu	B. Tech. (DT)	2016-2020	Qualified the exam for IRMA

### 6.5.7.2. Students Placement Profile:

*Provide detailed information in tabular form about student performance in ARS/and other national examinations/State level examinations or equivalent. Year wise placement profile shall be provided.*

Year	Government	Industry	Self-Employed	Others (Bank Insurance)
2016-17	04	18	01	05
2017-18	Nil	15	02	03
2018-19	03	14	03	05
2019-20	03	17	01	06
2020-21	Nil	11	02	Nil



### 6.5.7.3. Awards/Recognitions/Certificates:

*Provide information on awards/recognitions/certificates in tabular form for last five years separately for students and faculty.*

#### Awards/Recognitions/Certificates received by Students:-

##### (a) Gold medals for securing top OGPA in Faculty (Last Five Years)

Sr. No	Name of student	Name of Degree Programme	Name of the award	Year of awarded
1.	Sonanki Mitra	B.Tech(Dairy Technology) (2011-15 academic session)	Prof. Sukumar De Gold Medal	2016
2.	Indranil Choudhury	M.Tech(Dairy Technology) (2013-15 Academic Session)	Smt. Tithamayee Ganguli Gold Medal	2016
3.	Ronit Mondal	B.Tech(Dairy Technology) (2012-16 academic session)	Prof. Sukumar De Gold Medal	2017
4.	Jaba Roy	M.Tech(Dairy Technology) (2014-16 Academic Session)	Smt. Tithamayee Ganguli Gold Medal	2017
5.	Rahul Mondal	B.Tech(Dairy Technology) (2013-17academic session)	Prof. Sukumar De Gold Medal	2018
6.	Debarima Ghosh	M.Tech(Dairy Technology) (2015-17 Academic Session)	Smt. Tithamayee Ganguli Gold Medal	2018
7.	Alisha Chhetri	M.Tech(Dairy Chemistry) (2015-17 Academic Session)	Prof. N. C. Ganguli Memorial Gold Medal	2018
8.	Rahul Mondal	B.Tech(Dairy Technology) ( 2013-17 academic session)	IDA(EZ) Gold Medal	2017
9.	Rajulagari Madhavi	M.Tech(Dairy Microbiology) (2014-16 Academic Session)	IDA(EZ) Gold Medal	2017

##### (b) Gold medals for other outstanding performance in various fields

Sr.No	Name of student	Name of Degree Programme	Name of the award	Year of awarded
1.	Subhadip Manik	M.Tech(Dairy Technology) in 2018-19 academic session	Best Student Award in Faculty level	2020
2.	Subhadip Manik	M.Tech(Dairy Technology) in 2018-19 academic session	Student of the Year by AIASA	2020
3.	Tamal Sarkar	B.Tech(Dairy Technology) in 2015-19 academic session	Best Student Award in Faculty level	2019
4.	AmrikHazra	B.Tech(Dairy Technology) in 2015-19 academic session	Best Student Award in Faculty level	2018
5.	AmrikHazra	B.Tech(Dairy Technology) in 2015-19 academic session	Best Student Award in University Level	2018
6.	Antarip Chatterjee	B.Tech(Dairy Technology) in 2015-19 academic session	Best Student Award in Faculty level	2017



**(c) Best poster / oral presentation/researcher awards to students. (Last Five Years)**

Sr. No.	Name of the student	Department	Position	Year of Award	Awarded during
1.	Pavel Rout	Dairy Chemistry	1 <sup>st</sup> Prize: Poster	2020	NAHEP(IG) Project: National Seminar on TIDP
2.	Chandrakanta Sen	Dairy Chemistry	2 <sup>nd</sup> Prize: Poster	2020	NAHEP(IG) Project: National Seminar on TIDP
3.	Arunabha Roy, Maitree Dutta	B.Tech(DT), 1 <sup>st</sup> Year	1 <sup>st</sup> Prize: Poster	2020	National Science Day by PASE
4.	Reshab Majumder	B.Tech(DT), 3rd Year	2 <sup>nd</sup> Prize: Extempore	2020	National Science Day by PASE
5.	Arnab Das	B.Tech(DT), 1 <sup>st</sup> Year	3 <sup>rd</sup> Prize: Extempore	2020	National Science Day by PASE
6.	Pritam Bera	B.Tech (DT) 1 <sup>st</sup> Year Student	1 <sup>st</sup> Prize: Poster	2019	National Milk Day: organized by NAHEP(IG)
7.	Debanjan Maity	B.Tech (DT) 3rd Year Student	2nd Prize: Poster	2019	National Milk Day: organized by NAHEP(IG)
8.	Mahasweta Bhattacharyya (M.tech,1st year) Md. Zishan Ahmed (B.Tech 3rd year) Isha Ghosh (B.Tech 2nd year) Shubham Kar (B.Tech 1st year)		1stPrize : Quiz	2019	National Milk Day: organized by NAHEP(IG)
9.	SoumitraHazra(M. Tech,1st Year) Sayantani Mondal(B.Tech 3rd year) SaptadipMiatur (B.Tech 2nd year) Rahul Pradhan (B.Tech 1st year)		2nd Prize: Quiz	2019	National Milk Day: organized by NAHEP(IG)
10.	AnikKoley(M.Tech ,1st year) Saptanil Ghosh(B.Tech 3rd year) Akash Saha(B.Tech 2nd year), Arnab Das(B.Tech 1st year)		3rd Prize: Quiz	2019	National Milk Day: organized by NAHEP(IG)
11.	AmrikHazra &Shrutosom Das	B.Tech (DT) 4th Year Student during 2018	2nd Prize: Scentific Model	2018	Kolkata District Student youth fair:2018



12.	AmrikHazra & Tamal Sarkar	B.Tech (DT) 3rd Year Student during 2018	3rd Prize: Poster	2018	Tesseract-2018: organized by GNIT College
13.	Subhadip Manik, Pavel Rout, Rimli Chatterjee, BanashreeNaskar	M.Tech(DT) Students	1st Prize: Quiz	2018	National Milk Day: organized by FDT
14.	Rajshekher Maity, Jotisman Soren, Joy Adhikary, Soumyadip Dey	B.Tech(DT) students	2nd Prize	2018	National Milk Day: organized by FDT
15.	Antarip Chatterjee & Indranil Banerjee	B.Tech (DT) 3rd Year Student during 2017	1st Prize: Poster	2017	IIT Pakriti: 2017
16.	Debarima Ghosh & Maumita Adhikary	M.Tech (DT) Student during 2017	1st Prize: Poster	2017	Tesseract-2017: organized by GNIT College
17.	Payel Karmakar & Alisha Chhetri	B.Tech (DT) 3rd Year Student during 2017	2nd Prize: Poster	2017	Tesseract-2017: organized by GNIT College

**(d) Performance of Faculty of Dairy Technology Students in Inter- Agri University Youth Festival( Last Five Years)**

Sr. No.	Name of the student	Name of the Event	Place Secured	Year
1.	Diptomoy Bhattacharya	Light Vocal(Indian)	4th	2018
2.	Sumongol Ghosh	Collage	2nd	2020
3.	Subhadip Manik, Pronay Mondal, Reshav Majumder, Swarup Mallick, Bapan Samanta, Santanu Halder, Soumita Bag, Sudipta Mondal, Sumongal Ghosh, Koushik Das	Procession	2nd	2020

**(e) Performance of Students in Inter- College Youth Festival( Last Five Years)**

Sr. No.	Name of the student	Name of the Event	Place Secured	Year
1.	Abhisek Ojha, Jyotishman Soren, Rajsekhar Maty and Supratim Paul	Quizella: IIT Pakriti	2nd	2019
2.	Soumita Bag	Turn-Coat: IIT Pakriti	2nd	2019
3.	Abhilash Basu, Rajsekhar Maity, Sohan Mondal, Soumyadip Dey, Jyotisman Soren	Quizella: IIT Pakriti	1st	2018
4.	Soumita Bag	Turncoat: IIT Pakriti	3rd	2018
5.	AmrikHazra, Shrutosom Das, Tamal Sarkar, Nafaraj Mondal, Siddhartha Nath	Vantage Point: IIT Pakriti	3rd	2018



**(f) Other achievements of Students**

Sr. No.	Name	Course	Batch	Achievement
1.	AmrikHazra	B. Tech. (DT)	2015 - 2019	1 <sup>st</sup> Prize, BITM Model in district level
2.	Shutrosom Das	B. Tech. (DT)	2015 - 2019	
3.	Tamal Sarkar	B. Tech. (DT)	2015 - 2019	Student of the year – 2019 F/DT
4.	Subhadip Manik	M.Tech. (DT)	2018-2020	Student of the year – 2020 F/DT
5.	Adittyia Dutta	B. Tech. (DT)	2016-2020	3rd Prize, National Dairy and Food Quiz Contest by SMC, AAU.
6.	Manos Sarkar	B. Tech. (DT)	2016-2020	
7.	Maumitaadhikary	M.Tech. (DT)	2016-2018	1st prize in poster competition (Tesseract) on the theme “General Trends in modernization of Food Technology” at Guru Nanak Institute on Technology on 8 <sup>th</sup> February, 2017.
8.	Debarima Ghosh	M.Tech. (DT)	2015-2017	

**Awards/Recognitions/Certificates received by Faculty members:-**

**Department of Dairy Microbiology**

Sl. No.	Name of the recipient	Name of the honour/ award/ fellowship / scholarship etc.	Offering Organization	Field of achievement
1	Prof. Surajit Mandal, Professor, Dept. of Dairy Microbiology	Associate Fellow	National Academy of Dairy Science, India (NADSI)	Achievements in dairy science and technology
		Best Oral Presentation Award	College of Dairy Technology, Sri Venkateswara Veterinary University, Tirupati (Andhra Pradesh)	Oral Presentation in National Conference on “Challenges and Opportunities for the New Generation Dairy Foods in India”, on ‘Bioprocess for stable and active probiotic Lactobacillus spp.’
2	Dr. Lopamudra Halder Associate Professor, Dept. of Dairy Microbiology	Best Oral Presentation Award (1 <sup>st</sup> )	Jointly by Krishi Sanskriti and BCKV	Oral Presentation in International Conference on Agriculture and Allied Sciences on ‘Efficacy of Probiotic Bacillus coagulans for production of milk based dried formulae’
		Best Oral Presentation Award (3 <sup>rd</sup> )	Indian Meat Science Association	Oral Presentation in IMSACON VIII-2018, on ‘Prevalence of Antibiotic Resistant Coliform Organisms in Market Sarpuria, a Geographical Indication Sweetmeat of West Bengal, India’
		Invited Guest Speaker for	ICAR-CIFRI,	



		Women in Agriculture Day in India on December, 4, 2018	Barrackpore, Kolkata	
		Best Paper Award	Indian Society of Extension Education	Oral Presentation in ISEE National Seminar-2018 on "Skilled training on value added milk products' business: A way forward for income enhancement of the dairy farmers"
		Best Poster Presentation Award (1 <sup>st</sup> )	Indian Dairy Association (EZ)	Poster Presentation in 47th Dairy Industry Conference-2019, on 'Skill Development for Milk Based Entrepreneurship: A Way Forward for Transforming Livelihood onto a Path of Prosperity'
3	Mr. Amit Kumar Barman	Best Paper Award	Jointly by Krishi Sanskriti and BCKV	Oral Presentation in International Conference on Agriculture and Allied Sciences-20-19, on "Comparative Study On The Shelf Life Of Treated Paneer "

### Department of Dairy Chemistry

Sl. No.	Name of the recipient	Name of the honour/ award/ fellowship / scholarship etc.	Offering Organization	Field of achievement
1	Prof. Pikani Ranjan Roy	Best Teacher Award of the Faculty of Dairy Technology	WBUAFS	Dairy Technology
2	Dr. Chaitali Chakraborty and Prof. Pinaki Ranjan Roy	Best Poster Award	National Seminar on " Traditional Indian Dairy Products-Prospects of Commercialization" Organized by the National Agricultural Higher Education Project (NAHEP)-Innovation Grant, at the Faculty of Dairy Technology, WBUAFS, Nadia held on 13th March, 2020	on the topic "Enzymatic modification of Whey Protein Isolates using food grade enzymes and it's resulting functional properties"
3	Prof. Pinaki Ranjan Roy and Dr. Chaitali	Second for poster presentation	Organized by the National Agricultural	on the topic "Textural Quality of Paneer



	Chakraborty		Higher Education Project (NAHEP). Innovation Grant, at the Faculty of Dairy Technology, WBUAFS, Nadia held on 13th March, 2020	added with Nisin" in the National Seminar on " Traditional Indian Dairy Products- Prospects of Commercialization"
4	Dr. Chaitali Chakraborty	Best Paper Award	46th Dairy Industry Conference at Kochi, Kerala during 8-10 February, 2018	article published in Indian Dairyman 2016 entitled "Advancements in Packaging of Milk and Milk Products"
5	Dr. Chaitali Chakraborty	Best Paper Award	EDCT 2018, International Conference on Emerging Trends in Electronic Devices and Computational Techniques, Technically Co-Sponsored by IEEE Kolkata Section, organized by Guru Nanak Institute of Technology during 8-9 March, 2018	on the topic "Application of Optical Sensors in Determination of Light Absorbents of Purple Cabbage Fortified Lime Squash"

#### Department of Dairy Technology

Sl. No.	Name of the recipient	Name of the honour/ award/ fellowship / scholarship etc.	Offering Organization
1.	Dr. Anindita Debnath	Second best paper award for " Sensory and colour profile of milk-coconut sweet as a function of ingredients" published in Indian Journal of Dairy Science.	Indian Dairy Association
2.	Dr. Anindita Debnath	Secure third position in poster presentation on "Rheological property of Inulin added low and reduced fat cream cheese" in 47th Dairy Industry Conference organised by Indian Dairy Association	Indian Dairy Association
3.	Dr. Anindita Debnath	Best paper award for "Effect of Processing Parameters on Quality Attributes of Cream Cheese" published in Indian Journal of Dairy Science.	Indian Dairy Association
4.	Mr. Kuntal Roy	Young Professional Award-2020	Vigyan Varta

#### 6.5.7.4. Employability

*What are the set of achievements such as skills, understandings and personal attributes that make College students more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy? Provide one page note on the subjects.*

The Achievements are:-

- 1) Professional skills of the students has been enhanced
- 2) Logical understanding of the students in respect of relevant functional areas has been enhanced.



- 3) Personality development of the Students has been made to make them confident, self reliant and presentable before recruitment boards.

The ultimate goal of any student after graduation/post graduation is either engage in self-employment as entrepreneur or get employed in private or public sector industries or organizations. Imparting skills to learners based on above specific job needs is mandatory of any college/institution. Graduate students right from the beginning are taught theoretically and practical skills on different areas milk procurement, Processing, marketing and distribution, business management, entrepreneurial development, interpersonal relationships, effective communications skills etc. till the end of the degree programme. Subject courses are designed in accordance with V Deans' committee report giving more importance to practical skills in all areas of Dairy Sectors.

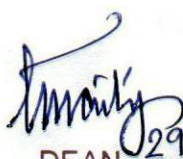
Placement Cell of the Institute is taking all efforts to improve the employability skill of the students. The students are trained in various skill by the professional expert. One Faculty member conducts many sessions on preparation of Resume, participation in interview and group discussion. The Academic counselors also periodically interact with the students and motivate them to prepare for competitive exams- quantities analysis, reasoning ,language skill etc are invited to conduct special sessions to students to improve their skill. Alumni also regularly interact with students and share their experience. As a consequence of the sustained efforts of the faculty members in the college and the own initiate of the students several alumni are successfully serving the various walks of life and brought good name to the Institution.

### **6.5.9 CERTIFICATE**

I, Prof. (Dr.) Tarun Kumar Maity, Dean, Faculty of Dairy Technology, West Bengal University of Animal & Fishery Sciences hereby certify that the information contained in Sections 6.4 and Section 6.5.1 to 6.5.7.4 are furnished as per the records available in the college and degree awarding university.

Date: 29.01.2021

Place: Mohanpur, Nadia

  
DEAN 29.01.2021  
Faculty of Dairy Technology  
W. B. University of Animal & Fishery Sciences  
Mohanpur-741252 Nadia (WB.)



## Self Study Report for the Faculty of Veterinary & Animal Sciences

### 6.5.1. FACULTY ADMINISTRATION

#### 6.5.1.1. Faculty Dean's Office Establishment:

*Whether Dean's post has been sanctioned by the appropriate authority as per ICAR Model Act/UGC guidelines? Date of selection of present Dean, mode of selection, tenure etc. shall be mentioned. Clearly mention the staff and infrastructure/ facilities available in the Dean's Secretariat.*

Whether Dean's post has been sanctioned by the appropriate authority as per ICAR Model Act/UGC guidelines?	The post of Dean, Faculty of Veterinary & Animal Sciences has been sanctioned by the Govt. of West Bengal which is in consonance with the ICAR Model Act / UGC guidelines.
Date of selection of present Dean	16.06.2020*
Mode of selection of Dean	Direct recruitment
Tenure of Dean	Four (4) years

**\*At present the Faculty is headed by Prof. (Dr.) Nilotpall Ghosh, as Dean from 16.06.2020. Prof Ghosh is assigned to discharge the duties of the Dean, Faculty of Veterinary & Animal Sciences, WBUAFS, Kolkata in addition to his normal duties as Professor LPM.**

#### Dean's Secretariat

##### Infrastructure/ facilities available in the Dean's Secretariat

The secretariat is well equipped & furnished. All staff is having computers along with internet connection. Printers, scanners, photocopier machines, and vehicles are available for office use.

##### Staff of Dean's Secretariat

The Dean is assisted by Campus In-Charge, Deputy Registrar, Deputy Librarian, Assistant Engineer, Medical Officer, Dean Students' Welfare, NSS Coordinator, Controller of Examinations, and Head of the Departments. The Dean is also assisted by its secretariat staff members.

Name of the Post	Present position	No. of Staff
Dean		1
<b><u>Dean's Secretariat</u></b>		
Asst. Administrative Officer (A&AO)	Campus In-charge and his Estb. under Registrar of the university	1
PA or PS	-	0
Academic Assistant (AA)	Sr. Assistant	1
Establishment Assistant	Sr. Assistant	1
Account Assistant	Asst. Cashier	1
Driver	Sr. Driver cum Mechanic	1
	Driver (MRW)	1
	Jr. Assistant	1
Attendants	Office Attendant (G I)	1
	Office Attendant (G I)	1



	Office Attendant (G I)	1
	Office Attendant (G I)	1
<b>Sweeper</b>	Sr. Sweeper	1
<b>Casual / Daily rated Workers</b>	Muster Roll Worker	1
	Muster Roll Worker	1
	Muster Roll Worker	1
	Muster Roll Worker	1
	Muster Roll Worker	1
	Muster Roll Worker	1

\* Gardener, Electrician, Plumber etc are placed under the Campus In-Charge, Mohanpur Campus and under the Estate Manager at Belgachia Campus. These works are usually done through external agencies.

#### 6.5.1.2. Monitoring Mechanism for Quality Education (On-Line)

*Whether the College is having an internal quality assurance system, with appropriate structure and processes, and with enough flexibility to meet the diverse needs of the stakeholders which is required for planning, guiding and monitoring quality assurance and quality enhancement activities of the Colleges. How effectively monitoring of teaching, research and extension across the departments is being conducted, and mention the impact of monitoring on the outcome of the College with reference to students' excelling in academics, research and extracurricular activities.*

#### **Whether the Faculty / College is having an internal quality assurance system?**

The university has an internal quality assurance system, with appropriate structure and processes, and with enough flexibility to meet the diverse needs of the stakeholders which is required for planning, guiding and monitoring quality assurance and quality enhancement activities of the Faculty.

#### **How effectively monitoring of teaching, research and extension across the departments is being conducted?**

##### **Teaching :**

The registration of courses for each semester is undertaken through online mode. The conduct of theory and practical class are time to time reviewed by the Heads of the Departments and the Dean of the Faculty.

##### **Undergraduate degree programme:**

- 1) Mid semester, Practical and Theory examinations are conducted to assess the students.
- 2) Assignments are given to the students in each course related to the curriculum.
- 3) Mock examinations are conducted for the students during the 1<sup>st</sup> year.
- 4) Feedback on course content and teaching is taken from students and the same is acted upon.
- 5) Academic Counselling is extended for a group of students in batches by the teachers.
- 6) Heads of the Departments meet the respective batches students time to time to coordinate the activities.



### **Postgraduate and Doctoral degree programme:**

- 1) Periodic assignments, term paper, presentation of advancements in a particular course curriculum is done by the students.
- 2) The qualifying examination is conducted at the end of the course work to evaluate students understanding about the various courses.
- 3) The theses submitted by the Master Degree and PhD students are also evaluated by external experts.
- 4) The final thesis viva-voce for the Doctoral programme is also conducted through public defence mode as and when required.
- 5) Each registered course of Master Degree and Doctoral programme is evaluated by the students of a particular batch about the content and its delivery.

### **Research**

#### **Student Research:**

- 1) Presentation for outline of research work and finalization is done by the Advisory Committee with the inputs from the Heads of the Departments and Dean.
- 2) The Student Research work is monitored by the Chairman of the Advisory Committee / Supervisor.
- 3) The periodical review of the research work of all Master Degree and Doctoral students by the Dean of the faculty.
- 4) Publications of Master Degree and Doctoral research work in well rated journals is appreciated.

#### **Faculty Research**

- 1) The research projects are submitted to the Directorate of Research, Extension and Farms for initial scrutiny and recommendation before final submission.
- 2) The progress of each research project is periodically monitored and reviewed.
- 3) The final submission of report on project is also reviewed.

### **Extension**

- 1) It is mandatory for the teachers to take part in the extension activities as and when organized by the Dean of the Faculty and the Directorate of Research, Extension and Farms.
- 2) Field visit by the teachers on need basis as and when asked for by the university / State Govt. to diagnose the problem and provide appropriate recommendations.
- 3) Participation in training programme organized by the university for the farmers as experts is mandatory and review of such participation is done especially during the submission of the Self Assessment Report for promotion under Career Advancement.

### **Impact of monitoring on students excellence in academic, research, and extracurricular activities**

#### **Academic**

- 1) Higher academic performance of students with improved OGPA
- 2) Improved enrolment of students in post graduate programme
- 3) Participation and selection for higher education in National and International Institute.



- 4) Participation in competitive examinations for jobs and success thereof.

#### Research

- 1) Publication of research articles in reputed journals by the students and faculty members.
- 2) Receipt the sanction of research projects from the Govt. / Private Agencies.
- 3) Facilitated receipt of Best Student Award.

#### Extracurricular

- 1) Participation in the NSS programmes.
- 2) Participation and excelling in the Agri Sports / Agricultural Meets organised by ICAR.
- 3) Participation and excelling in the Cultural Meets / Sports Meets organised by AIU.

#### **6.5.1.3. Board of Studies:**

*Whether the CC in the Department level and Board of Studies at the College is in place? The composition of the BoS and date of conduct of meetings for last five years and major recommendations made by the BoS should be given in tabular form.*

There is a separate board of studies for each of 21 (twenty one) numbers of the Departments. The composition, powers and functions of the board of studies is prescribed in the statutes is detailed below.

##### **1. Composition of the Board of Studies for each Department**

- The Head of the Department is the Chairman and Convener of the Board of Studies.
- Each Board of Studies consists of all whole-time teachers of the Department concerned.

##### **2. The functions of Board of Studies**

- To propose to the Faculty concerned the courses of study and curriculum for various programmes of instructions offered by the concerned Faculty.
- To make proposal to Faculty Council for Post-Graduate and Under-graduate studies for the programme for inter-disciplinary study and research.
- To review the academic programme of the Department from time to time and to propose the method of redressal of the problems if any, to the Faculty Council for approval.
- To consider any other matter referred to it by the Faculty Council, the Executive Council or Vice- Chancellor, as the case may be.

#### **Date and recommendations of board of studies from 2016-17 to 2020-21 (as on 31.12.2020)**

Sr. No.	Year	Date	Major Recommendations
<b>Department of Animal Nutrition</b>			
1	2016-17	28.04.2016 10.08.2016 20.12.2016 16.02.2017 28.03.2017	1. Allotment of Animal Nutrition courses of BVSc & AH and MVSc amongst the teachers of the department. 2. Allotment of students will be based on option and merit list of the students in 1 <sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation. 3. Allocation of work related to laboratory amongst the staff members of the department. 4. Recommendation of the list of Awardees of different degrees. 5. Major, minor and supportive courses for Master and Doctoral Programme in Animal Nutrition were suggested. 6. List of External Examiners for evaluation of M.V.Sc and Ph. D. Theses was finalized.



2	2017-18	17.05.2017 12.09.2017 15.12.2017 22.03.2018	<ol style="list-style-type: none"> <li>1. Allotment of Animal Nutrition courses of BVSc &amp; AH and MVSc amongst the teachers of the department.</li> <li>2. Allotment of students will be based on option and merit list of the students in 1<sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation.</li> <li>3. Recommendation of the list of Awardees of different degrees.</li> <li>4. Major, minor and supportive courses for Master and Doctoral Programme in Animal Nutrition were suggested.</li> </ol>
3	2018-19	19.06.2018 24.08.2018 15.11.2018 20.02.2019	<ol style="list-style-type: none"> <li>1. Allotment of Animal Nutrition courses of BVSc &amp; AH and MVSc among the faculty members.</li> <li>2. Allocation of work related to laboratory work amongst the member of the department.</li> <li>3. Recommendation of the list of Awardees of different degrees.</li> <li>4. Major, minor and supportive courses for Master and Doctoral Programme in Animal Nutrition were suggested.</li> <li>5. List of External Examiners for evaluation of M.V.Sc and Ph. D. Thesis was finalized.</li> </ol>
4	2019-20	23.04.2019 18.07.2019 14.11.2019 19.02.2020	<ol style="list-style-type: none"> <li>1. Allotment of Animal Nutrition courses of BVSc &amp; AH and MVSc among the faculty members.</li> <li>2. Allotment of students will be based on option and merit list of the students in 1<sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation.</li> <li>3. Major, minor and supportive courses for Master and Doctoral Programme in Animal Nutrition were suggested.</li> <li>4. Recommendation of the list of Awardees of different degrees.</li> </ol>
5	2020-21	23.09.2020	<ol style="list-style-type: none"> <li>1. Distribution of UG and PG courses on virtual mode during the COVID-19 pandemic since classes on physical mode have not yet been started.</li> </ol>
<b>Department of Livestock Farm Complex</b>			
1	2016-17	04.04.2016 16.08.2016 07.10.2016 14.03.2017	<ol style="list-style-type: none"> <li>1. Allocation of work related to Livestock Farm amongst the faculty and staff members of the department.</li> <li>2. Allotment of Livestock Farm Complex courses of BVSc &amp; AH among the faculty members.</li> </ol>
2	2017-18	21.06.2017 30.08.2017 14.11.2017 28.02.2018	<ol style="list-style-type: none"> <li>1. Allocation of work related to Livestock Farm amongst the faculty and staff members of the department.</li> <li>2. Allotment of Livestock Farm Complex courses of BVSc &amp; AH among the faculty members.</li> </ol>
3	2018-19	09.05.2018 13.08.2018 27.11.2018 25.03.2019	<ol style="list-style-type: none"> <li>1. Allocation of work related to Livestock Farm amongst the faculty and staff members of the department.</li> <li>2. Allotment of Livestock Farm Complex courses of BVSc &amp; AH among the faculty members.</li> </ol>
4	2019-20	19.06.2019 26.09.2019 11.12.2019 26.02.2020	<ol style="list-style-type: none"> <li>1. Allocation of work related to Livestock Farm amongst the faculty and staff members of the department.</li> <li>2. Allotment of Livestock Farm Complex courses of BVSc &amp; AH among the faculty members.</li> </ol>
5	2020-21	31.08.2020	<ol style="list-style-type: none"> <li>1. Due to maintain COVID protocol, the academic activities was hampered since March,2020. So, for the well being of the students of UG, the online classes are to be started.</li> <li>2. Allocation of work related to Livestock Farm amongst the faculty and staff members of the department.</li> </ol>
<b>Department Livestock Production Management</b>			
1	2016-17	05.05.2016 24.08.2016 22.11.2016 23.02.2017	<ol style="list-style-type: none"> <li>1. Allotment of LPM courses of BVSc &amp; AH and MVSc among the faculty members.</li> <li>2. Allotment of students will be based on option and merit list of the students in 1<sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation.</li> </ol>



			3. Allocation of work related to laboratory work amongst the member of the department. 4. Major, minor and supportive courses for Master and Doctoral Programme in LPM were suggested. 5. List of External Examiners for evaluation of M.V.Sc and Ph. D. Thesis was finalized.
2	2017-18	24.04.2017 18.07.2017 21.11.2017 27.03.2018	1. Allotment of LPM courses of BVSc & AH and MVSc among the faculty members. 2. Allotment of students will be based on option and merit list of the students in 1 <sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation. 3. Major, minor and supportive courses for Master and Doctoral Programme in LPM were suggested.
3	2018-19	27.06.2018 19.09.2018 31.12.2018 27.03.2019	1. Allotment of LPM courses of BVSc & AH and MVSc among the faculty members. 2. Allocation of work related to laboratory work amongst the member of the department. 3. Major, minor and supportive courses for Master and Doctoral Programme in LPM were suggested. 4. List of External Examiners for evaluation of M.V.Sc and Ph. D. Thesis was finalized.
4	2019-20	26.06.2019 17.09.2019 19.12.2019 31.01.2020	1. Allotment of LPM courses of BVSc & AH and MVSc among the faculty members. 2. Allotment of students will be based on option and merit list of the students in 1 <sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation. 3. Major, minor and supportive courses for Master and Doctoral Programme in LPM were suggested.
5	2020-21	16.09.2020	2. Due to maintain COVID protocol, the academic activities was hampered since March,2020. So for the well being of the students of UG, PG , the online classes are to be started.
<b>Department Livestock Products Technology</b>			
1	2016-17	13.04.2016 14.07.2016 31.10.2016 25.01.2017	1. Allotment of LPT courses of BVSc & AH and MVSc among the faculty members. 2. Allotment of students will be based on option and merit list of the students in 1 <sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation. 3. Allocation of work related to laboratory work amongst the member of the department. 4. Major, minor and supportive courses for Master and Doctoral Programme in LPT were suggested. 5. List of External Examiners for evaluation of M.V.Sc and Ph. D. Thesis was finalized.
2	2017-18	10.04.2017 07.07.2017 13.11.2017 06.02.2018	1. Allotment of LPT courses of BVSc & AH and MVSc among the faculty members. 2. Allotment of students will be based on option and merit list of the students in 1 <sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation. 3. Major, minor and supportive courses for Master and Doctoral Programme in LPT were suggested.
3	2018-19	16.05.2018 14.08.2018 20.11.2018 12.03.2019	1. Allotment of LPT courses of BVSc & AH and MVSc among the faculty members. 2. Allocation of work related to laboratory work amongst the member of the department. 3. Major, minor and supportive courses for Master and Doctoral Programme in LPT were suggested. 4. List of External Examiners for evaluation of M.V.Sc and Ph. D.



			Thesis was finalized.
4	2019-20	16.07.2019 25.09.2019 05.12.2019 09.03.2020	1. Allotment of LPT courses of BVSc & AH and MVSc among the faculty members. 2. Allotment of students will be based on option and merit list of the students in 1 <sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation. 3. Major, minor and supportive courses for Master and Doctoral Programme in LPT were suggested.
5	2020-21	24.09.2020	1. Due to maintain COVID protocol, the academic activities was hampered since March,2020. So for the well being of the students of UG, PG, the online classes are to be started.
<b>Department of Veterinary Clinical Complex</b>			
1	2016-17	18.04.2016 20.07.2016 21.11.2016 27.03.2017	1. Allocation of work related to Outdoor Clinic amongst the faculty and staff members of the department. 2. Allotment of VCC courses of BVSc & AH among the faculty members.
2	2017-18	03.05.2017 16.08.2017 20.11.2017 27.02.2018	1. Allocation of work related to Outdoor Clinic amongst the faculty and staff members of the department. 2. Allotment of VCC courses of BVSc & AH among the faculty members.
3	2018-19	15.05.2018 29.08.2018 06.11.2018 11.03.2019	1. Allocation of work related to Outdoor Clinic amongst the faculty and staff members of the department. 2. Allotment of VCC courses of BVSc & AH among the faculty members.
4	2019-20	23.07.2019 13.11.2019 11.02.2020	1. Allocation of work related to Outdoor Clinic amongst the faculty and staff members of the department. 2. Allotment of VCC courses of BVSc & AH among the faculty members.
5	2020-21	30.09.2020	1. Due to maintain COVID protocol, the academic activities was hampered since March,2020. So, for the well being of the students of UG, the online classes are to be started. 2. Allocation of work related to Outdoor Clinic amongst the faculty and staff members of the department.
<b>Department of Veterinary Anatomy &amp; Histology</b>			
1	2016-17	18.04.2016 15.07.2016 13.11.2016 28.03.2017	1. Allotment of courses of BVSc & AH and MVSc among the faculty members. 2. Allotment of students will be based on option and merit list of the students in 1 <sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation. 3. Allocation of work related to laboratory work amongst the member of the department. 4. Major, minor and supportive courses for Master and Doctoral Programme were suggested. 5. List of External Examiners for evaluation of M.V.Sc and Ph. D. Theses was finalized.
2	2017-18	08.08.2017 31.08.2018	1. Selection of Research guide and regarding the external selection of question setter 2. Selection of Research guide
3	2018-19	25.05.2018 13.07.2018 06.12.2018 15.03.2019	1. Allotment of courses of BVSc & AH and MVSc among the faculty members. 2. Allocation of work related to laboratory work amongst the member of the department. 3. Major, minor and supportive courses for Master and Doctoral Programme were suggested.
4	2019-20	26.07.2019	1. Allotment of students will be based on option and merit list of the students in 1 <sup>st</sup> semester examination, list of eligible guides



		16.11.2019 05.02.2020	<ul style="list-style-type: none"> <li>will be on the seniority and rotation.</li> <li>2. Major, minor and supportive courses for Master and Doctoral Programme were suggested.</li> <li>3. List of External Examiners for evaluation of M.V.Sc and Ph. D. Theses was finalized.</li> </ul>
5	2020-21	30.09.2020	Distribution of UG and PG courses on virtual mode during the COVID-19 pandemic since classes on physical mode have not yet been started.
<b>Department of Animal Genetics and Breeding</b>			
1	2016-17	18.05.2016 16.08.2016 26.10.2016 02.02.2017	<ul style="list-style-type: none"> <li>1. Ph.D. class distribution</li> <li>2. UG class assignment.</li> <li>3. Visit of ICAR accreditation team</li> <li>4. Ph.D. scholars' supervision allotment</li> <li>5. AGB Practical manual preparation.</li> <li>6. Strengthening of PG seminar room.</li> </ul>
2	2017-18	11.05.2017 02.08.2017 27.11.2017	<ul style="list-style-type: none"> <li>1. UG &amp; PG class assignment.</li> <li>2. Proposal for anti-virus software installation in computer lab.</li> <li>3. Ph.D. scholar's advisory committee formation.</li> <li>4. Ph.D. course distribution and supervisor selection.</li> <li>5. Utilization of ICAR development grant.</li> </ul>
3	2018-19	12.07.2018 26.09.2018	<ul style="list-style-type: none"> <li>1. UG &amp; PG class distribution</li> <li>2. PG admission committee formation</li> <li>3. UG Exam related issues</li> <li>4. Ph.D. research scholar's advisory committee formation.</li> <li>5. Utilization of ICAR development grant.</li> </ul>
4	2019-20	10.07.2019 25.09.2019 23.12.2019 19.02.2020 31.08.2020	<ul style="list-style-type: none"> <li>1. UG, PG, PhD course distribution.</li> <li>2. AMC of new instruments.</li> </ul>
5	2020-21	22.11.2020 08.12.2020 31.12.2020	<ul style="list-style-type: none"> <li>1. PG admission &amp; PhD Exam related</li> <li>2. UG &amp; PG course distribution</li> </ul>
<b>Department of Veterinary Biochemistry</b>			
1	2016-17	28.05.2016 11.09.2016 21.12.2016 13.02.2017 20.03.2017	<ul style="list-style-type: none"> <li>1. Allotment of courses of BVSc &amp; AH and MVSc amongst the teachers of the department.</li> <li>2. Allotment of students will be based on option and merit list of the students in 1<sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation.</li> <li>3. Allocation of work related to laboratory amongst the staff members of the department.</li> <li>4. Recommendation of the list of Awardees of different degrees.</li> <li>5. Major, minor and supportive courses for Master and Doctoral Programme were suggested.</li> <li>6. List of External Examiners for evaluation of M.V.Sc and Ph. D. Theses was finalized.</li> </ul>
2	2017-18	27.05.2017 13.09.2017 25.12.2017 20.03.2018	<ul style="list-style-type: none"> <li>1. Allotment of courses of BVSc &amp; AH and MVSc amongst the teachers of the department.</li> <li>2. Allocation of work related to laboratory amongst the staff members of the department.</li> <li>3. Recommendation of the list of Awardees of different degrees.</li> <li>4. Major, minor and supportive courses for Master and Doctoral Programme were suggested.</li> </ul>
3	2018-19	19.06.2018 24.08.2018 15.11.2018	<ul style="list-style-type: none"> <li>1. Allotment of students will be based on option and merit list of the students in 1<sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation.</li> </ul>



		20.02.2019	2. Recommendation of the list of Awardees of different degrees. 3. List of External Examiners for evaluation of M.V.Sc and Ph. D. Theses was finalized.
4	2019-20	03.04.2019 28.07.2019 19.11.2019 29.02.2020	1. Allotment of students will be based on option and merit list of the students in 1 <sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation. 2. Recommendation of the list of Awardees of different degrees. 3. List of External Examiners for evaluation of M.V.Sc and Ph. D. Theses was finalized.
5	2020-21	23.11.2020	Distribution of UG and PG courses on virtual mode during the COVID-19 pandemic since classes on physical mode have not yet been started.
<b>Department of Veterinary Epidemiology &amp; Preventive Medicine</b>			
1	2016-17	18.04.2016 21.09.2016 22.11.2016 23.02.2017 28.03.2017	1. Allotment of courses of BVSc & AH and MVSc amongst the teachers of the department. 2. Allocation of work related to laboratory amongst the staff members of the department. 3. Recommendation of the list of Awardees of different degrees. 4. List of External Examiners for evaluation of M.V.Sc and Ph. D. Theses was finalized.
2	2017-18	21.04.2017 23.09.2017 20.12.2017 24.03.2018	1. Allotment of courses of BVSc & AH and MVSc amongst the teachers of the department. 2. Allocation of work related to laboratory amongst the staff members of the department. 3. Recommendation of the list of Awardees of different degrees. 4. Major, minor and supportive courses for Master and Doctoral Programme were suggested.
3	2018-19	29.04.2018 20.09.2018 25.11.2018 21.02.2019	1. Allotment of students will be based on option and merit list of the students in 1 <sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation. 2. Recommendation of the list of Awardees of different degrees. 3. List of External Examiners for evaluation of M.V.Sc and Ph. D. Theses was finalized.
4	2019-20	03.05.2019 28.08.2019 19.12.2019 29.03.2020	1. Allotment of students will be based on option and merit list of the students in 1 <sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation. 2. Recommendation of the list of Awardees of different degrees. 3. List of External Examiners for evaluation of M.V.Sc and Ph. D. Theses was finalized.
5	2020-21	23.09.2020	Distribution of UG and PG courses on virtual mode during the COVID-19 pandemic since classes on physical mode have not yet been started.
<b>Department of Veterinary Gynaecology &amp; Obstetrics</b>			
1	2016-17	18.05.2016 16.08.2016 26.10.2016 02.02.2017	1. Ph.D. class distribution 2. UG class assignment. 3. Visit of ICAR accreditation team 4. Ph.D. scholars' supervision allotment 5. AGB Practical manual preparation. 6. Strengthening of PG seminar room.
2	2017-18	11.05.2017 02.08.2017 27.11.2017	1. UG & PG class assignment. 2. Proposal for anti-virus software installation in computer lab. 3. Ph.D. scholar's advisory committee formation. 4. Ph.D. course distribution and supervisor selection. 5. Utilization of ICAR development grant.
3	2018-19	12.07.2018 26.09.2018	1. UG & PG class distribution 2. PG admission committee formation 3. UG Exam related issues



			4. Ph.D. research scholar's advisory committee formation. 5. Utilization of ICAR development grant.
4	2019-20	10.07.2019 25.09.2019 23.12.2019 19.02.2020 31.08.2020	1. UG, PG, PhD course distribution. 2. AMC of new instruments.
5	2020-21	22.11.2020 08.12.2020 31.12.2020	1. PG admission & PhD Exam related 2. UG & PG course distribution
<b>Department of Veterinary Medicine, Ethics &amp; Jurisprudence</b>			
1	2016-17	23.05.2016 11.08.2016 11.11.2016 22.02.2017	1. Allotment of courses of BVSc & AH and MVSc among the faculty members. 2. Allotment of students will be based on option and merit list of the students in 1 <sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation. 3. Allocation of work related to laboratory work amongst the member of the department. 4. Major, minor and supportive courses for Master and Doctoral Programme were suggested. 5. List of External Examiners for evaluation of M.V.Sc and Ph. D. Thesis was finalized.
2	2017-18	11.06.2017 17.09.2017 23.12.2017 16.03.2018	1. Allotment of courses of BVSc & AH and MVSc among the faculty members. 2. Allotment of students will be based on option and merit list of the students in 1 <sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation. 3. Major, minor and supportive courses for Master and Doctoral Programme were suggested.
3	2018-19	26.05.2018 21.09.2018 21.12.2018 15.03.2019	1. Allotment of courses of BVSc & AH and MVSc among the faculty members. 2. Allocation of work related to laboratory work amongst the member of the department. 3. Major, minor and supportive courses for Master and Doctoral Programme were suggested. 4. List of External Examiners for evaluation of M.V.Sc and Ph. D. Thesis was finalized.
4	2019-20	17.07.2019 20.09.2019 15.11.2019 19.03.2020	1. Allotment of courses of BVSc & AH and MVSc among the faculty members. 2. Allotment of students will be based on option and merit list of the students in 1 <sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation. 3. Major, minor and supportive courses for Master and Doctoral Programme were suggested.
5	2020-21	22.09.2020	Due to maintain COVID protocol, the academic activities was hampered since March,2020. So for the well being of the students of UG, PG , the online classes are to be started.
<b>Department of Veterinary Microbiology</b>			
1	2016-17	20.05.2016 12.09.2016 20.12.2016 23.02.2017 21.03.2017	1. Allotment of courses of BVSc & AH and MVSc amongst the teachers of the department. 2. Allotment of students will be based on option and merit list of the students in 1 <sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation. 3. Allocation of work related to laboratory amongst the staff members of the department. 4. Recommendation of the list of Awardees of different degrees.



