SELF STUDY REPORT 2021

COLLEGE OF VETERINARY SCIENCE & ANIMAL HUSBANDRY

BIRSA AGRICULTURAL UNIVERSITY
RANCHI – 834006
(JHARKHAND)

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6.5 Self Study Report of the College

Brief Account of Genesis of the College:

College of Veterinary Sciences and Animal Husbandry Ranchi was established on 30th November, 1961. (Late) Col. Dr. S.M. Ishaque, G.B.V.C., P.G. (Germany), F.R.V.C.S. (Sweden) joined as first principal and under his dynamic leadership the main building, hostels and residential units were constructed. It was a constituent college of Ranchi University and functioned under State Animal Husbandry Department till 1970. It became the integral part of Rajendra Agricultural University, Pusa, Samastipur with its creation in 1971. These programmes were further strengthened in all major disciplines in 1977 onward. With the inception of R.A.U., as per mandate, it was obligatory on the part of State Animal Husbandry Department to transfer all research units as well as livestock and poultry farm to the university which could not materialize and state Animal Husbandry Department transferred only Veterinary Colleges situated at Patna and Ranchi restricting its facilities to teaching only. However, in spite of these constraints, the College of Veterinary Sciences & Animal Husbandry moved on the path of glory through its faculty's dint and determination and became the main campus for Post graduate studies. On 26th June 1981, Birsa Agricultural University was inaugurated by the then Prime Minister Late Smt Indira Gandhi and this college became part of the new university as the only institute to impart Veterinary Council of India controlled under-graduate teaching besides M.V.Sc. and Ph.D. programmes, Diploma and Certificate courses in Aquaculture along with research and extension education activities. At present, Dr. Sushil Prasad is working as the Dean of the college.

Location and Jurisdiction:

The Ranchi College of Veterinary Sciences and Animal Husbandry is situated in the campus of Birsa Agricultural University near Kanke block and located at 85.19^0E and 23.17^0N and 625 meters above mean sea level in Ranchi, the state capital of Jharkhand. The college is 16 kilometers away from Ranchi Railway Station and 20 kilometers from Birsa Munda Airport, Ranchi. The climate is sub-humid mega thermal.

Vision:

- The Vision of college is to be a Center of Excellence in Teaching, Research and Extension Education in the field of Veterinary and Animal Sciences

- Produce competent and skilled human resources which are socially sensitive, skilled and responsible,
- Undertake region-based, need-based and basic research for improving animal health and productivity by adopting modern technology including value addition,
- Provide efficient extension services at the door step of poor and marginal farmers and livestock owners and motivating them to adopt animal husbandry, poultry, and related vocations as an engine of economic growth and social empowerment
- Empower women to become, "Knowledgeable Livestock Stakeholders" by giving them economic identity, as majority of the activities of Animal Husbandry practices are in the hands of women.

Mission:

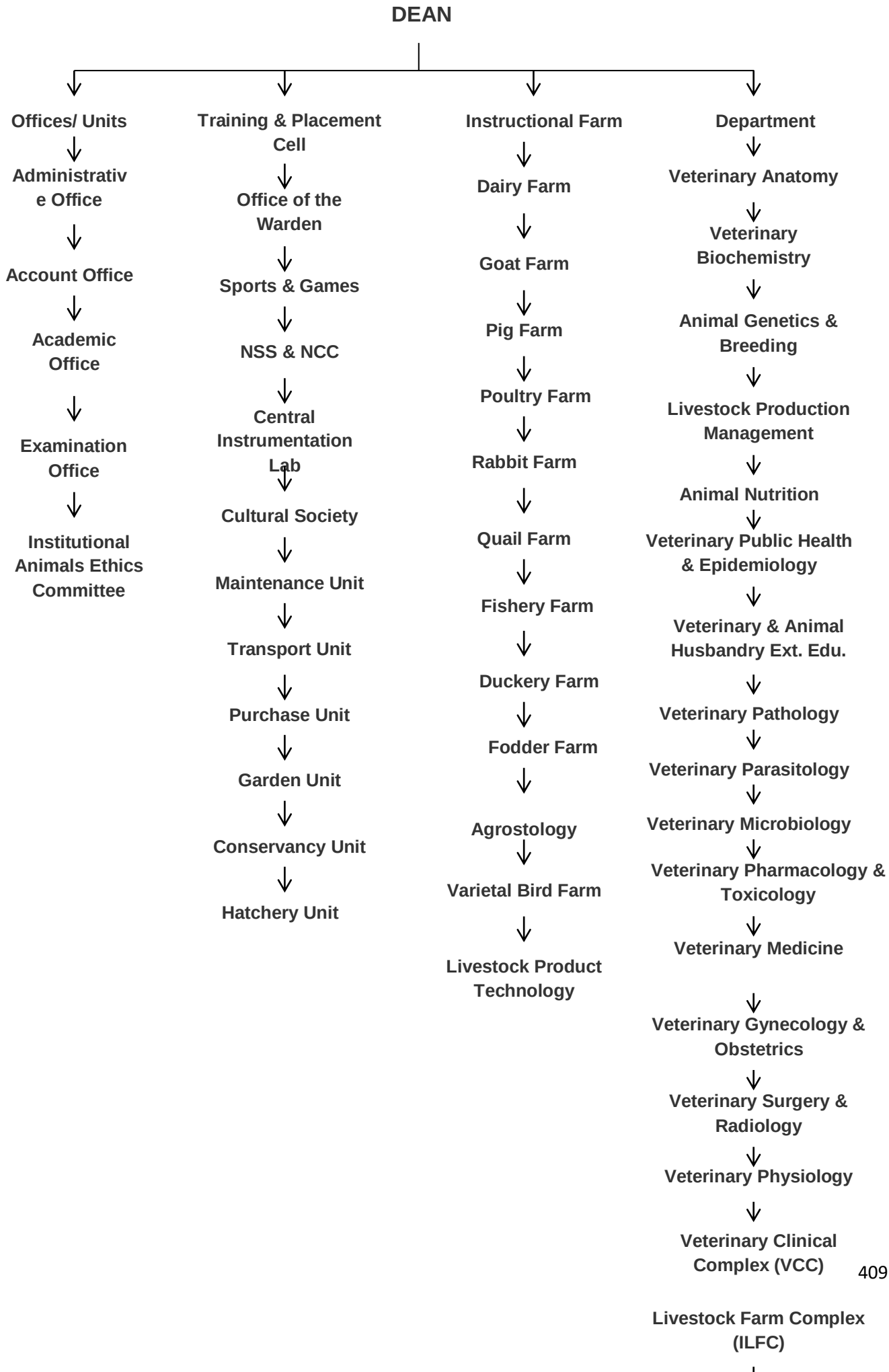
- To make Ranchi Veterinary College a Center of Excellence in academic and research field.
- To improve the quality of life for people and animals by advancing veterinary education, improving animal health and welfare, strengthening research, and enhancing environmental quality
- To provide extension services to the farmers and livestock owners
- To provide extremely competenthuman resource who will ethically carry out professional activities related to animal sciences, as practicing veterinarians or research scientists for the betterment of farming society

Goals and Objectives:

- To disseminate the veterinary knowledge and train the rural youth to improve the welfare of animals/birds and to balance the demand of livestock production in quantity as well as quality through technology transfer, especially for Jharkhand state
- Create opportunities for livelihood generation for the rural youth
- Prepare quality veterinarians for providing a boost to Animal Husbandry production and animal health care in the state and country
- Carry out need based research with the core objectives of increasing productivity from domestic andbirds, as well as protecting wildlife animals
- Conduct training programmes to generate self-employment opportunity for rural youth,

- Provide technical support to Department of Animal Husbandry, Government of Jharkhand for conceptualization, formulation and implementation of farmer welfare schemes for doubling the income of farmers
- Provide advanced treatment facilities to whole of Jharkhand through referral hospital (Veterinary Clinical Complex) at Ranchi College of Veterinary Sciences and Animal Husbandry,
- Develop Advanced Disease Diagnostic Facilities in the college for early diagnosis of disease outbreaks as well as to formulate preventative measures in such outbreaks,
- Coordinate with national institutes through MOUs for training and capacity building of teachers and scientists of the college and carry out collaborative work to explore disease conditions prevalent in the state,
- Provide consultancy to the farmers of Jharkhand or queries regarding animal diseases and animal husbandry using ITC techniques,
- Mapping of the state for heavy metal residue in milk and water,
- Develop gene bank of indigenous varieties of animals and birds

6.5.1 College Administration



6.5.1.1 College Dean's Office Establishment:

The Dean's post is sanctioned by the appropriate authority as per ICAR Model Act and the Dean is appointed on a tenure basis.

Name of the Dean	**Dr. Sushil Prasad**
Mode of Selection	In-charge
Date of Selection of Present Dean	13.02.2020
Tenure	Till further order

Staff Position in the Dean's Secretariat –

Sl. No.	Name of the Post	Sanctioned	Filled
1	Administrative Officer	-	-
2	PS/ Sr. Steno	2	1
3	Accountant	2	2
4	Assistant Accountant	1	1
5	Store keeper	1	1
6	Academic Assistant/ Typist	1	1
7	Establishment Assistant/ Jr. Clerk	7	4
8	Computer Typist	2	2
9	Driver	4	3
10	Account Attendant	3	3
11	Messenger	-	-
12	Attendant	21	18
13	Sweeper	25	22

Infrastructure/facilities available in the Dean's Secretariat –

Sl. No.	Establishment	Number of Room
1	Administrative Officer	1
2	PS/ Sr. Steno	1
3	Accountant	1
4	Assistant Accountant	1

6.5.1.2 Monitoring Mechanism for Quality Education

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 college. The monitoring mechanism for quality education comprises of Student Advisory Committee, Board of Studies, Academic Council, Research Council, and Extension Council.

Monitoring of Teaching

- ❖ Self-appraisal report of individual teachers is evaluated by Dean, Director Research, Director Extension Education, Dean Post-Graduate Studies and Vice-Chancellor.
- ❖ Evaluation of teachers through feedback proforma from students for undergraduate teaching.
- ❖ CCTV cameras have been installed in each lecture room for regular surveillance.
- ❖ Programme of work, synopsis and thesis work of PG students is approved in Departmental Advisory Committee and Students' Advisory Committee. PG students deliver synopsis seminar in open house mode in faculty to get feedback from the departmental faculties. The synopsis is evaluated internally before submission to the Dean, PGS for final approval.

Monitoring of Research

- ❖ The Professors and Heads make frequent visits to the research field and laboratories.
- ❖ The Annual Technical Programme meetings are held under the chairmanship of Director of Research along with ADR, Dean, HODs of the concerned and related departments to review and monitor the research work carried out in all the departments.
- ❖ Action plan of teachers/ scientists for research work is discussed in Technical committee meetings.
- ❖ Mid-term appraisal meetings are held to review the research work.
- ❖ Tour programmes and tour diaries are approved by the controlling authority.

Monitoring of Extension

- ❖ Extension activities to be conducted by faculty members are planned in the Departmental Committee. The extension activities are also monitored by the respective KVK Advisory Committee.
- ❖ Tour programmes and tour diaries are approved by the controlling authority.

- ❖ The Professors and Heads convene regular meetings of different Extension Specialists and also maintain liaison through telephone system for disease survey & surveillance

6.5.1.3 Course Curriculum Development/Board of Studies

The development of course curriculum is made as per the norms of Veterinary Council of India and Indian Council of Agricultural Research through Board of Studies and Academic Council conducted at institutionaland university level respectively, which has the responsibility of improving academic activities such as proposing new courses of studies, curricula modification etc. for the various programs offered by the College. The Board of Studies also reviews the standards of teaching regularly.

The Ranchi College of Veterinary Sciences and Animal Husbandry also has Departmental Advisory Committee (DAC) at the Department level.

Departmental Advisory Committee: The Departmental Advisory Committee (DAC) is constituted with the approval of the competent authority for management of teaching, research and extension within each department of the college.

Composition of DAC:

1. Chairman of the Department (Chairperson),
2. Professor (Member),
3. Associate Professor/ Sr. Scientist (One Member each from teaching, research & extension stream), and
4. Assistant Professor/ Jr. Scientist (Member Secretary nominated by the Chairman).