			5. Major, minor and supportive courses for Master and Doctoral Programme were suggested. 6. List of External Examiners for evaluation of M.V.Sc and Ph. D. Theses was finalized.
2	2017-18	21.04.2017 23.10.2017 21.11.2017 21.02.2018	1. Allotment of courses of BVSc & AH and MVSc amongst the teachers of the department. 2. Allocation of work related to laboratory amongst the staff members of the department. 3. Recommendation of the list of Awardees of different degrees. 4. Major, minor and supportive courses for Master and Doctoral Programme were suggested.
3	2018-19	29.06.2018 21.09.2018 25.11.2018 21.02.2019	1. Allotment of students will be based on option and merit list of the students in 1 <sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation. 2. Recommendation of the list of Awardees of different degrees. 3. List of External Examiners for evaluation of M.V.Sc and Ph. D. Theses was finalized.
4	2019-20	03.05.2019 18.07.2019 29.10.2019 22.02.2020	1. Allotment of students will be based on option and merit list of the students in 1 <sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation. 2. Recommendation of the list of Awardees of different degrees. 3. List of External Examiners for evaluation of M.V.Sc and Ph. D. Theses was finalized.
5	2020-21	23.11.2020	Distribution of UG and PG courses on virtual mode during the COVID-19 pandemic since classes on physical mode have not yet been started.
<b>Department of Veterinary Parasitology</b>			
	2016-17	12.05.2016 10.08.2016 16.10.2016 12.02.2017	1. Ph.D. class distribution 2. UG class assignment. 3. Visit of ICAR accreditation team 4. Ph.D. scholars' supervision allotment 5. AGB Practical manual preparation. 6. Strengthening of PG seminar room.
	2017-18	12.05.2017 12.08.2017 14.11.2017	1. UG & PG class assignment. 2. Proposal for anti-virus software installation in computer lab. 3. Ph.D. scholar's advisory committee formation. 4. Ph.D. course distribution and supervisor selection. 5. Utilization of ICAR development grant.
	2018-19	11.07.2018 16.09.2018	1. UG & PG class distribution 2. PG admission committee formation 3. UG Exam related issues 4. Ph.D. research scholar's advisory committee formation. 5. Utilization of ICAR development grant.
	2019-20	11.07.2019 15.09.2019 24.12.2019 29.02.2020 30.08.2020	1. UG, PG, PhD course distribution. 2. AMC of new instruments.
	2020-21	22.11.2020	1. PG admission & PhD Exam related 2. UG & PG course distribution
<b>Department of Veterinary Pathology</b>			
1	2016-17	20.04.2016 11.08.2016 21.12.2016 26.02.2017	1. Allotment of courses of BVSc & AH and MVSc amongst the teachers of the department. 2. Allotment of students will be based on option and merit list of the students in 1 <sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation.



		21.03.2017	<ul style="list-style-type: none"> <li>3. Allocation of work related to laboratory amongst the staff members of the department.</li> <li>4. Recommendation of the list of Awardees of different degrees.</li> <li>5. Major, minor and supportive courses for Master and Doctoral Programme were suggested.</li> <li>6. List of External Examiners for evaluation of M.V.Sc and Ph. D. Theses was finalized.</li> </ul>
2	2017-18	11.05.2017 22.09.2017 10.12.2017 21.03.2018	<ul style="list-style-type: none"> <li>1. Allotment of courses of BVSc &amp; AH and MVSc amongst the teachers of the department.</li> <li>2. Allotment of students will be based on option and merit list of the students in 1<sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation.</li> <li>3. Recommendation of the list of Awardees of different degrees.</li> <li>4. Major, minor and supportive courses for Master and Doctoral Programme were suggested.</li> </ul>
3	2018-19	29.06.2018 20.08.2018 25.11.2018 12.02.2019	<ul style="list-style-type: none"> <li>1. Allotment of courses of BVSc &amp; AH and MVSc among the faculty members.</li> <li>2. Allocation of work related to laboratory work amongst the member of the department.</li> <li>3. Recommendation of the list of Awardees of different degrees.</li> <li>4. Major, minor and supportive courses for Master and Doctoral Programme were suggested.</li> <li>5. List of External Examiners for evaluation of M.V.Sc and Ph. D. Thesis was finalized.</li> </ul>
4	2019-20	13.05.2019 10.07.2019 24.11.2019 29.02.2020	<ul style="list-style-type: none"> <li>1. Allotment of courses of BVSc &amp; AH and MVSc among the faculty members.</li> <li>2. Allotment of students will be based on option and merit list of the students in 1<sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation.</li> <li>3. Major, minor and supportive courses for Master and Doctoral Programme were suggested.</li> <li>4. Recommendation of the list of Awardees of different degrees.</li> </ul>
5	2020-21	23.11.2020	Distribution of UG and PG courses on virtual mode during the COVID-19 pandemic since classes on physical mode have not yet been started.
<b>Department of Veterinary Pharmacology &amp; Toxicology</b>			
1	2016-17	21.04.2016 02.09.2016 10.12.2016 13.02.2017 25.03.2017	<ul style="list-style-type: none"> <li>1. Allotment of courses of BVSc &amp; AH and MVSc amongst the teachers of the department.</li> <li>2. Allotment of students will be based on option and merit list of the students in 1<sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation.</li> <li>3. Allocation of work related to laboratory amongst the staff members of the department.</li> <li>4. Recommendation of the list of Awardees of different degrees.</li> <li>5. Major, minor and supportive courses for Master and Doctoral Programme were suggested.</li> <li>6. List of External Examiners for evaluation of M.V.Sc and Ph. D. Theses was finalized.</li> </ul>
2	2017-18	28.04.2017 21.10.2017 22.11.2017 11.02.2018	<ul style="list-style-type: none"> <li>1. Allotment of courses of BVSc &amp; AH and MVSc amongst the teachers of the department.</li> <li>2. Allocation of work related to laboratory amongst the staff members of the department.</li> <li>3. Recommendation of the list of Awardees of different degrees.</li> <li>4. Major, minor and supportive courses for Master and Doctoral Programme were suggested.</li> </ul>
3	2018-19	19.06.2018 02.09.2018	<ul style="list-style-type: none"> <li>1. Allotment of students will be based on option and merit list of the students in 1<sup>st</sup> semester examination, list of eligible guides</li> </ul>



		20.11.2018 21.02.2019	will be on the seniority and rotation. 2. Recommendation of the list of Awardees of different degrees. 3. List of External Examiners for evaluation of M.V.Sc and Ph. D. Theses was finalized.
4	2019-20	13.04.2019 28.07.2019 21.10.2019 23.02.2020	1. Allotment of students will be based on option and merit list of the students in 1 <sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation. 2. Recommendation of the list of Awardees of different degrees. 3. List of External Examiners for evaluation of M.V.Sc and Ph. D. Theses was finalized.
5	2020-21	23.12.2020	Distribution of UG and PG courses on virtual mode during the COVID-19 pandemic since classes on physical mode have not yet been started.
<b>Department of Veterinary Physiology</b>			
1	2016-17	10.05.2016 11.08.2016 26.10.2016 19.02.2017	1. Ph.D. class distribution 2. UG class assignment. 3. Visit of ICAR accreditation team 4. Ph.D. scholars' supervision allotment 5. AGB Practical manual preparation. 6. Strengthening of PG seminar room.
2	2017-18	12.06.2017 11.09.2017 14.12.2017	1. UG & PG class assignment. 2. Proposal for anti-virus software installation in computer lab. 3. Ph.D. scholar's advisory committee formation. 4. Ph.D. course distribution and supervisor selection. 5. Utilization of ICAR development grant.
3	2018-19	12.08.2018 26.09.2018	1. UG & PG class distribution 2. PG admission committee formation 3. UG Exam related issues 4. Ph.D. research scholar's advisory committee formation. 5. Utilization of ICAR development grant.
4	2019-20	12.04.2019 15.02.2019 24.12.2019 29.03.2020 10.08.2020	1. UG, PG, PhD course distribution. 2. AMC of new instruments.
5	2020-21	22.11.2020	1. PG admission & PhD Exam related 2. UG & PG course distribution
<b>Department of Veterinary Public Health</b>			
1	2016-17	23.06.2016 12.08.2016 11.10.2016 12.02.2017	1. Allotment of courses of BVSc & AH and MVSc among the faculty members. 2. Allotment of students will be based on option and merit list of the students in 1 <sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation. 3. Allocation of work related to laboratory work amongst the member of the department. 4. Major, minor and supportive courses for Master and Doctoral Programme were suggested. 5. List of External Examiners for evaluation of M.V.Sc and Ph. D. Thesis was finalized.
2	2017-18	11.04.2017 27.09.2017 23.11.2017 26.03.2018	1. Allotment of courses of BVSc & AH and MVSc among the faculty members. 2. Allotment of students will be based on option and merit list of the students in 1 <sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation.



			3. Major, minor and supportive courses for Master and Doctoral Programme were suggested.
3	2018-19	02.05.2018 25.09.2018 19.12.2018 25.03.2019	1. Allotment of courses of BVSc & AH and MVSc among the faculty members. 2. Allocation of work related to laboratory work amongst the member of the department. 3. Major, minor and supportive courses for Master and Doctoral Programme were suggested. 4. List of External Examiners for evaluation of M.V.Sc and Ph. D. Thesis was finalized.
4	2019-20	23.07.2019 10.09.2019 25.11.2019 14.03.2020	1. Allotment of courses of BVSc & AH and MVSc among the faculty members. 2. Allotment of students will be based on option and merit list of the students in 1 <sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation. 3. Major, minor and supportive courses for Master and Doctoral Programme were suggested.
5	2020-21	22.11.2020	Due to maintain COVID protocol, the academic activities was hampered since March,2020. So for the well being of the students of UG, PG , the online classes are to be started.
<b>Department of Veterinary Surgery &amp; Radiology</b>			
1	2016-17	11.04.2016 11.09.2016 26.10.2016 22.02.2017	1. Ph.D. class distribution 2. UG class assignment. 3. Visit of ICAR accreditation team 4. Ph.D. scholars' supervision allotment 5. AGB Practical manual preparation. 6. Strengthening of PG seminar room.
2	2017-18	22.05.2017 10.08.2017 24.11.2017	1. UG & PG class assignment. 2. Proposal for anti-virus software installation in computer lab. 3. Ph.D. scholar's advisory committee formation. 4. Ph.D. course distribution and supervisor selection. 5. Utilization of ICAR development grant.
3	2018-19	11.09.2018 26.09.2018	1. UG & PG class distribution 2. PG admission committee formation 3. UG Exam related issues 4. Ph.D. research scholar's advisory committee formation. 5. Utilization of ICAR development grant.
4	2019-20	12.05.2019 25.09.2019 24.12.2019 29.03.2020	1. UG, PG, PhD course distribution. 2. AMC of new instruments.
5	2020-21	30.08.2020 22.11.2020	1. PG admission & PhD Exam related 2. UG & PG course distribution
<b>Department of Veterinary &amp; Animal Husbandry Extension Education</b>			
1	2016-17	21.05.2016 12.09.2016 11.12.2016 23.02.2017 15.03.2017	1. Allotment of courses of BVSc & AH and MVSc amongst the teachers of the department. 2. Allotment of students will be based on option and merit list of the students in 1 <sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation. 3. Allocation of work related to laboratory amongst the staff members of the department. 4. Recommendation of the list of Awardees of different degrees. 5. Major, minor and supportive courses for Master and Doctoral Programme were suggested. 6. List of External Examiners for evaluation of M.V.Sc and Ph. D.



			Theses was finalized.
2	2017-18	18.04.2017 22.10.2017 12.11.2017 10.02.2018	1. Allotment of courses of BVSc & AH and MVSc amongst the teachers of the department. 2. Allocation of work related to laboratory amongst the staff members of the department. 3. Recommendation of the list of Awardees of different degrees. 4. Major, minor and supportive courses for Master and Doctoral Programme were suggested.
3	2018-19	29.06.2018 12.09.2018 23.11.2018 11.02.2019	1. Allotment of students will be based on option and merit list of the students in 1 <sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation. 2. Recommendation of the list of Awardees of different degrees. 3. List of External Examiners for evaluation of M.V.Sc and Ph. D. Theses was finalized.
4	2019-20	23.04.2019 20.07.2019 11.10.2019 21.02.2020	1. Allotment of students will be based on option and merit list of the students in 1 <sup>st</sup> semester examination, list of eligible guides will be on the seniority and rotation. 2. Recommendation of the list of Awardees of different degrees. 3. List of External Examiners for evaluation of M.V.Sc and Ph. D. Theses was finalized.
5	2020-21	21.11.2020	Distribution of UG and PG courses on virtual mode during the COVID-19 pandemic since classes on physical mode have not yet been started.
<b>Department of Avian Science</b>			
1	2016-17	N/A	N/A
2	2017-18	N/A	N/A
-	2018-19	N/A	N/A
-	2019-20	18.09.2019	Assuming the charge of Head of the Dept. of Avian Science by Dr M. C. Pakhira as per officer order Allotment of courses of BVSc & AH amongst the teachers of the department.
5	2020-21	05.11.2020	Allotment of courses of BVSc & AH on virtual mode amongst the teachers of the department in view of COVID-19 pandemic
<b>Department of Animal Biotechnology</b>			
1	2016-17	N/A	N/A
-	2017-18	N/A	N/A
-	2018-19	N/A	N/A
4	2019-20	19.09.2019	Assuming the charge of Head of the Dept. of Avian Science by Dr. Aditya Pratab Achariya as per officer order Allotment of courses of BVSc & AH amongst the teachers of the department.
5	2020-21	05.11.2020	Allotment of courses of BVSc & AH on virtual mode amongst the teachers of the department in view of COVID-19 pandemic



#### 6.5.1.4. Anti-Ragging Cell:

*In pursuance to the Judgment of the Hon'ble Supreme Court of India dated 08.05.2009 in Civil Appeal No. 887/2009, the University Grants Commission has framed "UGC Regulations on curbing the menace of ragging in higher educational institutions, 2009" which have been notified on 4th July, 2009 in the Gazette of India. Does the College follow this regulation and subsequent guidelines issued in the matter in letter and spirit? Give details.*

The Anti Ragging Cell has been constituted as per guidelines of the University Grants Commission. Apart from the Anti Ragging Cell constituted by the university at the university level to curb the menace of ragging, there is a faculty level Anti Ragging Squad to assist the Anti Ragging Cell details of which are mentioned below:

#### **Anti-Ragging Squad for the Faculty of Veterinary & Animal Sciences (Mohanpur and Belgachia Campus):**

- (i) In-Charge Students' Welfare, Faculty of Veterinary & Animal Sciences as the Head of the Squad
- (ii) Provosts of all the Students Hostels at Mohanpur and Belgachia Campus,
- (iii) Teacher members – two members nominated by the Dean, Faculty of Veterinary & Animal Sciences amongst them one must be Women Teacher,
- (iv) Non-teaching members – two non-teaching members to be nominated by the Dean, Faculty of Veterinary & Animal Sciences.

The above Squad is entrusted with the task of organizing surprise visits to hostels, canteens, library etc. with or without notice of the students to keep strict vigil and for on the spot disposal of ragging complaints, if any etc. The Squad members should meet the present students preferably in the hostels and also empowered to stay in the hostels at night for a period of 15-20 days or till Freshers' Welcome is over at the respective campuses as a part of anti-ragging campaign. The Squad Head along with other members takes all possible efforts in close liaison with the Anti-Ragging Monitoring Cell to prevent ragging activities inside the campuses and to sensitize the senior students as well. The Head of Squad submits the Action Taken Report (ATR) on anti-ragging activities undertaken in the Faculty of Veterinary & Animal Sciences after one month of admission of students in each session to the Registrar and Chairman of Anti-Ragging Monitoring Cell and continue the strict vigil in this respect.

#### **Year wise date of the meetings:**

2016-17	2017-18	2018-19	2019-20	2020-21
06.09.2016	-	-	22.04.19	-
-	-	-	23.09.19	-

#### **Number of complaints**

S.N.	Subject	2016-17	2017-18	2018-19	2019-20	2020-21
1.	No. of complaint	-	-	-	01	-
2.	complaint disposed	-	-	-	01	-
3.	no of cases pending	-	-	-	-	-
4.	no of workshop	01	01	01	01	-



#### 6.5.1.5. Biological Waste Disposal Facility:

*Whether wastes (chemical, biological, radioactive, universal, and recyclable) are generated by a variety of research, clinical, service, maintenance, and cleaning operations at the College level? If yes, then mention the disposal mechanism being adopted as per the government guidelines.*

**Whether wastes (chemical, biological, radioactive, universal, and recyclable) are generated by a variety of research, clinical, service, maintenance, and cleaning operations at the College level?**

**YES.**

**If yes, then mention the disposal mechanism being adopted as per the government guidelines.**

1. Chemical, Biological and recyclable wastes generated through a variety of practical classes, research activities, maintenance and cleaning operation at the college level have been disposed systematically.
2. Other Biological wastes / Chemical Waste etc. are disposed of with the help of Local Municipality. Every day the Municipal personnel pay visit to the campus with vehicle and other accessories to collect the waste materials which are disposed by them at the designated centres of the Municipality.
3. No radioactive waste is generated in the faculty.
4. The laboratory chemical wastes are disposed by burying deep into the soil.
5. Waste materials of the Farm Complex used for making of vermicompost.

#### 6.5.1.6. Institutional Ethics Committee for Experiment on Animals:

*Whether the institute/College is following CPCSEA guidelines and constituted an Institutional Animal Ethics Committee (IAEC), get their animals house facilities inspected and get their project cleared by CPCSEA and IAEC before commencing them? The College should make statement that it is adhering all guidelines in the matter.*

**Whether the institute/College is following CPCSEA guidelines and constituted an Institutional Animal Ethics Committee (IAEC), get their animals house facilities inspected and get their project cleared by CPCSEA and IAEC before commencing them?**

**Yes.**

**The College should make statement that it is adhering all guidelines in the matter:**

There is an Animal Ethics Committee at the university level duly registered with the Ministry of Environment, Forest and Climate Change (Animal Welfare Division), Govt. of India. The said committee takes care of relevant issues of all the three faculties of the university including the Faculty of Veterinary & Animal Sciences. The Animal House facilities of the university are inspected from time to time and before commencement of a research work the relevant issues are taken care of by the committee on the basis of referred cases. The faculty has been following the guidelines of the CPCSEA as applicable.



#### 6.5.1.7. Committee for Prevention of Sexual Harassment of Women at Work Places:

*Does the institution is adhering the sexual harassment of women at workplace (Prevention, Prohibition and Redressal Act, 2013) in letter and spirit. Mention the constitution of sexual harassment committees and date of proceedings conducted in last five years in tabular form.*

**Does the institution is adhering the sexual harassment of women at workplace (Prevention, Prohibition and Redressal Act, 2013) in letter and spirit.**

**YES.** Sexual Harassment at workplace violates the rights and opportunities of women to seek, obtain and hold employment without discrimination. West Bengal University of Animal & Fishery Sciences is always alert to provide a safe work environment to their women employees and include both preventive and remedial measures to make the work environment safe for women employees.

#### **Constitution of sexual harassment committees:**

There exists a committee for this purpose in the University since 2004 as per VISHAKHA guidelines promulgated by the Supreme Court of India, which is reconstituted from time-to-time. The latest committee was reconstituted vide Notification No. WBUAFS/Admn/ NC-2/768 dt. 27/03/2019 with 10 members as follows :

Name & Designation	
12.Smt. Aparajita Biswas, Computer Programmer, DREF, WBUAFS	Presiding Officer
13.Programme Officer, Sanhita (NGO)	Member
14.Dr. Satabdi Das, Scientist, DREF,WBUAFS	Member
15.Prof. Kalyani Roy, Professor, Dept. of Gynaecology & Obstetrics, F/VAS	Member
16.Mrs. Papri Pal, Lab Attndnt.(Gr-III),Dept.of Aquaculture, F/FSc., WBUAFS	Member
17.Mrs.Koumari Chowdhuri, Tech. Asstt.,F/DT,WBUAFS	Member
18.Mr.Anuj Kumar Chakraborty,Secretary Faculty Council, WBUAFS	Member
19.Prof. S. Batabyal, Dean of Students Welfare,WBUAFS	Member
20.In-Charge Students' Welfare, Faculty of VAS,WBUAFS	Member
21.In-Charge Students' Welfare, Faculty of DT,WBUAFS	Member
22.In-Charge Students' Welfare, Faculty of F Sc., WBUAFS	Member

**NB: The above committee has been constituted centrally at the university level which caters the three faculties of the university.**

**Report of the committee constituted for Prevention of Sexual Harassment of Women at Work Places last five years starting from 2016-17 to 2020-21 (Case related to the Faculty of Fishery Sciences):**

Sl. No.	Year	No. of cases received	No. of Meetings held	Meeting Date	No. of cases pending
1	2016-17	Nil	Nil	NA	Nil
2.	2017-18	Nil	Nil	NA	Nil
3.	2018-19	Nil	Nil	NA	Nil
4.	2019-20	1	6	03/04/2019 18/04/2019 24/04/2019 14/05/2019 27/05/2019 31/05/2019	Nil
5.	2020-21*	Nil	Nil	NA	Nil

**\* As on 31.12.2020**



## 6.5.2. FACULTY

### 6.5.2.1. Faculty Strength (as on 31.12.2020)

*Mention the Faculty position (both in sanctioned and in-position) at the College / Faculty.*

Sl. No.	Dept.	Faculty Position Sanctioned by the Govt. as per ICAR/UGC/VCI			Faculty Position filled		
		Prof.	Asso. Prof.	Asst. Prof.	Prof.	Asso. Prof.	Asst. Prof.
1	Animal Nutrition	1	2	5	1	1	3
2	Livestock Farm Complex	1	1	4	1	0	4
3	Livestock Production Management	1	2	5	2*	0	1
4	Livestock Products Technology	1	1	2	1	0	2
5	Veterinary Clinical Complex	1	1	4	1	1	7
6	Veterinary Anatomy & Histology	2	1	4	2*	1	1
7	Animal Genetics and Breeding	1	2	5	1*	2	3
8	Veterinary Biochemistry	1	1	3	1	1	2
9	Veterinary Epidemiology & Preventive Medicine	1	0	2	2*	0	1
10	Veterinary Gynaecology & Obstetrics	1	1	5	2*	0	4
11	Veterinary Medicine, Ethics & Jurisprudence	1	1	3	2*	1	0
12	Veterinary Microbiology	1	2	5	1	0	4
13	Veterinary Parasitology	1	1	3	1	1	3
14	Veterinary Pathology	1	2	5	1*	0	4
15	Veterinary Pharmacology & Toxicology	0	2	2	1	0	1
16	Veterinary Physiology	1	1	5	1	1	3
17	Veterinary Public Health	1	1	2	0	1	2
18	Veterinary Surgery & Radiology	1	2	6	4*	0	1
19	Veterinary & Animal Husbandry Extension Education	1	1	1	1	1	2
20	Avian Science	1	2	4	-	1	4
21	Animal Biotechnology	1	1	3	-	-	2

\* Promoted as Professor / Associate Professor under Career Advancement Scheme.

**NB:** Apart from the Teaching posts mentioned above, Guest Teachers / Adjunct Faculty / Contractual Teachers also take part in the academic programmes. The university is exploring the possibility to initiate the recruitment process of teachers against sanctioned posts.

### 6.5.2.2 Faculty Profile (Department Wise): (as on 31.12.2020)

*Mention department wise faculty profile in tabular form and mention whether present profile is sufficient to meet the academic requirement of the College*

Sl. No.	Name	Designation	Highest qualification	Experience (years)	Sufficient for current academic programme?
<b>1. Department of Veterinary Anatomy &amp; Histology</b>					
1	Prof. Sanjay Roy	Professor	PhD	20	YES
2	Prof. Partha Das	Professor	PhD	20	
3	Dr. Arun Kr. Mondal	Asso. Professor	PhD	10	



4	Dr. Nirmal Kr. Tudu	Asst. Professor	PhD	5	
<b>2. Department of Veterinary Physiology</b>					
5	Prof. Pradip Kr. Das	Professor	PhD	19	YES
6	Dr. Prabal Ranjan Ghosh	Asso. Professor	PhD	20	
7	Dr. Kinsuk Das	Asst. Professor	PhD	12	
8	Dr. Dipak Banerjee	Asst. Professor	PhD	10	
9	Dr. Joydip Mukherjee	Asst. Professor	PhD	10	
<b>3. Department of Veterinary Biochemistry</b>					
10	Prof. Subhasis Batabyal	Professor	PhD	20	YES
11	Dr. Apratim Maity	Asso. Professor	PhD	15	
12	Dr. Samik Polley	Asst. Professor	PhD	2	
13	Dr. Swaraj Biswas	Asst. Professor	MVSc	2	
<b>4. Department of Livestock Production Management</b>					
14	Prof. Rajarshi Samanta	Professor	PhD	25	YES
15	Prof. Nilotpal Ghosh	Professor	PhD	20	
16	Dr. Santanu Bera	Asst. Professor	PhD	10	
<b>5. Department of Animal Genetics &amp; Breeding</b>					
17	Prof. Ajit Kr. Sahoo	Professor	PhD	30	YES
18	Dr. Subhash Taraphdar	Asso. Professor	PhD	18	
19	Dr. Manoranjan Roy	Asso. Professor	PhD	15	
20	Dr. Uttam Sarkar	Asst. Professor	PhD	13	
21	Dr. Ananta Kr. Das	Asst. Professor	PhD	5	
22	Dr. Sanjoy Datta	Asst. Professor	MSc	5	
<b>6. Department of Animal Nutrition</b>					
23	Prof. Barun Roy	Professor	PhD	25	YES
24	Dr. Guru Prasad Mandal	Asso. Professor	PhD	15	
25	Dr. Amlan K. Patra	Asst. Professor	PhD	15	
26	Dr. Stephen Soren	Asst. Professor	MVSc	2	
<b>7. Department of Livestock Products Technology</b>					
27	Prof. Subhasis Biswas	Professor	PhD	30	YES
28	Dr. Debashis Bhattacharyya	Asst. Professor	PhD	20	
29	Dr. Gopal Patra	Asst. Professor	PhD	13	
<b>8. Department of Veterinary and Animal Husbandry Extension Education</b>					
30	Prof. Arunasis Goswami	Professor	PhD	20	YES
31	Dr. Sukanta Biswas	Asso. Professor	PhD	2	
32	Dr. Debasis Ganguli	Asst. Professor	PhD	12	
33	Dr. Debasish Saha	Asst. Professor	PhD	2	
<b>9. Department of Veterinary Microbiology</b>					
34	Prof. S Narayan Joardar	Professor	PhD	15	YES
35	Dr. Devi Prasad Isore	Asst. Professor	PhD	13	
36	Dr. Indranil Samanta	Asst. Professor	PhD	13	
37	Dr. Samir Dey	Asst. Professor	PhD	10	
38	Dr. Kunal Batabyal	Asst. Professor	PhD	10	
<b>10. Department of Veterinary Pathology</b>					
39	Prof. S K Mukhopadhyay	Professor	PhD	25	Yes
40	Dr. Nimai Chand Patra	Asst. Professor	PhD	13	
41	Dr. Saktipada Pradhan	Asst. Professor	PhD	13	
42	Dr. Rabindra Nath Hansda	Asst. Professor	PhD	8	
43	Dr. Samiran Mondal	Asst. Professor	PhD	9	
<b>11. Department of Veterinary Parasitology</b>					
44	Prof. S Ch. Mandal	Professor	PhD	30	YES
45	Dr. Surajit Baidya	Asso. Professor	PhD	20	
46	Dr. Ruma Jas	Asst. Professor	PhD	13	
47	Dr. Soumitra Pandit	Asst. Professor	PhD	9	



48	Dr. Abhijit Nandi	Asst. Professor	MVSc	3	
<b>12. Department of Veterinary Pharmacology &amp; Toxicology</b>					
49	Prof. Tapan Kr. Mondal	Professor	PhD	30	YES
50	Dr. T. K. Sar	Asst. Professor	PhD	15	
51	Dr Raja L	Asst. Professor	PhD	02	
<b>13. Veterinary Public Health</b>					
52	Dr. Chanchal Debnath	Asso. Professor	PhD	13	YES
53	Dr. Rahul Barua	Asst Professor	PhD	02	
54	Dr. Ripan Biswas	Asst Professor	MVSc	02	
<b>14. Department of Veterinary Surgery &amp; Radiology</b>					
55	Prof. Debaki Ghosh	Professor	PhD	20	YES
56	Prof. Samar Halder	Professor	PhD	20	
57	Prof. Sarbani Hazra	Professor	PhD	20	
58	Prof. Samit Kr. Nandi	Professor	PhD	20	
<b>15. Department of Veterinary Gynaecology &amp; Obstetrics</b>					
59	Prof. Siddhartha Basu	Professor	PhD	30	YES
60	Prof. Kalyani Roy	Professor	PhD	18	
61	Dr. P. R. Nandi	Asst. Professor	MVSc	18	
62	Dr. Amit Kumar Soren	Asst. Professor	MVSc	6	
63	Dr. Pradip Sarkar	Asst. Professor	MVSc	5	
64	Dr Durgadas Mondal	Asst. Professor	MVSc	5	
<b>16. Department of Veterinary Medicine, Ethics &amp; Jurisprudence</b>					
65	Prof. Samar Sarkar	Professor	PhD	30	YES
66	Prof. Chandan Lodh	Professor	PhD	20	
67	Dr Amit Raj Gupta	Asso. Professor	PhD	02	
<b>17. Department of Veterinary Epidemiology &amp; Preventive Medicine</b>					
68	Prof. Chanchal Guha	Professor	PhD	30	YES
69	Prof. Ujjal Biswas	Professor	PhD	20	
70	Dr. ParthaSarathi Jana	Asst. Professor	PhD	13	
<b>18. Department of Veterinary Clinical Complex</b>					
71	Dr S K Guha	Professor	PhD	20	YES
72	Dr. Mrityunjoy Mondal	Asso. Professor	PhD	15	
73	Dr. Shyam Sundar Kesh	Asst. Professor	PhD	8	
74	Dr. Shubhamitra Chaudhuri	Asst. Professor	PhD	8	
75	Dr. Prasenjit Mukherjee	Asst. Professor	PhD	8	
76	Dr. Tanmoy Rana	Asst. Professor	PhD	2	
77	Dr. Chhotan Ghosh	Asst. Professor	PhD	2	
78	Dr. Falguni Mridha	Asst. Professor	MVSc	2	
79	Dr. Subhasis Roy	Asst. Professor	PhD	2	
<b>19. Department of Livestock Farm Complex</b>					
80	Dr B K Sil	Professor	PhD	20	YES
81	Dr Dulal Chandra Roy	Asst. Professor	PhD	9	
82	Dr. Amitava Roy	Asst. Professor	PhD	2	
83	Dr. Aruna Pal	Asst. Professor	PhD	9	
84	Dr. Chittapriya Ghosh	Asst. Professor	PhD	10	
<b>20. Department of Avian Science</b>					
85	Dr. Manik Pakhira	Asso. Professor	PhD	10	YES
86	Dr. Suman Biswas	Asst. Professor	PhD	2	
87	Dr. Probhakar Biswas	Asst. Professor	PhD	2	
88	Dr. Hemanta Kumar Maity	Asst. Professor	PhD	2	
89	Dr. Indrajit Kar	Asst. Professor	PhD	2	
<b>21. Department of Animal Biotechnology</b>					
90	Dr. Ayan Mukherjee	Asst. Professor	PhD	2	YES
91	Dr. Aditya Pratap Acharya	Asst. Professor	PhD	2	



### 6.5.2.3. Credentials of the Faculty

**Whether the institution has employed competent faculty members qualified to accomplish the mission and goals of the institution?**

**YES.**

**Give the highest qualification received by each faculty, related work experiences in the field, professional licensure and certifications, honors and awards, continuous documented excellence in teaching, or other demonstrated competencies and achievements that contribute to effective teaching and student learning outcomes.**

**Details of honours /awards /fellowships /scholarship/recognitions etc. offered by organization of State/National/International repute received by the teachers:**

Sl. No	Name of the recipient	Name of the honour/ award/ fellowship/ scholarship etc.	Offering organization	Field of remarkable activity
1	Dr. Manoranjan Roy, Assistant Professor, Deptt of Animal Genetics & Breeding	1st position	Society for Conservation of Domestic Animal Biodiversity (in 2017)	Oral presentation in National Symposium on "Biodynamic Animal Farming for the Management of Livestock Divers under Changing Global Scenario"
2	Dr. UttamSarkar, Assistant Professor, Deptt of Animal Genetics & Breeding	Certificate of Appreciation	International Journal of Livestock Research	Member of Scientific Advisory Board
3	Dr. SanjoyDatta, Assistant Professor, Deptt of Animal Genetics & Breeding	Certificate of Appreciation	International Journal of Livestock Research	Member of Scientific Advisory Board
4	Dr. P.N.Chatterjee, Assistant Professor, Deptt of Animal Nutrition	Outstanding Paper Presentation Award	DST, Govt. of West Bengal	Nano-materials in Animal Nutrition
5	Dr. A. K. Patra, Assistant Professor, Deptt of Animal Nutrition	Alexander von Humboldt Fellowship	Alexander von Humboldt Foundation of Germany	Animal Science
		Member of Advisory Board	Cariplo Foundation, Italy	Evaluation of the project proposals
6	Dr. Aruna Pal, Assistant Professor, Deptt of Livestock Farm Complex	"Certificate of Commendation, 2017	Department of Higher Education, Science and Technology and Biotechnology, Govt. of West Bengal	Best Presentation on Birbhum sheep characterization.
		Best Poster presentation Award 2017	Society for Domestic Animal Biodiversity	Characterization of indigenous ducks of West Bengal
		"Outstanding Paper presentation Award" 2016	Department of Science and Technology, Govt.	Next generation sequencing studies on Birbhum sheep.



			of West Bengal at Regional Science Congress, Presidency Division, West Bengal	
		Best Oral presentation Award 2016	Society for Domestic Animal Biodiversity	Molecular characterization of Birbhum sheep based on mitochondrial genes.
7	Dulal Chandra Roy, Assistant Professor, Deptt of Livestock Farm Complex	Environment Excellence Award 2017	Scientific and Environmental Research Institute, Kolkata	Agriculture, environment and food safety
8	Prof. S. Biswas, Professor, Dept. of Livestock Products Technology	Member, Board of Director	West Bengal Livestock Development Corporation Ltd. Govt. Of W.B	
		Member of Research Advisory Committee, NRC on Meat, Hyderabad	Nominated by ICAR, New Delhi	
		Member, State level Committee of Slaughter House	Dept. Of Urban Development, Govt. Of W.B	
		Member, VCI accreditation committee for establishment of new colleges	Nominated by VCI, New Delhi	
9	Prof. S. Ray, Professor, Dept. of Veterinary Anatomy & Histology	Fellow IAVA	IAVA	
10	Dr. A.K. Mandal, Associate Professor, Dept. of Veterinary Anatomy & Histology	Best Paper Award	IAVA	
11	Dr. N. K. Tudu. Assistant Professor, Dept. of Veterinary Anatomy & Histology	Best Paper Award	IAVA	
12	Dr. N. K. Tudu. Assistant Professor, Dept. of Veterinary Anatomy & Histology	D.Sc. (HonorisCausa)	Sidho-Kanho-Birsha University, Purulia	
13	Dr. Subhasis Batabyal, Professor, Dept. of Veterinary Bio-Chemistry	Reviewer Excellence Award	Agricultural Research Communication Centre (ARCC)	Outstanding contribution to the ARCC journals
14	Dr M Mondal, Associate Professor, Dept. of Veterinary Clinical Complex	Best Poultry Pathologist Award (IAVP Lifetime achievement award)	Indian Association of Veterinary Pathologists	Avian Pathology
		Editor	Journal of	-



			Interacademia	
		Lead Speaker in XXIII Annual Conference of Indian Association for the Advancement of Veterinary Research (IAAVR)	OUAT, Bhubaneswar	Avian Diseases
		Chairman - 16th Indian Veterinary Congress (2016) and XXIII Annual conference of Indian Association for Advancement in Veterinary Research in College of Veterinary Science and A.H.	OUAT, Bhubaneswar	Avian Diseases
		Co-Chairman - 33rd Annual Convention of Indian Society for the Study of Animal Reproduction (ISSAR)	WBUAFS, Kolkata.	Animal Reproduction
		Rapporteur - National symposium of 46th Veterinary Re-union	WBUAFS, Kolkata	-
15	Dr. Indranil Samanta, Assistant Professor, Dept. of Vety. Microbiology	Best Teacher Award- 2017 (below 45 category) of F/O Veterinary and Animal Sciences,	West Bengal University of Animal and Fishery Sciences	Teaching, research and extension
		Best Oral Presentation Award in 31st Annual Convention of IAVMI and national symposium at Sri Venkateswara Veterinary University, Tirupati, Andhra Pradesh	IAVMI	Cryptosporidium infection in birds
		Selected for Summer Research Fellowship- 2018 (for teachers)	Indian Academy of Sciences-Indian National Science Academy-The National Academy of Sciences (jointly conferred)	Teaching and research
16	Dr. S. N. Joardar, Professor, Dept. of Vety. Microbiology	Best Teacher Award - 2018 (Faculty of Veterinary and Animal Sciences)	West Bengal University of Animal and Fishery Sciences	Teaching, research and extension
		Best Research Paper Award in West Bengal State Science and Technology Congress, 2016	DST, Govt. of West Bengal	Agriculture, Veterinary & Aquaculture Section
		Rashtriya Gaurav Award (2017)	India International Friendship Society (IIFS), New Delhi	Research & Teaching



17	Dr. Kunal Batabyal, Assistant Professor, Dept. of Vety. Microbiology	Dr C Natarajan Endowment Award (Gold Medal) for Best Paper in 12th National APHV Conference, Durg (Dec, 2016)	APHV	Pathogenic P. aeruginosa in milk
		2nd Best Oral Presentation Award in 12th National Conference of APHV and National Symposium at CVS&AH, Durg (Dec, 2016)	APHV	Quality Control in foods of animal origin
18	Samir Dey, Assistant Professor, Dept. of Vety. Microbiology	Best paper presentation Award in National Seminar in Vth Annual Convention of SVSBT, Odisha, 22-23 September, 2017	SVSBT	Vety. Microbiology
19	Dr. Soumitra Pandit, Assistant Professor, Dept. of Vety. Parasitology	'Outstanding Paper' Presentation Award Title of paper & authors: (Pandit, S, Jas R., Badiya S and Debbarma A (2017): Impact of Gastrointestinal Parasitism in Garole Sheep of Sundarban Delta of West Bengal)	2nd Regional Science & Technology Congress, 2017, Southern Region, organized by University of Kalyani, Kalyani, Nadia, West Bengal : 14-15th December, 2017	Vety. Physiology
20	Dr. S.K. Mukhopadhyay, Professor, Deptt. of Veterinary Pathology	Diplomat ICVP	Indian College of Veterinary Pathologist (ICVP)	Vety. Pathology
		Nominee CPCSEA	Ministry of Forest and Environment, GOI	Animal Ethics
21	Dr. S. Mondal, Assistant Professor, Deptt. of Veterinary Pathology	Best oral presentation award	Society for Bioinformatics and Biological Science	Cancer
22	Dr. Dipak Banerjee, Assistant Professor, Dept. of Vety. Physiology	Outstanding Paper award in 1st Regional Science & Technology Congress – 2016-17 for Presidency division	Department of Science and Technology, WB	Molecular Biology
		Dr. P.K. Dwarikanath Memorial Young Scientist Award	Society of Animal Physiologists of India (SAPI)	Environment & Stress Physiology
23	Dr. Kinsuk Das, Assistant Professor, Dept. of Vety. Physiology	International Travel Support Grant	Science and Engineering Research Board, DST, Govt. of India	Oral presentation at the XII Anniversary Commemorative Event of Niche-In Centre for Regenerative Medicine (NCRM NICHE 2017) held at NCGM, Tokyo,



				Japan
24	Prof. Pradip Kumar Das, Professor, Dept. of Vety. Physiology	A Roy Award	Society of Animal Physiologists of India (SAPI)	Poultry Development and Research
25	Prof. Samit Kumar Nandi, Professor, Dept. of Vety. Surgery & Radiology	National Teaching Excellence Award 2016	International Benevolent Research Foundation	In recognition of teaching excellence
		Late Dr. P. S. Khankhoje Gold Medal	Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola	For outstanding research work in the disciplines of Agriculture including Animal Sciences, Fisheries and Agricultural Engineering during the year 2015-16.
		Best Teacher Award 2016 (Above 45 years Category)	West Bengal University of Animal and Fishery Sciences	In recognition of teaching excellence of the Faculty of Veterinary & Animal Sciences, West Bengal University of Animal and Fishery Sciences
		Best Teacher Award 2017 at University Level	West Bengal University of Animal and Fishery Sciences	In recognition of teaching excellence at the university level.
		Fellow. National Academy of Agricultural Sciences, New Delhi, 2018	National Academy of Agricultural Sciences, New Delhi.	In remarkable contribution in Indian Agricultural Sciences
		Fellow, Indian Society for Veterinary Surgery, 2017.	Indian Society for Veterinary Surgery	In remarkable contribution in Veterinary Surgery and Radiology in India
26	Dr. Sanjoy Datta, Assistant Professor, Deptt of Animal Genetics & Breeding	Certificate of appreciation in recognition of outstanding contribution to the quality of the journal	International Journal of Livestock Research	Reviewer and Member, Scientific Advisory Board, IJLR
27	Dr. P.N. Chatterjee, Assistant Professor, Deptt of Animal Nutrition	University Best Teacher Award	WBUAFS, Kolkata	Best Teacher of University
		Best Teacher Award F/O. VAS	WBUAFS, Kolkata	Best Teacher of F/O. VAS
		Outstanding Presentation Award	Dept. of Science, Technology and Biotechnology, Govt. of West Bengal	Research
		Dr. Rishendra Verma Young Scientist Award	Indian Association for Advancement of Veterinary Research, IVRI, Izatnagar	Research
		Best Oral Presentation Award	Animal Nutrition Association of India (BASU - Patna Chapter)	Research
28	Dr. Santanu Bera	Member of Scientific	Indian Journal of	Contribution to quality



	Assistant Professor & Head, Deptt. Of Livestock Production Management	Advisory Board	Livestock Research	of the journal
29	Dr Nilotpall Ghosh Professor Dept of Livestock Production Management	Appointed External Adjunct Faculty BHU	Banaras Hindu University, Varanasi, Uttar Pradesh	
30	Prof. Subhasis Biswas, Professor & Head, Deptt of Livestock Products Technology	G.V. Narayankhedkar Memorial Award	19th Indian Veterinary Congress and IAAVR	Contribution in veterinary education and research
31	Dr. P. Mukherjee, Assistant Professor Deptt. of Veterinary Clinical Complex	3rd Presentation award	Indian Meat Science Association	Poster presentation
32	Prof. Chandan Lodh, Professor, Deptt of Veterinary Medicine, Ethics & Jurisprudence	Borhringer-Gold Medal for Health Management in Canine Practice-2019	Indian Society for advancement of Canine Practice	Canine Health Management
33	Dr. S. N. Joardar, Professor, Deptt of Veterinary Microbiology	Elected Member of National Academy of Veterinary Sciences (I)	National Academy of Veterinary Sciences (I)	Veterinary Microbiology
		IAAVR Merit Award	Indian Association for the Advancement of Veterinary Research (IAAVR)	Veterinary Microbiology
		Personality of the Year (2018) Award	Reguerdon Inc., New Delhi	Veterinary Microbiology
		Biography in Asia Pacific Who's Who (2019)	Publisher-Rifacimento International, New Delhi	Veterinary Microbiology
34	Dr. Indranil Samanta, Assistant Professor, Deptt of Veterinary Microbiology	Summer Research Fellowship-2018 (for teachers)	Indian Academy of Sciences-Indian National Science Academy-The National Academy of Sciences	Veterinary Microbiology
		Outstanding contribution in reviewing	Elsevier	Reviewing the research articles published in Elsevier Journals associated with Microbiology
		Best Oral Presentation Award	International symposium and 8th Conference of Indian Meat Science Association at West Bengal University of Animal and Fishery Sciences	Veterinary Microbiology (Antimicrobial resistance)
		'P. Madhusudan Gold Medal' (2019)	Indian Association for the	Veterinary Microbiology (Teaching and Research)



			Advancement of Veterinary Research (IAAVR)	
35	Dr. K Batabyal, Assistant Professor, Deptt of Veterinary Microbiology	3rd Best Oral Presentation Award	International Symposium & 8th Conference of Indian Meat Science Association (IMSACON – VIII), held at WBUAFS, Kolkata	Veterinary Microbiology (Antimicrobial resistance)
		2nd Best Oral Presentation Award	National Symposium & 19th Indian Veterinary Congress/XXVI Annual Conference of IAAVR, held at WBUAFS, Kol.	Veterinary Microbiology (Food intoxication)
36	Dr. S. Baidya Associate Professor & Head, Deptt. Of Veterinary Parasitology	Dr. C. Natarajan Endowment Award (Gold Medal).	Association of Public Health Veterinarians in XIII Biannual National Conference of Association of Public Health Veterinarians & Symposium	For Best Paper Presentation Award on community Science in Veterinary Public Health, 2018.
37	Dr. S. Pandit, Assistant Professor, Deptt. Of Veterinary Parasitology	Outstanding Paper Presentation Award, Bidhannagar College, Kolkata, 18-19th December, 2018	3rd Regional Science and Technology Congress (Southern Region)- 2018	Agriculture and Animal Sciences
38	Dr. S.K.Mukhopadhyay Professor, Deptt. Of Veterinary Pathology	CPCSEA Nominee, 2018	CPCSEA, Ministry of Environment, Forests & Climate Change, Govt. of India	CPCSEA
39	Dr. S. Mondal Assistant Professor, Deptt. Of Veterinary Pathology	CPCSEA Nominee, 2018	CPCSEA, Ministry of Environment, Forests & Climate Change, Govt. of India	CPCSEA
40	Dr. S. Pradhan Assistant Professor, Deptt. Of Veterinary Pathology	Certificate of Appreciation	By the ISEE, 2018	Veterinary Education & Extension
41	Dr. R.N. Hansda Assistant Professor, Deptt. Of Veterinary Pathology	Certificate of Appreciation	By the ISEE, 2018	Veterinary Education & Extension
42	Prof. Pradip Kumar Das, Professor & Head,	Associate Editor	Indian Journal of Animal Health	Contribution towards teaching, research &



	Dept. of Veterinary Physiology			extension in the field of Veterinary & Animal Husbandry
43	Dr. Kinsuk Das Assistant Professor, Dept. of Veterinary Physiology	Senior Member	Hong Kong Chemical, Biological & Environmental Engineering Society	Nanomedicine
		Member	International Association of Advanced Materials, Sweden	Nanomedicine
44	Dr. Chanchal Debnath, Associate Professor, Deptt. Of Veterinary Public Health	Dr. R.R. Shukla Gold Medal Award for best paper presentation on "Zoonotic diseases of National importance and the control and Containment of such diseases in India" XIII Biennial National Conference of Association of Public Health Veterinarians held at CoVAS, G.B. Pant University of Agri. & Tech., Pantnagar-263145, Uttarakhand. .	Association of Public Health Veterinarians	Mycotic Zoonoses
45	Prof. Samit Kumar Nandi, Professor & Head, Deptt. Of Veterinary Surgery & Radiology	Tata Innovation Fellowship 2018-19	Department of Biotechnology, Ministry of Science & Technology, Government of India, New Delhi	To recognize and reward scientists with outstanding track record in biological sciences to find innovative solutions to major problems in healthcare, agriculture and other areas related to life sciences and biotechnology.
		Fellow, 2019	Indian Association for the Advancement of Veterinary Research	Overall National & International outstanding contributions in the field of Veterinary Science & Animal Husbandry.
46	Prof. Subhasis Biswas, Professor & Head, Deptt of Livestock Products Technology	Appreciation Award	Indian Association for the Advancement of Veterinary Research (IAAVR)	Contribution in veterinary education and research
		Member, Research Advisory Committee, NRC on Meat, Hyderabad	Nominated by ICAR, New Delhi	
		Member, , State level Committee of slaughter house	Nominated by Deptt. of Urban Development, Govt.	



			of W.B	
		Member, VCI accreditation committee for establishment of new colleges	Nominated by VCI, New Delhi	
47	Prof. Partha Das, Professor, Dept. of Vety. Anatomy & Histology	Life time achievement Award	PasudhanPraharee	Significant contribution in Animal Welfare
		Certificate of Appreciation	International Journal of Livestock Research	Member, Scientific Advisory Board
	Dr.Arun Kumar Mandal, Assistant Professor, Dept. of Vety. Anatomy & Histology	Certificate of Appreciation	International Journal of Livestock Research	Member, Scientific Advisory Board
48	Prof. Subhasis Batabyal, Professor & Head, Deptt of Veterinary Bio-Chemistry	Reviewer Excellence Award	ARCC	Reviewer of Indian Journal of Animal Research and Asian Journal of Dairy and food Research
49	Prof. SubhasisBatabyal, Professor & Head, Deptt of Veterinary Bio-Chemistry	Appreciation Award	Indian Association for the Advancement of Veterinary Research (IAAVR)	For conduction of 19th Indian Veterinary Congress at Kolkata
50	Dr. Indranil Samanta, Assistant Professor, Dept. of Veterinary Microbiology	Best Teacher Award (University level)	WBUAFS	Veterinary Microbiology
51	Dr. S. K. Mukhopadhyay Professor, Dept. Of Veterinary Pathology	Fellow Indian Association of Veterinary Pathologist	Indian Association of Veterinary Pathologist(IAVP)	Excellence contribution in Veterinary Pathology
52	Dr. Kinsuk Das Assistant Professor, Dept. of Veterinary Physiology	First prize in Innovative Idea Competition	Jointly by DSIR-TOCIC, IIT-Kharagpur, CSIR-CGCRI & CSIR-CMERI	Innovation and Entrepreneurship

#### 6.5.2.4. Technical and Supporting Staff (as on 31.12.2020)

*Whether the College has appointed (in place) sufficient technical/laboratory/farm staff to cater the need of practical and field experiments. Mention department wise distribution of technical, supporting and field staff in the tabular form.*

**Whether the College has appointed (in place) sufficient technical/laboratory/farm staff to cater the need of practical and field experiments?**

**Yes.**



The college has been provided with technical / Laboratory/ Farm staff to cater to the need of practical and filed experiments. Department wise distribution of technical, supporting and field staff are provided as under:

Sl. No.	Name of Department / Establishment / Subject / Disciplines	Designation	Group	Man in position
01.	Dean, Faculty of Veterinary & Animal Sciences	Senior Assistant	C	2
		Cash Assistant	C	1
		Office Attendant Gr. I	D	4
		Driver-cum-Mechanic	D	1
		Farash	D	1
		Senior Sweeper	D	1
02.	Animal Nutrition	Technical Assistant	C	0
		Junior Assistant	C	1
		Office Attendant Gr. I	D	1
		Laboratory Attendant	D	0
		Animal Attendant	D	1
03.	Livestock Farm Complex	Senior Assistant	C	1
		Technical Assistant	C	1
		Junior Animal Keeper	D	2
		Senior Animal Keeper	D	2
		Office Attendant Gr. II	D	0
04.	Livestock Production Management	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. I	D	1
		Laboratory Attendant	D	1
05.	Livestock Products Technology	Technical Assistant	C	1
		Junior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	0
		Senior Animal Keeper	D	1
06.	Veterinary Clinical Complex	Senior Assistant	C	1
		Store Keeper	C	1
		Senior Compounder	C	1
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	0
		Senior Animal Keeper	D	9
		Record Supplier	D	1
		Sweeper	D	2
07.	Veterinary Anatomy & Histology	Senior Assistant	C	1
		Technical Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	2
08.	Animal Genetics and Breeding	Technical Assistant	C	1
		Senior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Sweeper	D	1
09.	Veterinary Biochemistry	Technical Assistant	C	1
		Senior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Sweeper	D	0



10.	Veterinary Epidemiology & Preventive Medicine	Technical Assistant	C	0
		Senior Assistant	C	1
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	1
		Sweeper	D	0
11.	Veterinary Gynaecology & Obstetrics	Technical Assistant	C	0
		Senior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Sweeper	D	1
		Senior Animal Keeper	D	1
12.	Veterinary Medicine, Ethics & Jurisprudence	Technical Assistant	C	0
		Senior Assistant	C	1
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Sweeper	D	0
13.	Veterinary Microbiology	Technical Assistant	C	0
		Senior Assistant	C	1
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	1
		Sweeper	D	0
14.	Veterinary Parasitology	Technical Assistant	C	1
		Senior Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	0
		Sweeper	D	0
15.	Veterinary Pathology	Technical Assistant	C	0
		Senior Assistant	C	1
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	0
		Sweeper	D	1
16.	Veterinary Pharmacology & Toxicology	Technical Assistant	C	1
		Senior Assistant	C	0
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	0
		Sweeper	D	1
		Senior Animal Keeper	D	1
17.	Veterinary Physiology	Technical Assistant	C	1
		Senior Assistant	C	1
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	0
		Sweeper	D	0
		Senior Animal Keeper	D	0
18.	Veterinary Public Health	Technical Assistant	C	0
		Senior Assistant	C	0
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	0
		Sweeper	D	0
		Senior Animal Keeper	D	0
19.	Veterinary Surgery & Radiology	Technical Assistant	C	1
		Senior Assistant	C	1
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	0



20.	Veterinary & Animal Husbandry Extension Education	Sweeper	D	1
		Senior Animal Keeper	D	0
		Technical Assistant	C	0
		Senior Assistant	C	1
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	1
		Sweeper	D	0
		Senior Animal Keeper	D	0
21.	Avian Science	Technical Assistant	C	0
		Senior Assistant	C	1
		Office Attendant Gr. II	D	1
		Laboratory Attendant	D	0
		Sweeper	D	0
		Senior Animal Keeper	D	0
22.	Animal Biotechnology	Technical Assistant	C	0
		Senior Assistant	C	1
		Office Attendant Gr. II	D	0
		Laboratory Attendant	D	1
		Sweeper	D	1
		Senior Animal Keeper	D	0

**NB: Vacancy arisen due to retirement / death will be filled up shortly.**

### 6.5.3. LEARNING RESOURCES

#### 6.5.3.1. College Library

*Mention the information about location of the library, present staff position (in place) and availability of Wi-Fi, sufficient books and other reading materials, periodicals and research journals, internet with sufficient number of computers, seating capacity, employing the latest technology in library sciences, stocking arrangements, collection of volumes on different subjects, latest publications in the fields of relevant subjects, automation and user services through computer, opening hours, subscription of journals of national and international repute, national dailies, magazines etc.*

The library is the Centre of academic activities of the Faculty of Veterinary & Animal Sciences. While classroom teaching provides a glimpse of knowledge, the library disseminates a wide range of knowledge to attain intellectual heights. Teachers and students of the Faculty of Veterinary & Animal Sciences as well University use the library to satisfy their need of knowledge. The collection of Library includes various text books, Journals, magazines etc in the area of Veterinary & Animal Sciences and allied subjects. The documents in the library are arranged in APUPA pattern with proper signage for different sections of the library and Open Access System for accessing library collections is implemented. The library is well equipped and fully computerized. The open-source software for library management system KOHA is used for automation of library management activities. Various e-Journals of National and International journals in the area of Veterinary & Animal Sciences and allied sciences are subscribed.

#### a. Total Area of the library:

Carpet area of 3000 sq. ft and well equipped, comfortably furnished and has airy, spacious and well lit interiors.



**b. Location of the library**

The college library can accommodate 100 users at any given time and follows the open access system. The system allows any student/staff to pick and choose any book they like. The Dewey decimal classification is the system used for classifying the books in the library. The library provides services to the students, teachers and staffs.

**c. Staff position**

Sl. No.	Position	Number
01	Junior Library Assistant (Contractual)	02
02	Junior Assistant	01
03	Other Category of Staff	04

**d. Wi-Fi facility**

College has the Wi-Fi facility campus wide for students and staff and they are making use of it effectively by using their login and password and through which students and faculty members can browse CeRA and e-resources of the library.

**e. Books and other reading materials**

The college library has got potential titles and has 10000 volumes of books on various branches of Veterinary & Animal Sciences etc. The library also had 200 collections of bound volumes of journals. Library has rich sources of collection of references i.e. dictionaries, directories, encyclopedias, monographs, atlas, general studies, JRF/SRF and other competitive exams preparatory books. All thesis of Master degree and Ph.D are preserved in hard copy and soft copy.

**f. Periodicals and Research Journals**

Library has 15 computer systems with internet facility for searching online public access catalogue (OPAC) of the library where students can access CeRA and other online resources from ICAR and university.

**g. Seating Capacity**

Library has 75 seating capacity at a given point of time. Library is using KOHA Integrated Library System for its collection management and retrieval of documents with barcode facility and scanners. The stock is arranged in classified order according to the dewy decimal classification system in the library.

**h. Latest Publications**

As and when we get budget for purchase of books we usually prefer to purchase latest publications various branches of Veterinary & Animal Sciences, guide books for JRF/SRF, etc.

**j. Automation and User servers**

Library is installed KOHA Integrated Library System software for its collection management and retrieval of documents in the library with barcode facility, scanners for transaction with automated library borrower's cards.

**k. Opening Hours**

Library remains open from 10.00 am to 7.00 pm on Monday to Friday We have been subscribing 05 dailies out of these three are in English, Bangla language and rest are in Kannada languages.



### 6.5.3.2. Laboratories, instructional farm, workshops, dairy plant, veterinary clinic, hatchery, ponds etc.,

*Clearly mention about laboratories, instructional farm, workshops, dairy plant, veterinary clinic, hatchery, ponds etc facilities available in the College with its numbers, space, specialty to conduct practical/hands on training.*

#### Department-wise some Major Laboratories established:

Sl. No.	Departments	Name of laboratories
1	Veterinary Anatomy & Histology	Osteology, Arthology, Splanchnology, Neuro and Angiology, Histology and Embryology
2	Veterinary Physiology	Haematology and respiratory physiology laboratory, Reproductive, environmental and experimental physiology laboratory, PG Laboratories -- Molecular Biology and Bioinformatics, Immuno-physiology, Spectrophotometry, Cell Physiology, Electrophysiology & Ultrasonography lab
3	Veterinary Biochemistry	Clinical Biochemistry, Analytical Biochemistry, Immuno Biochemistry and Reproductive biochemistry laboratory
4	Animal Genetics & Breeding	Computer and statistical analysis lab., molecular biology lab.
5	Animal Nutrition	Feed processing and mixing lab., feed/fodder analysis lab., energy metabolism lab.
6	Livestock Production Management	Small animal handling room, large animal handling room, museum for breed
7	Animal Husbandry Extension & Education	Audio visual technology laboratory, photography cum graphic unit, projection unit
8	Veterinary Pathology	Histopathology lab., Clinical pathology, Immunopathology lab., Necropsy unit and Pathology museum facilities
9	Veterinary Parasitology	Helminthological lab., Entomology and Protozoology lab., Immuno and molecular Parasitology lab (for Pg & PhD)
10	Veterinary Microbiology	Bacteriology, virology and immunology laboratory
11	Veterinary Pharmacology and Toxicology	CPCSEA approved large animals house facility CPCSEA approved laboratory animal facility, Research laboratory (2 nos.), Sophisticated instrument laboratory, Pharmacy laboratory, Pharmacology museum
12	Veterinary Medicine, Ethics and Jurisprudence	Clinical medicine lab.
13	Veterinary Gynaecology and Obstetrics	Semen/Andrology lab., Phantom hall and palpation room, AI centre with semen storage facility.
14	Veterinary Surgery & Radiology	Ophthalmology lab, Bone research laboratory and imaging unit (X-ray facility, Colour dropler, C-Arm facility, Operation theatre both small and large animal), Stem Cell Laboratory
15	Veterinary Epidemiology & Preventive Medicine	Preventive lab for Virology, bacteriology and Parasitology
16	Veterinary Public Health	Milk hygiene and meat hygiene lab, zoonosis cum epidemiology lab.
17	Livestock Products Technology	Small scale poultry processing unit, Microbiology lab, Meat, Egg & Poultry Quality Control Unit (for PG & PhD), Poultry processing & meat exam lab (for PG & PhD)



### List of Scientific Equipment:

Name of the Department	List of instrument
<b>Animal Genetics &amp; Breeding</b>	Microscope-13, Deep fridge-1, Refrigerator-2, Autoclave-1, Bacteriological hood-1, Centrifuge machine-2, Dancing shaker-1, Water distillation plant-1, Horizontal electrophoresis system with power supply-1, Vertical electrophoresis system with power supply-1, Hot air oven-1, Micro Centrifuge machine-1, Microwave oven-1, Neubauer's chamber-1, Thermal cycler with UPS (PCR Machine)-1, pH meter-1, Photoplan microscope with monitor-1, Vortex-1, Spinwin-1, UV transilluminator-1, Digital weighing balance-1, Waterbath-1
<b>Veterinary Anatomy &amp; Histology</b>	Animal Embalming equipment, Bones of different animals, Microtome, Hot air Woven, Microscopes, Trinocular microscope with video camera and monitor for displaying histological slides, Specimens of different animals, Animal Embalming equipment, Bones of different animals, Leica Microtome, Leica DM 2000 , Trinocular phase contrast and fluorescence microscope, Olympus, Inverted Microscope, Refrigerator (-40) and (-10), Cryostat, Elisa Rider, Monopan Electronic balance, automatic tissue processor
<b>Animal Nutrition</b>	Socs plus, Kel plus, Fibertake, socsolate aparator (Manual), Micro kjelal (Manual), Hot air oven – 2, Muffle Furnace, Hot plate-1, Hot plate magnetic stirrer, Electronic Balance-2, Refrigerator=1
<b>Veterinary Biochemistry</b>	pH meter, hot air oven, incubator, centrifuge, colorimeter, UV/VIS Spectrophotometer, PCR, PCR, Gel Doc, Spectrophotometer, high precision microscope, cooling centrifuge
<b>Veterinary Microbiology</b>	Hot Air Oven (Old) (1 no.), Incubator (Old) (1 no.), Refrigerator (Old) (1 no.), Wooden Tool (32 nos.), Magnetic Stirrer (1 no.), Desiccator (1 no.), Wooden Shelf (1 no.), Aqua Guard (1 no.), Window AC (1 no.), Metal Distillation Plant (1 no.), Glass Double Distillation Plant (1 no.), Water bath (Lunar) (1 no.), Laminar Air Flow (Horizontal) (Cleanair) (1 no.)
<b>Veterinary Parasitology</b>	Autoclave (2), Hot air Oven (2), Incubator (3), Refrigerator (2), Microscope with HP 1 oil immersion (30), Binocular Microscope -8 (1, Attachment/Projection/CCV), Microscope phase contrast (1), Microtome rotary and blade sharpener (1), Centrifuge machine (6), Sterilizer Unit, Distillation set, Slide cabinet, Slide boxes, Desiccator, Research microscope trinocular with photographic arrangement, Overhead projector, Pestle mortar, Dissection set, Dissection microscope , Water bath, McMaster Chamber, Bearman's Apparatus Real Time PCR (RT - PCR), Gradient PCR, Duo Flow Chromatography System Nano drop Spectrophotometer, Microscopes, Autoclave & Hot-air Oven, Deep Freezer (-40C), Refrigerator, Gel Documentation System, Electro-elution Machine, HPLC, ELISA Reader
<b>Veterinary Pathology</b>	Hot Air Oven (2 no), Deep Freezer (-20°C)-1, Rotary Microtome-1, Student Microscope-5, Binocular Microscope-1, Desktop Computer-3, Incubator (1 no), Ph. Meter (2 no.) Distillation plant-1, Ice Flaker-1, Refreegeator-3, Water Bath-2, Camera-1 for Histopathology, Centrifuge machine-2, PM Set-1, PM Table-2, Bone cutter saw-1, Staining set-2
<b>Veterinary Pharmacology &amp; Toxicology</b>	Atomic Absorption Spectrophotometer (Varian make), Ultra Homoginizer with probe Distillation apparatus, Soxhelt apparatus, Photoactometer Analgesimeter, Millipore Water Purifier System, Rota-rod apparatus, Pole climbing apparatus, Addys hot plate Hot air oven, Inqubeter, Gas Chromatography with ECD and FID (Varian make) Ultra HPLC (Water make) HPLC with DAD (Shimadzu make), UV Spectrophotometer (Agilent make), Floride meter, Micro Homoginizer, Cooling Centrifuge machine, Ultra cooling centrifuge machine, Centrifuge machine (Remi make)
<b>Veterinary Physiology</b>	ECG machine, USG machine, Multi para monitor, Pluse oximeter, Foetal heart beat monitor, Programmable bio-freezer, Water bath with Shaker, Inverted Fluorescent Microscope , Zoom Stereo microscope, Homogenizer, Vortex, pH meter, Refrigerated Centrifuge, Biosafety cabinet (BS II), Laminar flow, CO <sub>2</sub>



	incubator, Hot air oven, Autoclave, Distilled water apparatus -20° C freezer, Ultra low temp freezer (- 80 ° C), Master cycler, PCR workstation, Electrophoresis apparatus, Gel Documentation system, 0°C Mini cooler Lab top, Atomic Absorption Spectrophotometer, Elisa plate reader, UV Spectrometer, Automatic ELISA Plate washer, Spectrophotometry Lab
<b>Animal Husbandry Extension &amp; Education</b>	Display Board, LCD Projector, Kaleidoscope, Slide Projector, Large screen TV & other necessary equipment's as per VCI recommendation. AV Aids such as- LCD Projector, Kaleidoscope, Slide Projector, Video Camera, Large screen TV, Dark room & others relevant Lab. instruments etc. Extension education related various Models, specimen, all kind of Farm literatures & other relevant equipment's etc.
<b>Veterinary Epidemiology &amp; Preventive Medicine</b>	Monocular Microscope-15 nos.; Monocular Microscope inclined- 2 nos.; Binocular Microscope- 2 nos.; Overhead projector- 1 no.; LCD projector- 1 no.; Refrigerator- 1 no., Bacteriological incubator- 1no.; Digital weighing balance- 1 no.; Mechanical balance- 1no.; Digital pH meter- 1 no.; Water bath- 1 no.; Centrifuge machine- 1 no.; Autoclave- 1 no.; Hot Air Oven- 1no.; Distillation unit- 1 no. , Laminar Air Flow- 1 no.; Deep Freezer (—20°C) - 1 no., Distillation unit- 1 no.; BOD incubator- 1 no.; Autoclave- 1 no.; Hot Air Oven- 1 no.; Digital pH meter- 1 no.; Micropipette- 5 nos.; Laminar Air Flow- 1 no.; Binocular Microscope- 2 nos.; Monocular Microscope-2 nos.; Digital weighing balance- 1 no. , Refrigerator- 3 nos., Deep Freezer (—20°C) - 1 no.; Deep Freezer (—80°C) - 1 no.; Digital pH meter- 1 no.; Digital weighing balance- 1 no.; Centrifuge Machine- 1 no.; Cooling Centrifuge Machine- 1 no.; ELISA Reader- 1 no.; Laminar Air Flow- 1 no.; BOD incubator- 1 no.; Egg Incubator- 3 nos.; Bacteriological incubator- 1 no.; .; Autoclave- 1 no.; Hot Air Oven- 1 no.; Water bath- 1 no.; Micropipette- 7 nos.; Freeze Dryer- 1 no. Biosafety cabinet, Class-II- 1 no.; Thermocycler- 1 no.; Gel Doc.- 1 no.; Spectrophotometer- 1 no.; BOD with shaker- 1 no.; Deep freezer {-80°C)- 1 no.; Refrigerator- 2 nos.; Autoclave- 1 no.; Hot Air Oven- 1 no., Distillation unit- 1no.
<b>Veterinary Gynaecology and Obstetrics</b>	Distillation Plant , Deep Freezer, Autoclave, Hot air oven, Phantom Box, Thygesen's Embryotome, Obstetrical set, Vaginal Speculum, Semen Analyser, Spectrocolorimeter, Stereozoom Microscope, Electronic Balance
<b>Veterinary Public Health</b>	Bacteriological Incubator, Phase Contract Microscope, Refrigerator, Monopan Blance, Thermal Cycler, Refrigerated Micro Centrifuge, Turbidity Meter, -80° C Freezer, Kern Precision Balance, Homogeniser, Shaker Incubator, Micro Centrifuge, Laminar airflow system, BOD incubator, Gel electrophoresis, Rotary evaporator., Bacteriological Incubator, Refrigerator, Monopan Blance, -20° C Freezer, Tissue Homogeniser, Laminar airflow system, BOD incubator, Autoclave, Hot air oven, Digital Colony counter, Laboratory centrifuge, Water distillation plant
<b>Veterinary Surgery &amp; Radiology</b>	Surgical instruments Operation table, Boyles apparatus instruments for PG and PhD
<b>Livestock Farm Complex</b>	Sprayer – 1, Shearing and clipping equipment – 1 set, Debeaking equipment – 1 set, Tatooing set tags etc – 1, Egg Candler – 1, Incubator (Hatchery) -1, Battery Brooder – 1, Trap nest – 5, Egg Grading Machine – 1, Automatic scalding -1, Milking machine set -1, Chick sexing machine -1, Vernier Callipers – 5, Screw Gauge – 5, Maximum-Minimum Thermometer – 2, Psycho-meter, Hair Hygrometer -1, Milking cans -2, Milking piles -2, Milk measures – 1, Cream separator – 1, Butter churns -1, Branding set – 1, Castrator -1, Electrator – 1, Tractor, Farm equipment and Implement, Machinery as per requirement.
<b>Livestock Production Management</b>	Sprayer – 3, Shearing and clipping equipment – 1, Tatooing set tags etc -1, Incubator (Hatchery) -1, Trap nest -2, Vernier Callipers -4, Screw Gauge -2, Maximum-Minimum thermometer – 2, Hair Hygrometer -1, Milking cans -2, Milking piles -2, Milk measures – 1, Branding set -1, Castrator – 1 for each species, Electric clipper -1, Gerber's centrifuge -1
<b>Livestock Products Technology</b>	Refrigerator – 2, Deepfreeze -1, Electronic monopan balance -1, Balance for weighing birds -2, Bone cutting machine -1, Incubator -1, Hot air oven -2, Stunning machine -1, Automatic scaler -1, Feather plucking machine -1, Student's



	microscope -1, Meat mincing machine -1, sausage maker -1, Smoking unit -1, Salting instruments -1, Butchering sets -1, Packing unit - 1, Lactometer -5, Gerber's centrifuge -1, Gerber's tubes - 20, Vacuum pump - 1, pH meter -1, Microscope binocular - 1, Spectrophotometer -1, Hand sealing machine for bottles, cans, plastic, bags -1
<b>Veterinary Clinical Complex</b>	Pleximeters and percussion hummers - 5 set, Electronic stethoscope -1, Ophthalmoscopes -1, Electrocardiograms - 1, Blood pressure monitors -2, Otoscopes -1, Haemocytometers -12, Haemoglobinometers -15, Glass-ware, Small animal examination table -4, Instrument Trolleys - 4, Travis - 2, Travis (examination) -1, Microscope - 2
<b>Veterinary Medicine, Ethics and Jurisprudence</b>	Black board cum display board - 4, Lab stools - 24, Microscopes -18, Electronic monopan balance - 1, Distillation units -5, Digital pH meters -2, Spectrophotometers -1, Microhaematocrits - 4 set, Incubators-4 - 1, Hot-air ovens -1, Water baths -1, Autoclave (vertical) -1, Microscope with attachment for microphotographs -1, Stethoscopes with multiple ear-pieces - 3 set, Glass-ware

#### Farmland (hectare) available for instruction:

Sr. No.	Particulars	Area (ha)
1.	Total land	0.46 ha + 63 acres of land handed over by Haringhata Farm
2.	Land in Possession	0.46
3.	Irrigated Land	0.46
4.	Rain fed	0
5.	Land Under Buildings/ Roads/ Play Ground/ Hills (Cattle sheds, Piggery, goat shed etc)	0.27

#### Other Farm facilities at the Department of LFC for instruction

Sl. No.	Name of the farm	No.	No. of animals kept
1	Dairy cattle shed	02	51
2	Heifer shed	01	22
3	Calf shed	01	8
4	Bull shed	01	4
5	Goat shed	01	11
6	Piggery shed	01	20
7	Casting -cum-judging ring	01	
8	Manure pit	01	
9	Weighing platform balance with shed	01	
10	Animal crate shed (with 4 crate)	01	
11	Feed godown	01	
12	Dry roughage store and chopper unit	01	
13	Pump house	02	
14	Animal disposal pit	01	

#### Hatchery / Poultry Farm for instruction

Sr No	Name of the Farm	Space (Area) Sq ft	Specialty to conduct practical / hands on training / research etc
1	Poultry Farm for laying birds (2 tier)	7200 Sq ft	Individual as well as batch wise practical and training can be conducted
2	Poultry Brooding cum Growing House	2000 Sq ft	



3	Hatchery Unit – 2 Setter (5000 capacity) and 1 Hatcher (5000 capacity)	900 Sq ft	
3	Germplasm Unit	600 Sq ft	Practical demonstration and exposure on different breeds of poultry and pet birds.