Board of Studies: The college has a Board of Studies which has the responsibility of regulating academic syllabus and other activities such as proposing new courses of studies, curricula modification etc. for the various programs offered by the College. The Board of Studies also reviews the standards of teaching regularly. The previous faculty board of studies committee constituted by the Dean has following members:

Sl. No.	Name of the Teacher	Designation	Affiliation
a. Chairman of the Committee:		**Dean, R.V.C.**	
1	**Dean, R.V.C.**	**-**	
b. Faculty Members:			
1	Dr. B.P.S. Yadav	Ex Director, North East Hill Region, ICAR Complex, Bariatu , Ranchi	ICAR

2	Dr. A.K. Choudhary	District Fisheries Officer	GOJ
3	Mr. Bhartendu Vimal	Academic I/C (CoFSI, Gumla)	
4	Mr. Ashish Kumar	Dy. Director, Fisheries, SCI	GOJ
5	Dr. M.K. Gupta	Univ. Prof. & Chairman	
6	Dr. Alok Kr. Pandey	Univ. Pro. & Chairman, Extension	
7	Dr.S.K. Pal	Prof. Agronomy, RAC	
8	Dr. A.K. Singh	Assoc. Dean, CFSc	
C. Member Secretary			
Dr. Suresh Mehta, Asstt. Registrar			

(Annexed as 20_Annexure_XX_RVC_6.5.1.3 _BOS)

Anti-Ragging Activities:

- Teachers visit to the hostels & hostel premises both in day time as well asduring night hours
- Dean is informed immediately in case of any report about ragging
- Strict disciplinary action is taken by Disciplinary Committee against students involved in ragging activities
- Provision to lodge FIR if the situation requires.
- Bond stating non-indulgence in any act of ragging is obtained from students at the time of admission as per the directives of Honorable Supreme Court of India

6.5.1.4 Anti-Ragging Cell

The college follows the regulation and subsequent guidelines issued in the matter. There is an anti-ragging committee constituted by the Dean. The composition of the committee along with details of the members is given as under:

Sl. No.	Name of the Teacher	Designation	Affiliation
c. Chairman of the Committee:		Dean, R.V.C.	
	Dr. A.K. Pandey	Warden, RVC	
d. Co- Chairman of the Committee:			

1 2	Dr. A.K. Sharma Dr. Raju Prasad	Dy.Warden, Hostel No.-1 Dy.Warden, Hostel No. -2	
e. Faculty Members:			
	Dr. Suresh Mehta	Asstt.Registrar,RVC	
	Dr. Swati Sahay	Dy. Warden, Girls Hostel	
	Dr. Gloria Tigga	Dy. Warden	
	Dr. Ravindra Kumar	Dy. Warden, Hostel No.3	
	Dr. Sanjit Kumar	Asstt. Prof., Pathology	

(Annexed as 21_Annexure _XXI_RVC_6.5.1.4_Anti Ragging)

6.5.1.5 Biological Waste Disposal Facility

The chemical, biological and recyclable waste collected in the college premises arising from classroom activities, research activities, farm operations, maintenance and cleaning operations at the college level are disposed-off safely as per the the guidelines of the University. Biological waste is collected physically and used as manure after decomposition. The carcass of dead farm animals or other animals are safely disposed after post mortem examination by burial method as per the directives of Honorable Supreme Court of India

(Annexed as 22_Annexure_XXII_RVC_6.5.1.5 _Biological Waste)

6.5.1.6 Institutional Ethics Committee for Experiment on Animals

College of Veterinary Sciences and Animal Husbandry, Ranchi has Institutional Animal Ethics Committee (IAEC) duly approved by CPCSEA, New Delhi. The Experimental Animal House Facilities for both large and small animals have been approved by CPCSEA (Committee for the purpose of control and supervision of Experiments on Animal), New Delhi, vide registration number: -528/GO/Re/SL/02/CPCSEAand is valid up to 25.07.2024**.**

(Annexed as 23_Annexure_XXIII_RVC_6.5.1.6 _Ethics Committee)

6.5.1.7 Committee for Prevention of Sexual Harassment of Women

A safe workplace is everywoman's legal right. An internal committee is in place at university level in complianceto "The Sexual Harassment of Women at Workplace; Prevention, Prohibition and Redressal Act, 2013. The committee consists of senior women staff members and other members from all sections of employees. The college did not have any past record of women harassment cases so far.

(Annexed as 24_Annexure_XXIV_RVC_6.5.1.7 _Sexual Harassment)

6.5.2 Faculty

6.5.2.1 Faculty Strength:

The sanctioned posts of Professors or Chief Scientists, Associate Professors or Senior Scientists, and Assistant Professors or Junior Scientists in the college are 18, 17 and 46, respectively, as per VCI guidelines.

The details of faculty strength are given as under:

Designation	Sanctioned	In place*
Professors and equivalent	18	05
Associate Professors and equivalent	17	00
Assistant Professors and equivalent	46	44

**Note: ***Faculty in place includes Professors and Associate Professors promoted under CAS

6.5.2.2 Faculty Profile:

The college has nineteen departments including Aquaculture departments at present to meet the academic requirement of the UG, PG and Ph.D. degree programme. The college has well qualified and experienced faculty members having vast experience and international exposure and they are involved in UG, PG and Ph.D. teaching, research, extension and outreach activities. Competent faculties are positioned in different departments *viz.* Veterinary Anatomy, Veterinary Physiology, Veterinary Biochemistry, Veterinary Pharmacology & Toxicology, Veterinary Parasitology, Veterinary Microbiology, Veterinary Pathology, V.P.H.E., Animal Nutrition, A.G.B., L.P.M., Gynaecology & Obstetrics, Surgery & Radiology, Veterinary Medicine, Veterinary & Animal Husbandry Extension Education, L.P.T., V.C.C., I.L.F.C. and Aquaculture to accomplish the faculty requirement as per VCI recommendations.

The details of department-wise faculty positions are given as under:

Department	No. of faculty position sanctioned	No. of faculty position filled

	Prof.	Assoc. Prof.	Asstt. Prof.	Prof.	Assoc. Prof.	Asstt. Prof.
Veterinary Anatomy	1	1	2	0	0	3
Veterinary Physiology	1	1	3	0	0	3
Veterinary Biochemistry	1	1	4	0	0	3
Veterinary Pharmacology & Toxicology	1	1	1	0	0	1
Veterinary Parasitology	1	1	2	0	0	1
Veterinary Microbiology	1	1	2	0	0	2
Veterinary Pathology	1	1	2	1*	0	1
V.P.H.E.	1	1	1	0	0	1
Animal Nutrition	1	1	1	0	0	3
A.G.B.	1	1	1	0	0	3
L.P.M.	1	1	2	1*	0	7
Gynaecology & Obstetrics	1	1	3	0	0	1
Surgery & Radiology	1	1	3	0	0	3
Veterinary Medicine	1	1	3	0	0	4
Veterinary & Animal Husbandry Extn. Edu.	1	1	1	2*	0	2
L.P.T.	1	1	2	0	0	1
V.C.C.	1	1	6	0	0	4
I.L.F.C.	1	0	6	0	0	0
Aquaculture	-	-	1	1	0	-
Total	**18**	**17**	**46**	**5**	**0**	**43**

The details of department-wise list of publications by faculty is given below –

Department	Publications					
	Full paper	Conference/ Symposium	Books	Book Chapters	Manuals	Annual/ Research reports
Veterinary Anatomy	24	8	3	1	4	5
Veterinary Physiology	6	5	-	-	-	5
Veterinary Biochemistry	30	6	3	5	4	5
Veterinary Pharmacology & Toxicology	20	5	-	-	-	5
Veterinary Parasitology	3	4	1	1	2	5

Veterinary Microbiology	6	6	-	-	-	5
Veterinary Pathology	24	12	1	-	1	5
V.P.H.E.	2	1	-	5	-	-
Animal Nutrition	12	2	-	4	-	5
A.G.B.	24	18	3	2	2	5
L.P.M.	44	16	7	-	-	5
Gynaecology & Obstetrics	18	4	-	3	-	5
Surgery & Radiology	52	5	1	5	-	5
Veterinary Medicine	31	16	-	1	-	5
Veterinary & Animal Husbandry Extn. Edu.	20	12	-	2	8	5
L.P.T.	-	-	-	-	-	-
V.C.C.	-	-	-	-	1	-
I.L.F.C.	6	4	-	-	-	-
Aquaculture	12	2	1	2	7	1

6.5.2.3 Credentials of the Faculty:

Qualified and efficient faculty members are essential to carry out the mission of the college and to ensure the quality and integrity of its academic program. Since, the student learning is central to the institution's mission and educational programme, the faculty has responsibility of overseeing and coordinating all the educational activities.

In compliance with the above standards, this college is positioned with competent faculty members and they continuously excel in the triple roles they perform viz. teaching, research and extension with their expertise in the subject, work experience and continuous updating of knowledge. The experience, publications, honors and awards received by them reflect their effectiveness in the given role.

The credential details of individual faculty are furnished as:

Sl. No.	Name	Designation	Highest Qualification	Total Experience (Years)	Honours& Awards	Any Other Achievement that contributes to effective teaching and student learning and outcome
Veterinary Anatomy						
1	Dr. Suresh Mehta	Asstt. Prof. and Head	Ph.D.	17 Yrs.	4	I. PPT of whole

				.		course prepared II. Dissection CD prepared III. Innovation made in teaching
2	Dr. Arpana Priyanka Minj	Asstt. Prof.	Ph.D.	1 month	1	
3	Md. Taufique Ahmad	Teaching Asso.	M.V.Sc .(NET)	2 years	3	
Veterinary Physiology						
1	Dr. R.K. Verma	Asstt. Prof. & Head	Ph.D.	17 Yrs.	3	
2	Dr. Gloria Tigga	Asstt. Prof.	Ph.D.	17 Yrs.	3	
Veterinary Biochemistry						
1	Dr. Shiv Kr. Yadav	Asstt. Prof.	M.V.Sc .(NET).	4 Yrs.	6	
2	Dr. Aftab Adil	Asstt. Prof	M.V.Sc. .(NET)	15 Yrs	2	
3	Dr. Susmita	Asstt. Prof	Ph.D.	11 months	-	

Veterinary Pharmacology & Toxicology						
1	Dr. Raju Prasad	Asstt. Prof& Head	Ph.D.	15 Yrs	1	Teaching with help of social media Google meet, zoom etc.
2	Dr. Vishakha Singh	Asstt. Prof.	Ph.D.	1 month		
Veterinary Parasitology						
1	Dr. Madhurendr aBachan	Teaching Assoc.	Ph.D.	3 yrs	-	Teaching with the help of social media, Google Meet and Zoom etc
Veterinary Microbiology						
1	Dr. Shiv Varan Singh	Asstt. Prof.	Ph.D.	5 months		Teaching with PPT , Google meet, zoom etc.
2	Dr. Sweta Kumari	Teaching Assoc	M,.V.S c.	2 yrs.		
Veterinary Pathology						
1	Dr. M.K. Gupta	University Professor and Chairman	Ph.D.	32 yrs	1	
2	Dr. Sanjit Kr.	Asstt. Prof.	Ph.D.	5 yrs.	-	
3	Dr. Brajesh Kr.	Teaching Assoc.	M.V.Sc .	10 months	-	
V.P.H.E.						
1	Dr. PrishillaKerk etta	Asstt.. Prof.	Ph.D.	2 yrs	-	
2	Dr. Pankaj Kr.	Asstt. Prof.	M.V.Sc . .(NET)	11 years	-	
Animal Nutrition						
1 2 .	Dr S. S. Kullu Dr. Subodh Kr. Sinha	Asstt. Prof. Asstt. Prof.	Ph.D. Ph.D.	02 years 06 yrs.		
3	Dr. NealkantRaj wade	Asstt. Prof.	M.V.Sc .(NET).	3 months		
4	Dr. Rakesh Kr.	Teaching Assoc,	M.V.Sc .	2 yrs.	1	
A.G.B.						

1	Dr. Nandani Kumari	Asstt. Prof.	Ph.D.	7.5 yrs	8	
2	Dr. Rebeka Sinha	Asstt. Prof.	Ph.D.	9 months		
L.P.M.						
1	Dr. Sushil Prasad	Chairman cum Univ. Prof.	Ph.D.	32 Yrs	12	
2	Dir. Ravindra Kumar	Asstt. Prof.	Ph.D.	10 Yrs	17	
3	Dr. Tajwar Izhar	Asstt. Prof.	Ph.D.	5 yrs		
4	Dr. Nishant Patel	Asstt. Prof.	M.V.Sc (NET).	2yrs		
5	Dr. Nirmala Minz	Asstt. Prof.	M.V.Sc. (NET)	02yrs	2	
6	Dr. K. Phule Japhet	Asstt. Prof.	Ph.D.	01 yr	2	
Gynaecology & Obstetrics						
1	Dr. Anand Kr.	Asstt. Prof.	M.V.Sc. (NET)	4yrs	-	
Surgery & Radiology						
1	Dr. A.K. Sharma	Asstt. Prof. & Head	Ph.D.	16yrs	7	
2	Dr. Reetu	Asstt. Prof.	Ph.D.	3yrs	-	
3	Dr. Vinod Kr.	Teaching Assoc.	M.V.Sc.	19 yrs.	-	
Veterinary Medicine						
1	Dr. Praveen Kr.	Asstt. Prof.	Ph.D.	17 yrs		
2	Dr. Abhishek Kkr.	Asstt. Prof.	Ph.D.	17 yrs		
3	Dr. Ansar Ahmad	Asstt. Prof.	Ph.D.	16 yrs		
4	Dr. Swati Sahay	Asstt. Prof.	Ph.D.	16 yrs		
Veterinary & Animal Husbandry Extn. Edu.						
1	Dr. J. Oraon	Chairman, cum	Ph.D.	32yrs		

		Univ. Prof.				
2	Dr. A.K. Pandey	Univ. Prof.	Ph.D.	31 yrs		
3	Dr. B. K. Singh	Asstt. Prof. cum Jur. Sci.	M.V.Sc. .(NET)	05yrs		
4	Dr. Nandita Bera	Teaching Asstt.	M.V.Sc.	01 yr	.	
L.P.T.						
1	Dr. Rajesh Kr.(2016-19)	Asstt. Prof.	M.V.Sc. NET	3 yrs (Presently doing Ph.D.		
V.C.C.						
1	Dr. Alok Singh	Asstt. Prof.	Ph.D.	10 months		
2	Dr. L.S. Xaxa	Asstt. Prof.	M.V.Sc .(NET)	10 months	-	
3	Dr. Smiriti	Asstt. Prof.	M.V.Sc .(NET)	10 months		
4	Dr. Vidya Bhushan Kr.	Teaching Assoc.	M.V.Sc.	2 yrs	-	
I.L.F.C.						
1	Dr. ShushmaManjhi	Asst. Prof.	Ph.D.	2 yrs	1	
2	Dr. Pawan Kr. Verma	Teaching Assoc.	M.V.Sc.	10 months	1	
Aquaculture						
1	Dr. A.K.Singh	Univ. Prof.	Ph.D.	30 yrs.	-	

The list of the retired faculties is as follows:

Sl. No.	Name	Retired on
	Dr. R.L. Prasad	31.01.2018
1	Dr. A.K. Shrivastava	31.01.2018
2	Dr. L.B. Singh	31.01.2018

3	Dr. Kalimuddin	28.01.2018
4	Dr. A.R. Deb	31.01.2018
5	Dr. A.K. Ishwar	30.09.2018
6	Dr. B.K. Roy	31.01.2019
7	Dr. K.K. Singh	31.01.2019
8	Dr. Arun Prasad	31.07.2019
9	Dr. M.P. Sinha	30.09.2019

6.5.2.4 Technical and Supporting Staff:

The available supporting staff is just sufficient to support effective implementation of the programme. The department-wise distribution of technical, supporting and field staff in college is presented below:

Department	Technical Staff	Supporting Staff	Field Staff
Veterinary Anatomy	Nil	3+1(Casual)	-
Veterinary Physiology	Nil	2+2(Casual)	
Veterinary Biochemistry	01	2+2(Casual)	
Veterinary Pharmacology & Toxicology	01	2+2(Casual)	
Veterinary Parasitology	-	2+2(Casual)	
Veterinary Microbiology	01	3+3(Casual)	
Veterinary Pathology	01	1+2(Casual)	
V.P.H.E.	-	3+1(Casual)	
Animal Nutrition	-	2+1(Casual)	
A.G.B.	-	3+2(Casual)	
L.P.M.	-	2+2(Casual)	
Gynaecology & Obstetrics	-	4+2(Casual)	
Surgery & Radiology	-	3+2(Casual)	
Veterinary Medicine	01	2+2(Casual)	
Veterinary & Animal Husbandry Extn. Edu.		0+5(Casual)	
L.P.T.		0+5(Casual)	
V.C.C.		0+3(Casual)	
I.L.F.C.		2+2(Casual)	
Aquaculture		3+1(Casual)	

6.5.3 Learning Resources

6.5.3.1 College Library:

Each department of Ranchi College of Veterinary Sciences and Animal Husbandry is having its own departmental library in addition to College Library. However, Birsa Agricultural University has a Central Library, which is a central facility catering to the needs of all the colleges of the University. To enhance and enrich the knowledge of the students and scientists, a well-equipped modern College Library is available with a total collection of 22996 books, 1861 reference books, 996 theses, and about 2452 national and international journals, etc.; and other facilities like Krishi Kosh,KrishiPrabha, CeRa, video conferencing and multimedia. The open access journals are accessed through CeRA (Consortium

for e-Resources in Agriculture) and DOAJ (Directory of Open Access Journals). The library is digitalized by Koha Open Sources Library Automation Software. It provides information support to its teachers, scientists, extension specialists, students, and other members drawn from non-teaching staff. The working hours of library during are 9.00 am to 5.00 PM. There is Prof. I/C Librarian who is assisted by clerical and support staff.

List of Library Resources –

Sl. No.	Resources	Numbers
1.	Textbooks	22996
2.	Reference books	1861
3.	National Journals	996
4.	International Journals	1456
6.	Magazines	Sufficient
7.	Newspapers	Sufficient
8.	PG and Ph.D. thesis	996

Sl. No.	Facilities	Numbers	Area	Specialty to conduct practical/ hands on training

Veterinary Anatomy				
1	UG Lab.	1	800sq.	• Dissection is being carried out on cadavers obtained from postmortem. • specimens without communicable diseases are being used which were collected from dead animals • Computer simulations software's, and previous specimens of different organs present in museum are being utilized for practical demonstrations. • Skeletons of all domesticated animals and birds are available for practical demonstration
2	Histology room area	1	800 sq	
3	Bone room	1	800sq	
4	Dissection Hall	1	2000sq	
Veterinary Physiology				
1	UG Lab.	1	600 sq.	Hematological examination in the lab.
2	PG Lab	1	600 sq.	
Veterinary Biochemistry				
1	UG Lab	1	600 sq.	Practical is conducted regularly which are related to Veterinary Biochemistry.
2	PG Lab	1	400 sq.	
3	Instrumentation Hall	1	200 sq.	

Veterinary Pharmacology & Toxicology				
1	UG Lab	1	990 sq.	• Hot plate and tail flick analgiometer is used to to demonstrate analgesic effect in rat. • Convulsiometer is used to demonstrate anticonvulsant effect. • Plethysmometer is used to demonstrate anti-inflammatory effect. • Rota rod apparatus is used to demonstrate muscle relaxant effect.
2	PG Lab	3	1450sqft.	

Veterinary Parasitology				
1	UG Lab	02	800 sq.	• Collection and examination of different mites through skin scrapping and their identification • Examination of blood smear/blood for diagnosis of blood protozoan and microfilariae • Methods of collection, preservation, fixation and staining of Helminths and protozoal parasite • Methods for culture of third stage larvae Super family Trichostrongyloides for laboratory purposes
2	PG Lab	01	800 sq.	

Veterinary Microbiology				
1	UG Lab	01	784 sq.ft.	• Collection of samples from field and farm. Isolation and identification of bacteria and diagnosis of diseases. • Practical's are conducted with the help of flow chart and practical manuals along with learning by doing process under the guidance of teachers
2	I. PG Lab II.	02 03	784 sq.ft. 340 sq.	
Veterinary Pathology				
1	Clinical Pathology Laboratory		600 sq.	• To train the students to carry out methodical PM examination of large animals, small animals, poultry and laboratory animals for developing better understanding of animal body. • Practical classes are conducted with the help of PPT, practical manuals, gross specimens and histopathological slides, clinical samples and biopsy samples. • Histopathological and histochemical studies are conducted for diagnosis of cancer, systemic and inflammatory conditions
2	Histo pathology, HistoChemisiitry& Immunohisto lab		400 sq.	
3	Postmortem room		600sq	
V.P.H.E.				
1	UG Lab		1x800	• Practical are conducted as per the course

2	PG Lab.		1x800	outline of the VCI. The practical are well explained and demonstrated in the laboratories

Animal Nutrition				
1	UG Lab	2	600sq	• Demonstration of Sample (feed, faeces & urine) collection and processing from Domestic, Companion and Lab animals. o Practicals are conducted with the help of flowchart and practical manuals along with learning by doing process under the guidance of teachers. o Chemical and nutritional evaluation of feeds, feed supplements, grass and forage for commercial and companion animals, fish and birds. o Proximate Analysis, ADF and NDF estimation of feed and fodder.
2	PG lab	1	600 sq.	
3	Class room	1	500 sq.	
A.G.B.				
1	UG Lab	1	500 sq.	Hands on training were provided to the students of U.G on various molecular techniques in past.
2	PG lab	1	500 sq	
3	Computer lab		1200 sq	

L.P.M.				
1	UG Lab.-cum Museum		1x600 sq	• Most of the practical classes are being conducted in the instructional farm according to the course. • Hands on training is provided to the students by dividing in batches. Students are also instructed to present the things through power point presentation in conference room. • We have prepared practical manuals and distributed among students for getting clear ideas about the practical aspect.
2				
Gynaecology & Obstetrics				
1	UG Lab		17600 sq	• Pregnancy diagnosis and artificial insemination. • Students were engaged in daily clinical cases treatments to develop better practical knowledge and treatment skill. • Various essential laboratory works as a part of students' research and clinical cases were conducted by students on regular basis under the guidance of professor to impart general idea and technical skill among them.
2	Hall		17600 sq	

Surgery & Radiology				
1	PG Lab		600 sq	Suturing practice in cloths and cadaver • Students are encouraged to perform minor surgeries like wound debridement, excision of urethral process etc and external fracture fixation by POP coaptation. • Assistance in major surgeries regularly (batchwise) to improve their surgical skills
2	Large Animal O.T.		1500 sq	
3	Small Animal O.T		600 sq	
4	Practical Lecture Hall		1x1000 sq	
5	X-ray &Imeging		900 sq	
Veterinary Medicine				
1	UG Lab.		2x600 sq	• Blood and Serum biochemical and Hematological analysis. • ECG recording in animals and its interpretation especially in canines. • Ultrasonography of patient and its interpretation especially in canines. • Blood Transfusion in Small and Large animals and its consequences • Peritoneal Dialysis/Hemodialysis in the management of renal diseases.
2	PG &Ph.D Lab	/	1x1000 sq + 1x800 sq	

Veterinary & Animal Husbandry Extn. Edu.				
1	A.V. Lab +Group discussion		1x1500 sq ft.	• Organization of group discussion for the farmers. • Visit to livestock market, commercial livestock and poultry farms etc. • Visit to dairy cooperatives societies and dairy plant.
2	Seminar room & communication center		1x1500 sq.ft.	
3	Computer Lab		1x250 sq.ft.	
L.P.T.				
1	UG Lab	1	800 sq.ft	• The practical hands for the undergraduate students are enhanced by training in the area of milk and meat processing
2				
3				
V.C.C.				
1	UG Lab	1	800 sq.ft	• Under graduate students from different departments conduct their research studies in the clinical cases of the department under expert guidance**.**
2				
3				

I.L.F.C.				
1	Instructional Dairy farm		1x3 acre	
2	Instructional Sheep & Goat Farm		1x2.5 acre	
3	Instructional Pig Farm		1x3 acre	
4	Instructional Poultry Farm		1x2 acre	
5	Instructional Poultry Hatchery Farm		1x0.5 acre	
6	Varietal birds & rabbit Farm		1x0. 5 acre	
7	Fodder Farm		20 acre	
Aquaculture				
1	Laboratory			
2	Pond			
Sl. No.	**Facilities**	**Numbers**	**Area**	**Specialty to conduct practical/ hands on training**

Stocking Arrangements –

6.5.3.2 Laboratories, Instructional farm, Workshops, Dairy Plant, Veterinary Clinic, Hatchery, Ponds etc.:

Department-wise information regarding laboratory facilities, instructional farm, workshops, dairy plant, veterinary clinic, hatchery, ponds, etc. in various departments of the college are given as under –

List of major equipments:

S. No.	Name of department	Name of equipments	No. of equipment
1.	Veterinary Anatomy and Histology	Microtome	2
		Cryostat Microtome	1
		Binocular microscopes	2
		Monocular microscopes	30
		LCD projection TV	1
		LCD projector	1
		Hot air oven	1
		Computer with printer	1
		Maceration tanks	1
		Trinocular microscope	1
		Tissue embedding system	1
		Millipore purifier	1
		P ^{H} meter	1
		Hot air oven	1
		Cadaver injector	1
		Deep freezer -20^{0} c - Horizontal	1
		Digital Analytical balance	1
		Tissue floatation bath (hot water bath)	1
		Refrigerator (double door)	1
		Electric bone saw	1