#### Irrigation infrastructure facilities

Total cultivable land	Area (ha)
a) Irrigated land	0.46
b) No. of deep/shallow tube well with submersible pump	02

#### Farm Power, Machineries and Irrigation Facilities

The Faculty has farm power, machineries viz., Rotary Tiller (Rotavator), Cultivator, Tractor, Power tiller for day to day work and teaching purpose.

#### Veterinary Clinic:

There are two full fledged Veterinary Clinics one at Belgachia (Kolkata) and other is at Mohanpur Campus for Large, Small Animals and Birds. Belgachia Clinic is considered as a referral Hospital in eastern part of India. Several numbers of complicated cases are referred to this Clinic for Surgical, Medical treatment as well as to assess the sequel of certain cases. There is a set up of Critical Care Unit (CCU) for the pet animals. Both the Clinics in Kolkata and Mohanpur functioning with all necessary facilities i.e. X-Ray, USG, Dialysis, ECG etc. Both the places have Hemato Biochemical Laboratories for routine as well as critical analysis and or estimation of Hematological and Biochemical parameters. There is also the facilities of routine examination of faecal and urine sample of animals and birds. Undergraduate and Post Graduate students are closely associated with clinical examination of the outdoor patients followed by tentative / confirmative diagnosis.

#### 6.5.3.3. Student READY / In-Plant Training / Internship / Experiential Learning Programmes

*Clearly mention about the implementation of Student READY/ In-plant training/ Internship/ Experiential Learning programmes and learning outcomes as per the guidelines of ICAR. Profit sharing mechanism (amount) shall be mentioned for each ELP unit sanctioned by the ICAR for the college.*

- 1. Internship Programme:** Compulsory rotating internship training for six months (180 days). Internship allowance @ Rs.3000 per month was received from ICAR for the last year passed out in the session 2019-20. Now from the ensuing session 2020-21 the internship programme will be held for a period of one year as per VCI guidelines.
- 2. Educational tour:** Each year one long tour and one short tour are usually arranged for each batch of students.
- 3. Exposure visit:** Sufficient exposure visits are arranged for the students through animal health camps, NSS activities etc.



4. **Learning Outcomes:** Student gained the knowledge about therapeutic and preventive health care, as well as commercial livestock farming.

#### 6.5.3.4. Curricula Delivery through ICT (Smart Class Rooms/Interactive Board Etc.,)

*Whether the College is using smart class rooms/interactive board etc. for teaching and practicals. Number of class rooms upgraded as smart class rooms should be mentioned.*

The Faculty of Veterinary & Animal Sciences facilitates the use of Information and Communication Technology (ICT) for effective delivery of content for which the college has made available the smart class room with smart board. In addition to this, classrooms have the facilities of projectors for teaching through Power Point Presentation of theory and practical classes along with podium of inbuilt speakers and amplifiers to make audible to the students. Seminar room has the facility of multimedia projectors for student's seminar delivery and practical classes. Department also have the multimedia projectors for practical classes. Beside this all the Faculty members are taking classes on online mode by using google meet, google class room, what's app, E-mail etc

### 6.5.4. STUDENT DEVELOPMENT

#### 6.5.4.1. Student Intake and Attrition:

*The information about student intake and attrition, for the College as a whole but separated in UG, PG and PhD categories shall be provided in tabular form for last five years.*

Admission to BVSc and AH degree programme is undertaken on the basis of merit list published by the NEET followed by a counseling programme. VCI and ICAR syllabi and guidelines as applicable are followed in respect of UG, PG and doctoral programmes.

FACULTY	DEGREE	Intake	Enrolled				
			2016-2017	2017-2018	2018-2019	2019-2020	2020-21
Veterinary & Animal Sciences	B.V.Sc & AH	83	78	77	82	80	83
	MVSc	Max. 6/Dept.	21	39	61	48	59
	Ph.D.	Max. 3/Dept.	16	19	14	15	N/A*

FACULTY	DEGREE	Intake	Attrition				
			2016-2017	2017-2018	2018-2019	2019-2020	2020-21
Veterinary & Animal Sciences	B.V.Sc & AH	83	28	29	6	25	N/A
	MVSc	Max. 6/Dept.	4	8	10	5	N/A
	Ph.D.	Max. 3/Dept.	10	4	15	5	N/A

\* As on 31.12.2020 PhD admission procedure not completed due to COVID-19 pandemic.



#### 6.5.4.2 Number of Students in theory and Practical Classes

*Mention the Degree Programme wise number of students sitting in a class for theory and practical, separately in tabular form. Complete list of academic programmes (UG and discipline wise masters and Ph.D), for which accreditation is sought, need to be provided. The list should provide only programmes in which students are already passed out.*

Sl No.	Name of the Programme	Total Intake / Year	Batch of Students in Theory Class	Batch of Students in Practical Class
1	Under Graduate – BVSc & AH	83	100	25 to 28 (3 batches per class)
2	Post Graduate – MFSc			
	Animal Nutrition	6/Year	6-10	6-10
	Livestock Production Management	6/Year	6-10	6-10
	Livestock Products Technology	6/Year	6-10	6-10
	Veterinary Anatomy & Histology	6/Year	6-10	6-10
	Veterinary Biochemistry	6/Year	6-10	6-10
	Veterinary Epidemiology & Preventive Medicine	6/Year	6-10	6-10
	Veterinary Gynaecology & Obstetrics	6/Year	6-10	6-10
	Veterinary Medicine, Ethics & Jurisprudence	6/Year	6-10	6-10
	Veterinary Microbiology	6/Year	6-10	6-10
	Veterinary Parasitology	6/Year	6-10	6-10
	Veterinary Pathology	6/Year	6-10	6-10
	Veterinary Pharmacology & Toxicology	6/Year	6-10	6-10
	Veterinary Physiology	6/Year	6-10	6-10
	Veterinary Public Health	6/Year	6-10	6-10
	Veterinary & Animal Husbandry Extension Education	6/Year	6-10	6-10
3	Doctoral Programme – PhD			
	Animal Nutrition	3/Year	3 - 5	3 - 5
	Livestock Production Management	3/Year	3 - 5	3 - 5
	Livestock Products Technology	3/Year	3 - 5	3 - 5
	Veterinary Anatomy & Histology	3/Year	3 - 5	3 - 5
	Veterinary Biochemistry	3/Year	3 - 5	3 - 5
	Veterinary Epidemiology & Preventive Medicine	3/Year	3 - 5	3 - 5
	Veterinary Gynaecology & Obstetrics	3/Year	3 - 5	3 - 5
	Veterinary Medicine, Ethics & Jurisprudence	3/Year	3 - 5	3 - 5
	Veterinary Microbiology	3/Year	3 - 5	3 - 5
	Veterinary Parasitology	3/Year	3 - 5	3 - 5
	Veterinary Pathology	3/Year	3 - 5	3 - 5
	Veterinary Pharmacology & Toxicology	3/Year	3 - 5	3 - 5
	Veterinary Physiology	3/Year	3 - 5	3 - 5
	Veterinary Public Health	3/Year	3 - 5	3 - 5
	Veterinary & Animal Husbandry Extension Education	3/Year	3 - 5	3 - 5



**List of academic programmes (UG and discipline wise masters and Ph.D), for which accreditation is sought, need:**

**1) UG Programme – Bachelor of Veterinary Science and Animal Husbandry (BVSc & AH)**

**2) PG Programme – Master of Veterinary Sciences (MVSc) in the following Departments:-**

- Animal Nutrition
- Livestock Production Management
- Livestock Products Technology
- Veterinary Anatomy & Histology
- Animal Genetics and Breeding
- Veterinary Biochemistry
- Veterinary Epidemiology & Preventive Medicine
- Veterinary Gynaecology & Obstetrics
- Veterinary Medicine, Ethics & Jurisprudence
- Veterinary Microbiology
- Veterinary Parasitology
- Veterinary Pathology
- Veterinary Pharmacology & Toxicology
- Veterinary Physiology
- Veterinary Public Health
- Veterinary Surgery & Radiology
- Veterinary & Animal Husbandry Extension Education

**3) Doctoral Programme : Ph.D in Veterinary Sciences in the following Departments:-**

- Animal Nutrition
- Livestock Production Management
- Livestock Products Technology
- Veterinary Anatomy & Histology
- Animal Genetics and Breeding
- Veterinary Biochemistry
- Veterinary Epidemiology & Preventive Medicine
- Veterinary Gynaecology & Obstetrics
- Veterinary Medicine, Ethics & Jurisprudence
- Veterinary Microbiology
- Veterinary Parasitology
- Veterinary Pathology
- Veterinary Pharmacology & Toxicology
- Veterinary Physiology
- Veterinary Public Health\*
- Veterinary Surgery & Radiology
- Veterinary & Animal Husbandry Extension Education

**\* NB: The MVSc and PhD programmes under the Department of Veterinary Public Health were not accredited in the year 2016 since the teaching strength was less. Now, consequent upon recruitment of teachers in the said department, it is proposed that the MVSc and PhD programmes under the Department of Veterinary Public Health now be accredited since the programme has been running in the said department from 2003 onwards.**



#### 6.5.4.3 Admission Process:

*Clearly give complete mechanism of admission for UG, PG and PhD programmes, fee payment mechanism, registration procedure, academic schedule publication at the start of the semester etc. Write information in one page only.*

##### **For admission in B.V.Sc. & AH programme :-**

1. The candidate must qualify and obtain a rank in the NEET-UG conducted by NTA.
2. The candidate must be a domicile of West Bengal.
3. The candidate must pass Higher Secondary (10+2) Examination of the West Bengal Council of Higher Secondary Education or its equivalent examination in science stream from any recognized Board/ Council from any institution within West Bengal.
4. The candidate must pass the Higher Secondary (10+2) or its equivalent examinations from any recognized Board/ Council with Physics, Chemistry, Biology or Biotechnology and English as compulsory subjects with individual pass marks (in both theory and practical wherever applicable) in all the above four subjects in regular class mode.
5. The candidate must obtain 50 % marks in Physics, Chemistry, Biology or Biotechnology and English taken together for unreserved category and 47.5 % in case of reserved category candidates.

##### **For admission in MVSc and Ph.D. Programme**

1. The selection of candidates is made strictly on the basis of merit and performance in the personal interview. The merit shall be decided on the basis of percentage of marks in aggregate or O.G.P.A. in Bachelor's Degree Examination as well as marks or O.G.P.A. in subject concerned in which admission is sought. The total marks for preparation of merit list is 100 out of which 80% on merit (the relative weightage on the overall performance in the Bachelor's Degree and in the subject concerned i.e. 50 marks from OGPA obtained in UG level and 30 marks from the subject concern) and 20% on personal interview(online mode).
2. The candidate shall have to score a minimum of 50% in aggregate of merit and interview altogether (i.e. 50 out of 100) to qualify for admission into Postgraduate Programme.
3. The candidates selected through ICAR all India Examination for admission to Master's Degree course shall be exempted from aforesaid selection process.

#### 6.5.4.4. Conduct of Practical and Hands on Training

*Mention the brief report on how the practical and hand-on-training is being conducted in different courses to meet the student satisfaction. Write information in one page only.*

Degree Programme	Theory	Practical
MVSc	Single batch of each semester (class)  Maximum number of students in each class is 6 + few students from Supporting fields	Single batch of each semester (class) Maximum number of students in each class is 6 + few students from Supporting fields



PhD	Single batch of each semester (class)	Single batch of each semester (class)
-----	---------------------------------------	---------------------------------------

The students of clinical and para-clinical subjects are getting hands-on-training in Veterinary Clinical complex, and students of animal husbandry are getting hands-on-training in Livestock Farm Complex, besides in nearby Govt. livestock farms. In addition to this, the students do their practical and hands-on-training in the concerned Department or laboratory of nearby institutes (belongs to State Govt. or Central Govt.).

#### 6.5.4.5. Examination and Evaluation Process

*The evaluation of students' performance is a central task of College administration. A brief report on examination and evaluation process for UG, PG and PhD be given separately mentioning external/internal components. System of evaluation should clearly be mentioned for UG, PG and PhD.*

#### For UG Programme (BVSc & AH) :-

1. The Examination and Evaluation System is followed as per VCI-MSVE Regulations 2016.
2. The examination shall be to assess whether the student has been able to achieve a level of competence and for academic assessment evaluation of practical aspects of the curriculum shall much greater emphasis leading to separate examinations and requiring the student to secure a minimum of 50% marks, in theory as well as in practical, in each examination.
3. The weightage of theory and practical shall be in the ratio of 60:40 respectively. The distributions of marks for objective and subjective questions in each subject shall be in the ratio of 40:60 respectively in the annual examinations as well as in the internal assessments(theory examinations)

#### **For internal Examinations : Time allotted – 60 Minutes**

Objective- 16 Marks – Time allotted : 20 Minutes

Subjective- 24 Marks- Time allotted: 40 Minutes) 25% Extra Questions with one Broad Question of 6 marks)

#### **For External Examinations : Time allotted – 3 Hours**

Objective- 40 Marks – Time allotted : 45 Minutes

Subjective – 60 Marks – Time allotted : 2 Hours 15 Minutes ( 25% Extra Questions with one Broad Question of 6 marks).

In the objective part, all the questions are to be attempted (80 Questions x 0.5 marks)

4. The schedule of examination during Bachelor of Veterinary Science and Animal Husbandry Degree course shall consist of Internal Assessment and External examinations as detailed below, namely –

Internal Assessment	Course Coverage*	Marks Allotted	Weightage Allotted
First	First 30%	40 Marks	Weightage 10
Second	31-60%	40 Marks	Weightage 10
Third	61-90%	40 Marks	Weightage 10
Annual Examination	Whole Course (100%)		
Theory	Paper- I	100 Marks	Weightage 20
	Paper -II	100 Marks	Weightage 20
Practical	Paper- I	100 Marks	Weightage 20
	Paper -II	100 Marks	Weightage 20



5. There shall be four professional examinations- one each after 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> year and the 4<sup>th</sup> after one and half year and these professional examinations shall have only the theory component with external system and the practical component shall be dealt with internally.
6. The examination for Livestock Farm Complex and Veterinary Clinical Complex shall be conducted twice a year i.e. first practical exam after completion of 50% syllabus and the second one, when the course is completed but the second exam shall comprise of entire syllabus and annual professional examination shall be held after the completion of 100% course content in each subject and the result of the best of two internal assessments shall be accounted for.
7. The evaluation of answer books of internal examinations shall be done by the concerned teacher(s) whereas evaluation of answer books of annual theory examinations shall be done by the external examiner(s).
8. The practical examinations shall be conducted by a Board of Examiners consisting of concerned Head of the Department, teacher(s) and a representative of the Dean.
9. The answer books of internal assessment shall be shown to students and the records of internal assessment as well as that of annual practical examination shall be submitted to Controller of Examinations.
10. The duration of internal assessment shall be at least one hour whereas the duration of annual theory examination shall be three hours and one month prior to the commencement of annual examinations the best of two internal assessment marks shall be submitted by the instructor through the Head to the Controller of Examinations.

**For PG Programme (MVSc in different disciplines / departments):-**

The full marks for theory and practical in a course is 100 marks each. In theory examination, there is 40% marks in objective form as quiz consisting of 4 (four) Tests of 10 marks each and remaining 60% marks as End Term (external paper), which is for 2 hours duration. In practical, there is 40% mark in viva-voce and the remaining is on assignment, practical manual and practical experiment. The marks (theory and practical all together) obtained by one student is given in grade. Examination schedule will be declared by the Controller of Examinations. The students are to secure satisfactory grade (minimum 50% marks to be obtained).

An amanuensis shall be allowed in the case of physically handicapped candidates who are temporarily disabled from writing with their own hands.

There shall be a Comprehensive Examination consisting of written and oral examination from the total major courses taken by the students. A student shall have to appear in comprehensive examination at the end of third semester. The CoE in consultation with the HoD, advisor and other teacher members of the department shall conduct the written and oral examination. There shall be a question paper of 80 marks of three hours duration (external). After passing the written examination successfully (securing at least 50 marks) the oral examination of 20 marks will be conducted by the HoD and advisor members after notification of Controller of Examinations. The student shall not be allowed to submit his / her



thesis without successful completion of Comprehensive Examination. The result of the comprehensive examination will be sent to the Controller of Examination by HoD.

Grading will be done in ten-point scale. The grade points when multiplied by 10 will give equivalent marks in percentage. The grade point obtained in a course will be rounded off to the second decimal place. The minimum grade point to be secured for the successful completion of the course will be 5.0.

#### **For Doctoral Programme (PhD in different disciplines / departments) :-**

The full marks for theory and practical in a course is 100 marks each. In theory examination, there is 40% marks in objective form as quiz consisting of 4 (four) Tests of 10 marks each and remaining 60% marks as End Term (external paper), which is for 2 hours duration. In practical, there is 40% mark in viva-voce and the remaining is on assignment, practical manual and practical experiment. The marks (theory and practical all together) obtained by one student is given in grade. Examination schedule will be declared by the Controller of Examinations. A student shall have to appear in the comprehensive examination at the end of 2<sup>nd</sup> semester and must be before synopsis seminar only for theory (external subjective paper) and it would be for 100 marks for which result is not reflected in OGPA.

#### **6.5.4.6. NCC/NSS/RVC Units**

*Clearly mention the existence and functioning of these units and how it is benefiting the student development. A brief report should be given (without photographs).*

Students of Faculty of Veterinary & Animal Sciences participated in University NSS programme conducted once in a year during 3<sup>rd</sup> and 4<sup>th</sup> semester. Dedicated staff is deputed to conduct various activities under this programme.

Sl No.	Year	1 (NSS Day) 24 <sup>th</sup> September	2 (International Yoga Day) 21 <sup>st</sup> June	3 (Agriculture Education Day) 3 <sup>rd</sup> December	4 (Awareness Camp & Camus Cleaning Day) 17 <sup>th</sup> March
1	2016-17	93	83	99	85
2	2017-18	91	94	85	89
3	2018-19	86	87	88	96
4	2019-20	102	134 (Virtual Mode)	101	-
5	2020-21	125 (Virtual Mode)		137 (Virtual Mode)	

#### **6.5.4.7. Language Laboratory**

*It is required of any student to have a good command of the language for communication purposes, with clarity and accuracy being vital for effective and efficient communication. What helps one to acquire such proficiency in a language is the process and the method of learning that language. Mention which of these type of Conventional, Lingua Phone, Computer Assisted Language Laboratory and Multimedia Hi-Tech Language Laboratory are being used for language teaching in the college.*

Faculty of Veterinary & Animal Sciences receives students from different districts of state and different states of India with different backgrounds and as such there is a need for English language proficiency for understanding the other subjects as the course is in English medium. In this context, teachers of



Faculty of Veterinary & Animal Sciences conducts English language classes to fulfill the requirement of learning English. Presently the language is basically taught by conventional methods along with usage of computer assisted laboratory. Learning is also being impacted by participatory approach and application of audio-visual aids. Further, keeping broader perspective in mind, the report writing, paragraph writing, precis writing, abstracting and summarizing are being taught to the students in a conventional manner to enable the students to learn and to write notes of class lectures and writing the report of state and national tours. Nevertheless, these are being required primarily to collect information of the programme and to report it to the course teacher/s. Lastly, to develop the career of students how to face interview, drafting of letters, CV and resume are being taught. These auras of teaching enable them to learn and write everything individually. More or less, the assignments are being designed in view of TOFEL and competitive based exams for the English language test.

#### 6.5.4.8. Cultural Center

*Does the college has cultural center to empower student leaders to explore, celebrate, and educate the campus community about the diversity among them? Does the college offers an inclusive and reflective space, multicultural programming, and support services that encourage positive interaction, academic persistence, and growth among students, faculty, and staff?*

The Faculty of Veterinary & Animal Sciences promotes for multicultural programmes and every year cultural programme is organized in the faculty auditorium under the leadership of the Students' Union / Students' Welfare Committee. The students of the Faculty also participate in the Agri Cultural Meet organized by ICAR every year. The faculty members, students and staff members participate in cultural events organized on 2<sup>nd</sup> January every year as a part of University Foundation Day Celebration. The Recreation Club established in the university arranges for different cultural programmes every year. The cultural group, hosts various literacy and cultural activities. A wide range of recreation, extra-curricular and sports activities is provided through the Student's Union. Different cultural program, sports, interactive and social programmes are being conducted by the In-Charge Students' Welfare and Dean Students' Welfare. University extends financial assistance for organizing the programmes to encourage positive interaction, academic persistence, and growth among students, faculty, and staff.

#### 6.5.4.9. Personality Development

*Personality development programme is aimed at increasing employability of the students. Whether the college has provisions for inclusion of functional grammar in Standard English, speaking skills, reasoning, group discussions interview skills, personal interviews, quantitative ability, verbal ability, mock tests and some special sessions to promote the personality development in the students?*

**Whether the college has provisions for inclusion of functional grammar in Standard English, speaking skills, reasoning, group discussions interview skills, personal interviews, quantitative ability, verbal ability, mock tests and some special sessions to promote the personality development in the students?**

**YES. Details are mentioned below:**

Sl no	Year	Programme (number of participants)	
		Spoken English & Personality Development	Ignite your Mind- Personality Development programmes organised
1	2016-17	66	65



2	2017-18	79	74
3	2018-19	89	93
4	2019-20	93	87
5	2020-21	-	-

Students counseling and personality development programme is in operation since the inception of the college. Counseling is an important component of students' welfare programmes. It is mainly meant for personality development and to provide guidance to the students in their academic programme. Personality development programmes were organized at regular interval inviting guest lecturers from outside institution, who conducted theory and practical sessions. Our college regularly conduct special guest lecturers in soft skill viz. English communication skills, reasoning, group discussions, interview skills, quantitative ability, verbal ability and mental ability to students in association with various coaching institutes

### 6.5.5. PHYSICAL FACILITIES

#### 6.5.5.1. Hostel Facilities for the Students of Faculty of Veterinary & Animal Sciences

*Clearly mention the number of hostels available for the College students for boys and girls, separately with its total capacity, students per room accommodated in each hostel, mess facility, drinking water, indoor games specially for girls, cleaning of hostel premises, transport facility, emergency medical facility etc.*

Sr. No.	Name of Hostel	No. of Hostel	Total capacity	Students/ per room
1	Boys Hostel	UG-2	270 + 270	3 per room
		PG-1	90	2 per room
2	Girls Hostel	UG-1	90	3 per room
		PG-1	56	2 per room

#### Facilities available in the hostel

Sr. No.	Particular	Boys Hostel	Girls hostel
1	Mess facility	Available	Available
2	Drinking water	Available	Available
3	Indoor games (TT, Carom)	Available	Available
4	Hot water	Available	Available
5	News paper	Available	Available
6	Wifi	Available	Available
7	RO water purifier	Available	Available
8	Washing machine	Available	Available
9	Outdoor (Football, cricket, volley ball, badminton)	Available	Available
10	Multigym facility	Available	Available
11	Cultural facility (musical instruments)	Available	Available

#### 6.5.5.2. Examination hall

Mention the availability of number of examination halls, its capacity etc. for the College.

Particular	Details
No. Of exam halls	06
Capacity	100 students at a time
Measures for preventing mal practices	CCTV Camera & College invigilation committee

There is a central examination hall at Vivek Bhawan in the university head quarters at Belgachia, Kolakta-37.



### 6.5.5.3. Sports and Recreation facilities:

*Clearly mention the number of indoor and outdoor sports facilities available for the College students. A brief note on day to day management and use of these facilities shall be provided in the report.*

**The college is facilitated with both indoor and outdoor games.**

Particular	Details
No. of indoor game facilities	Available in the Hostel Common room for indoor game (Table tennis, treadmill, chess and carom)
No. of outdoor games facilities	Play Ground Established In 8000 M2 area (Shot-put, Volley ball, High jump stand, Cricket kit, Volley ball kit and court, Football, kho-kho etc.,
A brief note on day to day activities	Good facilities are available for sports and game. Students have option to participate in outdoor and indoor games. There is a separate department of Physical Education headed by a qualified sports Instructor of Physical Education.

### 6.5.5.4. Auditorium

*Does the college has auditorium? Mention its year of construction, sitting capacity and how frequently being used for the College functions.*

**Does the college has auditorium?**

**Yes.**

**Year of construction, sitting capacity and how frequently being used for the College functions:**

An auditorium facility is available at the Mohanpur campus of University having sitting capacity of 500 persons which was built in the year 1974 and inherited from BCKV. Since inception the auditorium is frequently used for training, seminar, cultural program etc. There is also an Auditorium named as Community Hall at Belgachia Campus which is used for college functions.

### 6.5.5.5. Exhibition Hall/Museum

*Does the college have the Exhibition Hall/Museum? Mention about its use and special events being conducted in these units.*

**Does the college have the Exhibition Hall/Museum?**

**Yes.**

**Use and special events being conducted in these units:**

Sr. No.	Name of Department	Name of Exhibition Hall	Purpose
1	Dept of Veterinary Anatomy and Histology	Big exhibition hall	Exhibition of anatomical specimen.
2	Dept of Livestock Production Management	Exhibition hall	Exhibition of various equipment used in livestock farm management.



## 6.5.6. RESEARCH FACILITIES

### 6.5.6.1. PG Laboratories and Equipment

*Clearly mention the department wise PG laboratories and equipment housed in individual laboratory in the Colleges along with any other research unit.*

Sl. No.	Departments	Name of laboratories
1	Veterinary Anatomy	Osteology, Arthology, Splanchnology, Neuro and Angiology, Histology and Embryology
2	Veterinary Physiology	Haematology and respiratory physiology laboratory, Reproductive, environmental and experimental physiology laboratory, PG Laboratories -- Molecular Biology and Bioinformatics, Immuno-physiology, Spectrophotometry, Cell Physiology, Electrophysiology & Ultrasonography lab
3	Veterinary Biochemistry	Clinical Biochemistry, Analytical Biochemistry, Immuno Biochemistry and Reproductive biochemistry laboratory
4	Animal Genetics & Breeding	Computer and statistical analysis lab., molecular biology lab.
5	Animal Nutrition	Feed processing and mixing lab., feed/fodder analysis lab., energy metabolism lab.
6	Livestock Production Management	Small animal handling room, large animal handling room, museum for breed
7	Animal Husbandry Extension & Education	Audio visual technology laboratory, photography cum graphic unit, projection unit
8	Veterinary Pathology	Histopathology lab., Clinical pathology, Immunopathology lab., Necropsy unit and Pathology museum facilities
9	Veterinary Parasitology	Helminthological lab., Entomology and Protozoology lab., Immuno and molecular Parasitology lab (for PG & PhD)
10	Veterinary Microbiology	Bacteriology, virology and immunology laboratory
11	Veterinary Pharmacology and Toxicology	CPCSEA approved laboratory animal facility, Research laboratory (2 nos.), Sophisticated instrument laboratory, Pharmacy laboratory, Pharmacology museum
12	Veterinary Medicine, Ethics and Jurisprudence	Clinical medicine lab.
13	Veterinary Gynaecology and Obstetrics	Semen/Andrology lab., Phantom hall and palpation room, AI centre with semen storage facility.
14	Veterinary Surgery & Radiology	Ophthalmology lab, Bone research laboratory and imaging unit (X-ray facility, Colour dropler, C-Arm facility, Operation theatre both small and large animal), Stem Cell Laboratory
15	Veterinary Epidemiology & Preventive Medicine	Preventive lab for Virology, bacteriology and Parasitology
16	Veterinary Public Health	Milk hygiene and meat hygiene lab, zoonosis cum epidemiology lab.
17	Livestock Products Technology	Small scale poultry processing unit, Microbiology lab, Meat, Egg & Poultry Quality Control Unit (for PG & PhD), Poultry processing & meat exam lab (for PG & PhD)
18	Livestock Farm Complex	Farm both small and large animals, fodder production unit, Hydroponics etc.
19	Veterinary Clinical Complex	Operation theatre both small and large animals, Veterinary diagnosis lab.



**List of Scientific Equipment:**

Name of the Department	List of instrument
<b>Animal Genetics &amp; Breeding</b>	Microscope-13, Deep fridge-1, Refrigerator-2, Autoclave-1, Bacteriological hood-1, Centrifuge machine-2, Dancing shaker-1, Water distillation plant-1, Horizontal electrophoresis system with power supply-1, Vertical electrophoresis system with power supply-1, Hot air oven-1, Micro Centrifuge machine-1, Microwave oven-1, Neubauer's chamber-1, Thermal cycler with UPS (PCR Machine)-1, pH meter-1, Photoplan microscope with monitor-1, Vortex-1, Spinwin-1, UV transilluminator-1, Digital weighing balance-1, Waterbath-1
<b>Veterinary Anatomy &amp; Histology</b>	Animal Embalming equipment, Bones of different animals, Microtome, Hot air Woven, Microscopes, Trinocular microscope with video camera and monitor for displaying histological slides, Specimens of different animals, Animal Embalming equipment, Bones of different animals, Leica Microtome, Leica DM 2000 , Trinocular phase contrast and fluorescence microscope, Olympus, Inverted Microscope, Refrigerator (-40) and (-10), Cryostat, Elisa Rider, Monopan Electronic balance, automatic tissue processor
<b>Animal Nutrition</b>	Socs plus, Kel plus, Fibertake, socsolate aparator (Manual), Micro kjelal (Manual), Hot air oven – 2, Muffle Furnace, Hot plate-1, Hot plate magnetic stirrer, Electronic Balance-2, Refrigerator=1
<b>Veterinary Biochemistry</b>	pH meter, hot air oven, incubator, centrifuge, colorimeter, UV/VIS Spectrophotometer, PCR, PCR, Gel Doc, Spectrophotometer, high precision microscope, cooling centrifuge
<b>Veterinary Microbiology</b>	Hot Air Oven (Old) (1 no.), Incubator (Old) (1 no.), Refrigerator (Old) (1 no.), Wooden Tool (32 nos.), Magnetic Stirrer (1 no.), Desiccator (1 no.), Wooden Shelf (1 no.), Aqua Guard (1 no.), Window AC (1 no.), Metal Distillation Plant (1 no.), Glass Double Distillation Plant (1 no.), Water bath (Lunar) (1 no.), Laminar Air Flow (Horizontal) (Cleanair) (1 no.)
<b>Veterinary Parasitology</b>	Autoclave (2), Hot air Oven (2), Incubator (3), Refrigerator (2), Microscope with HP 1 oil immersion (30), Binocular Microscope -8 (1, Attachment/Projection/CCV), Microscope phase contrast (1), Microtome rotary and blade sharpener (1), Centrifuge machine (6), Sterilizer Unit, Distillation set, Slide cabinet, Slide boxes, Desiccator, Research microscope trinocular with photographic arrangement, Overhead projector, Pestle mortar, Dissection set, Dissection microscope , Water bath, McMaster Chamber, Bearman's Apparatus Real Time PCR (RT - PCR), Gradient PCR, Duo Flow Chromatography System Nano drop Spectrophotometer, Microscopes, Autoclave & Hot-air Oven, Deep Freezer (-40C), Refrigerator, Gel Documentation System, Electro-elution Machine, HPLC, ELISA Reader
<b>Veterinary Pathology</b>	Hot Air Oven (2 no), Deep Freezer (-20°C)-1, Rotary Microtome-1, Student Microscope-5, Binocular Microscope-1, Desktop Computer-3, Incubator (1 no), Ph. Meter (2 no.) Distillation plant-1, Ice Flaker-1, Refreegeator-3, Water Bath-2, Camera-1 for Histopathology, Centrifuge machine-2, PM Set-1, PM Table-2, Bone cutter saw-1, Staining set-2
<b>Veterinary Pharmacology &amp; Toxicology</b>	Atomic Absorption Spectrophotometer (Varian make), Ultra Homoginizer with probe Distillation apparatus, Soxhelt apparatus, Photoactometer Analgesimeter, Millipore Water Purifier System, Rota-rod apparatus, Pole climbing apparatus, Addys hot plate Hot air oven, Inqubeter, Gas Chromatography with ECD and FID (Varian make) Ultra HPLC (Water make) HPLC with DAD (Shimadzu make), UV Spectrophotometer (Agilent make), Floride meter, Micro Homoginizer, Cooling Centrifuge machine, Ultra cooling centrifuge machine, Centrifuge machine (Remi make)
<b>Veterinary Physiology</b>	ECG machine, USG machine, Multi para monitor, Pluse oximeter, Foetal heart beat monitor, Programmable bio-freezer, Water bath with Shaker, Inverted Fluorescent Microscope , Zoom Stereo microscope, Homogenizer, Vortex, pH meter, Refrigerated Centrifuge, Biosafety cabinet (BS II), Laminar flow, CO <sub>2</sub>



	incubator, Hot air oven, Autoclave, Distilled water apparatus -20° C freezer, Ultra low temp freezer (- 80 ° C), Master cycler, PCR workstation, Electrophoresis apparatus, Gel Documentation system, 0°C Mini cooler Lab top, Atomic Absorption Spectrophotometer, Elisa plate reader, UV Spectrometer, Automatic ELISA Plate washer, Spectrophotometry Lab
<b>Animal Husbandry Extension &amp; Education</b>	Display Board, LCD Projector, Kaleidoscope, Slide Projector, Large screen TV & other necessary equipment's as per VCI recommendation. AV Aids such as- LCD Projector, Kaleidoscope, Slide Projector, Video Camera, Large screen TV, Dark room & others relevant Lab. instruments etc. Extension education related various Models, specimen, all kind of Farm literatures & other relevant equipment's etc.
<b>Veterinary Epidemiology &amp; Preventive Medicine</b>	Monocular Microscope-15 nos.; Monocular Microscope inclined- 2 nos.; Binocular Microscope- 2 nos.; Overhead projector- 1 no.; LCD projector- 1 no.; Refrigerator- 1 no., Bacteriological incubator- 1no.; Digital weighing balance- 1 no.; Mechanical balance- 1no.; Digital pH meter- 1 no.; Water bath- 1 no.; Centrifuge machine- 1 no.; Autoclave- 1 no.; Hot Air Oven- 1no.; Distillation unit- 1 no. , Laminar Air Flow- 1 no.; Deep Freezer (—20°C) - 1 no., Distillation unit- 1 no.; BOD incubator- 1 no.; Autoclave- 1 no.; Hot Air Oven- 1 no.; Digital pH meter- 1 no.; Micropipette- 5 nos.; Laminar Air Flow- 1 no.; Binocular Microscope- 2 nos.; Monocular Microscope-2 nos.; Digital weighing balance- 1 no. , Refrigerator- 3 nos., Deep Freezer (—20°C) - 1 no.; Deep Freezer (—80°C) - 1 no.; Digital pH meter- 1 no.; Digital weighing balance- 1 no.; Centrifuge Machine- 1 no.; Cooling Centrifuge Machine- 1 no.; ELISA Reader- 1 no.; Laminar Air Flow- 1 no.; BOD incubator- 1 no.; Egg Incubator- 3 nos.; Bacteriological incubator- 1 no.; .; Autoclave- 1 no.; Hot Air Oven- 1 no.; Water bath- 1 no.; Micropipette- 7 nos.; Freeze Dryer- 1 no. Biosafety cabinet, Class-II- 1 no.; Thermocycler- 1 no.; Gel Doc.- 1 no.; Spectrophotometer- 1 no.; BOD with shaker- 1 no.; Deep freezer (-80°C)- 1 no.; Refrigerator- 2 nos.; Autoclave- 1 no.; Hot Air Oven- 1 no., Distillation unit- 1no.
<b>Veterinary Gynaecology and Obstetrics</b>	Distillation Plant , Deep Freezer, Autoclave, Hot air oven, Phantom Box, Thygesen's Embryotome, Obstetrical set, Vaginal Speculum, Semen Analyser, Spectrocolorimeter, Stereozoom Microscope, Electronic Balance
<b>Veterinary Public Health</b>	Bacteriological Incubator, Phase Contrast Microscope, Refrigerator, Monopan Balance, Thermal Cycler, Refrigerated Micro Centrifuge, Turbidity Meter, -80° C Freezer, Kern Precision Balance, Homogeniser, Shaker Incubator, Micro Centrifuge, Laminar airflow system, BOD incubator, Gel electrophoresis, Rotary evaporator., Bacteriological Incubator, Refrigerator, Monopan Balance, -20° C Freezer, Tissue Homogeniser, Laminar airflow system, BOD incubator, Autoclave, Hot air oven, Digital Colony counter, Laboratory centrifuge, Water distillation plant
<b>Veterinary Surgery &amp; Radiology</b>	Surgical instruments Operation table, Boyles apparatus instruments for PG and PhD
<b>Livestock Farm Complex</b>	Sprayer – 1, Shearing and clipping equipment – 1 set, Debeaking equipment – 1 set, Tatooing set tags etc – 1, Egg Candler – 1, Incubator (Hatchery) -1, Battery Brooder – 1, Trap nest – 5, Egg Grading Machine – 1, Automatic scalding -1, Milking machine set -1, Chick sexing machine -1, Vernier Callipers – 5, Screw Gauge – 5, Maximum-Minimum Thermometer – 2, Psycho-meter, Hair Hygrometer -1, Milking cans -2, Milking piles -2, Milk measures – 1, Cream separator – 1, Butter churns -1, Branding set – 1, Castrator -1, Electrator – 1, Tractor, Farm equipment and Implement, Machinery as per requirement.
<b>Livestock Production Management</b>	Sprayer – 3, Shearing and clipping equipment – 1, Tatooing set tags etc -1, Incubator (Hatchery) -1, Trap nest -2, Vernier Callipers -4, Screw Gauge -2, Maximum-Minimum thermometer – 2, Hair Hygrometer -1, Milking cans -2, Milking piles -2, Milk measures – 1, Branding set -1, Castrator – 1 for each species, Electric clipper -1, Gerber's centrifuge -1
<b>Livestock Products Technology</b>	Refrigerator – 2, Deepfreeze -1, Electronic monopan balance -1, Balance for weighing birds -2, Bone cutting machine -1, Incubator -1, Hot air oven -2, Stunning machine -1, Automatic scaler -1, Feather plucking machine -1, Student's



	microscope -1, Meat mincing machine -1, sausage maker -1, Smoking unit -1, Salting instruments -1, Butchering sets -1, Packing unit - 1, Lactometer -5, Gerber's centrifuge -1, Gerber's tubes - 20, Vacuum pump - 1, pH meter -1, Microscope binocular - 1, Spectrophotometer -1, Hand sealing machine for bottles, cans, plastic, bags -1
<b>Veterinary Clinical Complex</b>	Pleximeters and percussion hummers - 5 set, Electronic stethoscope -1, Ophthalmoscopes -1, Electrocardiograms - 1, Blood pressure monitors -2, Otoliths -1, Haemocytometers -12, Haemoglobinometers -15, Glass-ware, Small animal examination table -4, Instrument Trolleys - 4, Travis - 2, Travis (examination) -1, Microscope - 2
<b>Veterinary Medicine, Ethics and Jurisprudence</b>	Black board cum display board - 4, Lab stools - 24, Microscopes -18, Electronic monopan balance - 1, Distillation units -5, Digital pH meters -2, Spectrophotometers -1, Microhaematocrits - 4 set, Incubators - 1, Hot-air ovens -1, Water baths -1, Autoclave (vertical) -1, Microscope with attachment for microphotographs -1, Stethoscopes with multiple ear-pieces - 3 set, Glass-ware

### 6.5.6.2. Research Contingency

*A note on amount of research contingency for each department shall be provided. Whether it meets the students' demand?*

Details of Research Contingencies are mentioned below:

- Sanction of Research Grant from the university's own fund to the faculty members through a selection process.
- Financial and Administrative support to the faculty members to participate in the Research oriented Workshops organized by different Institutes of repute.
- Sanction of Research Contingency Grant to the Post Graduate students through a selection process.
- Motivating the faculty members to submit research projects to different Govt and Private funding agencies.
- Promotion of collaborative research activities by the faculty members funded by external Govt. and Private Agencies.