		Animal hoisting unit with hooks etc(mummy stand)	4
		Post mortem sets/ Dissecting set	1
		Scissors Straight	5
		Scissors Curved	5
		Hand saw	1
		Forceps Large	5
		Forceps small	4
		Artery forceps	4
		B. P Handles	5
		Enameled iron or Tissue disposable buckets	2
		Steel racks for wet specimens	14
		Enameled trays	2
		Slide box (100 slides)	100
		Slide Cabinet2000slides	2
		Stainingjars	40
		Couplingjars	10
		S.S.Stainingtrays	1

2.	Veterinary Physiology	Microscope	10
		Distillation set	1
		Centrifuge	2
		Spectrophotometer	1
		Kymograph	4
		Autoclave	1
		Heamometer	10
		Refrigerator	1
		Millipore	1
		Sphygmomanometer	1

3.	Animal Genetics and Breeding		
		PCR	1
		RT-PCR	1
		ELISA SET UP	1
		Microscopes	2
		GEL-DOC System	1
		GEL-Dryer	1
		Microwave	1
		ICE -Maker	1
		Deep Fridge	1
		Centrifuge Machine -Large and Small one	1
		Laminar flow	1
		Vortexing machine	1
		Horizontal gel set up	1
		Other important molecular equipments	
44	VetyVeVeterinary Bio-chemistry	PCR	1
		Ultracentrifuge	1
		Centrifuge (5000 RPM)	1
		Spectrophotometer	1
		Automatic Analyzer (Semi)	1
		Automatic Analyzer(Fully)	1
		Rotatory Vacuum Bath	1
		Electrophoretic Machine (Mini Dual)	1
		Water bath incubator	1
		Thin Layer Chromatography.	1
		Distillation set	1

4.	Livestock Production and Management	Tractor and Trolley	01
		Konica minolta 287 photocopiers	01
		DE 628 reverse automatic document readers	01
		Interactive touch panel tt55 75'' Interactive board	01
		Enamel tray(12''x10'')	04
		Enamel Tray (12'' X 8'')	04
		Enamel Tray (14'' X 19'')	04
		Physical Balance	01
		Vernier caliper with val vel box	02
		Sphero Meter	02
		Small SCREW GAUGE (BIG AND SMALL)	02
		Burdizzo Castrator	03
		Avery Physical Balance	02
		Spring Balance (Capacity -10 kg.)	02
		Cold Branding	10
		Docking Machine	03
		Tattooing Forcep	01
		Hot branding (0-9)	10
		Hot branding (a-f)	06
		Cold branding (a-f)	06
		Slide caliper	02
		Hp laser printer model 1005	01
		Halogen heater	01
		Milking machine	03
		Chaff cutter	01
		Egg washing machine	01
		Incubator (setter + hatcher + brooder house)	01
		Refrigerator	03
		Deep freezer	02
		Kudal	02

		Basula	01
		Balance	01
		Calculator	01
		Grass cutter	02
		Torch 2 cell	01
		Bucket (steel)	08
		Sickle	02
		Belcha	08
		Steel chair	02
		GI tub 36”	02
		Tub 20”	16
		Chair without arm + chair with arm	06
		Enamel tray	02
		Avery India self-Indicator (10 kg)	01
		Revolving chair	03
		File (Ratee)	02
		sectarian table	02
		Gamla (Aluminium)	06
		feeder big	04
		feeder small	01
		electrical balance	01
		Avery India hanging machine (100 kg.)	02
		Generator	01
		Trolley	02
		Battery Exide	01
		Room heater	01
		B.N.C. jack (c.c.t.v. camera)	08
		Camera	01
		G.I. feeder tub	14

5.	Veterinary and Animal Husbandry Extension Education	Overhead Projector with Screen 72" ×96"	1
		LCD projector with screen	1
		Multimedia Projector	1
		Public address system	1
		Computer lab with internet facilities	15
		Interactive Panel	1
		Digital camera	1
		Vehicle for field visit (35 seaters) Optional	1
		LED 30" Monitor	1
6.	Veterinary Parasitology	Microscopes including trinocular	20
		Autoclave	01
		BOD Incubator	01
		Bacteriological Incubator	01
		Hot air oven	01
		Laminar flow	01
		Deep freeze (-20 ^{O} C)	01
		Cooling centrifuge	01
		Spectrophotometer	01
		Vertical slab gel electrophoresis assembly	01
7.	Veterinary Microbiology	Autoclave Horizontal	01
		Autoclave	01
		Student microscope	21
		Ultra-violet microscope with U.V assembly	01
		Incubator	02
		Biological Oxygen demand (B.O.D.) Incubator	01
		Immunoelectrophoresis unit	02
		High speed Centrifuge	01
		Refrigerated centrifuge	01
		Inoculation cabin	01

8	Animal Nutrition	Protein Analyzer	01
		Hot air oven	02
		Electronic monopan balance	02
		Muffle furnace	02
		Suction Pump	01
		Digestion set	02
		Soxhlet apparatus set	02

		Centrifuge machine	01
		Spectrophotometer	01
		Fibre estimation apparatus	01
9.	Veterinary Pathology	Post mortem set	01
		Rotary microtome	02
		Microtome Knife sharpener	01
		Paraffin floatation bath (55-65^0 C)	01
		Paraffin bath/oven	01
		Refrigerator	01
		Monocular and Binocular microscopes	34
		Fluorescent microscope	01
		Hot air oven	02
		Incubator	03
		Laboratory Centrifuge	02
		Microhematocrit Centrifuge	01
		Microhematocrit reader	01
		Hemocytometer	20
		Hemoglobinometer	20
		Wintrobetube with stand	01
		Westergren tube with stand	01
		UV Spectrophotometer	01
		Electronic Digital Mono pan Balance	01
		Urinometer	01
		Refractometer	01
		Glucometer	01
		Autopsy table for small animals	02
		Laminar flow	01
		Autoclave	01
		Digital Camera	01
		Electrophoresis Unit	01
		P^H Meter	01

10.	Veterinary Pharmacology and Toxicology	Refractometer	01
		Glucometer	01
		Autopsy table for small animals	02
		Laminar flow	01
		Autoclave	01
		Digital Camera	01
		Electrophoresis Unit	01
		P^H Meter	01
		10 KVA online UPS	**2**
		Hot air oven	1
		Circulating water bath	1
		Digital spectrophotometer	1
		Digital plethysmometer	1
		Biochemical autoanalyser	1
		Digital research microscope with imaging software	1
		Digital balance	2
		Sonicator	1

11.	Veterinary Public Health and Epidemiology	Microscope	30
		Serological water bath	2
		pH meter (Digital)	1
		High speed centrifuge	1
		Spectrophotometer	NIL
		Lovibond comparater with phosphates and Resazurine disc	2
		Colony counter	1
		Burner	10
		Electronic monopan balance	1
		Autoclave	1
		Hot air oven	1
		B.O.D incubators	1

		Incubator	2
		Deep freezer	1
		Lab refrigerator	2
		Gerber's centrifuge hand operated	1
		Dark field Microscope	1
12.	Livestock Products Technology		
		Hot air oven	02
		Autoclave small	01
		BOD incubator	01
		Incubator	01
		Laminar flow	01
		Spectrophotometer	01
		Centrifuge machine	01
		Digital pH meter	01
		Deep freeze	02
		Manual cream separator	01
		Bowl chopper	01
		Meat Mincer	01
		Sausage filler	01
		Paneer vat	01
		Water bath	01
		Lactometer	08
		Refrigerator	01

13.	**Veterinary Surgery and Radiology**	General surgical instruments	2sets
		Orthopedic surgery instruments	1 set
		Shadowless lamp (two pedestal and one ceiling)	3
		Electrocautery setup	1
		Physiotherapy equipments (Diathermy, therapeutic ultrasound Infrared lamp,UV lamp)	1 each

		Endoscopy	1
		BPL oxygenator	1
		BPL ECG machine	1
		NIBP machine	1
		Conventional x- ray machine (ceiling model)	1
		Autoclave	1
		Hot air oven	1
		Centrifuge	1
		Soxhlet apparatus	1
		Semi autoanalyser	1
		Laryngoscope	1
		Binocular microscope	1
		Diagnostic ultrasound	1 repairable
		Hydraulic table (Large Animal)	1 (repairable)
		Mobile x- ray machine (100 a) mobile	1 (repairable)

14.	Veterinary Gynaecology and Obstetrics	Binocular Microscope	04
		Computer assisted semen analyzer	01
		Flowcytometer	01
		Ultra-Sonography Machine	01
		Phase contrast microscope	01
		Biofreezer	01
		Cold cabinet	01
		CO2 Incubator	01
		Deep freeze	02
		Steriozoom microscope	01
15.	Veterinary Clinical Complex (VCC)	Teat and udder instruments	01
		Biochemical Auto analyzer	01
		Incubator (Normal +BOD)	02
		Laminar Flow	01
		Binocular Microscope	02

		Haemoglobinometer	01
		Haemocytometer	02
		Centrifuge (ordinary)	01
		Electro surgery unit	01
		X-ray film viewers	01

16.	Veterinary Medicine	Autoclave	02
		Balance	04
		Hot Air Oven	01
		Incubator	01
		Microscope Monocular	08
		Binocularmicroscope	12
		Haemometer	03
		Haemocytometer	03
		Elisa Reader	01
		Hi-Speed Centrifuge Machine	01
		Serologicalwaterbath	01
		Hemodialysis Machine	01
		ECG Machine	01
		Ultrasound Machine	01
		Oxygenator	01
		Fully automatic autoanalyzer	01
		Semi-automatic autoanalyzer	01
		Endoscopy Machine	01
		Hematoanalyzer	01
		Laminar Flow	01
		Defibrillator	01
17.	Livestock Farm Complex (LFC)	Tractor	02
		Rotovator	01
		Chaff cutter	02
		Mixer grinder	02
		Weighing machine	03

		Debeaking machine	01
		Incubator	01
		Castrator	02
		Automatic vaccinator	01
		Artificial insemination gun	03

6.5.3.3 Student READY/In-Plant Training/Internship/Experiential Learning Programmes:

There is no provision of Student READY programme in Veterinary Science. The final year B.V.Sc. students undergo compulsory one year internship programme in different divisions as per Veterinary Council of India regulations, 2016. Evaluation is conducted on last day of the internship by the committee constituted by the Dean through a comprehensive viva and thereafter, only the successful students are awarded the B.V.Sc& AH degree.

Batch-wise students are allowed to join Internship programme in Instructional bovine farm, Small ruminant farm, Pig farm, Poultry farm, Processing plant and hatchery, Department of Livestock Processing Technology, Department of Microbiology, Rabbit and Varietal Bird Farm, Bhagwan Birsa Biological Park Ormanjhi, Rural area work, Department of Veterinary Pathology & Parasitology, Department of Veterinary Medicine, Department of Veterinary Surgery, Department of Veterinary Gynecology. The Internship programme was tied-up with different Hospitals of State Govt. during COVID – 19 pandemic.

6.5.3.4 Curricula Delivery through IT:

ICT is a powerful tool for teaching and learning. ICT can also facilitate management and enhance communication for the benefit of whole college community. Furthermore, it can play its part in enabling students to articulate their world and develop as responsible global citizen. Ranchi College of Veterinary Sciences and Animal Husbandry aims to continually develop its potential to integrate the use of ICT for effective and stimulating curriculum delivery. The college encourages staff and students to develop lifelong learning skills and to explore the capability of ICT to meet current and future challenges in an increasingly interconnected world.

In order to achieve these aims, all the classroom of UG, PG and Ph.D. programme in Ranchi College of Veterinary Sciences and Animal Husbandry are well-equipped with LCD projector and audio system for

the perfect delivery of the lectures. All the laboratories of different departments of the college are equipped with LCD projectors.

Registration of courses for each academic year and payment of academic year and hostel fees is done through online by the students. Computers are also installed in various analytical software and statistical tools for developing creative and research aptitude among the students. The students refer online sources of the courses, assignments, and project work.

The college continues to update and keep abreast of advances in information and communication technology and is constantly looking at new and innovative ways of supporting teaching and learning in the classroom.

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 Ph.D. categories has been provided in tabular form for last five year.

Name of Degree Programme	**Actual student admitted in last five years (From session 2016-17 to 2020-21)**					**Attrition (%)**				
B.V.Sc. & A.H.	**Y 1 2016-17**	**Y 2017-18**	**Y 3 2018-19**	**Y4 2019-20**	**Y5 (Current Year)**	**Y1**	**Y2**	**Y 3**	**Y4**	**Y5 (Current Year)**
B.V.Sc. & A.H. Actual students admitted Students at present	37 25	51 38	49 28	49 49	60 58	32%	26%	42%	0%	3%

Name of Degree Programme	Actual student admitted in last five years (From session 2016-17 to 2020-21)					Attrition (%)				
	Y1 2016-17	Y2 2017-18	Y 3 2018-19	Y4 2019-20	Y5 (Current Year)	Y 1	Y2	Y 3	Y4	Y5 (Current Year)
M.V.Sc (Department of veterinary Anatomy)	02 (04)	01 (04)	00 (04)	00 (04)	00 (04)	02 50 %	03 0%	04 00%	04 00%	04 00%

Name of Degree Programme	Actual student admitted in last five years (From session 2016-17 to 2020-21)					Attrition (%)				
Physiology	Y 1	Y2	Y 3	Y4	Y5 (Current Year)	Y 1	Y2	Y 3	Y4	Y5 (Current Year)
M.V.Sc.	NIL	1	Nil	Nil	1		100%			

Name of the degree programme	Actual students admitted in last five years					Attrition (%)				
Livestock Production & Management	y1	Y2	Y3	Y4	Y5 (Current year)	Y1	Y2	Y3	Y4	Y5 (Current year)
M.V.Sc.	01 (04)	- (04)	04 (04)	02 (04)	01 (04)	01 (75)	04 (100)	04 (0)	02 (50)	01 (75)

Name of Degree Programme	Actual student admitted in last five years (From session 2016-17 to 2020-21)					Attrition (%)				
(Animal Nutrition)	Y 1	Y2	Y 3	Y4	Y5(Current Year)	Y 1	Y2	Y 3	Y4	Y5(Current Year)
M.V.Sc.	0	0	0	0	0	0	0	0	0	0

Name of Degree Programme	Actual student admitted in last five years (From session 2016-17 to 2020-21)					Attrition (%)				
Microbiology	**Y 1**	**Y2**	**Y 3**	**Y4**	**Y5 (Current Year)**	**Y 1**	**Y2**	**Y 3**	**Y4**	**Y5 (Current Year)**
M.V.Sc	01 (02)	00 (02)	00 00	00 00	00 00	50 %	100 %	0	0	0

Name of Degree Programme	Actual student admitted in last five years (From session 2016-17 to 2020-21)					Attrition (%)				
Veterinary Pathology	Y 1	Y2	Y 3	Y4	Y5 (Current Year)	Y 1	Y2	Y 3	Y4	Y5 (Current Year)
M.V.Sc.	0 (02)	1 (02)	1 (02)	0 (02)	0 (02)	00 NA	01 (0.00)	01 (0.00)	00 (NA)	00 (NA)

Name of Degree Programme	Actual student admitted in last five years (From session 2016-17 to 2020-21)					Attrition (%)				
(Veterinary Pharmacology and Toxicology)	Y 1	Y2	Y 3	Y4	Y5 (Current Year)	Y 1	Y2	Y 3	Y4	Y5 (Current Year)
M. V. Sc.	1 (04)	0 (03)	0 (03)	0 (03)	0 (03)	3 (75)	3 (100)	3 (100)	3 (100)	3 (100)

Name of degree programme	Actual students admitted in last 5years					Attrition percentage				
Veterinary Surgery and	Y1 (2016-17)	Y2 (2017-18)	Y3 (2018-19)	Y4 (2019-20)	Y5 (2020-21)	Y1 (2016-17)	Y2 (2017-	Y3 (2018-19)	Y4 (2019-20)	Y5 (2020-21)

Radiology							18)			
PG programme	2 (2)	1 (2)	0 (2)	2 (2)	2 (2)	0	50	100	0	0

Name of Degree Programme	**Actual student admitted in last five years(Fromsession2016-17 to2020-21)**					**Attrition(%)**				
Medicine	Y1	Y2	Y3	Y4	Y5 (Current Year)	Y1	Y2	Y3	Y4	Y5 (CurrentYear)
M.V.Sc.	3	1	3	3	6 (8)	1	1	2	3	6

Name of the Degree Programme	**Actual student admitted in last five years**					**Attrition (%)**				
	Y1	Y2	Y3	Y4	Y5 (Current Year)	Y1	Y2	Y3	Y4	Y5 (Current Year)
M.V.Sc.	02	02	-	-	-					

Name of degree programme	Actual students admitted in last 5years					Attrition percentage				
Gynaecology and Obstetrics	Y1 (2016-17)	Y2 (2017-18)	Y3 (2018-19)	Y4 (2019-20)	Y5 (2020-21)	Y1 (2016-17)	Y2 (2017-18)	Y3 (2018-19)	Y4 (2019-20)	Y5 (2020-21)
PG programme	1 (2)	1 (2)	0	0	0	1 (00)	1 (00)	0	0	0

Ph.D. (Veterinary Sc.)

Name of the degree	Actual students admitted in last five years	Attrition (%)

programme										
Livestock production and management	Y1	Y2	Y3	Y4	Y5 (Current year)	Y1	Y2	Y3	Y4	Y5 (Current year)
Ph. D	02	00	02	01	01	01 (50)	00 (100)	02 (0)	1 (50)	01 (50)

Name of Degree Programme	**Actual student admitted in last five years (From session 2016-17 to 2020-21)**					**Attrition (%)**				
Veterinary Pathology	**Y 1**	**Y2**	**Y 3**	**Y4**	**Y5 (Current Year)**	**Y 1**	**Y2**	**Y 3**	**Y4**	**Y5 (Current Year)**
Ph.D.	01 (01)	01 (01)	01 (01)	0 (01)	0 (01)	01 (0.00)	01 (0.00)	01 (0.00)	00 (NA)	00 (NA)

Name of degree programme	**Actual students admitted in last 5years**					**Attrition percentage**				
Vety. Gyaecology and obstetrics	**Y1 (2016-17)**	**Y2 (2017-18)**	**Y3 (2018-19)**	**Y4 (2019-20)**	**Y5 (2020-21)**	**Y1 (2016-17)**	**Y2 (2017-18)**	**Y3 (2018-19)**	**Y4 (2019-20)**	**Y5 (2020-21)**
PhD programme	0 (1)	0	0	0	0	0 (100)	0	0	0	0

Name of the Degree Programme	Actual student admitted in last five years					Attrition (%)				
Veterinary and Animal Husbandry Extension	Y1	Y2	Y3	Y4	Y5 (Current Year)	Y1	Y2	Y3	Y4	Y5 (Current Year)

Education										
Ph.D.	-	01	-	-	01		0.00			0.00

This clearly shows that the students who have the intent to pursue their carrier in Veterinary Science make flawless choice in B.V.Sc. / M.V.Sc. / Ph.D. programme and complete the degree successfully. The college also provides conducive learning environment and opportunities equally to all the students. The students with poor financially background is provided with various government supported welfare schemes such as fellowship, scholarship or tuition fee waivers, etc.

6.5.4.2 Average Number of Students in Theory and Practical Classes:

In order to achieve individual attention and feedback of the students in the classroom activities either theory or practical, the teacher to student ratio for any given class is important factor to take into consideration. On this accord, this college has a very conducive and student friendly size of a class.

A brief account on composition of students in theory and practical classes is as follows –

Degree programme	**Student – Teacher Ratio**		
	Theory	**Practical**	**Project**
B.V.Sc.	20:1	10:1	10:1
M.V.Sc. in all departments	4:1	4:1	4:1
Ph.D. in all departments	4:1	4:1	4:1

6.5.4.3 Admission Process:

The admissions to all the UG, PG and Ph.D. programmes of the Ranchi College of Veterinary Science and Animal Husbandry are done through Jharkhand Combined Entrance Competitive Examination (JCECE) based on the aggregate marks obtained by the candidate in entrance examination and along with consideration of reservation policy of State Government. ICAR nominees are also admitted in all programmes for which ICAR is conducting entrance examination separately. In addition, 15% of the total sanctioned seats are filled through All India NEET entrance examination. The registration cards are issued by the Academic Cell of the college, following the adoption of the courses as per VCI (U.G.) and ICAR (P.G., Ph.D.) norms. Academic schedule for the Undergraduate is prepared by the academic cell of the college and distributed to individual student at the start of the session and Academic schedule for the Postgraduate is prepared by the Office of the Registrar of the university distributed to individual student at the start of the session as well displayed on the notice board of the college.

Sl. No.	Degree programme	Mechanism of Admission (Through written exam/ ICAR nominee/Foreign students)	Fee payment mechanism (Cash/Online)	Registration procedure (On-site/ Online)	Academic schedule at the start of session
1.	B.V.Sc.	Through competitive exam	Online as well as cash	On site/on line	Uploaded on the website
2.	M.V.Sc.	Through competitive exam	Online as well as cash	On site/on line	Uploaded on the website
3.	Ph.D.	Through competitive exam	Online as well as cash	On site/on line	Uploaded on the website

6.5.4.4 Conduct of Practical and Hands on Training:

We follow three different basic steps viz., seeing/observing, doing and writing for practical learning of students under the guidance of teachers.

Seeing/Observing: Students observe the method of doing various things by their teachers, e.g., various operations and other clinical procedures. For passive learning various flow charts banners and posters are displayed. The power point presentations on various topics are also delivered to students.

Doing: The UG students are involved in performing various activities in the laboratories/farms as well in hospitals. They are involved in recording of various clinical parameters, administration of medicines, minor surgical/obstetrical procedures and analysis of samples in the laboratory. They are provided training of artificial insemination, pregnancy diagnosis and various other clinical procedures.

Writing: The UG students are also involved in filling of various records like OPD registers and treatment cards. Beside these they also fill their practical manuals prepared as per VCI curriculum along with learning by doing process. Practical conducted with the help of flow chart and practical manuals prepared as per VCI curriculum along with learning by doing process in the guidance of teachers. Various activities in the laboratories of different departments are performed as follows –

- Collection of blood samples from LFC.
- Students are supported by adequate Skeletons of different animal species, diagrams, specimens, slides, PPT, etc. to understand the subject in a simple and efficient manner.
- Hematological examination in the lab.
- Urine examination in the lab.
- Semen examination.

- Recording of data from meteorology observatory.
- Assignments allotted to group of students.
- Estimation of biochemical parameters.
- Demonstration of organs for the infestation of the parasites and for the presence of lesions caused by the parasites.
- Demonstration of procedures for the collection of samples from animals for the detection of the parasites.
- Demonstration of the procedures for the processing of clinical samples for parasitic detection.
- Identification of the parasites/cysts/eggs by morphological examination,
- Preservation of the parasites specimen.
- In line with VCI directions the staff members of the department introduce the students with different techniques of collection of samples from field and farm and isolation and identification of Bacteria and diagnosis of diseases.
- Hands on training are given to the students about the techniques of Post-mortem examination and writing of Post-mortem report in large and small animals as well as birds.
- Expertise is provided to the UG and PG students for the preparation and interpretation of histopathological slides.
- Practical classes are conducted with the help of flowcharts, practical manuals, gross specimens and histopathological slides.
- The samples of milk, meat and water are collected for their quality assessment.
- Collection of feed samples from field.
- Analysis of samples in the lab.
- Assignments allotted to group of students.
- Research conducted by students.
- Formulation of balanced ration for dairy farm.
- Exposure visit to feed factory/farms.
- Collection and analysis of production and reproduction data.
- Cytogenetic experiment with the help of visuals aid.
- Assignments allotted to group of students.
- Demonstration of cattle judging on dairy farm.
- In line with the VCI directions the staff members of the Department introduces the student with different processing of Livestock Products (Milk, Meat, Egg and Wool).

- The students are supported by adequate diagrams, slides, PPT, etc. to understand the subject in a simple and efficient manner.
- The students are also provided learning material like practical manuals, Class notes and e-books which are very useful to improve the knowledge of students.
- The practical hands for the undergraduate students are enhanced by the practical hands on training to under graduate and post graduate students in the area of milk and meat processing.
- Practicals are conducted as per the courses outlined by the Veterinary Council of India (VCI). Practical manuals are provided to the students and practicals are well explained and demonstrated.
- For radiology practical, radiographs of normal and abnormal organs are maintained in the department. These radiographs are shown to the students during practical classes.
- Collection of data at field level about the farmer's problems.
- Preparation of different literature like leaflet, posters, charts, flash cards.
- Assignments allotted to group of students
- To conduct different awareness programme by students to farmers.
- Dentition and age determination in livestock at farm.
- Demonstration of disbudding and castration in animals.
- Live demonstration of various fodder crops.
- Hands on training on deticking, spraying, shearing, deworming to students.