### 6.5.7. OUTCOME/OUTPUT

#### 6.5.7.1. Student Performance in National Examinations:

*Provide detailed information in tabular form about student performance in JRF/SRF/NET/ARS/and other national examinations for last five years. Only those students receiving fellowships should be mentioned here.*

##### (a) Performance of students in National Examinations

Sl. No	Year	Number of students achieved				
		NTS	JRF	SRF	NET	ARS
1	2016-17	4	6	1	10	7
2	2017-18	3	2	Nil	9	1
3	2018-19	1	1	1	1	2
4	2019-20	2	3	Nil	4	NIL
5	2020-21	3	5	4	Nil	NIL



### 6.5.7.2. Students Placement Profile:

Provide detailed information in tabular form about student performance in ARS/and other national examinations/State level examinations or equivalent. Year wise placement profile shall be provided.

Year	Government	Industry	Self-Employed	Others (Bank Insurance)
2016-17	56	11	02	03
2017-18	24	09	01	04
2018-19	29	05	03	01
2019-20	14	02	01	01
2020-21	Nil	02	02	Nil

### 6.5.7.3. Awards/Recognitions/Certificates:

Provide information on awards/recognitions/certificates in tabular form for last five years separately for students and faculty.

#### Awards/Recognitions/Certificates received by Students:-

##### List of the Candidates who are to be awarded Gold Medals

##### YEAR 2016

- **University's Gold Medal.**  
[for securing Highest Marks in B.V.Sc & A.H]
  - Sujoy Tamang
- **Smt. Mira Mallik Gold Medal.**  
[for securing Highest Marks in B.V.Sc & A.H]
  - Sujoy Tamang
- **Prof. D. B. Mukherjee Gold Medal**  
[for securing Highest Marks in Veterinary Surgery and Radiology in B.V.Sc & AH.]
  - Lhendup Bhutia
- **Dr. S. N. Roy Gold Medal**  
[for securing Highest Marks in Livestock Farm Management in B.V.Sc & AH.]
  - Lhendup Bhutia
- **First Batch(1953) B.V.Sc Students' Gold Medal**  
[for securing Highest Marks in 5th and 6th Semester in B.V.Sc & AH.]
  - Sujoy Tamang
- **Dr. B. N. Dey Memorial Endowment Gold Medal**  
[for securing Highest Marks in Veterinary Gynaecology & Obstetrics in B. V. Sc & A. H.]
  - Dipak Kumar Banerjee
- **Dr. B. N. Mukherjee Gold Medal**  
[for securing Highest Marks in Vety. Epidemiology & Preventive Medicine in B. V. Sc. & A. H.]
  - Sujoy Tamang
- **Charu Chandra Koley Gold Medal**  
[for securing Highest Marks in Animal Genetics & Breeding in B. V. Sc. & A. H.]
  - Lhendup Bhutia
- **Dinesh Chandra De and Sova De Memorial Gold Medal**  
[for securing Highest Marks in 5<sup>th</sup> Composite Annual Examination in B. V. Sc. & A. H.]
  - Subhamoy Ghosh
- **Dr. Subir Kr. Sinha Memorial Gold Medal**  
[for securing Highest Marks in Veterinary Medicine, Ethics & Jurisprudence in B. V. Sc. & A. H.]
  - Dipak Kumar Banerjee



- **Dr. D. K. Biswas Gold Medal**  
[for securing Highest Marks in Poultry Production Management in B. V. Sc. & A. H.]  
- Lhendup Bhutia
- **Dr. G. L. Sharma Endowment Gold Medal**  
[for securing Highest Marks in Veterinary Public Health in B. V. Sc. & A. H.]  
- Dipak Kumar Banerjee
- **Dr. (Mrs.) Gita Biswas Gold Medal**  
[for securing Highest Marks in Veterinary Parasitology in B. V. Sc. & A. H.]  
- Lhendup Bhutia
- **Dr. Animesh Kumar Chakraborty Gold Medal**  
[for securing Highest Marks in Veterinary Pharmacology & Toxicology in B. V. Sc. & A. H.]  
- Sujoy Tamang
- **Dr. G. C. Banerjee Gold Medal**  
[for securing Highest Marks in Animal Nutrition in B. V. Sc. & A. H.]  
- Lhendup Bhutia
- **1972 Batch B.V.Sc. & A.H. Students Gold Medal**  
[for securing Highest Marks in B.V.Sc & A.H.]  
- Sujoy Tamang
- **Prof. K. L. Bhowmick & Prof A.K. Majumdar Memorial Gold Medal**  
[for securing Highest Marks in Veterinary A.H. Extension Education in B. V. Sc. & A. H.]  
- Sujoy Tamang
- **Dr. P. Bhattacharya Gold Medal**  
[for securing Highest Marks in OGPA in Animal Production & Management in M. V. Sc.]  
- Tridib Debnath
- **Dr. Rathindranath Ghosh Gold Medal**  
[for securing Highest Marks in Veterinary Pharmacology & Toxicology in M. V. Sc.]  
- Sujoy Dasgupta

#### **YEAR 2017**

- **University's Gold Medal.**  
[for securing Highest Marks in B.V.Sc & A.H.]  
- Chayna Singha Mahapatra
- **Smt. Mira Mallik Gold Medal.**  
[for securing Highest Marks in B.V.Sc & A.H.]  
- Chayna Singha Mahapatra
- **Prof. D. B. Mukherjee Gold Medal**  
[for securing Highest Marks in Veterinary Surgery and Radiology in B.V.Sc & AH.]  
- Bipasha Goswami
- **Dr. S. N. Roy Gold Medal**  
[for securing Highest Marks in Livestock Farm Management in B.V.Sc & AH.]  
- Chayna Singha Mahapatra
- **First Batch(1953) B.V.Sc Students' Gold Medal**  
[for securing Highest Marks in 5th and 6th Semester in B.V.Sc & AH.]  
- Chayna Singha Mahapatra
- **Dr. B. N. Dey Memorial Endowment Gold Medal**  
[for securing Highest Marks in Veterinary Gynaecology & Obstetrics in B. V. Sc & A. H.]  
- Rinzee Tamang
- **Dr. B. N. Mukherjee Gold Medal**  
[for securing Highest Marks in Vety. Epidemiology & Preventive Medicine in B. V. Sc. & A. H.]  
- Chayna Singha Mahapatra



- **Charu Chandra Koley Gold Medal**  
[for securing Highest Marks in Animal Genetics & Breeding in B. V. Sc. & A. H.]  
- Chayna Singha Mahapatra
- **Dinesh Chandra De and Sova De Memorial Gold Medal**  
[for securing Highest Marks in 5<sup>th</sup> Composite Annual Examination in B. V. Sc. & A. H.]  
- Chayna Singha Mahapatra
- **Dr. Subir Kr. Sinha Memorial Gold Medal**  
[for securing Highest Marks in Veterinary Medicine, Ethics & Jurisprudence in B. V. Sc. & A. H.]  
- Ajantika Ghosh
- **Dr. D. K. Biswas Gold Medal**  
[for securing Highest Marks in Poultry Production Management in B. V. Sc. & A. H.]  
- Chayna Singha Mahapatra
- **Dr. G. L. Sharma Endowment Gold Medal**  
[for securing Highest Marks in Veterinary Public Health in B. V. Sc. & A. H.]  
- Chayna Singha Mahapatra
- **Dr. (Mrs.) Gita Biswas Gold Medal**  
[for securing Highest Marks in Veterinary Parasitology in B. V. Sc. & A. H.]  
- Chayna Singha Mahapatra
- **Dr. Animesh Kumar Chakraborty Gold Medal**  
[for securing Highest Marks in Veterinary Pharmacology & Toxicology in B. V. Sc. & A. H.]  
- Chayna Singha Mahapatra
- **Dr. G. C. Banerjee Gold Medal**  
[for securing Highest Marks in Animal Nutrition in B. V. Sc. & A. H.]  
- Chayna Singha Mahapatra
- **1972 Batch B.V.Sc. & A.H. Students Gold Medal**  
[for securing Highest Marks in B.V.Sc & A.H]  
- Chayna Singha Mahapatra
- **Prof. K. L. Bhowmick & Prof A.K. Majumdar Memorial Gold Medal**  
[for securing Highest Marks in Veterinary A.H. Extension Education in B. V. Sc. & A. H.]  
- Chayna Singha Mahapatra
- **Dr. Rathindranath Ghosh Gold Medal**  
[for securing Highest Marks in Veterinary Pharmacology & Toxicology in M. V. Sc.]  
- Shabnam Akhtar

#### Awards/Recognitions/Certificates received by Faculty members:-

Sl. No	Name of the recipient	Name of the honour/ award/ fellowship/ scholarship etc.	Offering organization	Field of remarkable activity
1	Dr. Manoranjan Roy, Assistant Professor, Deptt of Animal Genetics & Breeding	1st position	Society for Conservation of Domestic Animal Biodiversity (in 2017)	Oral presentation in National Symposium on "Biodynamic Animal Farming for the Management of Livestock Divers under Changing Global Scenario"
2	Dr. UttamSarkar, Assistant Professor, Deptt of Animal Genetics & Breeding	Certificate of Appreciation	International Journal of Livestock Research	Member of Scientific Advisory Board
3	Dr. SanjoyDatta, Assistant Professor, Deptt of Animal Genetics & Breeding	Certificate of Appreciation	International Journal of Livestock Research	Member of Scientific Advisory Board



4	Dr. P.N.Chatterjee, Assistant Professor, Deptt of Animal Nutrition	Outstanding Paper Presentation Award	DST, Govt. of West Bengal	Nano-materials in Animal Nutrition
5	Dr. A. K. Patra, Assistant Professor, Deptt of Animal Nutrition	Alexander von Humboldt Fellowship	Alexander von Humboldt Foundation of Germany	Animal Science
		Member of Advisory Board	Cariplo Foundation, Italy	Evaluation of the project proposals
6	Dr. Aruna Pal, Assistant Professor, Deptt of Livestock Farm Complex	"Certificate of Commendation, 2017	Department of Higher Education, Science and Technology and Biotechnology, Govt. of West Bengal	Best Presentation on Birbhum sheep characterization.
		Best Poster presentation Award 2017	Society for Domestic Animal Biodiversity	Characterization of indigenous ducks of West Bengal
		"Outstanding Paper presentation Award" 2016	Department of Science and Technology, Govt. of West Bengal at Regional Science Congress, Presidency Division, West Bengal	Next generation sequencing studies on Birbhum sheep.
		Best Oral presentation Award 2016	Society for Domestic Animal Biodiversity	Molecular characterization of Birbhum sheep based on mitochondrial genes.
7	Dulal Chandra Roy, Assistant Professor, Deptt of Livestock Farm Complex	Environment Excellence Award 2017	Scientific and Environmental Research Institute, Kolkata	Agriculture, environment and food safety
8	Prof. S. Biswas, Professor, Dept. of Livestock Products Technology	Member, Board of Director	West Bengal Livestock Development Corporation Ltd. Govt. Of W.B	
		Member of Research Advisory Committee, NRC on Meat, Hyderabad	Nominated by ICAR, New Delhi	
		Member, State level Committee of Slaughter House	Dept. Of Urban Development, Govt. Of W.B	
		Member, VCI accreditation committee for establishment of new colleges	Nominated by VCI, New Delhi	
9	Prof. S. Ray, Professor,	Fellow IAVA	IAVA	



	Dept. of Veterinary Anatomy & Histology			
10	Dr. A.K. Mandal, Associate Professor, Dept. of Veterinary Anatomy & Histology	Best Paper Award	IAVA	
11	Dr. N. K. Tudu. Assistant Professor, Dept. of Veterinary Anatomy & Histology	Best Paper Award	IAVA	
12	Dr. N. K. Tudu. Assistant Professor, Dept. of Veterinary Anatomy & Histology	D.Sc. (HonorisCausa)	Sidho-Kanho-BirshaUniversity, Purulia	
13	Dr. SubhasisBatabyal, Professor, Dept. of Veterinary Bio-Chemistry	Reviewer Excellence Award	Agricultural Research Communication Centre (ARCC)	Outstanding contribution to the ARCC journals
14	Dr M Mondal, Associate Professor, Dept. of Veterinary Clinical Complex	Best Poultry Pathologist Award (IAVP Lifetime achievement award)	Indian Association of Veterinary Pathologists	Avian Pathology
		Editor	Journal of Interacademia	-
		Lead Speaker in XXIII Annual Conference of Indian Association for the Advancement of Veterinary Research (IAAVR)	OUAT, Bhubaneswar	Avian Diseases
		Chairman - 16th Indian Veterinary Congress (2016) and XXIII Annual conference of Indian Association for Advancement in Veterinary Research in College of Veterinary Science and A.H.	OUAT, Bhubaneswar	Avian Diseases
		Co-Chairman - 33rd Annual Convention of Indian Society for the Study of Animal Reproduction (ISSAR)	WBUAFS, Kolkata.	Animal Reproduction
		Rapporteur - National symposium of 46th Veterinary Re-union	WBUAFS, Kolkata	-
15	Dr. IndranilSamanta, Assistant Professor, Dept. of Vety. Microbiology	Best Teacher Award- 2017 (below 45 category) of F/O Veterinary and Animal Sciences,	West Bengal University of Animal and Fishery Sciences	Teaching, research and extension
		Best Oral Presentation Award in 31st Annual Convention of IAVMI and national symposium at Sri	IAVMI	Cryptosporidium infection in birds



		Venkateswara Veterinary University, Tirupati, Andhra Pradesh		
		Selected for Summer Research Fellowship-2018 (for teachers)	Indian Academy of Sciences-Indian National Science Academy-The National Academy of Sciences (jointly conferred)	Teaching and research
16	Dr. S. N. Joardar, Professor, Dept. of Vety. Microbiology	Best Teacher Award - 2018 (Faculty of Veterinary and Animal Sciences)	West Bengal University of Animal and Fishery Sciences	Teaching, research and extension
		Best Research Paper Award in West Bengal State Science and Technology Congress, 2016	DST, Govt. of West Bengal	Agriculture, Veterinary & Aquaculture Section
		RashtriyaGaurav Award (2017)	India International Friendship Society (IIFS), New Delhi	Research & Teaching
17	Dr. KunalBatabyal, Assistant Professor, Dept. of Vety. Microbiology	Dr C Natarajan Endowment Award (Gold Medal) for Best Paper in 12th National APHV Conference, Durg (Dec, 2016)	APHV	Pathogenic P. aeruginosa in milk
		2nd Best Oral Presentation Award in 12th National Conference of APHV and National Symposium at CVS&AH, Durg (Dec, 2016)	APHV	Quality Control in foods of animal origin
18	Samir Dey, Assistant Professor, Dept. of Vety. Microbiology	Best paper presentation Award in National Seminar in Vth Annual Convention of SVSBT, Odisha,22-23 September,2017	SVSBT	Vety. Microbiology
19	Dr. SoumitraPandit, Assistant Professor, Dept. of Vety. Parasitology	'Outstanding Paper' Presentation Award Title of paper & authors: (Pandit, S, Jas R., Badiya S and Debbarma A (2017): Impact of Gastrointestinal Parasitism in Garole Sheep of Sundarban Delta of West Bengal)	2nd Regional Science & Technology Congress, 2017, Southern Region, organized by University of Kalyani, Kalyani, Nadia, West Bengal : 14-15th December, 2017	Vety. Physiology
20	Dr. S.K. Mukhopadhyay,	Diplomat ICVP	Indian College of Veterinary	Vety. Pathology



	Professor, Deptt. of Veterinary Pathology	Nominee CPCSEA	Pathologist(ICVP) Ministry of Forest and Environment, GOI	Animal Ethics
21	Dr. S. Mondal, Assistant Professor, Deptt. of Veterinary Pathology	Best oral presentation award	Society for Bioinformatics and Biological Science	Cancer
22	Dr. Dipak Banerjee, Assistant Professor, Dept. of Vety. Physiology	Outstanding Paperaward in 1st Regional Science & Technology Congress – 2016-17 for Presidency division	Department of Science and Technology, WB	Molecular Biology
		Dr. P.K. Dwarikanath Memorial Young Scientist Award	Society of Animal Physiologists of India (SAPI)	Environment & Stress Physiology
23	Dr. Kinsuk Das, Assistant Professor, Dept. of Vety. Physiology	International Travel Support Grant	Science and Engineering Research Board, DST, Govt. of India	Oral presentation at the XII Anniversary Commemorative Event of Niche-In Centre for Regenerative Medicine (NCRM NICHE 2017) held at NCGM, Tokyo, Japan
24	Prof. Pradip Kumar Das, Professor, Dept. of Vety. Physiology	A Roy Award	Society of Animal Physiologists of India (SAPI)	Poultry Development and Research
25	Prof. Samit Kumar Nandi, Professor, Dept. of Vety. Surgery & Radiology	National Teaching Excellence Award 2016	International Benevolent Research Foundation	In recognition of teaching excellence
		Late Dr. P. S. Khankhoje Gold Medal	Dr.PanjabraoDesh mukhKrishiVidyapeeth, Akola	For outstanding research work in the disciplines of Agriculture including Animal Sciences, Fisheries and Agricultural Engineering during the year 2015-16.
		Best Teacher Award 2016 (Above 45 years Category)	West Bengal University of Animal and Fishery Sciences	In recognition of teaching excellence of the Faculty of Veterinary & Animal Sciences, West Bengal University of Animal and Fishery Sciences
		Best Teacher Award 2017 at University Level	West Bengal University of Animal and Fishery Sciences	In recognition of teaching excellence at the university level.
		Fellow. National Academy of Agricultural Sciences, New Delhi, 2018	National Academy of Agricultural Sciences, New Delhi.	In remarkable contribution in Indian Agricultural Sciences
		Fellow, Indian Society for Veterinary Surgery, 2017.	Indian Society for Veterinary Surgery	In remarkable contribution in Veterinary Surgery and Radiology in India
26	Dr. SanjoyDatta,	Certificate of	International	Reviewer and Member,



	Assistant Professor, Deptt of Animal Genetics & Breeding	appreciation in recognition of outstanding contribution to the quality of the journal	Journal of Livestock Research	Scientific Advisory Board, IJLR
27	Dr. P.N.Chatterjee, Assistant Professor, Deptt of Animal Nutrition	University Best Teacher Award	WBUAFS, Kolkata	Best Teacher of University
		Best Teacher Award F/O. VAS	WBUAFS, Kolkata	Best Teacher of F/O. VAS
		Outstanding Presentation Award	Dept. of Science, Technology and Biotechnology, Govt. of West Bengal	Research
		Dr. RishendraVerma Young Scientist Award	Indian Association for Advancement of Veterinary Research, IVRI, Izatnagar	Research
		Best Oral Presentation Award	Animal Nutrition Association of India (BASU - Patna Chapter)	Research
28	Dr SantanuBera Assistant Professor & Head, Deptt. Of Livestock Production Management	Member of Scientific Advisory Board	Indian Journal of Livestock Research	Contribution to quality of the journal
29	DrNilotpallGhosh Professor Dept of Livestock Production Management	Appointed External Adjunct Faculty BHU	Banaras Hindu University, Varanasi, Uttar Pradesh	
30	Prof.SubhasisBiswas, Professor & Head, Deptt of Livestock Products Technology	G.V. Narayankhedkar Memorial Award	19th Indian Veterinary Congress and IAAVR	Contribution in veterinary education and research
31	Dr. P. Mukherjee, Assistant Professor Deptt. of Veterinary Clinical Complex	3rd Presentation award	Indian Meat Science Association	Poster presentation
32	Prof. ChandanLodh, Professor, Deptt of Veterinary Medicine, Ethics & Jurisprudence	Borhringer-Gold Medal for Health Management in Canine Practice-2019	Indian Society for advancement of Canine Practice	Canine Health Management
33	Dr. S. N. Joardar, Professor, Depttt of Veterinary Microbiology	Elected Member of National Academy of Veterinary Sciences (I)	National Academy of Veterinary Sciences (I)	Veterinary Microbiology
		IAAVR Merit Award	Indian Association for the Advancement of Veterinary Research (IAAVR)	Veterinary Microbiology
		Personality of the Year (2018) Award	Reguerdon Inc., New Delhi	Veterinary Microbiology
		Biography in Asia Pacific Who's Who	Publisher- Rifacimento	Veterinary Microbiology



		(2019)	International, New Delhi	
34	Dr. Indranil Samanta, Assistant Professor, Deptt of Veterinary Microbiology	Summer Research Fellowship-2018 (for teachers)	Indian Academy of Sciences-Indian National Science Academy-The National Academy of Sciences	Veterinary Microbiology
		Outstanding contribution in reviewing	Elsevier	Reviewing the research articles published in Elsevier Journals associated with Microbiology
		Best Oral Presentation Award	International symposium and 8th Conference of Indian Meat Science Association at West Bengal University of Animal and Fishery Sciences	Veterinary Microbiology (Antimicrobial resistance)
		'P. Madhusudan Gold Medal' (2019)	Indian Association for the Advancement of Veterinary Research (IAAVR)	Veterinary Microbiology (Teaching and Research)
35	Dr. K Batabyal, Assistant Professor, Deptt of Veterinary Microbiology	3rd Best Oral Presentation Award	International Symposium & 8th Conference of Indian Meat Science Association (IMSACON – VIII), held at WBUAFS, Kolkata	Veterinary Microbiology (Antimicrobial resistance)
		2nd Best Oral Presentation Award	National Symposium & 19th Indian Veterinary Congress/XXVI Annual Conference of IAAVR, held at WBUAFS, Kol.	Veterinary Microbiology (Food intoxication)
36	Dr. S. Baidya Associate Professor & Head, Deptt. Of Veterinary Parasitology	Dr. C. Natarajan Endowment Award (Gold Medal).	Association of Public Health Veterinarians in XIII Biannual National Conference of Association of Public Health Veterinarians & Symposium	For Best Paper Presentation Award on community Science in Veterinary Public Health, 2018.
37	Dr. S. Pandit, Assistant Professor, Deptt. Of Veterinary Parasitology	Outstanding Paper Presentation Award, Bidhannagar College, Kolkata, 18-19th December, 2018	3rd Regional Science and Technology Congress (Southern Region)-	Agriculture and Animal Sciences



			2018	
38	Dr. S.K.Mukhopadhyay Professor, Deptt. Of Veterinary Pathology	CPCSEA Nominee, 2018	CPCSEA, Ministry of Environment, Forests & Climate Change, Govt. of India	CPCSEA
39	Dr. S. Mondal Assistant Professor, Deptt. Of Veterinary Pathology	CPCSEA Nominee, 2018	CPCSEA, Ministry of Environment, Forests & Climate Change, Govt. of India	CPCSEA
40	Dr. S. Pradhan Assistant Professor, Deptt. Of Veterinary Pathology	Certificate of Appreciation	By the ISEE, 2018	Veterinary Education & Extension
41	Dr. R.N. Hansda Assistant Professor, Deptt. Of Veterinary Pathology	Certificate of Appreciation	By the ISEE, 2018	Veterinary Education & Extension
42	Prof. Pradip Kumar Das, Professor & Head, Dept. of Veterinary Physiology	Associate Editor	Indian Journal of Animal Health	Contribution towards teaching, research & extension in the field of Veterinary & Animal Husbandry
43	Dr. Kinsuk Das Assistant Professor, Dept. of Veterinary Physiology	Senior Member	Hong Kong Chemical, Biological & Environmental Engineering Society	Nanomedicine
		Member	International Association of Advanced Materials, Sweden	Nanomedicine
44	Dr. ChanchalDebnath, Associate Professor, Deptt. Of Veterinary Public Health	Dr. R.R. Shukla Gold Medal Award for best paper presentation on "Zoonotic diseases of National importance and the control and Containment of such diseases in India" XIII Biennial National Conference of Association of Public Health Veterinarians held at CoVAS, G.B. Pant University of Agri. & Tech., Pantnagar-263145, Uttarakhand. .	Association of Public Health Veterinarians	Mycotic Zoonoses
45	Prof. Samit Kumar Nandi, Professor & Head,	Tata Innovation Fellowship 2018-19	Department of Biotechnology, Ministry of Science	To recognize and reward scientists with outstanding track record



	Deptt. Of Veterinary Surgery & Radiology		& Technology, Government of India, New Delhi	in biological sciences to find innovative solutions to major problems in healthcare, agriculture and other areas related to life sciences and biotechnology.
		Fellow, 2019	Indian Association for the Advancement of Veterinary Research	Overall National & International outstanding contributions in the field of Veterinary Science & Animal Husbandry.
46	Prof. Subhasis Biswas, Professor & Head, Deptt of Livestock Products Technology	Appreciation Award	Indian Association for the Advancement of Veterinary Research (IAAVR)	Contribution in veterinary education and research
		Member, Research Advisory Committee, NRC on Meat, Hyderabad	Nominated by ICAR, New Delhi	
		Member, , State level Committee of slaughter house	Nominated by Deptt. of Urban Development, Govt. of W.B	
		Member, VCI accreditation committee for establishment of new colleges	Nominated by VCI, New Delhi	
47	Prof. Partha Das, Professor, Dept. of Vety. Anatomy & Histology	Life time achievement Award	PasudhanPraharee	Significant contribution in Animal Welfare
		Certificate of Appreciation	International Journal of Livestock Research	Member, Scientific Advisory Board
	Dr.Arun Kumar Mandal, Assistant Professor, Dept. of Vety. Anatomy & Histology	Certificate of Appreciation	International Journal of Livestock Research	Member, Scientific Advisory Board
48	Prof. Subhasis Batabyal, Professor & Head, Deptt of Veterinary Bio-Chemistry	Reviewer Excellence Award	ARCC	Reviewer of Indian Journal of Animal Research and Asian Journal of Dairy and food Research
49	Prof. SubhasisBatabyal, Professor & Head, Deptt of Veterinary Bio-Chemistry	Appreciation Award	Indian Association for the Advancement of Veterinary Research (IAAVR)	For conduction of 19th Indian Veterinary Congress at Kolkata
50	Dr. Indranil Samanta, Assistant Professor, Dept. of Veterinary Microbiology	Best Teacher Award (University level)	WBUAFS	Veterinary Microbiology
51	Dr. S. K. Mukhopadhyay Professor, Dept. Of	Fellow Indian Association of Veterinary Pathologist	Indian Association of Veterinary Pathologist(IAVP)	Excellence contribution in Veterinary Pathology



	Veterinary Pathology			
52	Dr. Kinsuk Das Assistant Professor, Dept. of Veterinary Physiology	First prize in Innovative Idea Competition	Jointly by DSIR- TOCIC, IIT- Kharagpur, CSIR- CGCRI & CSIR- CMERI	Innovation and Entrepreneurship

#### 6.5.7.4. Employability

*What are the set of achievements such as skills, understandings and personal attributes that make College students more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy? Provide one page note on the subjects.*

The Achievements are:-

- 1) Professional skills of the students has been enhanced
- 2) Logical understanding of the students in respect of relevant functional areas has been enhanced.
- 3) Personality development of the Students has been made to make them confident, self reliant and presentable before recruitment boards.

Most of the veterinary students are absorbed in Govt department, Animal Resources Development Department (ARDD) through West Bengal Public Service Commission as Veterinary Officer. Few students used to take other jobs including Assistant Professor, Scientist, private companies (Poultry, medicine, R&D etc). Very few pass graduates are absorbed in State Administration through WBPSC in Govt Executive jobs.

The ultimate goal of any student after graduation/post graduation is either engage in self-employment as entrepreneur or get employed in private or public sector industries or organizations. Imparting skills to learners based on above specific job needs is mandatory of any college/institution. Graduate students right from the beginning are taught theoretically and practical skills on different areas milk procurement, Processing, marketing and distribution, business management, entrepreneurial development, interpersonal relationships, effective communications skills etc. till the end of the degree programme. Subject courses are designed in accordance with V Deans' committee report giving more importance to practical skills in all areas of Dairy Sectors.

Placement Cell of the Institute is taking all efforts to improve the employability skill of the students. The students are trained in various skill by the professional expert. One Faculty member conducts many sessions on preparation of Resume, participation in interview and group discussion. The Academic counselors also periodically interact with the students and motivate them to prepare for competitive exams- quantities analysis, reasoning ,language skill etc are invited to conduct special sessions to students to improve their skill. Alumni also regularly interact with students and share their experience. As a consequence of the sustained efforts of the faculty members in the college and the own initiative of the students several alumni are successfully serving the various walks of life and brought good name to the Institution.

#### 6.5.9 CERTIFICATE:

I, Prof. (Dr.) Nilotpal Ghosh, Dean, Faculty of Veterinary & Animal Sciences West Bengal University of Animal & Fishery Sciences hereby certify that the information contained in Sections 6.4 and Section 6.5.1 to 6.5.7.4 are furnished as per the records available in the college and degree awarding university.

Date: 29.01.2021

Place: Mohanpur, Nadia

*Nilotpal.*  
29.01.2021  
DEAN (Actg.)  
F/o Veterinary & Animal Sciences  
West Bengal University of Animal & Fishery Sciences  
Kolkata - 37 & Mohanpur, Nadia-741252



# **ANNEXURE – I**

**First Statutes of the West Bengal  
University of Animal & Fishery  
Sciences 1998**



THE FIRST  
**STATUTES**

OF

**THE WEST BENGAL UNIVERSITY OF  
ANIMAL & FISHERY SCIENCES**

1998





सत्यमेव जयते

*Extraordinary*  
Published by Authority

BAISAKHA 21

WEDNESDAY, APRIL 22, 1998

[SAKA 1920]

PART I—Orders and Notifications by the Governor of West Bengal, the High Court, Government Treasury, etc.

**GOVERNMENT OF WEST BENGAL**

## ANIMAL RESOURCES DEVELOPMENT DEPARTMENT

### Writers' Buildings, Calcutta

No. 775-Uni.

Calcutta, the 22nd April, 1998.

## NOTIFICATION

In exercise of the power conferred by sub-section (1) of section 34 of the West Bengal University of Animal and Fishery Sciences Act, 1995 (West Ben. Act VI of 1995), the Governor is pleased to make the following statutes:—



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## CHAPTER I

## 1. Preliminaries

- (1) These Statutes shall be called the West Bengal University of Animal and Fishery Sciences First Statutes, 1998.
- (2) They shall come into force on the date of their publication in the *Calcutta Gazette*.
- (3) Unless the context otherwise requires, the words and expressions used in these Statutes shall be interpreted to have the same meaning as they have in the Act.

## 2. Definitions

- (1) 'Academic year' means a period of twelve months commencing in the month of August, or such other month as the Council may by order direct;
- (2) The 'Act' means the West Bengal University of Animal and Fishery Sciences Act, 1995 (West Ben. Act VI of 1995);
- (3) "Allied Sciences" means science and technology related or pertaining to Veterinary, Animal Husbandry, Dairy, Fishery and Wildlife and include their applied social and commercial aspects;
- (4) "Assistant Returning Officer" means a person appointed as such by the Vice-Chancellor to discharge the functions of the Returning Officer under the overall supervision and control of the Returning Officer;
- (5) "Authorised Agent" means a person authorised by a candidate contesting an election to be present inside the polling centre or at the place of counting of votes on behalf of the candidate with the permission of the Presiding Officer or the Returning Officer;
- (6) "Board of Examinations" means the Board constituted for the purpose of finalisation of the results of the examinations of the University prior to their publications;
- (7) "Campus" means a unit of the University located at a particular address;
- (8) "Candidate" means a person contesting an election to any authority of the University;
- (9) "Chancellor" means the Chancellor of the University;
- (10) "Chapter" means a chapter of these Statutes;
- (11) "Clause" means a sub-division of the Statutes;
- (12) "College" means a college affiliated to the University;
- (13) "Constituency" means a group or category of voters eligible to vote to fill a seat of any authority created under the Act or the Statutes;
- (14) "Controller" means the Controller of Examinations of the University;
- (15) "Countersigning Authority" means the officer who countersigns the Annual Confidential Report;
- (16) "Department" means a department of a Faculty;
- (17) "Director" means the Director of Research, Extension and Farms of the University;
- (18) "Disciplinary Authority" means an authority to impose punishment on an employee;
- (19) "Election Day" with reference to any election under the Act or these Statutes means a date or dates fixed for polling in connection with such election;
- (20) "Elector" with reference to any constituency means a person entitled to vote in an election for that constituency;
- (21) "Electoral Roll" means the register of electors for a constituency;
- (22) "Emoluments" means pay and allowances or remuneration and includes leave salary and subsistence grant;
- (23) "Extension" means the activities concerned with training of persons, producers, consumers and other groups serving the cause of veterinary, fishery and allied sciences and technology and includes endeavour to work through meetings, demonstration and other appropriate methods of information-sharing and knowledge dissemination;



- (24) "Farm" means collective keeping and rearing of domestic animals, birds, fishes etc. and cultivation of fodder, crop etc. for the purpose of production, research, teaching and demonstration maintained and managed by the University;
- (25) "Finance Officer" means the Finance Officer of the University;
- (26) "Government" means the Government of West Bengal;
- (27) "Librarian" means the Librarian of the University;
- (28) "Presiding Officer" means a person appointed by the Returning Officer for conducting an election to any authority of the University;
- (29) "Register" for a constituency means a book where the names and other particulars in respect of electors of that constituency are kept;
- (30) "Registering Authority" means the Registrar or such other persons as may be appointed by an order in writing of the Vice-Chancellor to perform any or all of the functions of a Registering Authority under a provision of these Statutes;
- (31) "Registrar" means the Registrar of the University;
- (32) "Reporting Officer" means the officer who initiates Annual Confidential Report;
- (33) "Research Station" means a research station of the University anywhere maintained and managed by the University;
- (34) "Returning Officer" means the Registrar or such other person as may be appointed by order in writing by the Vice-Chancellor to perform any or all of the functions of the Returning Officer under a provision of these statutes;
- (35) "Rules" means the rules framed by a competent authority or officer within the framework of the Act, Statutes and Regulations;
- (36) "Schedule" means a Schedule to those statutes;
- (37) "Screening Committee" means Committee constituted for the purpose of re-employment/extension of officers and teachers;
- (38) "Section" means a section of the Act;
- (39) "Selection Committee"/"Standing Committee" means such committee as defined in the Act;
- (40) "Sub-section" means a sub-section of the Act;
- (41) "Supervisory Staff" means a teacher of the University or a person holding a scale of pay not less than that of a Superintendent of the University;
- (42) "Unit" means an administrative section of the University Office;
- (43) "Vice-Chancellor" means the Vice-Chancellor of the University and includes Vice-Chancellor appointed by Chancellor to officiate under sub-section (4) of section 9 of the Act.



## CHAPTER II

## OFFICERS OF THE UNIVERSITY

## PART I

## VICE-CHANCELLOR

3. (1) Not less than four months before the end of the term of a Vice-Chancellor, the Vice-Chancellor shall call a meeting of the Council to elect a panel of names in the manner provided for in sub-section (1) of section 9 of the Act.

(2) If appointment of a Vice-Chancellor becomes necessary due to resignation of a Vice-Chancellor or otherwise before the expiry of the term of a Vice-Chancellor, the Vice-Chancellor appointed to officiate under sub-section (4) of section 9 of the Act, shall call a meeting of the Council to elect a panel of names in the manner provided for in sub-section (1) of section 9 of the Act, as soon as possible.

(3) The panel elected by the Council shall without delay be forwarded to the Chancellor by the Vice-Chancellor or in the absence of the Vice-Chancellor, by the Registrar.

(4) The appointment of the Vice-Chancellor should be a tenure post for a period of four years and shall be eligible for re-appointment for a further period of four years or till the attainment of superannuation at 65 years of age, whichever is earlier.

4. (a) The Vice-Chancellor shall be paid a salary of Rs. 7,600/- per month (fixed) with other allowances as admissible to State Government Officers. The Salary would be subject to such kinds of revision by UGC/ICAR, New Delhi, as implemented by the State Government from time to time;
- (b) The Vice-Chancellor shall be provided with a chauffeur driven car and with rent free furnished residential accommodation and other perquisites as may be decided by the Executive Council;
- (c) The Vice-Chancellor shall be entitled to travelling allowance as applicable to the Group 'A' officers of the West Bengal Government for halts and travels in connection with the work of the University;
- (d) The Vice-Chancellor shall be entitled to leave as admissible to State Government officers;
- (e) The Vice-Chancellor shall be provided with such medical facilities/concessions as are admissible to State Government employees;
- (f) The Vice-Chancellor may be deputed on University business or at the request of the Government, on Government business or in public interest, to any part of India or outside of India. The period of deputation outside the University shall not exceed three months.

5. In addition to the powers and functions mentioned in section 10 of the Act, the Vice-Chancellor shall exercise the following powers and privileges:—

- (1) (a) To see that the academic standards of different faculties of the University and colleges are maintained and improved and that the activities of the University and colleges are conducted in accordance with the Act, the Statutes and the regulations;
- (b) To appoint persons to posts created by the Council with the prior approval of the State Government subject to general or special directions of the Council;
- (c) To abolish superfluous posts subject to special directions of the Council;
- (d) To transfer an employee from one post to another in the interest of the University without adversely affecting his service condition and emoluments;
- (e) To constitute ad-hoc committees for the purpose of selection of students for admission to the University, selection of staff for conducting enquiries into the affairs of the University or a college and such other purposes as may be specified by the Council;
- (f) To suspend or punish an employee or to punish, dismiss or suspend or expel a student;
- (g) To sanctions leave including extraordinary leave for higher studies;
- (h) To represent the University in Inter-University meetings and associations within the country;
- (i) To represent the University outside the country with the approval of the Council and the State Government;
- (j) To be present at and address any meeting of an authority of the University or participate in its deliberations even if he is not a member of the same provided that he shall not vote in the meeting unless he is a member of the Authority;
- (k) To enforce discipline among employees and students;
- (l) To inspect faculties, campuses and colleges, give appropriate directions and report to the appropriate authority of the University;



- (m) To oversee day to day work of the office of the University and maintenance and management of all properties, endowments and equipments of the University;
  - (n) To cause annual physical verification of the stocks and equipments of the University;
  - (o) To assign, modify and re-allocate functions and duties of employees of the University;
  - (p) To give directions for conduct of elections to authority of the University.
- (2) The powers, duties and functions of the Vice-Chancellor shall be exercised subject to the provisions of the Act, the Statutes, regulations and general or special directions of the Council.
- (3) Subject to general or special directions of the council, the Vice-Chancellor may delegate any of his functions under sub-clause (1) of this clause, to any officer of the University. But in spite of such delegation, exercise of his delegated functions shall be subject to his supervision and control and he shall be responsible for the smooth discharge of the delegated functions. He shall have the power of cancelling any delegation made by him.
- (4) Subject to general or special directions of the Council, the Vice-Chancellor shall divide the administrative work of the University into different units and issue order necessary for the purpose, and may also issue standing order regarding office and administrative procedure.
- (5) When any action has been taken by the Vice-Chancellor under sub-section (6) of section 10 of the Act, he shall immediately notify the same to the Secretary of the Authority which shall ordinarily have dealt with the matter, with direction to place the same on the agenda of the next available meeting of such Authority.
6. Such Authority may ratify the action taken by the Vice-Chancellor or may pass other appropriate order.
- (1) An appeal made under sub-section (8) of section 10 of the Act against any action under sub-section (10) of the said section of the Act, shall be in the form of a memorandum with a brief description of the action appealed against and reasons for the appeal. The memorandum of appeal shall be presented before the Registrar who shall place the same on the agenda of the next meeting of the Council. He shall produce in that meeting, office records relating to the action appealed against along with a note on whether the appeal was preferred within 30 days of the appellant having notice of the action taken or within 30 days of the formation of the first Council, whichever is later.
- (2) On consideration of such appeal the Council may make such order as it may consider to be appropriate.

## PART II

### REGISTRAR

7. (a) The Registrar shall be responsible to the Vice-Chancellor in exercise of the powers and duties specified in section 11 of the Act and shall exercise such other additional powers and duties delegated to him by the Vice-Chancellor with the approval of the Executive Council of the University;
- (b) Subject to the provision of section 10 sub-section (7) and section 19 sub-section (1) (XIV) the Registrar shall be responsible for the recruitment, appointment, payment of emoluments, promotion and retirement benefits to all teaching and non-teaching posts of the University;
- (c) He shall be responsible for the maintenance of the service and leave records of the teaching and non-teaching staff.
8. He shall be the custodian of the records and common seal of the University and shall have the power to deny access to any body other than the Vice-Chancellor or the Council except on authorisation by the Vice-Chancellor.
9. Subject to overall control of the Vice-Chancellor and the Executive Council, the Registrar shall be responsible for the management of the properties and the investments of the University.
10. The Registrar shall be responsible for the smooth functioning of the office of the University and shall sign provisional certificates and other documents.
11. In all suits and other legal proceedings by or against the University, the pleadings, the written statements, affidavits etc. shall be signed and verified by the Registrar and all processes in such suit or proceedings shall be issued to and served on the Registrar.
12. When the office of the Registrar is vacant due to illness of the Registrar or otherwise, such functions and duties may temporarily be assigned by the Vice-Chancellor to any other Officer of the University.



13. In terms of sub-section (1) of section 11 of the Act, the Council shall form a committee for appointment of the Registrar and selection procedure is to be completed at least two months before the term of the Registrar expires or as soon as possible when a Registrar ceases to hold office due to resignation or otherwise, before the completion of his term. The qualification for the post of Registrar, the composition of the committee and the salary and allowances payable to the Registrar shall be as given in Schedule I.

### PART III

#### FINANCE OFFICER

14. The composition of the Standing Committee for recommending a candidate for appointment to the post of Finance Officer, his qualification, salary shall be as shown in Schedule I.

15. In addition to what is mentioned in section 12 of the Act, the Finance Officer shall perform the following duties:—

- (a) The finance officer shall be the Member-Secretary of the Finance Committee;
- (b) He shall advise the Vice-Chancellor and Authorities in all financial matters;
- (c) He shall be responsible for the preparation of the annual budget in consultation with the Deans of the Faculty, Director of Research, Extension and Farms, and Heads of the Teaching and Administrative Departments for obtaining approval of the Executive Council under section 19(1) (XVI) through the Vice-Chancellor. He shall also prepare the annual accounts to submit the same to the Finance Committee within 31st March;
- (d) He shall be responsible for ensuring that all the money are expended for the purpose for which they have been granted or allotted;
- (e) He shall receive fees and other incomes, disburse payments and be responsible for the day to day financial transaction of the University and for all incidental matters including correspondences relating thereto;
- (f) He shall sign all the contracts made on behalf of the University and exercise such other powers as provided in the Act, Statutes and Regulations pertaining to account and finance of the University for which he shall be directly responsible to the Vice-Chancellor;
- (g) The Finance Officer shall be responsible for holding meeting of the Finance Committee at least thrice a year;
- (h) All matters relating to income and expenditure of the University in the various departments, not specifically provided for in the budget, which require reference to the Finance Committee, shall be routed through the Finance Officer whose opinion on such matters shall be recorded and considered by the Vice-Chancellor before they are submitted to the Finance Committee;
- (i) The Finance Officer shall be competent to call from the Faculty Council and the Heads of Teaching and Administrative Departments such information as may be necessary for the preparation of the Annual Budget or the Annual Accounts on or before the date fixed by the Vice-Chancellor and such information shall be supplied to him on or before such date;
- (j) He shall be responsible to the Vice-Chancellor to ensure—
  - (i) that expenditure not authorised in the budget is not incurred without appropriate sanction;
  - (ii) that all money belonging to the University are kept in a bank or banks approved by the Executive Council;
  - (iii) that all accounts of the University are properly kept and audited;
  - (iv) that the budget of the University is prepared and submitted to the Vice-Chancellor and the funds sanctioned are obtained in time;
  - (v) that notice for meetings of the Finance Committee is issued in time and minutes thereof are properly recorded;
- (k) Subject to the approval of the Council, he shall receive contributions, grants, gifts and endowments made in favour of or for the purpose of the University;
- (l) He shall evolve and install suitable system of accounting and business procedure and prescribe an accounts manual for use of officers of the University subject to approval of the Vice-Chancellor;
- (m) He shall develop and operate an internal audit system so that records of all officers and employees responsible for the receipts and expenditures of money are properly audited;
- (n) He shall prescribe financial forms to be used in the University;
- (o) Subject to the general control of the Vice-Chancellor, the cash and budget section of the University office shall be under his direct supervision;
- (p) He shall perform such other duties as may be assigned to him by the Council or the Vice-Chancellor from time to time.



## PART IV

*CONTROLLER OF EXAMINATIONS*

16. The composition of the Standing Committee for recommending a candidate for appointment to the post of Controller of Examinations as provided in sub-section (1) of section 16, his qualification, salary and allowances shall be as shown in Schedule I.

17. The Standing Committee provided for in sub-section (1) of section 16 of the Act, shall be formed by the Vice-Chancellor for the discharge of his functions. In addition to the powers contained in section 16, the Controller shall have the following duties and functions:

- (i) He shall be responsible for the maintenance of a register of Degrees and Diplomas awarded by the University, a register of Graduates and records of related information;
- (ii) He shall make arrangement for the conduct of examinations and for the due execution of all processes connected therewith;
- (iii) He shall be responsible to the Faculty Councils, the Executive Councils and the Vice-Chancellor for proper conduct of all University Examinations and timely publication of results thereof;
- (iv) He shall be responsible to convene meetings of the Boards of Examinations as and when necessary;
- (v) He shall be responsible for co-ordination of activities in respect of preparation, printing and custody of question papers pertaining to all examinations of the University and take necessary steps for printing the same;
- (vi) He shall perform such other duties as may be assigned to him by the Vice-Chancellor or the Executive Council or the Faculty.

## PART V

*LIBRARIAN*

18. (1) The composition of the Standing Committee for recommending a candidate for appointment to the post of Librarian under section 13, sub-section (1), his qualification, salary and allowances shall be as shown in Schedule I.

(2) The Standing Committee provided for in sub-section (1) of section 13 shall be formed by the Vice-Chancellor and its composition shall be as given in Schedule I.

19. Without prejudice to the generality of section 13, the Librarian shall be responsible for the following:

- (i) Accounting and custody of books, periodicals and other publications required to be kept in the library;
- (ii) Purchase of books, periodicals and other publications required by the Heads of Departments within the limits of financial allocations;
- (iii) Framing of rules relating to issue of books and periodicals to teachers and students of the University;
- (iv) Such other function related to the above which may be assigned by the Council or the Vice-Chancellor.

20. The Librarian shall convene the meeting of the Library Committee constituted as under, which shall monitor the progress, development and other affairs of the Library and shall meet at least once in three months.

The Committee shall consist of the following members:

- (i) Director of Research, Extension and Farms—Chairman;
- (ii) Deans of Faculties;
- (iii) Finance Officer;
- (iv) One Head of the Department from each Faculty to be nominated by the Faculty;
- (v) Two teachers of the University to be nominated by the Council;
- (vi) Librarian—Member-Secretary.

## PART VI

*DIRECTOR OF RESEARCH, EXTENSION & FARMS*

21. The composition of the Standing Committee for recommending a candidate for appointment to the post of Director of Research, Extension and Farms under section 15(1), his qualification, salary and allowances shall be as shown in Schedule I.

22. The Standing Committee provided for in sub-section (1) of Section 15 shall be formed by the Vice-Chancellor and its composition shall be as shown in Schedule I.



23. The Director of Research, Extension and Farms shall be a whole time officer of the University under the direct control of the Vice-Chancellor.

24. He shall have the following duties and responsibilities:—

- (a) He shall co-ordinate all research, extension and farm activities of the University in co-operation with the Deans. He shall be directly responsible to the Vice-Chancellor for the initiation, guidance and co-ordination of the Research programmes of the University and its different stations and co-ordinate the activities for the proper management of the University Farms and Extension Departments.
- (b) He shall be In-charge of all Research Stations, Institutes, Farms and Extension Departments and such other departments and units as may be assigned to him by the Vice-Chancellor.
- (c) He shall be responsible for bringing about close collaboration with the Departments of Animal Resources Development, Agriculture, Fisheries, Forest, Rural Development and Panchayet of the State Government, the Indian Council of Agricultural Research, Extension Directorate of the Central Government and other authorities in matters relating to their extension activities and act as the principal liaison officer in respect of extension of education.
- (d) He shall act as the Member-Secretary of the Research and Extension Council and propose research and extension programmes and policies in consultation with the Deans of the Faculties and In-charges of the stations.
- (e) He shall be responsible to establish live-stock farms and fish farms in different agroclimatic regions of the State under the control of the University to promote livestock and fish production in the State with the help of the State Government in obtaining infrastructural facilities for such activities.
- (f) He shall maintain co-ordination between State Government and University in respect of carrying out research, extension and farm activities.
- (g) He shall recommend necessary measures to protect and conserve endangered indigenous species of livestock, birds, fishes and other allied animals in the State.
- (h) He shall prepare an annual report on the research activities of the University with the help of the Deans of the faculties for consideration by the Research Council.
- (i) He shall cause to be published regularly Research Bulletins, articles and scientific journals which summarise research finding of the works carried out in the University and shall be the Chairman of the Editorial Board of any journal to be published by the University.
- (j) He shall represent (or arrange representation) under the direction of the Vice-Chancellor of the University in conferences, seminars, meetings etc. regarding research, extension and farm activities.
- (k) He shall be the principal liaison officer for dealing with funding agencies such as the Indian Council of Agricultural Research, the University Grants Commission, Council of Scientific and Industrial Research, Department of Science and Technology, Veterinary Council of India and other similar authorities and private agencies for the purpose of funding research.
- (l) He shall function in close co-operation with the Deans of Faculties in formulating research policies and programmes of the University.
- (m) He shall exercise such other powers and perform such other duties in the research, extension and farm activities as may be assigned by the Council or the Vice-Chancellor.

## PART VII

### DEANS

25. Deans of Faculties shall be officers of the University for the purpose of sub-section (7) of section 7.

26. (1) The first Dean of a Faculty may be appointed by the Vice-Chancellor on the recommendation of the Government and if so appointed shall hold office for a period of six months or till a Dean of that Faculty is appointed by the Council.

(2) The Vice-Chancellor shall form a Standing Committee for recommending persons for appointment as Deans. The composition of the Standing Committee, his salary and allowances shall be as given in Schedule I.



27. Subject to the provision of clause 26, on the recommendation of the Standing Committee referred to in sub-clause (2) of clause 26, the Council shall appoint the Dean for a term of four years with a provision for extension of terms subject to satisfactory performance of his/her duty on recommendation of the Screening Committee referred to at 2(37) along with co-option of the Head of the concerned Department. He may, however, resign or may be removed from the post before expiry of the term with the approval of the Executive Council.

28. (1) The Dean shall be the academic and executive Head of a Faculty and be responsible to the Vice-Chancellor for its academic activities.

(2) He shall work in close co-operation with the Director of Research, Extension and Farms, Controller of Examinations and Librarian for the execution of University policies pertaining to research, extension, farm and library activities of the Faculty.

(3) He shall be responsible for inter-campus collaboration and co-ordination of academic functions, maintenance of academic standards, constant review of educational programmes and their progress and due observance of Statutes and Regulations relating to the Faculty.

(4) He shall formulate and present for consideration of the Board of Studies policies and programmes on matters relating to the Faculty.

(5) He shall have such other functions related to the above as may be assigned by the Vice-Chancellor or the Council.

#### PART VIII

##### GENERAL

29. Qualifications for the posts, their salaries, appointing authority, composition of Standing Committee of other officers and employees of the University besides those mentioned in section 7 shall be as shown in Schedule I.

30. Salaries and allowances given in Schedules I and II may be revised by the Council in accordance with revised guidelines of the University Grants Commission, when there is an occasion to do so, and with the prior approval of the Government, provided that the emolument of an officer or an employee shall not be varied to his disadvantage during the term of his service.

31. Powers and functions and conditions of service of officers and employees of the University, to the extent not defined by these Statutes, shall be such as may be fixed by Regulations made by the Council in this behalf.



## CHAPTER III

## AUTHORITIES OF THE UNIVERSITY

## PART I

*THE EXECUTIVE COUNCIL*

32. The Council may submit to the Government, Legislative and other proposals for improvement in the functioning of the University.

33. The Council shall meet not later than in the second quarter of a financial year to consider the annual report, the actual accounts and the audit report for the previous financial year.

34. The Council shall meet not later than in the third quarter of each financial year to consider the budget estimate for the next financial year.

35. The Council shall normally meet at the principal seat of the University. It may also meet at any other campus or any other place as may be decided by the Vice-Chancellor.

36. No meeting of the Council shall be invalid on the ground of one or more members not having been elected or nominated.

37. If a meeting of the Council is adjourned due to lack of quorum, no quorum will be required at the adjourned meeting.

38. If the Vice-Chancellor is unable to remain present at a meeting of the Council due to unavoidable reasons, the members present shall elect one of them to be the Chairman of the meeting.

39. For a meeting of the Council, members not in the service of the Government or the University shall draw travelling allowance at rates to be fixed by the Council. Such rates shall be at par with that to which Group 'A' officers of the Government are entitled.

40. (1) The proceedings of a meeting of the Council shall be recorded by the Registrar and he shall arrange circulation of the same among its members as soon as after approval by the Vice-Chancellor or the member presiding over that meeting, as the case may be.

(2) If no exception is taken by any member who was present at the meeting as to the correctness of the minutes, within 7 days of circulation of the minutes, they shall be deemed as correct. If exception is taken within the time aforesaid by means of a letter addressed to the Registrar specifying the points which require correction in the minutes, the minutes shall be brought forward at the next meeting of the Council for confirmation of correctness by such of the members as were present when the business referred to was transacted. The minutes would thereafter be confirmed with such modification if any, as may be necessary.

(3) The Registrar being the ex-officio non-member Secretary of the Council shall convene the meeting of the Executive Council at least once in every two months in consultation with the Vice-Chancellor and issue notice of the meeting so that the notice along with the agenda reaches the members at least a fortnight before the meeting. In case of emergency meeting a notice along with the agenda has to reach the members at least 72 hours before the meeting.

## PART II

*FACULTIES*

41. In addition to the powers and duties mentioned in sub-section (1) of section 21 and section 22 of the Act, the Faculty shall have the following powers and functions:-

- (a) To make recommendations to the Council to conduct convocation for conferment of degrees;
- (b) To make recommendations to the Council for the conferment of Honorary Degree of Doctor of Science and other academic distinctions;
- (c) To make recommendations to the Vice-Chancellor regarding fixation, payment and receipt of fees and penalty for non-payment in time by the students of the University;



- (d) To constitute committee for institution of endowments, scholarships, fellowships, free studentships, medals and prizes and to formulate regulations for such awards from time to time;
- (e) To recommend to the council the admission strength for various disciplines in post-graduate studies;
- (f) To refer to the Board of Studies questions relating to academic matters;
- (g) To recommend the establishment of a new department, abolition/sub-division or reconstitution of existing department or departments based on a report of the Board of Studies;
- (h) To make recommendations to modify the regulations regarding admission of students into the University consistent with the Statutes and Regulations;
- (i) To determine the subjects of study in each department after considering the recommendations of the Board of Studies made in this behalf;
- (j) To recommend the minimum qualifications for the post of teachers of the Faculty;
- (k) To recommend a panel of experts with fields of specialisation for selection for teaching posts;
- (l) To submit each year its Annual Report to the Council;
- (m) To appoint, after considering the views of the Board of Studies, Board of Examinations in a subject or subjects relating to post-graduate studies including the subjects of doctoral thesis and for prizes and medals;
- (n) To take or recommend steps relating to students' welfare;
- (o) To make recommendations for creation of additional faculties when found necessary for the approval of the Council.

42. (1) The Faculty Council shall meet at least once in two months after giving a notice of at least 15 days.

(2) One-third of the members of the Faculty Council shall form the quorum. In case there is no quorum in a meeting, a second meeting shall be convened. No quorum will be required for such an adjourned meeting.

(3) In the absence of the Vice-Chancellor, the Dean of the Faculty will act as the Chairman for that meeting.

(4) All questions at meeting of the Faculty Council shall be decided by a majority of votes of the members present and voting and in the case of an equality of votes, the Vice-Chancellor or the member presiding as the case may be, shall have a second or casting vote.

(5) The proceedings of the Faculty Council shall be recorded by the Secretary of the Faculty and circulated among the members after approval by the Vice-Chancellor or the Presiding Officer as the case may be.

(6) If no exception is taken by any member who was present at that meeting as to the correctness of the minutes within 7 days of despatch of the minutes, they shall be deemed as correct. If exception be taken within the time aforesaid by means of a letter addressed to the Secretary of the concerned Faculty specifying the points which require correction in the minutes, the minutes shall be brought forward at the next meeting of the Faculty Council for confirmation or correction by such of the members as were present when the business were transacted to which the minutes refer.

43. (1) In addition to the members contained in sub-section (2) of section 21, the Farm Officer shall also be a member of the Faculty Council.

(2) A Faculty Council may co-opt members not exceeding three in number from among teachers of the Faculty and experts in the field of the subject of the Faculty.

(3) A Faculty may invite in any of its meetings persons whose advice it may consider necessary on subjects to be discussed in the meeting. Persons so invited shall not be entitled to vote in the meeting.

44. No meeting of a Faculty shall be invalid on the ground that one or more than one member has not been elected, nominated or appointed, as the case may be.

45. The Faculty Council may route its reports to the Council any academic matter regarding the Faculty as it may deem fit for discussion.

46. The Department of each Faculty shall be such as is shown in Schedule III.

### PART III

#### BOARD OF STUDIES

47. (1) In terms of the provision in sub-sections (2) and (3) of section 20 of the Act, each Department in a Faculty shall have a Board of Studies for each subject of study at the undergraduate and post-graduate levels.

(2) Each Board of Studies shall consist of all whole time teachers of the Department concerned.



- (3) The Head of the Department shall be the Chairman and Convenor of the Board of Studies.
- (4) The Board of Studies shall have the following powers and functions:
  - (a) To propose to the Faculty concerned the courses of study and curriculum for various programmes of instructions offered by the concerned Faculty;
  - (b) To make proposal to Faculty Council for post-graduate and undergraduate studies for the programme for inter-disciplinary study and research;
  - (c) To review the academic programme of the Department from time to time and to propose the method of redressal of the problems if any, to the Faculty Council for approval;
  - (d) To consider any other matter referred to it by the Faculty Council, the Executive Council or the Vice-Chancellor, as the case may be.

48. The Head of a Department shall be appointed from among the teachers of that Department on a rotational basis in order of seniority and rank. The Vice-Chancellor shall appoint the Head of the Department in consultation with the Dean of the concerned Faculty. The tenure of the Head of Departments shall be for a period of two years.

#### PART IV

#### OTHER AUTHORITIES

49. In terms of provisions of sub-section (4) section 17 the following shall be additional authorities of the University:
- (a) The Finance Committee;
  - (b) The Academic Council;
  - (c) Research & Extension Council;
  - (d) Board of Examinations.

50. (1) The Finance Committee shall consist of following members:
- (a) The Vice-Chancellor, who shall be the ex-officio Chairman;
  - (b) The Executive Council will nominate two of its members to the Committee. If any vacancy arises in the Finance Committee in respect of the members nominated by the Council, the Council shall nominate another member. The term of the nominated members of the Council shall be for two years;
  - (c) Secretary, Finance Department, Government of West Bengal, or his nominee not below the rank of a Joint Secretary;
  - (d) Secretary, Animal Resources Development Department, Government of West Bengal or his nominee not below the rank of a Joint Secretary;
  - (e) Secretary, Fisheries Department, Government of West Bengal or his nominee not below the rank of a Joint Secretary;
  - (f) Finance Officer—Member-Secretary;
  - (g) The Director of Research, Extension and Farms.

(2) The Chancellor may nominate one expert in financial management from outside the University as additional member of the Finance Committee.

(3) If a vacancy arises in the Finance Committee in respect of a member nominated by the Council, the Council shall nominate another member.

51. The Finance Committee shall advise on any financial matter that may be referred to it for opinion by any authority of the University and shall perform such other functions as may be assigned by the Vice-Chancellor or the Council.

52. Not later than 31st October every year, the Finance Committee shall consider at a meeting convened for the purpose, the annual budget estimates for the next financial year prepared by the Finance Officer under direction of the Vice-Chancellor and having considered the estimates, forward the same with its recommendations to the Council for examination and approval. Copies of the budget estimates as approved by the Executive Council shall be submitted to the State Government.

53. Soon after the close of each financial year, the Finance Committee shall consider the Annual Statements of Accounts for the previous financial year prepared by the Finance Officer and transmit the same with its recommendations to the Executive Council for examination and approval.

54. If, at any time during the year, there is reason to believe that the budget estimates under any head is likely to exceed and that the excess cannot be met by reduction under some other heads, supplementary budget estimates shall be submitted by the Finance Committee to the Executive Council for approval.



55. The Finance Committee shall review the financial position of the University from time to time.

56. In connection with the annual accounts or the annual budget or any other duty imposed on it by these Statutes, the Finance Committee may call for such papers or information as it may require relating to any relevant financial matter or any item of account.

57. Subject to the provisions in sub-section (3) of section 31 of the Act, no expenditure which is not covered by the budget grants or which is in excess of the budget provision may be incurred without consideration of the Finance Committee and prior approval of the State Government.

58. Subject to the provisions of the Act and the Statutes, the Finance Committee shall be competent to make regulations for the purpose of due exercise of the powers delegated to it or to discharge the duties imposed upon it and to amend or repeal any such rule.

59. Every rule and every amendment or repeal thereof is to be submitted to the Executive Council for ratification.

60. (1) The Academic Council shall consist of the following members:

- (i) the Vice-Chancellor—Chairman;
- (ii) the Director of Research, Extension and Farms;
- (iii) the Deans of Faculties;
- (iv) the Registrar—Non-member-Secretary;
- (v) the Controller of Examinations;
- (vi) the Librarian;
- (vii) all Heads of the Departments of all the Faculties;
- (viii) one Lecturer, one Reader and one Professor from each Faculty;
- (ix) one undergraduate student from each Faculty and one Post-graduate student from the University elected by the regular students in a manner as shall be prescribed;
- (x) two eminent academicians from the field of Veterinary/Dairy/Fishery Sciences nominated by the Vice-Chancellor.

(2) Subject to the general provision and control of the Council, an Academic Council shall be in charge of the academic affairs of the University and shall, subject to the provisions of this Act and the Statutes, superintend, direct and control and be responsible for the maintenance of standards of instruction, education and examination and other matters connected with the conferment of degrees or awards of diplomas, and shall exercise such other powers and perform such other functions as may be conferred or imposed on it by Statutes.

(3) (a) The term of office of the members of the Academic Council, other than the ex-officio members, shall be for two years;

(b) The members of the Academic Council shall not be entitled to receive any remuneration from the University except such daily and travelling allowances as may be prescribed:

Provided that nothing contained in this sub-section shall preclude any member from drawing his normal emoluments to which he is entitled by virtue of the office he holds;

(c) A member of the Academic Council, other than the ex-officio member, may tender resignation of his membership at any time before the expiry of the term of his office. Such resignation shall be conveyed to the Chancellor by a letter in writing by the member and the resignation shall take effect from the date of its acceptance by the Vice-Chancellor.

(4) The powers and functions of the Academic Council shall be:

- (a) to exercise general control on teaching and other educational programme and maintain and promote the standards thereof;
- (b) to make regulations regarding—
  - (i) the admission of students to the University;
  - (ii) the course of study leading to degrees, diplomas and other academic distinctions; and
  - (iii) the conduct of examinations and maintenance and promotion of standards of education;
- (c) to advise the Council on all academic matters including the control and management of Libraries;
- (d) to make recommendation to the Council for the institution of various teaching and other research and extension education posts and in regard to the duties thereof;
- (e) to formulate, modify or revise schemes for the constitution or reconstitution of departments of teaching, research and extension education;



- (f) to make recommendation to the Council regarding teaching, research and extension education of post-graduate students;
- (g) to make recommendation to the Council regarding the qualifications to be prescribed for teaching posts in the University;
- (h) to make recommendation to the Council for the conferment of honorary degrees or other distinctions; and
- (i) to exercise such other powers and perform such other functions as may be prescribed by the Statutes.

#### 61. Research and Extension Education Council

(1) In accordance with sub-section (4) of section 17 of the Act, the Research and Extension Education Council shall be an authority of the University. The Research and Extension Education Council shall be the policy making body on Research and Extension Education in the Faculties and Research Stations of the University.

(2) The Research and Extension Education Council shall consist of the following members:

- (i) The Vice-Chancellor—Chairman;
- (ii) The Director of Research, Extension and Farms—Member-Secretary;
- (iii) The Director of Veterinary Services and Animal Husbandry, Government of West Bengal;
- (iv) The Deans of Faculties;
- (v) The Director of Fisheries, Government of West Bengal;
- (vi) Head of all Research Stations and Project Co-ordinators of State/ICAR/other agencies, research schemes;
- (vii) Three scientists of eminence to be nominated by the Vice-Chancellor for their specialised knowledge, one for each faculty for a period of two years;
- (viii) Three progressive farmers associated with Veterinary, Animal Husbandry/Fisheries/Dairy Technology practices to be nominated by the Vice-Chancellor.

(3) The Research and Extension Education Council shall be the policy making body on research in the faculties and shall consider and make recommendations in respect of—

- (a) the formulation of research programmes and projects undertaken or to be undertaken by the University and its various research stations in the State in the field of Veterinary Sciences, Animal Husbandry, Fisheries, Dairy Technology and allied sciences with a view to promote effective co-operation;
- (b) physical and fixed facilities required for implementing research projects;
- (c) integration of research, extension education and teaching and participation of research workers in teaching and extension education;
- (d) orienting research to meet farmers needs;
- (e) to give advice and accept the reports of ongoing/completed research schemes by the scientists concerned;
- (f) any other matter pertaining to Veterinary Sciences, Animal Husbandry, Fisheries, Dairy Technology Research which may be referred to them by Executive Council/Vice-Chancellor.

(4) The term of office of the nominated members shall be two years;

(5) The Research and Extension Education Council shall meet atleast once in six months to identify priorities, approve the programmes of the activity and shall review the research and extension activity of the University;

(6) Co-ordination of extension education programme and projects of the University with the *Regional Officers*;

(7) Co-ordination and co-operation of extension educational activities of various agencies for improvement of Animal Husbandry/Fisheries/Dairy for the development of rural communities;

(8) Development of farmers' education and advisory service, identification and resolution of field problems and transfer of information;

(9) Methodology of extension education activities of the region;

(10) Integration of extension education with teaching and research in the University and participation of teachers in the field of extension programmes and education for their work.

#### 62. Board of Examinations

(1) In accordance with the provision of section 17 of the Act, the Board of Examinations shall be an authority of the University. The Board of Examinations shall have the following members:

- (a) One of the Deans by rotation—Chairman;
- (b) Registrar;
- (c) Deans of Faculties;
- (d) Controller of Examinations—Member-Secretary.

(2) The duties of the Board of Examinations shall be—

- (a) to organise and supervise the conduct of the University examinations;
- (b) to appoint internal and external examiners, where necessary;
- (c) to review and moderate results, where necessary as per the rules prescribed from time to time for the purpose under external evaluation system and to review the results under the internal assessment system;
- (d) to provisionally declare the results of the university examinations and to recommend to the Academic Council and to Executive Council for their approval of the award of the degree of the University.

(3) The Board of Examinations shall meet at least twice a year or as and when necessary at the discretion of the Chairman.



## CHAPTER IV

## ACADEMIC ACTIVITIES OF THE UNIVERSITY

63. The courses and subjects of study under each of the Faculties shall be as prescribed from time to time by the Faculty Council. While prescribing, the Council shall give due consideration and importance of the curricula of the I.C.A.R. and other Institutions in the country imparting the particular course of study to make it befitting course of study as most professional, need-based and at par with National and International standard and also to maintain the courses continuously, to improve the advancement of new discoveries. The Academic Council shall review the same at regular intervals. To ensure effective teaching being imparted, a Committee consisting of Heads of all Departments and members nominated by the Vice-Chancellor from other Universities, having academic distinction, and members of I.C.A.R. and U.G.C. will examine as to whether the curricula are at par with the requirement of the course.

**64. Function of the Head of the Department/Unit/Research Station/Centre**

The Head of each Department/Unit/Research Station/Centre—

- (a) shall be responsible to the Dean of the College as the case may be, for administrative, academic and all other activities;
- (b) shall report on the teaching, research and extension of educational work of the Department to the Dean and of the Departmental Research Station/Centre to the Director of Research, Extension and Farms;
- (c) shall prepare the Annual Budget in time;
- (d) shall be responsible for distribution and expenditure of the Departmental funds and for the care of University property under their control;
- (e) shall be responsible for distribution and expenditure of the budget;
- (f) shall provide for protection against theft, fire and other damages;
- (g) shall carry out any further functions as may be directed by the Dean/Director and the Vice-Chancellor; and
- (h) shall have general supervision of the work of students in the Department.

**65. Admission to the University**

(1) Students shall be admitted to the University in accordance with the Regulations approved by the Faculty Council. Any modification to the Regulations shall be made by the Vice-Chancellor on the recommendation of the Faculty Council in consonance with the rules of the Government that are in force and that may be issued from time to time by the Council in this regard.

(2) The number of students to be admitted shall be decided by the Council on the recommendation of the Faculty Council.

**66. Courses of Study**

The University shall offer the course leading to the following undergraduate and post-graduate degrees:

- (a) Bachelor of Veterinary Science and Animal Husbandry (B.V.Sc. & A.H.);
- (b) Bachelor of Technology (Dairy Technology) (B.Tech., D.T.);
- (c) Bachelor of Fishery Science (B.F.Sc.);
- (d) Master of Veterinary Science (M.V.Sc.);
- (e) Master of Technology (M.Tech., D.T.);
- (f) Master of Fishery Science (M.F.Sc.);
- (g) Doctor of Philosophy (Ph.D.).

These and other additional degrees, diplomas and certificate courses shall be offered by the University as decided from time to time by the Faculty Council. The detailed rules for admission of students of the courses and curricula on the method of examination and on the award of degrees shall be as prescribed by the Vice-Chancellor, on the recommendation of the Board of Studies and the Faculty Council with the approval of the Council.

**67. System of Instructions**

The system of instruction shall be as prescribed by the Council on the recommendations of Faculty Council and Board of Studies of the Faculties

**68. Student Fees & Other Charges**

(1) The fixation, payment and receipt of the University fees shall be determined by the Vice-Chancellor on the recommendation of the Faculty Council;



(2) The University fees other than the hostel fees, shall be classified in the following main categories:

- (a) Admission fee;
- (b) Tuition fee;
- (c) Laboratory fee;
- (d) Library fee;
- (e) Examination fee;
- (f) University Registration fee;
- (g) Contribution to such educational, social and recreational funds as may be prescribed;
- (h) Hand Book fees; and
- (i) Any other fees fixed from time to time.

(3) The amount chargeable under each category or any modification in such fees at various levels of academic pursuit, as well as the terms of payment and the provision of penalties for non-payment, shall be determined by the Vice-Chancellor on the recommendations of the Faculty Council.

#### **69. Endowments, Scholarships and Fellowships**

Funds and endowments for the existing Scholarships, Fellowships, Prizes and Medals etc. administered either by the University or by the Government departments or by any other agency shall be placed at the disposal of the University and shall be granted by the University as per the rules

#### **70 Convocation**

(1) Convocation shall be held by the University for the conferment of degrees, diplomas and other academic distinctions, as per the recommendations of the Faculty Councils and Board of Examinations as approved by the Council. The degree shall be conferred to all eligible candidates either in person or in absentia irrespective of the fact whether the candidate has applied or not. The procedure for admission to the convocation and in respect of the conduct and proceedings of the convocation shall be as prescribed in the Regulations.

(2) The honorary degree shall be conferred also at the convocation or at a special convocation, to be taken in person or in absentia.