6.5.4.5 Examination and Evaluation Process:

Semester system of education is followed for UG, PG and PhD programme. We are following the Annual System of Education in UG from the session 2017-18 as per the VCI Regulations, 2016. Whereas, the M.V.Sc. and Ph.D. programme are offered in semester system as per ICAR guidelines. A semester has 105 working days inclusive of mid-semester and final practical examination. The final theory examinations are conducted after completing 105 working days of the semester. The final theory examinations, schedule communicated by the Registrar office is adopted. The final theory examination comprises of three types of questions viz. objective type, short notes and long type. Evaluation of final theory examination answer papers is done by _external examiner_ and the results are declared. The results of the course are indicated by the grade point ranging from 0 to 10. The minimum grade point to be secured for the successful completion of a course is more than 5.00 and an OGPA of more than 5.0 for the award of the degree.

a. Student Evaluation

3. **Examination and Evaluation Process.** Examination and Evaluation are Conducted in following manners:-

UG

The under graduate examination consists of internal assessment and annual basis as detailed below as per VCI norms.

Internal Assessment **First** **Second** **Third**	**Course Coverage** **30%** **60%** **90%**	**Max Marks 40** **Max. Marks 40** **Max. Marks 40**	**Weightage 10** **Weightage 10** **Weightage 10**
Annual examination (Theory)	Paper-I Paper-II	Max. Marks 100 Max. Marks 100	Weightage 20 Weightage 20
Annual examination (Practical Theory)	Paper-I Paper-II	Max. Marks 60 Max. Marks 60	Weightage 20 Weightage 20

During COVID 19 online examination as per guidelines of VCI has been followed:-

PG: -

The Post graduate examination conducted as per guide line by Regulations on Resident instruction by BAU in following manners.

Type of examination	**Course involving practical (Max. marks)**	**Course involving no practical (Max. marks)**	**Course involving practical only (Max. marks)**
a) Quiz and assignment	10	10	10
b) Midterm examination	15	30	40
c) Practical examination And Viva voce	25	10 (Viva-voce)	50
d) End term	50	50	-
Total	100	**100**	**100**

b. Attendance requirements

A minimum of 75 per cent attendance separately in theory and practical of the concerned course is a must, failing which the student is not permitted to appear for both final theory and practical examination in the course concerned.

c. Grading:

Based on the evaluation in each course, the students are awarded grades as per the following scheme –

OGPA	Description of Performance
9.00 to 10.00	90 to 100%
8.00 to 8.99	80 to 89.9%
7.00 to 7.99	70 to 79.9%
6.00 to 6.99	60 to 69.9%
5.00 to 5.99	50 to 59.9%
4.00 to 4.99	40 to 49.9%

In deficiency courses "S" or "US" grade is awarded which has no effect on GPA/OGPA. The students must obtain a minimum OGPA of not less than 5.0 to qualify for the degree. Based on the position of result, Detailed Marks Card (DMC) isissued to all the students. The DMC clearly shows GPA/OGPA at the end of each semester. On completion of degree, division is indicated in the DMC of final semesters (year) as under:

OGPA	Description of Performance
5.00 to 5.99	2nd Class
6.00 to 7.49	1st Class
7.50 and above	1st Class with distinction

d. Weightage for theory and practical examinations is given below:
60 percent theory and 40 per cent practical in following manner

Annual examination (Practical Theory)	Paper-I Paper-II	Max. Marks 60 Max. Marks 60	Weightage 20 Weightage 20

e. Comprehensive examination (Written and Viva Voce/Oral):

In PG and Ph.D., after completion of 75% course work separately in major and minor subjects, written comprehensive examination is conducted. In major subject two papers and in minor subject one paper is conducted. Paper setting and evaluation is internal and qualifying marks are 60%. Viva Voce/Oral comprehensive examination is conducted by external examiner and grading is Satisfactory/ Unsatisfactory.

f. Thesis evaluation:

Examination Steps	Master's Programme	Doctoral Programme
i) Submission	After thesis seminar	• After thesis seminar, • One research paper should have been accepted and second submitted or one patent filed out of thesis work
ii) Evaluation	External (One examiner)	External (Two examiner)
iii) Viva Voce	Advisory Committee and one external examiner	Advisory Committee and one external examiner
	Satisfactory/ Unsatisfactory	Satisfactory/ Unsatisfactory

6.5.4.6 NCC/ NSS Units:

NCC unit of Ranchi College of Veterinary Science and Animal Husbandry has been functioning from the very beginning of the University itself. It is offered for three years to undergraduate students. The students are trained to develop among them the character, discipline, leadership, secular outlook, spirit of adventure and ideals of selfless service. NCC teaching is creating a human resource of organized, trained and motivated youth for providing leadership in all walks of life and personnel who are always available for the service of the nation.

NCC unit is providing an environment for motivating the youth to take up a career in the Defense Forces of the country. Duty and disciplined is inculcated amongst the youth of the College. The students undergo a rigorous training by doing drill, weapon training, sports and cultural activities, social activities, blood donations etc. The students participate in different kinds of camps. Apart from military training, non-military subjects just like history and culture of India, health and hygiene, religions customs, traditions, social and moral values of Indian society are also taught. The students are made to be well-versed in the legacy of freedom movement. They are taught about the personalities of Indian history like Maharana Pratap, Chhatrapati Shivaji, Rani Laxmi Bai, Guru Gobind Singh and other revered characters such as Netaji Subhash Chandra Bose & his INA, Poet Ravinder Nath Tagore, Allama Iqbal etc. are also made known to the cadets. Any current issue of social, moral, scientific, environmental and national importance is discussed with students from time to time. NCC 'B' Certificate is awarded to all the Cadets passing the NCC examination. For the last five years, there is nearly cent-percent pass result in 'B' Certificate examination with good grading.

National Service Scheme (NSS) unit of Ranchi College of Veterinary Science and Animal Husbandry has been functioning from the very beginning of the University itself. It is considered as a part of academic studies for the undergraduate students of the college. It is offered as a course of one credit in each academic year

Year	**Number of Students**
2016-17	95
2017-18	96
2018-19	98
2019-20	105
2020-21	112

List of Days and Weeks

Sl.No.	**Day**	**Date**	**Year**				
			16-17	**17-18**	**18-19**	**19-20**	**20-21**
01	Youth Day	12th January	√	√	√	√	Online
02.	RepublicDay	26thJanuary	√	√	√	√	Online
03.	MartyrDay	30thJanuary	√	√	√	√	Online
04.	InternationalWomen Day	8thMarch	√	√	√	√	Online
05.	WorldHealthDay	7thApril	√	√	√	-	Online
06.	Anti-TerrorismDay	21stMay	√	√	√	-	Online
07.	WorldNoTobacco Day	31stMay	√	√	√	-	Online
08.	World EnvironmentDay	5thJune	√	√	√	-	Online
09.	WorldPopulationDay	11thJuly	√	√	√	Online	Online
10.	IndependenceDay	15thAugust	√	√	√	Online	Online
11.	SadbavanaDay	20thAugust	√	√	√	Online	Online
12.	InternationalLiteracyDay	8thSeptember	√	√	√	Online	Online

13.	InternationalPeace Day	15thSeptember	√	√	√	Online	Online
14.	NSSDay	24thSeptember	√	√	√	Online	Online
15.	NationalBloodDonationDay	1stOctober	√	√	√	Online	Online
16.	CommunalHarmonyDay	2ndOctober	√	√	√	Online	Online
17.	NationalIntegrationDay	19thNovember	√	√	√	Online	Online
18.	WorldAIDSDay	1stDecember	√	√	√	Online	Online
19.	WorldHumanRightsDay	10thDecember	√	√	√	Online	Online
	WEEK		√	√	√	Online	Online
01.	NationalYouthWeek	12-19 January	√	√	√	Online	Online
02.	VanMahotsavaWeek	1-7July	√	√	√	Online	Online
03.	InternationalLiteracyweek	8-14July	√	√	√	Online	Online
04.	QuamiEktaWeek	19-25November	√	√	√	Online	Online

Activities

- April,16: NSS volunteers involved in vaccination campaigning programme on 19th April, 2016 at Samudaha village of Kanke block. The one hundred fifty cattle were vaccinated for HS + BQ.

- September,2016: The volunteers spread the message of communal harmony and national integration among students, employee, teachers, Scientists and the public. The NSS cadets of RVC collected Rs 900/ as donation in RVC campus to help child victims of communal and other forms of societal violence for their rehabilitation. The collected donation deposited in A/c No.007010110006040 (Bank 0f India) in the name of Secretary, National Foundation for Communal

Harmony, New Delhi on 13th September.

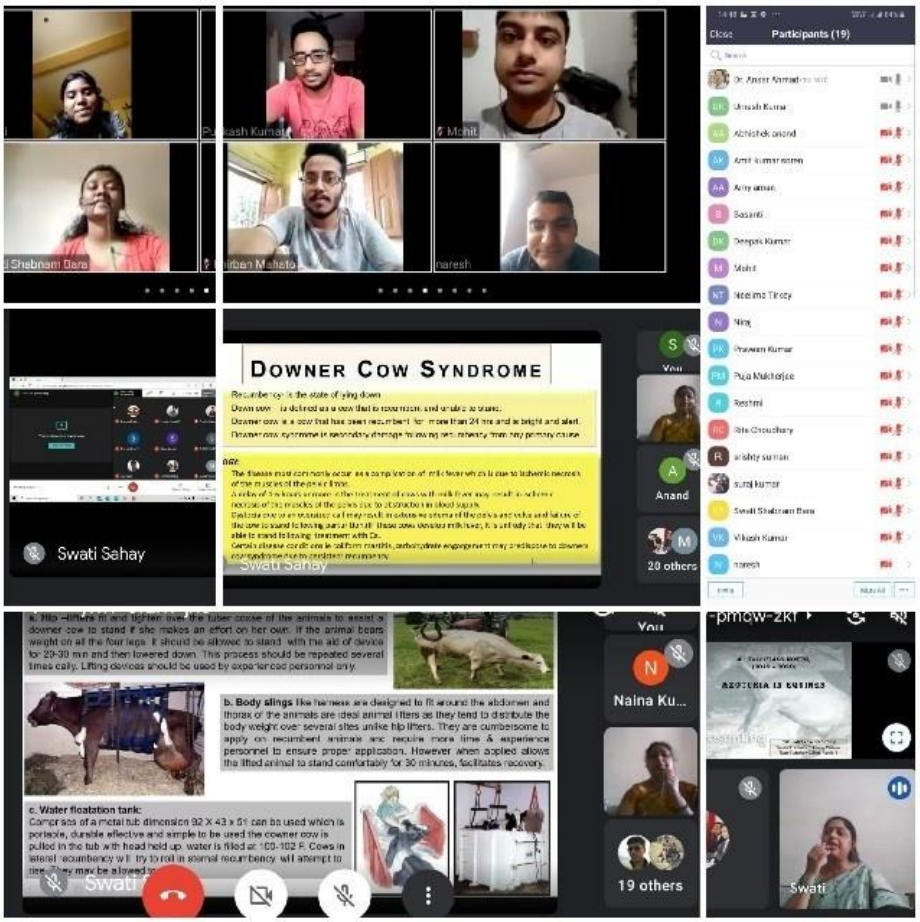
- November, 2016: Blood donation camp was organized on 26th November, 2016 with collaboration with Rotary club on occasion of World Veterinary day. Twenty volunteers donated the blood.
- January, 2017: NSS volunteers participated in Vaccination of FMD on 11th January at Villages Sukurhuttu and Kadma. The 100 cattle and 75 goats were vaccinated. NSS volunteers participated in flag hosting on eve of Republic Day.

6.5.4.7 Language Laboratory:

- At present, there is no language laboratory. Classes are conducted by the experts. Students also access online resources in ARIS cell and Computer Centre.

6.5.4.8 Cultural Center:

Cultural activities are conducted from time to time to commemorate important days related with veterinary field. In particular, World Veterinary Day is celebrated every year on last Saturday of the April month and different events are organized like Quiz competition, spotting competition, etc. Veterinary Week is also celebrated with different events like Quiz, Painting, Drawing, Poster competition, Rangoli competition etc.



Photographs of the student activities under cultural center:

AGRIUNIFEST attended by Students of Birsa Agricultural University (2016-2020):

1) XIVthAgriunifest during 01 – 04 February, 2016 at OUAT, Bhubenshwar
2) XVIIthAgriunifest during 22 – 25 February, 2017 at RUVAS, Bikaner
3) XVIIIthAgriunifest during 12 – 16 February, 2018 at SVVU, Tirupati, Andhra Pradesh
4) XIXthAgriunifest during 03 – 07 February, 2019 at SKDAU, Gujarat
5) XXthAgriunifest during 08 – 12 February, 2020 at IGKV, Raipur

6.5.4.9 Personality Development:

Personality of each passing student is groomed with the objective so that he/she is able to face any interview in future and succeed in life. For this purpose, students are encouraged for a proper

presentation on certain assigned topics which is delivered through power point presentation. Student corporate interactions are also organized from time to time. A mock group discussion session is also organized for internship students before completion of their degree.

6.5.5 Physical Facilities:

6.5.5.1 Hostels:

Adequate hostel facilities are available for girls and boys separately with required amenities including dining halls, common room, kitchen, guest room, sick room etc. The details of the hostels and infrastructure facilities are as follows –

Particulars	Boys Hostel			Girls Hostel		
	Hostel 1	Hostel 2	Hostel 3	Hostel 4	Hostel 5	Hostel 6
Total Capacity (Nos.)	123	123	123	81	72	18
Type of Room	3 seated	3 seated	3 seated	Single seated	3 seated	Single seated
Mess Facility	Available	Available	Available	Available	Available	Available
Drinking Water Facility	Available	Available	Available	Available	Available	Available
Indoor games	Available	Available	Available	Available	Available	Available
Transport Facility	Available at College level					
Emergency Medical Facility	University level					
Cleaning of Hostel Premises	Available	Available	Available	Available	Available	Available
Wi-Fi Connectivity	Available	Available	Available	Available	Available	Available
TV Hall	Available	Available	Available	Available	Available	Available
Common Reading Room	Available	Available	Available	Available	Available	Available
Fitness Centre	Available at Gymnasium and Hostel No.2					
Student Welfare Committee	Available	Available	Available	Available	Available	Available

6.5.5.2 Examination Hall:

The college has one well-ventilated examination hall with 350 seating capacity, furnished with armed chairs, electric fans, large windows, lights, drinking (RO) water facility, wall clock, ringing bell, electric fans and racks for safe keep of students' belongings. Examination hall is fitted with CCTV cameras for

monitoring the students by the Dean. The lecture rooms of the college are also used for conducting UG, PG and Ph.D. examination as per requirement.

6.5.5.3 Sports and Recreation Facilities: Sports is integral part of curriculum. The institute creates healthy atmosphere by providing required sports facilities and gymnasium. Facilities available in the college for sports and game activities and achievements made in sports and games are detailed below

Sl. No.	Games and Sports	Equipment and infrastructure available
1	Athletics	Available in hostels and the university sports complex
2	Volleyball	Available in the university sports complex
3	Basket Ball	Available in the university sports complex
4	Cricket	Available in the university sports complex
5	Football	Available in the hostels and university sports complex
6	Badminton	Available in the hostels and university sports complex
7	Table Tennis	Available in the hostels and university sports complex
8	Chess	Available in the hostels and university sports complex
9	Carom	Available in the hostels and university sports complex

6.5.5.4 Auditorium:

The college has its own double story auditorium with the total seating capacity of 350.The auditorium is frequently used for various programme like seminars, symposium, workshops and cultural activities.

6.5.5.5 Exhibition Hall/ Museum:

The Museum is located in deptt. OfVety. Anatomy and Vety. Pathology, where different departmental samples are displayed for educational purpose. In addition, the college also has its own Livestock Farm Complex (LFC), Veterinary Clinical Complex (VCC), Post-mortem Hall, and feed processing plant, etc.

6.5.6 Research Facilities:

6.5.6.1. Postgraduate laboratories and Equipments:

a) Laboratories:

The department-wise under-graduate and postgraduate laboratories are mentioned in the following table –

Sl. No.	Department	PG Laboratory
1	Veterinary Anatomy	Available
2	Veterinary Physiology	Available
3	Veterinary Biochemistry	Available
4	Veterinary Pharmacology & Toxicology	Available
5	Veterinary Parasitology	Available
6	Veterinary Microbiology	Available
7	Veterinary Pathology	Available
8	V.P.H.E.	Available
9	Animal Nutrition	Available
10	A.G.B.	Available
11	Livestock Production Management	Available
12	Gynecology & Obstetrics	Available
13	Surgery & Radiology	Available
14	Veterinary Medicine	Available
15	Veterinary & Animal Husbandry Extn. Edu.	Available
16	Livestock Processed Technology	Available
17	V.C.C.	-
18	I.L.F.C.	Available
19	Aquaculture	Available

a) Equipments:

The department-wise equipments are mentioned in the following table –

Department	Name of the Equipments
Veterinary Anatomy	Steel or Iron racks for bones Show-cases (glass paneled) for museum Compound microscopes Binocular microscopes P H meter Hot air oven Cadaver injector Slide warmer Semiautomatic or Automatic rotary microtome Tissue floatation bath Histoembedder Refrigerator (double door) Drilling machine for skeleton mounting sets Electric bone saw Post mortem sets
Veterinary Physiology	PCR ELISA Electrocardiograph Hemocytometer Hemoglobinometer Hot air oven Electronic monopan balance Water bath Centrifuge machine Spectrophotometer Microscope Deep Freezer Cup anemometer Rain gauge
Veterinary Biochemistry	PCR ELISA Electrocardiograph Hemocytometer Hemoglobinometer Hot air oven Electronic monopan balance Water bath Centrifuge machine Spectrophotometer Microscope Deep Freezer Cup anemometer Rain gauge
Veterinary Pharmacology & Toxicology	Demonstration table with electrical points,drainage,steriotaxic control etc.

	Observation cages for rats and mice Tuberculin syringes Monopan balance Compound microscope Binocular microscope Colorimeter Centrifuge (1000 RPM) Incubator (Bact.) Refrigerator (Double door) Dispensing scales with metric and apothecaries wt. Marble slab Pill tiles Spatula (iron, plastic and ebonite) Mortar and pestle (Porcelain& glass) Measuring glasses, cylinder Dispensing phials, pillbox etc. of various sizes Funnels, sieves and other miscellaneous items pH meter (digital) Electronic stimulator Deep freezer Water Still Serological water bath Vortex stirrer Tissue homogenizer Rectangular hot plate Temperature indicator Overhead projector LCD Projector Single pan electrical balance Digital Electronic top loading balance Vacuum pump U.V.Spectrophotometer Rota rod Analgesiometer (Hot Plate type) Analgesiometer (Tail flick type) Pole climbing apparatus Auto analyzer with all accessories Computer with scanner and printer Biosafety Cabinet Micro/Macro digestion chamber/units for sample digestion Vacuum Evaporator (Rotatory Type) Autoclave CO2 incubator Sonicator (UltraSonic) Rotatory Shaker Water Deionizer Atomic absorption spectrophotometer GCMS

Veterinary Parasitology	Microscopes including trinocular Autoclave BOD Incubator Bacteriological Incubator Hot air oven Hot plate Blood cell counter Water bath Laminar flow Deep freeze (-20 O C) Cooling centrifuge Centrifuges Spectrophotometer Vertical slab gel electrophoresis assembly Vortex shaker Magnetic stirrer Refrigerator
Veterinary Microbiology	Autoclave Horizontal Autoclave Hot air oven Instrument sterilizer Seitz filter assembly including Seitzfilter, vacuum pressure pumps etc. Other filters (Bakefield, Chamberland and membrane filters) Microscope Ultra-violet microscope with U.V assembly Stage and Ocular micrometer Hanging drop preparation slide with cover-slips Petri-dishes Inoculation loops Bunsen burners McIntosh and Feldt anaerobic jar Incubator Co2 Incubator Biological Oxygen demand (B.O.D.) Incubator Water bath Gel Chromatography apparatus Immunoelectrophoresis unit Centrifuge bucket High speed centrifuge Refrigerated centrifuge Ultra centrifuge Replica plate Freeze dryer Inoculation cabin Cubicals for Virological works Automatic pipette washer Deep-freeze (-20 0C) Deep-freeze (-700C)

	Laminar flow cabinet Triple –distillatory Metal distillatory Colony counter Perspex plates for H.A. tests. ELISA test reader Cages, syringe etc. Surgical instruments
Veterinary Pathology	Cryostat Microtome Rotary microtome, AO Spencer type with thin sectioning facility Paraffin floatation bath (temp. control 55-650 C) Paraffin bath/oven Dark field illumination with projecting units Phase contrast microscope Monocular and Binocular microscopes Overhead Projector (OHP), LCD Projector with screen Digital Camera with PC for Microscopic Photography Refrigerator Deep Freeze Centrifuge Hot air oven (Temp. 250oC) Microtome, knife sharpener to and fro with side shifting arrangements (Automatic) Autopsy table for birds (S.S. top with drain Autopsy table for small animals Specimen cutting table Autopsy knives Post-Mortem sets (with chisels, saw, rib cutter, shears, bone cutter, sharpener, etc.) Bone cutting saw (electric) Carcass trolley/carcass van (fully covered) Platform balance (large and small) Monopan digital balance (for weighing organs) Haemocytometer Haemoglobinometer
Veterinary Public Health and Epidemiology	Autoclave Hot air oven Bacteriological incubator Centrifuge Spectrophotometer Binocular microscope Monocular microscope Colony counter Electronic balance BOD incubator Micropipette Deep freeze (-200C) Laminar flow

	Laboratory refrigerators Vertex Shaker Magnetic stirrer Tissue homogenizer
Animal Nutrition	Protein Analyzer Hot air oven Electronic monopan balance Muffle furnace Desiccator Suction Pump Digestion set Grinder Balance (250Kg) Soxhlet apparatus set Water bath Centrifuge machine Spectrophotometer Microscope Fibre estimation apparatus
Animal Genetics and Breeding	Computers Hot air oven (450x600 x 450 mm) Microscope Water bath Slide Projector Centrifuge machine Triple beam Balance 111 gm. and 3 kg
Livestock Production Management	Shearing and clipping equipment Tattooing set, tags etc. Vernier Calipers Screw Gauge Branding set Castrator (for different species) Gerber's centrifuge
Gynecology & Obstetrics	Compound Microscope Binocular Microscope Travis Hemocytometer Monoplane balance Compound microscope Binocular microscope Embryotomy set Kelver training cow Electro ejaculator Autoclave Artificial Vagina Instrument Cabinet Whelping set Surgical Instruments

	Holmes needle Vaginal Clamp Automatic pipette Washer Incubator Semen shippers Thermos Flask Insemination catheter Storage tubes(cylinder) Stand for storage cylinders Swab holder Instrument sterilizer Record Syringe Injection cannula Rinsing pan Nose tongs Protective cloth Latex liner for AV Latex funnel Insulating bags Metal funnel Measures Drop pipette Filter paper Water suction pump Glassware Centrifuge (1000 RPM) Refrigerator Hot air oven CASA Flowcytometer USG Phase contrast microscope Biobreezer Cold cabinet Incubator CO2 Incubator Deep freezer Steriozoom microscope
Surgery & Radiology	General surgical instruments Electro-cautery unit Diathermy unit Autoclave Hot air oven Centrifuge machine Bone saw Diathermy machine Laryngoscope Binocular microscope Trinocular microscope Nikkon digital camera

	Nerve muscle stimulator Digital electronic balance Dog nail cutter Other instructional unit:Operation theatre for small and large animal surgery is common for the department and VCC
Veterinary Medicine	Autoclave Balance pH meter Oven Microscope Binocular microscope Haemometer Haemocytometer Spectrometer Serological water bath Centrifuge Deep freezer Refrigerator Incubator
Veterinary & Animal Husbandry Extension Education	Black board, display board, chart stand . Projection screens Epidiascope Overhead Projector Slide Projector Amplifiers Stage mikes Horns Units Hooters Television(coloured) Video Cassette Recorder Video Cassette player Video Camera Camera 35 mm
Livestock ProductsTechnology	Refrigerator (Single door) Deepfreeze Electronic Monopan balance Laminar Air flow BOD Incubator Spectrophotometer pH meter Hot air oven Microscope Bleeding Cone Scalding Tank Feather plucking machine Butchering sets (Knives etc.) Lactometer

	Meat Slicer Sausages Filler Meat mincing machine (Electric) Meat mincing machine (Manual) Bowl Chopper Butter Worker Butter churner Butter Cutter Cream Separator Gerber's Centrifuge Machine Gerber's Butyrometer Muffle Furness Cooking range Hand sealing machine Mixer and juicer Autoclave Centrifuge Machine Colony Counter Tissue Homogenizer
Veterinary Clinical Complex (VCC)	Teat and udder instruments Biochemical Auto analyzer Incubator (Normal +BOD) Laminar Flow Binocular Microscope Haemoglobinometers Haemocytometers Centrifuge (ordinary) Electro surgery unit X-ray film viewers
Livestock Farm Complex (ILFC)	Tractor Rotovator Chaff cutter Mixer grinder Weighing machine Debeaking machine Incubator Castrator Automatic vaccinator Artificial insemination gun
Aquaculture	

6.5.6.2. Research Contingency:

Major amount of Contingency for research is met from ICAR budget – "CentralAssistance". Some amount is also mobilized from projects running in the college. Centralizedfacility from the university provides contingency as per demand and the requirement.