#### **71. Award of Degrees and Diplomas**

The Board of Examinations and the Faculty Councils shall recommend to the Council the award of Degrees, Diplomas and other Academic distinctions, the procedure of which shall be as approved from time to time by the Faculty Councils.

#### **72. Honorary Degree & Other Academic Distinctions**

(1) The Honorary Degree of Doctor of Science shall be conferred upon a person on the ground that he/she is by reason of eminent position and attainments or by virtue of his/her contribution to learning or eminent services to the cause of Veterinary/Animal Sciences, Fishery Sciences, Dairy Sciences/Technology Education/Research and Development. A fit and proper person decided by the Faculty Councils and Executive Council shall receive such a Degree.

(2) The Council shall, subject to prior approval by the Chancellor, have powers to confer the Honorary Degree and other Academic distinctions, on the recommendations of the Faculty Councils, with at least two-third majority of the members present at the meeting.

(3) All proposals for the conferment of the Honorary Degree and other academic distinctions shall be made by a Committee constituted by the Vice-Chancellor.

#### **73. Research**

(1) Subject to the provisions of the Act and the Statutes research programmes in the University (fundamental as well as applied) shall be undertaken on the problems of Veterinary, Animal Husbandry, Fishery, Dairy Technology and other allied sciences for the purpose of aiding the development of agriculture and for the benefit of rural population in the State.

(2) The University through its research organisation shall be the leading agency of control over research activities in Veterinary, Animal Husbandry, Fishery, Dairy Technology and other allied branches in the State.

(3) Facilities of visit and use of research organisation and experimental station of the State Government under the control of concerned Departments may be made available to the University as and when required subject however to the pre-planned programme of the concerned Department, if any.

(4) The University may establish regional/zonal research stations and sub-stations in the different agro-climatic zones of the State for conducting research and other allied activities subject to the condition that in no way, that be a duplication of one already in the State.



**74. Extension Education**

(1) Extension Education programme shall be established in the University and shall, subject to the provisions of this Act and Statutes, make useful information based upon findings of research available to farmers and others to help and solve their problems. It shall conduct demonstrations and training programmes for the benefit of students, extension workers, farmers and others. Extension Education shall be co-ordinated with the other functions of the University and other appropriate agencies of the State

(2) The University shall be responsible for the Extension of Educational activities among farmers in the State for improvement of rural living and to increase Livestock and Fish production with special emphasis on their utilisation. The State may provide necessary infrastructural facilities in this respect.

**75. Farms**

(1) Subject to the provisions of the Act and the Statutes, the University shall establish livestock and fish farms for production, research, teaching and demonstration purposes.

(2) Shall protect and conserve endangered species of livestock, birds, fishes and other animals by establishing suitable farms at various sites of the State and by developing other allied facilities.



## CHAPTER V

## PART I

## GENERAL

76. Elections to the Council under clauses (h), (i) and (j) of sub-section (1) of section 18 and to a Faculty Council under clauses (g) and (h) of sub-section (2) of section 21 and other elections prescribed hereinbefore shall be according to the provisions of this chapter.

77. The Vice-Chancellor shall, in connection with any election, by an order in writing, fix a date or dates—

- (a) on or before which applications for enrolment as voters shall be submitted, which shall not be earlier than thirty days from the date of the order;
- (b) on or before which nomination for election shall be submitted, which shall not be earlier than fourteen days from the date of publication of the final electoral rolls for the constituency concerned after the last date of application for enrolment as voters fixed under clause (a);
- (c) on which scrutiny of nominations shall be made, which shall not be later than the third day from the last date for submission of nomination fixed under clause (b);
- (d) on or before which, applications for withdrawal of candidature, if any, shall be submitted which shall not be later than the third day from the date fixed under clause (c) for scrutiny of nominations;
- (e) on which a poll shall, if necessary, be taken, which shall not be earlier than thirty days from the last date for withdrawal of nomination fixed under clause (d);
- (f) on which counting of votes shall be commenced, which shall not be later than seven days from the date for taking poll fixed under clause (c).

78. Every order under Statute 77 shall be duly notified by the Registrar in such manner as may be determined by the Vice-Chancellor.

79. (1) As soon as possible after receiving the order of the Vice-Chancellor, the Registering Authority shall, in such manner as the Vice-Chancellor may direct, issue or cause to be issued, a notification stating the substance of the order and calling for applications for enrolment as voters in the respective constituencies (except Student constituency of each Faculty) from all persons entitled to vote at the election in such constituencies.

(2) The Registrar shall maintain a register in Form No 1(s) of the names of the students belonging to each Faculty as defined in section 18(1)(j) of the Act authenticated by the Vice-Chancellor.

80. (1) Not later than sixty days after the last date for application for enrolment of voters the Registering Authority shall prepare a preliminary electoral roll for every constituency of Council and Faculty Council containing the names of all persons who have either applied for enrolment as voters in the Constituency concerned (except regular student constituency of each Faculty) or entered in the register to have their names for regular students constituency) included in such rolls.

*Explanation.*—A teacher or a non-teaching staff shall be entitled to have his name included in the relevant electoral roll, even though he is on authorised leave.

(2) A person shall be entitled to have his name included in the electoral roll of one constituency only. A person qualified to have his name included in the electoral rolls of more than one constituency, shall indicate in writing to the Registering Authority the constituency in the electoral roll of which, he wishes to be included and the Returning Officer shall include his name accordingly. In the case of failure to indicate the constituency, the application shall be rejected.

(3) A preliminary electoral roll prepared under paragraph (1) together with a notice to the effect that electoral roll may be inspected and claims or objections in respect thereof filed, shall be published in the Notice Board of the office of the Registrar and in such other manner as the Vice-Chancellor may determine.

81. Within fifteen days from the date of such publication of an electoral roll, any claim or objection to the roll may be made in writing signed by the person making it stating specifically the grounds on which it is made and submitted to the Returning Officer either in person or by registered post.

82. (1) The Registering Authority shall after summary enquiry, dispose of all claims or objections submitted under clause 80 and amend the electoral roll so prepared which shall be kept in the office of the Registrar and shall, not later than seven days from the last date for filing claims and objections be published in the manner referred to in clause 80 of the Statute and the same shall come into force forthwith upon such publication. The decision of the Registering Authority on any claim or objection shall be final.



(2) The final electoral roll for any constituency prepared under paragraph (1), shall remain in force until a fresh electoral roll is prepared for that constituency in connection with the next general election on the expiry of the term of office of the members elected from that constituency, subject to such amendments if any, as the Registering Authority may, from time to time, consider necessary for the purposes of filling casual vacancies.

83. If, at any time before the publication of the final electoral roll of any constituency, any person applies for withdrawal of his name from such roll, the Registering Authority shall permit his name to be so withdrawn but such person shall not be entitled to claim a refund of the fees, if any, paid by him for inclusion of his name therein.

84. The Returning Officer shall have the power to correct any printing or clerical error or defect in a final electoral roll provided that no name is deleted from or added to an electoral roll thereby.

85. (1) The Registrar shall have the custody of the preliminary as well as the final electoral rolls.

(2) Electors may obtain copies of the preliminary as well as final electoral rolls from the office of the Registrar on payment of such price as may be fixed by the Registrar in this behalf.

86. Upon the publication under clause 82(1) of a final electoral roll for an election, the Returning Officer shall forthwith give notice in such manner as the Vice-Chancellor may direct, of the intended election, inviting nominations of candidates for election and specifying the last date fixed for making nominations, the date for scrutiny of nominations and the last date for withdrawal of candidature as well as the date of poll and the time and places at which, the person to whom the nomination papers are to be delivered.

87. (1) Any person whose name appears in the final electoral roll of any constituency and who is not disqualified to be elected as member of authorities under these Statutes, may be nominated as a candidate for election from that constituency.

(2) On or before the last date for submission of nomination of candidates for election fixed under clause 77(b), a candidate for election shall deliver or cause to be delivered to the Returning Officer between 11 a.m. and 4 p.m. on a working day of the University, a nomination paper in a form approved for the purpose by the Vice-Chancellor which shall be obtainable from the Returning Officer on payment of such price as may be fixed by the Registrar in this behalf.

(3) No nomination paper shall be valid unless it is signed by the candidate as assenting to the nomination and by one other person qualified to vote in the constituency concerned as proposer.

(4) An elector may sign as proposer only one nomination paper and no more, and if an elector signs as proposer more nomination papers than one, all the nomination papers so signed by such elector shall be invalid, provided that, this shall not apply to a constituency where the number of elector does not exceed five.

(5) A person qualified to vote in a particular constituency who has given assent to the nomination as candidate shall not sign any nomination paper as proposer for any candidate for that constituency.

(6) The Returning Officer shall hand over a receipt to the person delivering the nomination paper.

88. On the day fixed under clause 77(c) for scrutiny of nominations, the Returning Officer, in presence of a scrutiny committee constituted by the Vice-Chancellor with such members who are neither a candidate nor a proposer, shall scrutinise the nomination papers, in the presence of candidates or their authorised agents, if they appear, and publish on the notice board in his office, a list arranged alphabetically according to surname of contesting candidates whose nominations are found to be valid.

89. (1) Any candidate whose name appears in the list may withdraw his candidature by a notice in writing signed by him and delivered to the Returning Officer within the time fixed under clause 77(d).

(2) (a) If the number of contesting candidates in any constituency is equal to the number of persons to be elected, the Returning Officer shall declare all such candidates to have been duly elected;

(b) If the number of contesting candidates in any constituency is less than the number of persons to be elected, the Returning Officer shall declare all such candidates duly elected and the Vice-Chancellor shall thereafter call upon the constituency to elect a person(s) to fill the remaining seat(s);

(c) If the number of such candidates exceeds the number of persons to be elected, the Returning Officer shall forthwith publish in his office, a list of the candidates for election arranged alphabetically according to surnames and a poll shall be taken;

(d) An elector who has been allotted to a particular polling station shall be entitled to vote at that polling station;

(e) The Returning Officer shall, with the approval of the Vice-Chancellor, appoint a Presiding Officer for a polling station from amongst officers specified in section 7 and also may appoint such persons from among Supervisory staff as may be required to assist the Presiding Officer in his duties. Such persons appointed to assist the Presiding Officer shall be called polling assistants;



- (f) The Returning Officer shall make necessary arrangements for transportation of the ballot boxes and ballot papers to the polling stations. He shall also supply copies of instruction relating to rules and procedure of polling to each of the Presiding Officer;
- (g) After the polling is over, the Presiding Officer shall prepare a statement of the number of ballot papers used and the balance left over. The ballot papers remaining unused shall be packed and sealed. The ballot boxes shall also be sealed in the presence of the candidates or their authorised agents;
- (h) The Presiding Officer shall send all the ballot boxes to the Returning Officer. The Presiding Officer and the polling assistants on duty, must accompany the ballot boxes and hand over the same with the papers mentioned in clause (g) above, to the Returning Officer or his nominee in his office. The Returning Officer shall make necessary arrangement for keeping the ballot boxes in safe custody till the counting begins according to the schedule mentioned in clause 77(f).

90. (1) No person whose name does not appear in the final electoral roll of a constituency, shall be entitled to vote in that constituency.

(2) A person whose name appears in the final electoral roll of a constituency shall be entitled to vote in that constituency.

(3) No person shall be entitled to vote in any constituency if he is subject to any of the disqualification mentioned in Statute.

(4) Every elector shall have as many votes as there are persons to be elected in the constituency, but shall not have the right to record more than one vote in favour of any one candidate.

91. (1) On the day fixed for commencement of counting of votes the Returning Officer, shall, at such time and place as may be determined by the Vice-Chancellor and notified in the Notice Board in the Office of the Registrar in this behalf, proceed, in such manner as the Returning Officer may determine and with the help of such persons at the Vice-Chancellor may appoint to assist the Returning Officer, in the counting of votes, to open covers received by post, to open the envelopes containing the ballot papers, to open the ballot boxes and after scrutiny, to separate the ballot papers which the Returning Officer considers valid from those which he considers invalid and finally to count the valid votes given to each candidate and to record in a statement of the total number of valid votes as given to each candidates as well as the number of invalid votes, provided that the Returning Officer may adjourn at any stage, the proceedings referred to in this paragraph until such time or date as he may consider fit and proper.

(2) The Vice-Chancellor, the persons appointed to assist the Returning Officer in counting the votes and the candidates or, in their absence, their agents, duly authorised by them in writing, shall have the right to be present for the counting of votes.

92. A ballot paper shall be invalid if—

- (a) it is not duly marrecord of voting;
- (c) more than one mark is placed on it against any candidate's name;
- (d) the identity of the voter is disclosed;
- (e) the number of votes recorded therein exceeds the number of seats to be filled;
- (f) the mark is so placed as to render it doubtful to which candidate the vote has been given.

93. (1) When the counting of votes has been completed, the Returning Officer shall forthwith declare the candidate or candidates to whom the largest number of valid votes has been given, elected. When two or more candidates obtaining the largest number of votes have received an equal number of votes against one seat, the Returning Officer shall select one among them by drawing lots and declare him elected.

(2) The Returning Officer shall then seal in separate packets the valid and invalid ballot papers, mark each packet with description of its contents, the name of the constituency and the date of election and keep them in safe custody for a period of one month after the date of election, or if any dispute, arises regarding an election, until the dispute is disposed of.

94. (1) The Returning Officer shall decide all questions of eligibility for inclusion of any name in an electoral roll or for nomination or election or whether any person has been duly nominated or elected and all other questions relating to or arising in the course of any election.

(2) All disputes or objections relating to an election shall be made in writing and shall be forwarded to the Registrar so as to reach him not later than seven days after the declaration of the results of the election.

95. (i) Except as provided in these Statutes, the Vice-Chancellor shall have the power to determine the forms of notice, letters of intimation and all other papers necessary for holding an election..

(ii) The Registrar shall maintain a record as approved by the Vice-Chancellor as referred to in paragraph (i) of this clause.



96. Notwithstanding anything to the contrary elsewhere contained in these Statutes, the Vice-Chancellor may, at any time, cancel any date or dates fixed in connection with any election, and fix such other date or dates thereof as he may think fit.

(1) The Vice-Chancellor shall have the power to direct, in order to save time, the holding of an election in anticipation of any vacancy that is about to occur.

(2) The result of an election to fill a vacancy shall take effect, in the case of an anticipatory election referred to in paragraph (1), from the date of occurrence of vacancy or from the date of declaration of the result of the election, whichever is later. Such date shall be deemed to be the date of election of the member elected.

97. No election shall be invalid merely by reason of—

(1) any vacancy existing among the persons entitled to vote at such election;

(2) loss or delay during transmission of any notice or other paper sent to or by an elector or a candidate or on the ground that a candidate has not received such paper or notice, provided that it has been despatched by post under certificate of posting.

98. In any election, in respect of matters not expressly provided for in these Statutes, the Vice-Chancellor may give such directions not inconsistent with the provisions of the Act or these Statutes or any law for the time being in force, as he may consider necessary for the proper holding of the election.

## PART II

### SPECIAL PROVISIONS

99. (1) In the case of election under clause (h) of sub-section (1) of section 18 for choosing members of the Executive Council and under clause (g) of sub-section (2) of section 21, for choosing members of Faculty Council, the Returning Officer shall notify the venue, the date of election, the time and duration of polling. The date of polling shall be fixed in the notification in accordance with provisions of Part I. A copy of such notification shall be sent to each Department and office of the Dean of the concerned Faculty and shall be published in the Notice Board of the Office of the Registrar.

(2) The preliminary and final Electoral Rolls of the teachers of each Faculty separately shall be made in accordance with the provisions of Part I of this chapter.

(3) A teacher's name shall not be included in the final Electoral Roll or if included, shall be struck off from the roll under the orders of the Vice-Chancellor, if he is—

(a) appointed part-time, honorary or visiting teacher; or

(b) on lien service in any organisation other than the University; or

(c) on deputation to the University; or

(d) declared by a competent court to be of unsound mind; or

(e) undischarged insolvent; or

(f) convicted by a Court of law of an offence which involves moral turpitude.

(4) All other procedures relating to conduct of election shall apply, mutatis mutandis, as referred to in part I of this chapter.

100. (1) For the purpose of election of non-teaching staff of the University under clause (i) of sub-section (1) of section 18, the Returning Officer, as soon as may be, after receiving the order of the Vice-Chancellor shall issue notification stating the contents of the order and fix a copy of such notification on the Notice Board of the Registrar's Office or in such other places as may be determined by the Returning Officer.

(2) The name of a member of the non-teaching staff shall not be included in the final Electoral Roll or if included, shall be struck off from the roll, under the orders of the Vice-Chancellor if he is—

(a) on lien service elsewhere; or

(b) on deputation to the University; or

(c) appointed on ad-hoc basis or appointed on daily wage basis; or

(d) declared by a competent court to be of unsound mind; or

(e) an undischarged insolvent; or

(f) convicted by a Court of law for an offence which involves moral turpitude.

(3) All other procedures relating to conduct of election shall apply mutatis mutandis as referred to in part I of this chapter.



101. (1) For the purpose of election of regular student of the University under clause (j) of sub-section (1) of section 18 and clause (h) of sub-section (2) of section 21, the Returning Officer, as soon as may be, after receiving the order of the Vice-Chancellor under Statute 78, shall issue notification stating the content of the order and paste a copy of such notification on the Notice Board of the Register's Office and Dean's Office or in such other places as may be determined by the Returning Officer.

(2) All other procedures relating to conduct of election in Part I of this chapter, shall apply mutatis mutandis to election referred to in this Statute provided that a student's name shall not be included in the Register of regular students under the direction of the Vice-Chancellor, if he is found to be in default of payment of tuition fees and for other dues payable by him to the University at the time of notice for election is issued.

WEST BENGAL UNIVERSITY OF ANIMAL AND FISHERY SCIENCES  
ELECTION TO THE EXECUTIVE COUNCIL/FACULTY COUNCIL

FORM No. 1(s)

(See Statute)

Sl. No.	Full Name	Postal Address	Dept. and Faculty	Date of Admission into the Course	Remarks*
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\*For regular students only.

102. The Secretary to the West Bengal Legislative Assembly shall be the Returning Officer in respect of election of a member of the Executive Council under clause (k) of sub-section (1) of section 18 and shall devise his procedure.



## CHAPTER VI

## RECRUITMENT OF UNIVERSITY EMPLOYEES

103. Subject to the provisions of the Act and other provisions of the Statutes,—

- (a) such of the posts of the University which remain or fall vacant or are created by the University shall be filled in through direct recruitment or by transfer from one post to another or by promotion as provided in the Regulations. The decision of the Council shall be final;
- (b) the Selection Committees/Standing Committee for recruitment of teachers, officers/scientists and other employees for appointment to the posts of the University as the case may be, are mentioned in Schedule I and Schedule II;
- (c) such employees who are transferred under section 40 of the Act, 1995, to the University from the State Government and other Universities of the State, who opt to work in the University shall be governed by the service conditions as applicable to the West Bengal University of Animal and Fishery Sciences.

**Service on Deputation**

104. (1) The employees of the State, Central, Semi-quasi Government and Autonomous body may be taken on deputation in the University Service. The leave salary and pension and/or provident fund contributions as has been made by such employees, shall be paid, if necessary by the University to the parent body, as per the terms agreed upon by the University. The Vice-Chancellor shall have powers to take in on deputation Government servants/staff of University and Autonomous body and Institution to the University in the same scale of pay or on such terms and conditions as may be agreed upon by the Council.

While taking such employees on deputation either on their own seeking or University's requirement, the recruitment rules as to qualification, experience etc. and formation of Selection/Standing Committee etc. for the University employees shall be applicable. If such employees on completion/termination of his probation period opt for absorption in the University Service, the rules for the University Employees shall be applicable. Such employees who have been appointed on deputation/lien/temporary/contract service before the enactment of this Statute, if they on completion or the termination of their appointment (on deputation/lien/temporary/contract terms) period, seek/opt for permanent absorption in the University Service. The recruitment/confirmation rules in respect of the University employees (considering them as first entrants) in vogue, shall be applicable. Under no circumstances, this criteria of permanent absorption shall be relaxed.

To avoid any future complication of getting effect to this Statute, 1998, the University shall examine the cases of such employees and take necessary measures as laid down above.

(2) University employees may be permitted by the Vice-Chancellor to take up temporary appointments in the State or Central Government or under any authorised agencies and such employees shall be considered as on deputation. The leave salary and pension contribution shall be paid in accordance with the terms of the deputation. The period of such deputation will not exceed three years normally and in no case it shall exceed four years.

**105. Service Conditions, Gratuity, Insurance and Provident Fund**

(1) Subject to provisions of the Act, the service conditions including pension, gratuity, insurance, provident fund, special provident fund, family benefit fund, medical facilities, loans and advances for the employees of the University shall be as determined in the regulations of the University.

(2) The teaching and the Scientific staff of the University shall be governed by the University Grants Commission Scales of pay and allowances as implemented by the State Government from time to time. In respect of other allowances including travelling allowance and other benefits for the University Officers and staff, the rules and orders of the State Government shall be followed mutatis mutandis. However, the Council may effect modifications taking into consideration of peculiar circumstances that may exist in the University.

(3) The Selection/Standing Committee shall prepare a panel of at least 3 candidates, names arranged in order of merit in respect of each post. At least, 3 candidates fulfilling the conditions of recruitment shall have to turn up and to be interviewed by the Committee for preparing a valid panel.

(4) The Selection/Standing Committee may recommend, showing valid reasons, a higher initial starting/higher salary in the scale of pay for any post for any of the candidates included in the panel for consideration of the appointing authority. The Selection/Standing Committee may also recommend relaxation of age in favour of candidates considered to be exceptionally qualified and experienced:

- (i) The period of validity of any panel prepared by Selection Committee shall be one year from the date of approval;
- (ii) Any employee appointed from the approved panel reverted to his original post or discharged for want of vacancy on winding up of the scheme, fully or partially, shall be given priority to the next vacancy.

(5) The appointment by the appointing authority shall be made strictly in the order of ranking from the approved panel.



(6) In the interest of the University work, an employee shall be liable for transfer to any other post of the same rank within the jurisdiction of the University.

(7) (i) For all recruitments to the first level entrance posts in reservation of quota for SC/ST/OBC candidates shall be followed as per State Government rules;

(ii) The administrative powers of the competent authorities in respect of posting, transfer, deputation and acceptance of resignation etc., shall be as may be specified in the Regulation.

(8) (a) Every employee at the time of appointment on probation to a post in the University, shall produce a certificate of physical fitness issued by a Medical Officer duly authorised by the University in the prescribed form as shall be indicated in the Regulation;

(b) The following classes of employees shall be exempted from producing the certificate of physical fitness:

(i) All employees transferred to the University under section 40 of the Act; and

(ii) All employees on deputation with the University.

(9) (a) Every employee shall produce a character and conduct certificate from a responsible person and another from the Institution in which he/she last studied or worked at the time of his/her first appointment to the University;

(b) An employee shall be liable for any action as the appointing authority may deem fit if at any time such authority comes to know that the antecedents of the employee had been doubtful.

(10) Every employee shall produce authentic evidence to prove the correctness of his date of birth. The following records shall be considered as authentic:

(a) Secondary School-leaving Certificate/Higher Secondary Certificate, University/College Records;

(b) Certificate from recognised school;

(c) Certificate extract from Register of Birth;

(d) In the absence of items (a) to (c), a certificate issued by a Medical Officer not below the rank of Civil Surgeon on the ascertainment of age;

(e) If in the case of an employee, the year of birth is known but not the date, the 1st of July of that year shall be treated as the date of birth. When both the year and the month of birth are known but not the exact date 16th of the month shall be treated as the date of birth.

#### 106. Service Conditions, Leave rules, Pay allowances, Travelling allowances, etc.

(1) Pay, Dearness allowance, House Rent allowance and other allowances as admissible to State Government servants shall ordinarily be applicable to the corresponding non-teaching technical and non-technical staff of the University to whom the University Grants Commission/I.C.A.R. scale of pay are not applicable. The Dearness allowance, House Rent allowance and other allowances admissible to Government servant shall be applicable for teaching staff to whom the University Grants Commission/I.C.A.R. scale of pay are not applicable.

(2) Ordinarily a person on his first appointment to a post in the University shall start at the minimum of time scale applicable to that post or at a stage in the scale as specified in the Regulations. Higher initial pay in the time scale may be granted by the appointing authority provided the Selection Committee recommends higher initial pay on exceptional cases.

(3) Every employee of the University selected for appointment/promotion by transfer to a higher post involving higher duties and responsibilities shall have his pay fixed at the minimum of the time scale applicable to such higher post or at the stage in the said time scale next above the pay notionally arrived at by increasing his pay in the lower post by one increment whichever is higher. The minimum monetary benefit shall be 5 per cent over the pay drawn in the lower post. If the pay in the lower post on the date of promotion/appointment plus 5 per cent of the pay is stage in the scale of pay of the higher post, pay shall be fixed in the higher post at that stage. If there is no corresponding stage in the scale of pay the higher pay shall be fixed at the next higher stage. In no case the total emoluments drawn in his/her parent Department should be less in the University.

(a) When a person appointed/promoted to any post by direct recruitment or by transfer/promotion to which service rules or ad-hoc rules have not been prescribed, the following method shall be adopted for fixation of pay:—

#### *Method of appointment*

1. Direct recruitment

2. By recruitment/transfer/deputation

3. By promotion

4. Every employee appointed to the service of the University shall from the date on which he/she joins duty, be on temporary service for one year followed by probation period of two years. On completion of the probation period of successful performance of his/her duties, his/her confirmation to the post would be considered.

#### *Method of fixation of pay*

Minimum of the time scale of pay prescribed for the post

(a) The same rate of pay drawn in the post previously held, if both the posts carry identical scale of pay.

(b) If the scale of pay of the present post is higher, fixation as per provision of the Statute from time to time by orders of the University.

Pay fixation as per provision of the Statute/University Orders.



**107. Classification of the Staff of the University**

(1) The employees shall be classified into the following groups according to the initial basic pay of their time scale of pay as noted below:

Group A — Basic pay Rs. 3000/- and above.

Group B — Basic pay Rs. 1550/- and above.

Group C — Basic pay Rs. 1030/- and above.

Group D — Basic pay Rs. 880/- and above.

If the employees occupy selection grade or special grade post, their group shall be determined based on the scale of the basic grade pay.

**108. Qualification and Method of Recruitment**

(1) The qualification, method of selection, scale of pay and appointing authority in respect of various posts in the University shall be as specified in Schedules I and II.

(a) The officers of the University shall hold office/post till superannuation or removal/transfer/termination or otherwise by the University with the approval of the Council;

(b) The University shall resort to recruit officers of the University by open advertisement or through deputation provided that for recruitment to the Group B, C and D, the Government employment policy declared from time to time shall be followed;

(c) In case of direct recruitment to the posts of Professors/Associate Professors/Readers/Asstt. Professors/Lecturers, it shall be by advertisement and selection as per the method prescribed in Schedule I.

(2) All applicants having fulfilled the prescribed qualification, experience, age and other conditions shall be called for interview before the Selection Committee/Standing Committee as provided in Schedules I and II. However, the Selection Committee/Standing Committee shall be within its power to hold only written test or written test and interview, at its option, for selection, of suitable candidates for the purpose of recruitment. The constitution of Selection Committee/Standing Committee shall be as per the method specified in Schedules I and II.

**109. Code of Conduct of the Employees**

The code of conduct of the employees shall be framed by the University by Regulation.



## CHAPTER VII

## CONTROL AND DISCIPLINE OF THE EMPLOYEES

110. (1) The Vice-Chancellor shall be the Disciplinary Authority in respect of all employees other than the officers of the University.

(2) The Council shall be the Disciplinary Authority in respect of all officers of the University other than the Vice-Chancellor.

111. (1) The procedure for the disciplinary proceedings and punishment shall be such as may be fixed by the Council by Regulations.

(2) Until the Council makes Regulations on this behalf, West Bengal Services (Control, Classification and Appeal) Rules shall apply mutatis mutandis to the employees of the University.

112. (1) An appeal may be preferred before the Council against an order made by the Vice-Chancellor and the Disciplinary Authority.

(2) An appeal may be preferred before the Chancellor against an order passed by the Council as Disciplinary Authority.

113. (1) Annual Confidential Report of all categories of employees shall be obtained by the University Authority. The reporting and the countersigning authority for each category of employees shall be determined by the University by Regulations.

(2) Such Annual Confidential Report shall be maintained by a confidential section and shall be considered for promotions/benefits in service etc.



## CHAPTER VIII

### CONSTITUTION OF THE STUDENTS' UNION

#### PART I

##### **Students' Union**

114. There shall be a Students' Union of each Faculty of the University. All students of a Faculty shall constitute the General Body of the Students' Union of that Faculty.

##### **Name and Place of Office**

115. (i) The name of a Students' Union shall be indicated by incorporating the name of the Faculty concerned after the words "Students' Union".

(ii) The place of office of a Students' Union shall be in the main campus of the University. There shall be a branch offices of the Students' Union in other campuses.

##### **Members of Executive Committee of Students' Union**

116. (i) The Students' Union of each Faculty shall have an Executive Committee to organize the functions of the Union. The General Body of Students' Union in the main campus and in other campuses shall elect the members of the Executive Committee.

(ii) The members of the Executive Committee so elected shall elect the office-bearers of the Executive Committee from amongst themselves. The Executive Committee shall carry out the functions according to the constitution of the Students' Union approved by the Executive Council of the University.

##### **Term of Office of the Executive Committee**

117. The term of office of the Executive Committee of the Students' Union shall be for one year from the 1st April to 31st March every year.

##### **Union Fund**

118. (a) (i) Session charges collected from the members shall be placed under the Union Fund.

(ii) The University shall contribute an amount equal to the session charges collected from the members of the Students' Union.

(b) Executive Committee may spend the unspent money (Students' contribution) of the previous years' Union Fund with the approval of the General Body.

(c) All Funds of the Students' Union shall be kept in a nationalized Bank in the name of the Students' Union of the Faculty concerned.

(d) No money shall be spent from any of the Union Funds until the budget for the Students' Union is approved by the general body.



## PART II

## PROCEDURE

**Procedure of Election of Members to the Executive Committee**

119. (a) The Dean of the Faculty concerned shall be the Returning Officer for conducting the election of members and office-bearers to the Executive Committee of Students' Union. The election must be completed within the 20th March every year.

(b) Whenever an election is required to be held in pursuance of these Statutes, the Dean shall call upon the students of the Faculty to elect members and fix the last date of filing nomination, dates of scrutiny and withdrawal of nomination and date(s) of poll, if necessary, by issuing a notice thirty days prior to the date on which the poll shall be held.

(c) The name of the representative for each class of thirty students in an academic session shall be class and bear the signed consent of the candidate in Form No. 1 (SU). The nomination paper shall be submitted in sealed cover to the Returning Officer within the date and time notified in this regard:

Provided that for every additional 20 students of the class, representative is to be nominated for election in accordance with these Statutes.

(d) The Returning Officer shall scrutinize the nomination papers on the date fixed by him.

(e) Election of class representatives to the Executive Committee and of office-bearers shall be by secret ballot.

(f) Each elector may vote for as many candidates as there are vacancies, but shall not cast more than one vote in favour of a candidate.

(g) A candidate or his duly authorized agent, who must be an elector may be present at the polling station or at the place of counting of votes on behalf of the candidate with the prior permission of the Returning Officer.

(h) Immediate after the closing of the poll, the ballot box will be sealed by the Returning Officer in the presence of the authorized agent referred to in paragraph (8).

(i) Ballot papers will be counted on the date of poll or on the date and at the time and place fixed for counting to ballot papers by the Returning Officer. The Returning Officer shall notify the date, time and place of counting of the contesting candidates.

(j) A ballot paper shall be invalid if it does not bear the signature of the Returning Officer, or no vote is recorded by properly placing a cross (X) against the name of a candidate, or the number of votes recorded thereon exceeds the number of vacancies to be filled. The decision of the Returning Officer as to the validity of a ballot paper will be final.

(k) The Returning Officer, after declaring the results of election, shall forthwith report them to the Registrar and the Vice-Chancellor.

(l) Any objection relating to an election which is made before declaration of the results thereof shall be made in writing to the Returning Officer. The Returning Officer's decision shall be final subject to the provisions of paragraph (j).

(m) Every objection relating to an election which is made after declaration of results shall be made in writing to the Election Tribunal through the Secretary of the Election Tribunal so as to reach him not later than 7 days after such declaration, provided that unless the Election Tribunal directs, otherwise, a member who has been declared by the Returning Officer to have been duly elected shall enter his office and perform his duties as such member.



## ANNEXURE

## THE WEST BENGAL UNIVERSITY OF ANIMAL AND FISHERY SCIENCES

ELECTION TO THE STUDENTS' UNION  
FROM THE STUDENTS CONSTITUENCY

FORM No. 1

I, \_\_\_\_\_  
(Surname Name) (Class, Year of the Course)

do hereby propose to nominate \_\_\_\_\_  
as a candidate for election to the Students' Union from the Students constituency.

Date : \_\_\_\_\_ (Signature of Proposer)

I, \_\_\_\_\_  
(Surname Name) (Class, Year of the Course)

do hereby second the above proposal.

Date : \_\_\_\_\_ (Signature of Seconder)

I, \_\_\_\_\_  
(Surname Name) (Class, Year of the Course)

do hereby give my consent to the above proposal.

Date : \_\_\_\_\_ (Signature of Candidate)

- N.B. 1. The number of vacancy is .....  
2. One nomination paper to be used for one candidate.  
3. Only one candidate is to be proposed for a vacancy.  
4. Each nomination paper is to be delivered to the Returning Officer in a closed and sealed cover by the proposer in person or despatched by Registered Post with Acknowledgement Due so as to reach the Returning Officer on or before ..... during ..... to ..... p.m.



## CHAPTER IX

## VALIDITY

120. Notwithstanding anything contained in any provision of these Statutes, any action or order taken or made by the Government or any Authority of the University provided in the Act and Statutes, subject to the approval of Government, before coming into effect of these Statutes, shall be deemed to have been taken or made duly in accordance with these Statutes and shall not be invalid for reasons of inconsistency with any provision of these Statutes.



**SCHEDULE I****RECRUITMENT OF EMPLOYEES FOR APPOINTMENT IN THE UNIVERSITY  
(OFFICERS AND TEACHERS)**

Sl. No.	Post, Scale of Pay and Qualification	Constitution of Selection Committee (I) and Appointing Authority (II)	Constitution of Screening Committee
1	2	3	4
1.	Director of Research, Extension and Farm Rs. 4500/- — 7300/- +250/- p.m. Spl. pay.  (a) A minimum of Masters degree in any branch of Veterinary and Animal Science/Dairy Science/Fishery Science having at least 55% of marks in aggregate or OGPA of 2.75 out of 4.00.  (b) Ph.D. degree in any of the above noted branches.  (c) Evidence of published research papers (not less than 15) on the concerned branch in reputed national and international journal and having experience of research guide.  (d) Minimum 15 years experience in teaching, research including guiding research scholars (Ph.D./Masters) Research Projects and Extension Education in the field of concerned subject out of which holding responsible position and at least three years experience in a post not below the rank of Professor.	I. (a) Vice-Chancellor—Chairman.  (b-c) Three persons not holding any office of profit under the University and having special knowledge on subjects related to the posts and holds responsible position not below the rank/post of D.O.R.—as experts.  —2 nominated by E.C.  —1 nominated by Chancellor (out of the pannel of 3 prepared by Vice-Chancellor).  II. Vice-Chancellor with the approval of the Council.	1. One Dean (Seniormost) of the Faculties—Chairman.  2. Registrar as Member-Secretary.  3. Two other Deans.
2.	Dean of Faculty Rs. 4500/- — 7300/-+Spl. pay of Rs. 250/- p.m.  (a) A minimum of Master's degree in a subject/discipline of the concerned Faculty having at least 55% marks in aggregate or OGPA of 2.75 out of 4.00.  (b) Ph.D. degree in any subject of the concerned Faculty.  (c) Evidence of published papers on the concerned subject (not less than 10) in a reputed journal.  (d) Minimum of 15 years experience in teaching research including guiding research Schollars (Ph.D./Master) and holding position of which last 3 years in a post not below the rank of a Professor.  (e) Preference will be given to a candidate having worked as the Head of any Divn. in a Res. Institute or Deptt. of a Faculty for more than 2 years.	I. (a) Vice-Chancellor—Chairman.  (b) 3 person not holding any office of profit under the University and having special knowledge on subjects related to post—two such members nominated by the Vice-Chancellor and one by the Chancellor.  II. Vice-Chancellor with the approval of the Executive Council.	1. Director of Research, Extension and Farms—Chairman.  2. All Deans.  3. Registrar—Member-Secretary.



1	2	3	4
3. Registrar Rs. 4,500/- — 7,300/-.			
(a) A minimum of Master's degree in any branch of Veterinary and Animal Science/Dairy Science/Fishery Science having at least 55% of marks in aggregate or OGPA of 2.75 out of 4.00.		I. (a) Vice-Chancellor—Chairman.	1. Director of Research, Extension and Farms—Chairman.
(b) Ph.D. degree in any of the above noted branches.		(b-c) Three persons not holding any office of profit under the University and having special knowledge on subjects related to the posts and holds responsible position not below rank/post of Director of Research as experts of which —2 nominated by Executive Council.	2. All Deans.
(c) Minimum 10 years experience in a responsible administrative capacity in a teaching/research Institute of which last 3 years not below the rank of Reader.		—1 nominated by Chancellor (out of the panel of 3 prepared by Vice-Chancellor).	3. Controller of Examinations—Member-Secretary.
4. Finance Officer Rs 4,500/- — 7,300/-.		II. Vice-Chancellor with the approval of Executive Council.	
(a) A minimum of Master's degree in Commerce having 55% of marks in aggregate or OGPA of 2.5 out of 4.00.		I. (a) Vice-Chancellor—Chairman.	1. Director of Research, Extension and Farms—Chairman.
(b) C.A./M.B.A. with knowledge of application of computer in financial management.		(b) One representative of Audit & Accts. service (not holding a position below the rank of Finance Officer from State Government—Expert.	2. All Deans.
(c) 10 years experience in financial position in a Govt./Semi-Govt./Pvt. (of repute) sector orgn. of which last 5 years holding post not below the pay scale of a Reader.		(c) Director of Research, Extension and Farms.	3. Registrar—Member-Secretary.
5. Librarian Rs 4,500/- — 7,300/-.		(d) One expert in financial management nominated by Executive Council (out of a panel of 3 prepared by Vice-Chancellor).	
(a) A minimum of Master's degree in Library Science or equivalent having 55% marks in aggregate or OGPA 2.75 out of 4.00.		II. Vice-Chancellor with the approval of the Executive Council.	
(b) M.B.A. with knowledge of application of Computerisation in Library.		I. (a) Vice-Chancellor—Chairman.	1. Director of Research, Extension and Farms—Chairman.
(c) At least 10 years of experience in a University/Research Institute, Library in a responsible position of which last 5 years holding post not below the pay scale of a Reader.		(b) Director of Research, Extension and Farms.	2. All Deans.
6. Controller of Examinations Rs. 4,500/- — 7,300/-.		(c) One representative nominated by the Director National Library holding a position not below Librarian—Expert.	3. Registrar—Member-Secretary.
(a) A minimum of Master's degree in Veterinary or Animal Science/Dairy Science/Fishery Science or allied Science as approved by I.C.A.R. (M.Sc., Zoology in Fisheries, M.Sc. in Marine Science etc.) having at least 55% marks in aggregate or OGPA of 2.75 out of 4.00.		(d) One member nominated by E.C. out of a panel of 3 prepared by Vice-Chancellor.	
(b) Ph.D. degree in concerned subject.		(e) One member nominated by Vice-Chancellor having experience in library matter.	
(c) Evidence of published research papers in the concerned subject (not less than 10) in a reputed journal.		II. Vice-Chancellor with the approval of the Executive Council.	
(d) Minimum 12 years experience in teaching and research in the relevant subject in University/related Institute/ College of which last 3 years in a post not below the rank of a Professor.		I. (a) Vice-Chancellor—Chairman.	1. One Dean (Seniormost) of the Faculty—Chairman.
(e) 3 years administrative experience as head of a teaching department/examinations section. Preference will be given to the candidate having experience of working in the examinations section of University/Institute etc.		(b-c) 3 persons not holding any office of profit under the University and having special knowledge on subjects in related post and holding responsible position not below the rank of Controller of Examinations as expert, of which. —Two persons nominated by Executive Council.	2-4. Registrar—Member-Secretary and two other Deans.
		—One member nominated by Chancellor (out of the panel of 3 prepared by Vice-Chancellor).	
		II. Vice-Chancellor with the approval of the Executive Council.	



1	2	3	4
7. Professor Rs. 4,500/- — 7,300/-.	(a) A minimum of Master's degree in a subject/discipline (required for the particular post) of the concerned Faculty having at least 55% marks throughout the career in aggregate or OGPA of 2.75 out of 4.00. (b) Ph.D. degree in concerned subject. (c) Evidence of published reasearch papers on the concerned subject (not less than 10) in reputed journals of National and International level. (d) Minimum 12 yrs. experience in teaching research and guiding research scholars for Ph.D./Masters of which 5 yrs. experience in a post not below the rank of a Reader or its equivalent post. (e) Age not below 45 years (relaxable for exceptionally qualified and experienced candidates).	I. (a) Vice-Chancellor—Chairman. (b) Dean of the concerned Faculty member. (c) Two external experts (subject matter specialised) nominated by the Vice-Chancellor out of panel of experts approved by the Council on the recommendation of Faculty Council-Members. (d) Director of Research, Extension and Farms of the University. II. Vice-Chancellor with the approval of the Executive Council.	1. Dean of the Faculty—Chairman. 2-3. Head of the Deptt. of the concerned post in the Deptt. and Director of Research, Extension and Farms—Members.
8. Reader/Associate Professor Rs. 3700/- — 5700/-.	(a) A minimum of Master's degree in a subject/discipline (reqd. for the particular post) of the concerned Faculty having at least 55% marks throughout the career in aggregate or OGPA of 2.75 out of 4.00. (b) Ph.D. degree in concerned subject. (c) Evidence of published reasearch papers on the concerned subject (not less than 10) in a reputed journal of National and International level. (d) Minimum 5 yrs. experience in teaching and research includig guiding post-graduate research scholars. (e) Age not below 40 years (relaxable for exceptionally qualified and experienced candidates).	I. (a) Vice-Chancellor—Chairman. (b) Dean of the concerned Faculty member. (c) Two external experts (subject matter specialised) nominated by the Vice-chancellor out of panel of experts approved by the Council on the recommendation of Faculty Council-Members. (d) Director of Research, Extension and Farms of the University. II. Vice-Chancellor with the approval of the Executive Council.	1. Dean of the Faculty—Chairman. 2. Head of the Deptt. of the concerned post in the Deptt. and Director of Research, Extension and Farms—Members.
9. Lecturer/Assistant Professor Rs. 2200/- — 4000/-.	(a) A minimum of Master's degree in a subject/discipline (required for the particular post) of the concerned Faculty having at least 55% marks throughout the career in aggregate or OGPA of 2.75 out of 4.00. (b) Ph.D. degree in concerned subject. (c) Evidence of published reasearch papers on the concerned subject in a reputed journal. (d) Preference will be given to the candidates having B.F.Sc. and M.F.Sc. degree with some teaching and research experience and qualified NET/GATE Exam. in respect of posts in Fishery Faculty. (e) Age not above 35 years.	I. (a) Vice-Chancellor—Chairman. (b) Dean of the concerned Faculty member. (c) Two external experts (subject matter specialised) nominated by the Vice-chancellor out of panel of experts approved by the Council on the recommendation of Faculty Council-Members. (d) Director of Research, Extension and Farms of the University. II. Vice-Chancellor with the approval of the Executive Council.	1. Dean of the Faculty—Chairman. 2. Head of the Deptt. of the concerned post in the Deptt. and Director of Research, Extension and Farms—Members.

Note : In Fishery Science —(1) Master's degree shall mean B.F.Sc. followed by M.F.Sc. first preference or B.Sc. (Zoology) followed by M.Sc. (Zoology) with specialisation Fisheries/M.Sc. in Marine science/Industrial Fishery etc. as approved by the ICAR—2nd preference : In general.



(2) Qualifications for related subjects for the teaching post in the Faculty of Fishery Sciences means:

#### Related Subjects

Aquaculture	M.F.Sc./M.Sc Marine Biology/Environmental Sciences.
Fishery Biology	M.F.Sc./M.Sc.with specialisation in Fisheries/Fisheries Management.
Aquatic Biology	Ph.D. in Fishery Sciences or related subjects.
Oceanography	M.F.Sc./M.Sc. Oceanography/Marine Biology/Environmental Science/Ph.D. in these subjects.
Fish Processing Technology	M.F.Sc./M.Sc. Industrial Fisheries, Food Science Biotechnology, Microbiology, Biochemistry/Ph.D. in these subjects.
Microbiology	M.F.Sc./M.Sc./Ph.D. in Life Sciences/Microbiology.
Biochemistry	Biochemistry/Biotechnology.
Fishery Engineering	B.E./M.Tech/Ph.D. Marine Engineering/Aquaculture Engineering/Coastal Engineering.

#### SCHEDULE II

#### RECRUITMENT OF SUPERVISORY AND MINISTERIAL STAFF FOR APPOINTMENT IN THE UNIVERSITY

Sl. No.	Specification of Posts	Constitution of Selection Committee (i) and Appointing Authority (ii)	Constitution of Screening Committee
1.	Posts carrying Scale of Pay Rs. 2200/- — 4000/- and Rs. 3700/- — 5700/- (non-technical)	(i) Chairman Registrar/Dean/Director of Research, Extension and Farms depending upon the nature of post.  Three Members One—nominated by Executive Council Two—nominated by Vice-Chancellor. (ii) The Registrar	Chairman—Finance Officer. Two members—nominated by Vice-Chancellor.
2.	Technical posts/Auxiliary posts of various Pay Scales	(i) Chairman Director of Research, Extension and Farms/Dean depending upon the nature of post.  Three Members One—nominated by Executive Council Two—nominated by Vice-Chancellor. (ii) The Director of Research, Extension and Farms	Committee nominated by Vice-Chancellor.
3.	Ministerial Staff of various Pay Scales	(i) Committee nominated by Vice-Chancellor. (ii) The Registrar	Committee nominated by Vice-Chancellor.
4.	Supporting Staff (Group D)	(i) Committee nominated by Vice-Chancellor. (ii) The Registrar	Committee nominated by Vice-Chancellor.



**SCHEDULE III****THE DEPARTMENTS OF DIFFERENT FACULTIES OF THE UNIVERSITY**

Sl. No.	Name of Faculty	Departments
I.	Faculty of Veterinary & Animal Sciences	1. Veterinary Anatomy, Histology and Embryology; 2. Veterinary Physiology and Biochemistry; 3. Animal Nutrition; 4. Veterinary Pharmacology and Toxicology; 5. Veterinary Pathology; 6. Veterinary Microbiology; 7. Veterinary Parasitology; 8. Animal Production & Management; 9. Animal Genetics and Breeding; 10. Veterinary Medicine and Public Health; 11. Animal Products Technology and Marketing; 12. Veterinary Gynaecology and Obstetrics; 13. Veterinary Surgery and Radiology; 14. Veterinary Clinics.
II.	Faculty of Dairy Technology	1. Dairy Bacteriology; 2. Dairy Chemistry; 3. Dairy Technology; 4. Dairy Engineering.
III.	Faculty of Fishery Sciences	1. Fishery Biology and Basic Sciences; 2. Aquaculture; 3. Fishery Oceanography & Limnology; 4. Fish Processing Technology; 5. Fishery Engineering; 6. Fishery Pathology & Microbiology; 7. Fishery Economics, Statistics and Marketing; 8. Fishery Extension.

By order of the Governor,

A. SINHA,

*Principal Secretary to the Govt. of West Bengal,  
Animal Resources Development Department.*



# **ANNEXURE – II**

**The duties, responsibilities and powers of the Statutory Officers as mentioned in the Act of the university**



*The West Bengal University of Animal and Fishery  
Sciences Act 1995.*

*(Chapter III.—Officers of the University.—Clauses 7-9.)*

(c) to admit any person, or retain any student, whose conduct is prejudicial to the interest of the University or the rights and privileges of the students and the employees of the University;

(d) to admit to any course of study students larger in number, if necessary.

(3) Subject to the provisions of sub-section (2), the State Government may, by order, direct that the University shall reserve such percentage of seats for the students belonging to the Scheduled Castes, Scheduled Tribes, and backward classes of citizens as may be specified in such direction and, where such direction has been given, the University shall make the reservation accordingly.

CHAPTER III

Officers of the University.

Officers of  
University.

7. The University shall consist of the following officers:—

- (1) the Vice-Chancellor;
- (2) the Registrar;
- (3) the Finance Officer;
- (4) the Controller of Examinations;
- (5) the Librarian;
- (6) the Director of Research, Extension and Farms;
- (7) such other persons as may be declared by Statutes to be the officers of the University.

The Chancellor.

8. (1) The Governor shall be the Chancellor of the University.

(2) The Chancellor shall be the head of the University and shall, when present, preside at any convocation of the University and confer degrees, diplomas or other academic distinctions upon persons entitled to receive them.

(3) The Chancellor shall exercise such other powers and perform such other functions as may be conferred or imposed on him by or under this Act.

The Vice-  
Chancellor.

9. (1) The Vice-Chancellor shall be appointed by the Chancellor in consultation with the Ministers from a panel of three names of eminent persons in the field of veterinary and animal sciences and allied sciences, elected by the Council in accordance with the system of simple majority of votes.

(2) The Vice-Chancellor shall be a whole-time officer of the University, shall hold office for a period of four years and shall be eligible for re-appointment for a further period of four years:

Provided that no person shall hold the office of the Vice-Chancellor for more than eight years in aggregate:

Provided further that the Vice-Chancellor shall retire from office if, during the term of his office including the term of re-employment, he attains the age of 65 years:

Provided also that the Vice-Chancellor may, by writing under his hand addressed to the Chancellor and after giving two months' notice, resign his office.

(3) The emoluments and other conditions of service of the Vice-Chancellor shall be such as may be prescribed and shall not be varied to his disadvantage after his appointment.

(4) During the temporary absence of the Vice-Chancellor on leave or for any other reason, the Chancellor may appoint any person in consultation with the Ministers to officiate as the Vice-Chancellor.



*The West Bengal University of Animal and Fishery  
Sciences Act 1995.*

*(Chapter III.—Officers of the University.—Clauses 10-12.)*

Powers and  
functions of  
Vice-Chancellor.

10. (1) The Vice-Chancellor shall be the principal administrative and academic officer of the University and shall be the *ex officio* Chairman of the Council and the Faculty. He shall, in the absence of the Chancellor, preside at the convocation of the University and confer degrees, diplomas and other distinctions on persons entitled to receive them.

(2) The Vice-Chancellor shall exercise general control over the affairs of the University and shall be responsible for the due maintenance of discipline in the University.

(3) The Vice-Chancellor shall convene the meetings of the Council and the Faculty.

(4) The Vice-Chancellor shall ensure the faithful observance of the provisions of this Act and the Statutes and the Regulations made thereunder, and he shall have such powers as may be necessary for discharging his duties in this behalf.

(5) The Vice-Chancellor shall be responsible for the presentation of the annual financial estimates and annual accounts and balance sheet to the Council.

(6) The Vice-Chancellor may take any action in an emergency which in his opinion calls for immediate action. He shall, in such cases and as soon as may be thereafter, report such action to the authority which shall ordinarily have dealt with the matter.

(7) Subject to the foregoing provisions of this section, the Vice-Chancellor shall give effect to the orders of the Council regarding the appointment, suspension, and dismissal of officers, Teachers of the University, and other employees.

(8) Where any action taken by the Vice-Chancellor under sub-section (6) affects any person in the service of the University to his disadvantage, such person may prefer an appeal to the Council within 30 days from the date on which such person has notice of the action taken.

(9) The Vice-Chancellor shall be responsible for the proper administration of the University and for close co-ordination of teaching, research and extension education.

The Registrar.

11. (1) The Registrar shall be a whole-time officer of the University and shall be appointed by the Council on the recommendation of a committee appointed for the purpose.

(2) The salary and allowances payable to the Registrar shall be such as may be prescribed.

(3) The Registrar shall be responsible for the due custody of the records and the common seal of the University. He shall, by virtue of his being the *ex officio* non-member Secretary to the Council under sub-section (2) of section 18, place before the Council all such information as may be necessary for the transaction of business. He shall keep a permanent record of all courses, curricula and other information as may be deemed necessary.

(4) The Registrar shall perform such other functions as may be prescribed or as may be assigned to him by the Council or the Vice-Chancellor.

The Finance  
Officer.

12. (1) The Finance Officer shall be a whole-time officer of the University and shall be appointed by the Council on the recommendation of a standing committee.

(2) The salary and allowances and other conditions of service of the Finance Officer shall be such as may be prescribed.

(3) The Finance Officer shall manage the funds and investments of the University and shall advise in regard to its financial policy.



*The West Bengal University of Animal and Fishery  
Sciences Act 1995.*

*(Chapter III.—Officers of the University.—Clauses 13-16.—  
Chapter IV.—Authorities of the University.—Clause 17.)*

(4) The Finance Officer shall be responsible to the Vice-Chancellor for the preparation of the budget and the statements of accounts of the University.

(5) The Finance Officer shall be responsible to the Vice-Chancellor for ensuring that expenses are made in terms of the provisions in the budget. When any revision of the budget is needed in connection with any new programmes or changed requirements or for other reasons, he shall prepare a revised or supplementary budget and cause it to be placed before the appropriate authority for approval. He may disallow any expenditure which may contravene the provisions of any Statute or for which provision is required to be made by a new Statute.

The Librarian.

13. (1) The Librarian shall be a whole-time officer of the University and shall be appointed by the Council on the recommendation of a standing committee and shall be responsible for all matters concerning the library.

(2) The salary and allowances and other conditions of service of the Librarian shall be such as may be prescribed.

The Deans of  
Faculties.

14. (1) There shall be a Dean for each Faculty who shall be chosen in such manner and for such period as may be prescribed.

(2) The Dean shall have such duties, and shall perform such functions, as may be assigned to him by the Statutes.

The Director of  
Research, Extension  
and Farms.

15. (1) There shall be a Director of Research, Extension and Farms who shall be a whole-time officer of the University. He shall be appointed by the Council on the recommendation of a standing committee. The Director of Research, Extension and Farms shall be responsible for carrying out the research and extension programmes.

(2) The salary and allowances and other conditions of service of the Director of Research, Extension and Farms shall be such as may be prescribed.

(3) The Director of Research, Extension and Farms shall exercise such other powers and perform such other functions as may be conferred or imposed on him by Statutes.

The Controller  
of Examinations.

16. (1) The Controller of Examinations shall be appointed by the Council on the recommendation of a standing committee, and shall be responsible for all matters concerning examination, admission, maintenance of permanent record of the academic performance of students including the courses taken, grades obtained, degrees awarded, prizes and other distinctions won, and any other items pertinent to their academic performance.

(2) The salary and allowances and other conditions of service of the Controller of Examinations shall be such as may be prescribed.

(3) The Controller of Examinations shall exercise such other powers and perform such other duties as may be prescribed.

#### CHAPTER IV

##### Authorities of the University.

Authorities of  
University.

17. The following shall be the authorities of the University:—

- (1) the Executive Council;
- (2) the Faculty Council;
- (3) the Board of Studies;
- (4) such other bodies as may be declared by Statutes to be the authorities of the University.



# **ANNEXURE – III**

**The duties, responsibilities and powers  
of the Statutory Officers as mentioned in  
the Statutes of the university**



## CHAPTER II

## OFFICERS OF THE UNIVERSITY

## PART I

## VICE-CHANCELLOR

3. (1) Not less than four months before the end of the term of a Vice-Chancellor, the Vice-Chancellor shall call a meeting of the Council to elect a panel of names in the manner provided for in sub-section (1) of section 9 of the Act.

(2) If appointment of a Vice-Chancellor becomes necessary due to resignation of a Vice-Chancellor or otherwise before the expiry of the term of a Vice-Chancellor, the Vice-Chancellor appointed to officiate under sub-section (4) of section 9 of the Act, shall call a meeting of the Council to elect a panel of names in the manner provided for in sub-section (1) of section 9 of the Act, as soon as possible.

(3) The panel elected by the Council shall without delay be forwarded to the Chancellor by the Vice-Chancellor or in the absence of the Vice-Chancellor, by the Registrar.

(4) The appointment of the Vice-Chancellor should be a tenure post for a period of four years and shall be eligible for re-appointment for a further period of four years or till the attainment of superannuation at 65 years of age, whichever is earlier.

4. (a) The Vice-Chancellor shall be paid a salary of Rs. 7,600/- per month (fixed) with other allowances as admissible to State Government Officers. The Salary would be subject to such kinds of revision by UGC/ICAR, New Delhi, as implemented by the State Government from time to time;
- (b) The Vice-Chancellor shall be provided with a chauffeur driven car and with rent free furnished residential accommodation and other perquisites as may be decided by the Executive Council;
- (c) The Vice-Chancellor shall be entitled to travelling allowance as applicable to the Group 'A' officers of the West Bengal Government for halts and travels in connection with the work of the University;
- (d) The Vice-Chancellor shall be entitled to leave as admissible to State Government officers;
- (e) The Vice-Chancellor shall be provided with such medical facilities/concessions as are admissible to State Government employees;
- (f) The Vice-Chancellor may be deputed on University business or at the request of the Government, on Government business or in public interest, to any part of India or outside of India. The period of deputation outside the University shall not exceed three months.

5. In addition to the powers and functions mentioned in section 10 of the Act, the Vice-Chancellor shall exercise the following powers and privileges:—

- (1) (a) To see that the academic standards of different faculties of the University and colleges are maintained and improved and that the activities of the University and colleges are conducted in accordance with the Act, the Statutes and the regulations;
- (b) To appoint persons to posts created by the Council with the prior approval of the State Government subject to general or special directions of the Council;
- (c) To abolish superfluous posts subject to special directions of the Council;
- (d) To transfer an employee from one post to another in the interest of the University without adversely affecting his service condition and emoluments;
- (e) To constitute ad-hoc committees for the purpose of selection of students for admission to the University, selection of staff for conducting enquiries into the affairs of the University or a college and such other purposes as may be specified by the Council;
- (f) To suspend or punish an employee or to punish, dismiss or suspend or expel a student;
- (g) To sanctions leave including extraordinary leave for higher studies;
- (h) To represent the University in Inter-University meetings and associations within the country;
- (i) To represent the University outside the country with the approval of the Council and the State Government;
- (j) To be present at and address any meeting of an authority of the University or participate in its deliberations even if he is not a member of the same provided that he shall not vote in the meeting unless he is a member of the Authority;
- (k) To enforce discipline among employees and students;
- (l) To inspect faculties, campuses and colleges, give appropriate directions and report to the appropriate authority of the University;



- (m) To oversee day to day work of the office of the University and maintenance and management of all properties, endowments and equipments of the University;
  - (n) To cause annual physical verification of the stocks and equipments of the University;
  - (o) To assign, modify and re-allocate functions and duties of employees of the University;
  - (p) To give directions for conduct of elections to authority of the University.
- (2) The powers, duties and functions of the Vice-Chancellor shall be exercised subject to the provisions of the Act, the Statutes, regulations and general or special directions of the Council.
- (3) Subject to general or special directions of the council, the Vice-Chancellor may delegate any of his functions under sub-clause (1) of this clause, to any officer of the University. But in spite of such delegation, exercise of his delegated functions shall be subject to his supervision and control and he shall be responsible for the smooth discharge of the delegated functions. He shall have the power of cancelling any delegation made by him.
- (4) Subject to general or special directions of the Council, the Vice-Chancellor shall divide the administrative work of the University into different units and issue order necessary for the purpose, and may also issue standing order regarding office and administrative procedure.
- (5) When any action has been taken by the Vice-Chancellor under sub-section (6) of section 10 of the Act, he shall immediately notify the same to the Secretary of the Authority which shall ordinarily have dealt with the matter, with direction to place the same on the agenda of the next available meeting of such Authority.
6. Such Authority may ratify the action taken by the Vice-Chancellor or may pass other appropriate order.
- (1) An appeal made under sub-section (8) of section 10 of the Act against any action under sub-section (10) of the said section of the Act, shall be in the form of a memorandum with a brief description of the action appealed against and reasons for the appeal. The memorandum of appeal shall be presented before the Registrar who shall place the same on the agenda of the next meeting of the Council. He shall produce in that meeting, office records relating to the action appealed against along with a note on whether the appeal was preferred within 30 days of the appellant having notice of the action taken or within 30 days of the formation of the first Council, whichever is later.
- (2) On consideration of such appeal the Council may make such order as it may consider to be appropriate.

## PART II

### REGISTRAR

7. (a) The Registrar shall be responsible to the Vice-Chancellor in exercise of the powers and duties specified in section 11 of the Act and shall exercise such other additional powers and duties delegated to him by the Vice-Chancellor with the approval of the Executive Council of the University;
- (b) Subject to the provision of section 10 sub-section (7) and section 19 sub-section (1) (XIV) the Registrar shall be responsible for the recruitment, appointment, payment of emoluments, promotion and retirement benefits to all teaching and non-teaching posts of the University;
- (c) He shall be responsible for the maintenance of the service and leave records of the teaching and non-teaching staff.
8. He shall be the custodian of the records and common seal of the University and shall have the power to deny access to any body other than the Vice-Chancellor or the Council except on authorisation by the Vice-Chancellor.
9. Subject to overall control of the Vice-Chancellor and the Executive Council, the Registrar shall be responsible for the management of the properties and the investments of the University.
10. The Registrar shall be responsible for the smooth functioning of the office of the University and shall sign provisional certificates and other documents.
11. In all suits and other legal proceedings by or against the University, the pleadings, the written statements, affidavits etc. shall be signed and verified by the Registrar and all processes in such suit or proceedings shall be issued to and served on the Registrar.
12. When the office of the Registrar is vacant due to illness of the Registrar or otherwise, such functions and duties may temporarily be assigned by the Vice-Chancellor to any other Officer of the University.



13. In terms of sub-section (1) of section 11 of the Act, the Council shall form a committee for appointment of the Registrar and selection procedure is to be completed at least two months before the term of the Registrar expires or as soon as possible when a Registrar ceases to hold office due to resignation or otherwise, before the completion of his term. The qualification for the post of Registrar, the composition of the committee and the salary and allowances payable to the Registrar shall be as given in Schedule I.

### PART III

#### FINANCE OFFICER

14. The composition of the Standing Committee for recommending a candidate for appointment to the post of Finance Officer, his qualification, salary shall be as shown in Schedule I.

15. In addition to what is mentioned in section 12 of the Act, the Finance Officer shall perform the following duties:—

- (a) The finance officer shall be the Member-Secretary of the Finance Committee;
- (b) He shall advise the Vice-Chancellor and Authorities in all financial matters;
- (c) He shall be responsible for the preparation of the annual budget in consultation with the Deans of the Faculty, Director of Research, Extension and Farms, and Heads of the Teaching and Administrative Departments for obtaining approval of the Executive Council under section 19(1) (XVI) through the Vice-Chancellor. He shall also prepare the annual accounts to submit the same to the Finance Committee within 31st March;
- (d) He shall be responsible for ensuring that all the money are expended for the purpose for which they have been granted or allotted;
- (e) He shall receive fees and other incomes, disburse payments and be responsible for the day to day financial transaction of the University and for all incidental matters including correspondences relating thereto;
- (f) He shall sign all the contracts made on behalf of the University and exercise such other powers as provided in the Act, Statutes and Regulations pertaining to account and finance of the University for which he shall be directly responsible to the Vice-Chancellor;
- (g) The Finance Officer shall be responsible for holding meeting of the Finance Committee at least thrice a year;
- (h) All matters relating to income and expenditure of the University in the various departments, not specifically provided for in the budget, which require reference to the Finance Committee, shall be routed through the Finance Officer whose opinion on such matters shall be recorded and considered by the Vice-Chancellor before they are submitted to the Finance Committee;
- (i) The Finance Officer shall be competent to call from the Faculty Council and the Heads of Teaching and Administrative Departments such information as may be necessary for the preparation of the Annual Budget or the Annual Accounts on or before the date fixed by the Vice-Chancellor and such information shall be supplied to him on or before such date;
- (j) He shall be responsible to the Vice-Chancellor to ensure—
  - (i) that expenditure not authorised in the budget is not incurred without appropriate sanction;
  - (ii) that all money belonging to the University are kept in a bank or banks approved by the Executive Council;
  - (iii) that all accounts of the University are properly kept and audited;
  - (iv) that the budget of the University is prepared and submitted to the Vice-Chancellor and the funds sanctioned are obtained in time;
  - (v) that notice for meetings of the Finance Committee is issued in time and minutes thereof are properly recorded;
- (k) Subject to the approval of the Council, he shall receive contributions, grants, gifts and endowments made in favour of or for the purpose of the University;
- (l) He shall evolve and install suitable system of accounting and business procedure and prescribe an accounts manual for use of officers of the University subject to approval of the Vice-Chancellor;
- (m) He shall develop and operate an internal audit system so that records of all officers and employees responsible for the receipts and expenditures of money are properly audited;
- (n) He shall prescribe financial forms to be used in the University;
- (o) Subject to the general control of the Vice-Chancellor, the cash and budget section of the University office shall be under his direct supervision;
- (p) He shall perform such other duties as may be assigned to him by the Council or the Vice-Chancellor from time to time.



## PART IV

*CONTROLLER OF EXAMINATIONS*

16. The composition of the Standing Committee for recommending a candidate for appointment to the post of Controller of Examinations as provided in sub-section (1) of section 16, his qualification, salary and allowances shall be as shown in Schedule I.

17. The Standing Committee provided for in sub-section (1) of section 16 of the Act, shall be formed by the Vice-Chancellor for the discharge of his functions. In addition to the powers contained in section 16, the Controller shall have the following duties and functions:

- (i) He shall be responsible for the maintenance of a register of Degrees and Diplomas awarded by the University, a register of Graduates and records of related information;
- (ii) He shall make arrangement for the conduct of examinations and for the due execution of all processes connected therewith;
- (iii) He shall be responsible to the Faculty Councils, the Executive Councils and the Vice-Chancellor for proper conduct of all University Examinations and timely publication of results thereof;
- (iv) He shall be responsible to convene meetings of the Boards of Examinations as and when necessary;
- (v) He shall be responsible for co-ordination of activities in respect of preparation, printing and custody of question papers pertaining to all examinations of the University and take necessary steps for printing the same;
- (vi) He shall perform such other duties as may be assigned to him by the Vice-Chancellor or the Executive Council or the Faculty.

## PART V

*LIBRARIAN*

18. (1) The composition of the Standing Committee for recommending a candidate for appointment to the post of Librarian under section 13, sub-section (1), his qualification, salary and allowances shall be as shown in Schedule I.

(2) The Standing Committee provided for in sub-section (1) of section 13 shall be formed by the Vice-Chancellor and its composition shall be as given in Schedule I.

19. Without prejudice to the generality of section 13, the Librarian shall be responsible for the following:

- (i) Accounting and custody of books, periodicals and other publications required to be kept in the library;
- (ii) Purchase of books, periodicals and other publications required by the Heads of Departments within the limits of financial allocations;
- (iii) Framing of rules relating to issue of books and periodicals to teachers and students of the University;
- (iv) Such other function related to the above which may be assigned by the Council or the Vice-Chancellor.

20. The Librarian shall convene the meeting of the Library Committee constituted as under, which shall monitor the progress, development and other affairs of the Library and shall meet at least once in three months.

The Committee shall consist of the following members:

- (i) Director of Research, Extension and Farms—Chairman;
- (ii) Deans of Faculties;
- (iii) Finance Officer;
- (iv) One Head of the Department from each Faculty to be nominated by the Faculty;
- (v) Two teachers of the University to be nominated by the Council;
- (vi) Librarian—Member-Secretary.

## PART VI

*DIRECTOR OF RESEARCH, EXTENSION & FARMS*

21. The composition of the Standing Committee for recommending a candidate for appointment to the post of Director of Research, Extension and Farms under section 15(1), his qualification, salary and allowances shall be as shown in Schedule I.

22. The Standing Committee provided for in sub-section (1) of Section 15 shall be formed by the Vice-Chancellor and its composition shall be as shown in Schedule I.



23. The Director of Research, Extension and Farms shall be a whole time officer of the University under the direct control of the Vice-Chancellor.

24. He shall have the following duties and responsibilities:—

- (a) He shall co-ordinate all research, extension and farm activities of the University in co-operation with the Deans. He shall be directly responsible to the Vice-Chancellor for the initiation, guidance and co-ordination of the Research programmes of the University and its different stations and co-ordinate the activities for the proper management of the University Farms and Extension Departments.
- (b) He shall be In-charge of all Research Stations, Institutes, Farms and Extension Departments and such other departments and units as may be assigned to him by the Vice-Chancellor.
- (c) He shall be responsible for bringing about close collaboration with the Departments of Animal Resources Development, Agriculture, Fisheries, Forest, Rural Development and Panchayet of the State Government, the Indian Council of Agricultural Research, Extension Directorate of the Central Government and other authorities in matters relating to their extension activities and act as the principal liaison officer in respect of extension of education.
- (d) He shall act as the Member-Secretary of the Research and Extension Council and propose research and extension programmes and policies in consultation with the Deans of the Faculties and In-charges of the stations.
- (e) He shall be responsible to establish live-stock farms and fish farms in different agroclimatic regions of the State under the control of the University to promote livestock and fish production in the State with the help of the State Government in obtaining infrastructural facilities for such activities.
- (f) He shall maintain co-ordination between State Government and University in respect of carrying out research, extension and farm activities.
- (g) He shall recommend necessary measures to protect and conserve endangered indigenous species of livestock, birds, fishes and other allied animals in the State.
- (h) He shall prepare an annual report on the research activities of the University with the help of the Deans of the faculties for consideration by the Research Council.
- (i) He shall cause to be published regularly Research Bulletins, articles and scientific journals which summarise research finding of the works carried out in the University and shall be the Chairman of the Editorial Board of any journal to be published by the University.
- (j) He shall represent (or arrange representation) under the direction of the Vice-Chancellor of the University in conferences, seminars, meetings etc. regarding research, extension and farm activities.
- (k) He shall be the principal liaison officer for dealing with funding agencies such as the Indian Council of Agricultural Research, the University Grants Commission, Council of Scientific and Industrial Research, Department of Science and Technology, Veterinary Council of India and other similar authorities and private agencies for the purpose of funding research.
- (l) He shall function in close co-operation with the Deans of Faculties in formulating research policies and programmes of the University.
- (m) He shall exercise such other powers and perform such other duties in the research, extension and farm activities as may be assigned by the Council or the Vice-Chancellor.

## PART VII

### DEANS

25. Deans of Faculties shall be officers of the University for the purpose of sub-section (7) of section 7.

26. (1) The first Dean of a Faculty may be appointed by the Vice-Chancellor on the recommendation of the Government and if so appointed shall hold office for a period of six months or till a Dean of that Faculty is appointed by the Council.

(2) The Vice-Chancellor shall form a Standing Committee for recommending persons for appointment as Deans. The composition of the Standing Committee, his salary and allowances shall be as given in Schedule I.



27. Subject to the provision of clause 26, on the recommendation of the Standing Committee referred to in sub-clause (2) of clause 26, the Council shall appoint the Dean for a term of four years with a provision for extension of terms subject to satisfactory performance of his/her duty on recommendation of the Screening Committee referred to at 2(37) along with co-option of the Head of the concerned Department. He may, however, resign or may be removed from the post before expiry of the term with the approval of the Executive Council.

28. (1) The Dean shall be the academic and executive Head of a Faculty and be responsible to the Vice-Chancellor for its academic activities.

(2) He shall work in close co-operation with the Director of Research, Extension and Farms, Controller of Examinations and Librarian for the execution of University policies pertaining to research, extension, farm and library activities of the Faculty.

(3) He shall be responsible for inter-campus collaboration and co-ordination of academic functions, maintenance of academic standards, constant review of educational programmes and their progress and due observance of Statutes and Regulations relating to the Faculty.

(4) He shall formulate and present for consideration of the Board of Studies policies and programmes on matters relating to the Faculty.

(5) He shall have such other functions related to the above as may be assigned by the Vice-Chancellor or the Council.

#### PART VIII

##### GENERAL

29. Qualifications for the posts, their salaries, appointing authority, composition of Standing Committee of other officers and employees of the University besides those mentioned in section 7 shall be as shown in Schedule I.

30. Salaries and allowances given in Schedules I and II may be revised by the Council in accordance with revised guidelines of the University Grants Commission, when there is an occasion to do so, and with the prior approval of the Government, provided that the emolument of an officer or an employee shall not be varied to his disadvantage during the term of his service.

31. Powers and functions and conditions of service of officers and employees of the University, to the extent not defined by these Statutes, shall be such as may be fixed by Regulations made by the Council in this behalf.



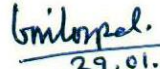
# **ANNEXURE – IV**

**List of Passed out students of MVSc  
course under Department of Veterinary  
Public Health, Faculty of Veterinary &  
Animal Sciences**



**List of Passed out students of MVSc course under Department of Veterinary Public Health, Faculty of Veterinary & Animal Sciences**

Sl No.	Name of the Student	Degree awarded	Year of passing
1.	Saswati Chakraborty	M.V.Sc	2003
2.	Chanchal Debnath	M.V.Sc	2003
3.	Mihir Kumar Biswaas`	M.V.Sc	2003
4.	Seuli Saha Roy	M.V.Sc	2004
5.	Nithya Quintoil	M.V.Sc	2004
6.	Debasis Pramanik	M.V.Sc	2005
7.	Aparna Das	M.V.Sc	2005
8.	Bijaykumar Mandovera	M.V.Sc	2006
9.	Rijula Sarkar	M.V.Sc	2007
10.	Madhu Sudan Mondal	M.V.Sc	2007
11.	Sanjoy Kumar Howladar	M.V.Sc	2007
12.	Subhasis Das	M.V.Sc	2008
13.	Malay Saha	M.V.Sc	2008
14.	Parijat Kabiraj	M.V.Sc	2008
15.	Shahbaz Manzoor	M.V.Sc	2009
16.	Amitabh Sachan	M.V.Sc	2010
17.	Suman Kr Saha	M.V.Sc	2012
18.	Praveen Kumar Praveen	M.V.Sc	2012
19.	Purrba Sarka	M.V.Sc	2013
20.	Halim Sarkar	M.V.Sc	2013
21.	Sunil Chandra Murmu	M.V.Sc	2013
22.	Monmon Saha	M.V.Sc	2014
23.	Debashis Murmu	M.V.Sc	2014
24.	Rakesh Kumar	M.V.Sc	2015
25.	Sagarika Das	M.V.Sc	2016
26.	Singh Abhishek Dharm Singh	M.V.Sc	2017
27.	Suvhdwip Roychowdhury	M.V.Sc	2018
28.	Tsherin Zangmu Bhutia	M.V.Sc	2019

  
 29.01.2021  
 DEAN (Actg.)  
 F/o Veterinary & Animal Sciences  
 West Bengal University of Animal & Fishery Sciences  
 Kolkata - 37 & Mohanpur, Nadia-741252



# **ANNEXURE – V**

**List of Passed out students of PhD  
course under Department of Veterinary  
Public Health, Faculty of Veterinary &  
Animal Sciences**



**List of Passed out students of PhD course under Department of Veterinary Public Health, Faculty of Veterinary & Animal Sciences**

Sl No.	Name of the Student	Degree awarded	Year of passing
1.	Mihir Kumar Biswas	Ph.D	2006
2.	Seuli Saha Roy	Ph.D	2007
3.	Arvind Kumar	Ph.D	2007
4.	Indu Sharma	Ph.D	2008

*Gmihapal.*  
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