Following Research Projects were running in Past Five Years –

Sl. No.	Name of Project	Funding Agency	Duration	Budget
1	All India Co-ordinated Project on Poultry Breeding	ICAR	Since 2008 to till date	75 lakh per year
2	AICRP on Goat Improvement	ICAR	Since 2009 to till date	30-35 lakh per year
3	AICRP on Mega Seed Project on Pig	ICAR	Since 2008 to till date	80-90 lakh per year
4	OutreachProgramme on Monitoring on drug reduces and environmental Pollutant	ICAR	Since 2009 to till date	8 lakh per year

6.5.7 Outcome/Output

6.5.7.1 Student Performance in National Examination:

Year	JRF		SRF		ARS-NET		Others (Specify)	
	No.	**%**	**No.**	**%**	**No.**	**%**	**No**	**%**
2016	Nil	-	01		Nil	-		
2017	Nil	-	Nil		03	42.85%		
2018	Nil	-	Nil		01	8.33		
2019	Nil	-	03		08	80.00		
2020	04	16.66	Nil		N.A	N.A		

6.5.7.2 Student Placement Profile:

Total number of graduates 79

a) Joined in Government services (Including contractual teacher) - 17

b) Joined in Industry - 25
c) Self-employed : Farming - 02
d) Business - 03

e) Further Education - 30

(Annexure Annexed as 25_Annexure_XXV_RVC_6.5.7.2 _Placement Cell)

6.5.7.3 Awards/Recognitions/Certificates:

Papers published and awards and distinctions by faculty in a year during preceding 5 years:

Name of Awards/Recognitions/Certificates	**Awarding Organization**	**Year (20)**	**International/ National**
Dr. Suresh Mehta (Department of Veterinary Anatomy)			
Fellow IAVA Award	Indian Association of vety. Anatomy	2016	National
Outstanding achievement award in the field of veterinary Anatomy	PRAGATI	2019	National
Excellence in Teaching Award	Agriculture environmental and biological science	2020	**International**
Best poster presentation award	DISHA	2019	National
Dr. ArpanaMinj			
Fellow IAVA Award Best PhD. Thesis award	Indian Association of Vety. Anatomy	2016	National
Dr. Md. Taufique Ahmad			
Best poster presentation	DISHA- 2019.	2019	National
Young professional award	PRAGATI-2019	2019	National
Best oral presentation award	PRAGATI-2019	2019	National
Best M.V.Sc. Thesis award	Agriculture environmental and biological science	2020	National
Dr. Kundan Kumar			
Best oral presentation award	DISHA	2019.	National
Best oral presentation award	Central Zone and East Zone & National Symposium	2020	National

Award:

i. Dr. Alok Kumar Pandey awarded "Dr. V. Kureen Lifetime Achievement Award" for significant contribution to the society and upliftment of Dairy Sector on the occasion of world milk day- 2021 by PashudhanPraharee.

ii. Dr. J. Oraon was awarded"Outstanding Achievement Award"on the occasion of National Conference on Doubling Farmers Income for Sustainable and Harmonious Agriculture (Disha 2019) By S&T Society, Telangana.

iii. Dr. Alok Kumar Pandey was awarded "Outstanding Achievement Award" in the field of Dairy Science conferred by Science & Tech Society for Integrated Rural Improvement on the occasion of National Conference on Doubling Farmers Income for Sustainable and Harmonious Agriculture (DISHA-2018) on 11-12 August 2018 at Ranchi.

iv. Dr. Alok Kumar Pandey was awarded for "Best Paper Presentation Award" for the paper entitled "Farming System Model For Micro Watershed In Rain Fed Areas Of Jharkhand" during ISEE national Seminar on Integrated Farming System for enhancing Farmer's income and nutritional security at West Bengal Univ. of Animal & Fishery Sciences, Kolkata, West Bengal on 05-07 December 2018.

v. Dr. Bhushan Kumar Singh was awarded "Young Scientist Award" conferred by Science & Tech Society for Integrated Rural Improvement on the occasion of National Conference on Doubling Farmers Income for Sustainable and Harmonious Agriculture (DISHA-2018) on 11-12 August 2018 at Ranchi.

vi. Dr. Bhushan Kumar Singh was awarded for "Best Paper Presentation Award" for the paper entitled "Use of Information Media and Awareness Status Regarding Dairy Animal Welfare Practices in Jamtara District of Jharkhand." during ISEE national Seminar on Integrated Farming System for enhancing Farmer's income and nutritional security at West Bengal Univ. of Animal & Fishery Sciences, Kolkata, West Bengal on 05-07 December 2018.

vii. Dr. Bhushan Kumar Singh was awarded "University Gold Medal" for securing highest OGPA in M. V. Sc for the year 2014-15 conferred during 6th Convocation of BAU held on 29/01/2019.

viii. Dr. Bhushan Kumar Singh was awarded for Outstanding M. Sc. Thesis award by SAID, Ranchi in LFS- 2018.

ix. Dr Madhurendu Kumar Gupta was awarded "Best Pathology Worker Award" by Indian Association of Veterinary Pathologists- 2021.

6.5.7.4 Employability:

Promotion of innovation in application of information communication technology in Vety Science and Animal Husbandry plays a critical role in knowledge-based growth ofVetyScience. Therefore, it is imperative to update the professional skills of teachers, researchers, extension specialists and students in the latest knowledge and techniques in the field of their specialization to bring about the desired qualitative improvement and necessary orientation to contemporary problems to make research and education more relevant. The basic objective in the competency framework of the college is not only to have the required competencies for the job but are also be able to promote development and delivery of need-based research and educational programme for the students that would enhance the livelihood

security and build up an easy, accessible and cost-effective knowledge. Career progression of students is also linked with periodic exposure to capacity building programme. The Ranchi College of Veterinary Science and Animal Husbandry provide a complete package of facilities to the students for building up their career.

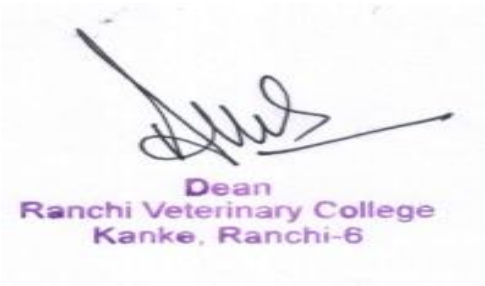
The veterinarian is always in demand both in private and government sector owing to their skill as a clinician, researcher, manager and extension worker. The students are hardworking, sincere and possess excellent communication skills. They are trained rigorously to excel in all situations. The course curriculum is designed to allow students to develop entrepreneurship and leadership qualities.

The students are imparted experience through learning by doing. They practice AI, vaccination, surgery, post-mortem and pathological tests. They are also exposed to real field situation so that they could be aware about the field problem.

6.5.8 SSR of the College must have the SSR of all its Degree Programmes (following section 6.4), then the report of the Colleges shall be considered.

6.5.9 Certificate (Applicable when SSR is submitted for Programmes& College)

I, the Dean Dr. Sushil Prasad of College of Veterinary Science and Animal Husbandry, BAU hereby certify that the information contained in Sections 6.4 and 6.5.1 to 6.5.7.4 are furnished as per the records available in the college and degree awarding university.



Signature of Dean of the College with Date & Seal

6.4. Self-Study Report for M. V. Sc. DegreeProgrammein Veterinary Anatomy

6.4.1. Brief History of the DegreeProgramme:

M.V.Sc. Postgraduate programme in the department of Veterinary Anatomy was started in 1972. A total of 06 seats for M.V.Sc. Programme in this department have been allotted by the university which may very time to time as per availability of teachers. Till date18 M.V. Sc. Students have beenpassed out.

Objective:

1. To produce the good quality students and scientists who are capable enough to contribute in the field of animal health and research related to Department of Veterinary Anatomy and Histology.
2. To impart training programmes for field veterinarians/ clinicians to refresh their anatomical knowledge.
3. To undertake research programmes on basic of applied anatomy.
4. To develop abilities of creative thinking and analytical power to understand the knowledge gaps in the field of Veterinary Anatomy and Histology as well as develop writing skill to express the research findings in scientifically appropriate manner.
5. To develop aptitude to work on modern instruments and techniques for carrying out high quality research so that it could be published in high impact factor journals.
6. To establish up to date laboratories which could be utilized for current day scientific approaches.
7. To assist clinical subjects in understanding the proper site of different organs of body system for clinical investigation.
8. To develop aptitude to work on different procedure of cytology, histology, Histo-chemistry,Histo enzymatic chemistry and electron-microscopic.

Accomplishments:

1. Published three books on (i) Fundamental of veterinary embryology. (ii) Question Bank on Veterinary Science**.**(iii) Doubling farmers income through livestock and fisheries interventions.

2. From 2016-to 2020 four M.V.Sc degree awarded on light and ultrasstructural studies on blood cells of different birds as well as Histological and certain Histochemial studies on oviduct of Jharseem and Dahlem Red Hen.

3. Two Post graduate students jointed as Veterinary officers in Jharkhand government and two students cleared national level ICAR-NET examination.

The faculty members of the department of Anatomy are awarded with excellence in teaching award, Fellow Indian Association of Veterinary Anatomist, Anatomist of the year (IAVA) award. Best Ph.D.Thesis Award, Best PG thesis awards, Best paper award and poster presentation award in national and international symposium, Young professional award best Scientist Award,. Outstanding achievement award in the field of Veterinary Anatomy.

6.4.2. FacultyStrength:

S. No.	Name of Post	Sanctioned strength	Staff in place	Vacant position	Staff recommended by the ICAR/UGC/VCI /other regulatorybodies
1.	Professor	1	Zero	One	One
2.	Associate Professor	2	Zero	Two	Two
3.	Assistant Professor	3	Three	Zero	Two

6.4.3. Technical and Supportingstaff:

S. No.	Name of Post	Sanctioned strength	Staff in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/other regulatorybodies
1.	Artist cum photographer	One	1	Zero	One
2.	Animal Attendant	Two	0	Two	Two
3.	Sweeper	One (Casual worker)	1	Zero	Two

6.4.4. Classrooms andLaboratories:

a) Details of Classrooms andLaboratories:

S. No	Particular	Number
1	Osteology Laboratory	1
2	Histology & Embryology Laboratory	1
3	Post Graduate Laboratory	1
4	Dissection Hall	1
5	Museum	1

a) Lists of major equipment's:

S. No	Name of equipment	Number
1	Microtome	3
2	Cryostat Microtome	2
3	Binocular microscopes	30
4	Monocular microscopes	2
	LCD projection TV	1
6	LCD projector	1
7	Autoclave	1
8	Hot air oven	1
9	Microscopic histology slides	200
10	Refrigerator	1
11	Computer with printer	1
12	Maceration tanks	1
13	Storage room for splanchnology specimens	1
14	Skeletons of all domesticated animals and birds	10
15	Trinocular microscope	1
16	Tissue embedding system	1
17	Millipore purifier	1

b) Theory and PracticalBatches:

S. No.	Courses	Theory Batch	Practical Batch
1	Post graduate	1	1

6.4.5. Conduct of Practical andHands-on-Training:

- Dissection has been carried out on cadavers obtained from postmortem.
- specimens are being used which were collected from dead animals without communicable diseases
- Computer simulations software, and previous specimens of different organs present in museum are being utilizedfor practical demonstration.
- Skeletons of all domesticated animals and birds are available for practical demonstration

6.4.6. Supervision of students in M.V. Sc. programme:

S.No.	Name of the students	Title of Thesis	Year of passing	Major Advisor
1	Dr.Saumya Shalini	Cyto-morphological, Cyto-chemical and Cyto-enzymic studies on blood cells of domestic fowl, duck and Japanese quail	2016	Dr. Suresh Mehta
2	Dr. Taufique Ahmad	Comprative histological and certain histochemical studies on oviduct of Jharseem and Dhalhum red hen (*Gallus domesticus)*	2018	Dr. Suresh Mehta
3	Dr. Kundan Kumar	Cyto-morphological, Cyto-chemical , Cyto-enzymic and Ultra-structural studies on blood cells of domestic Emu	2019	Dr. Suresh Mehta
4	Dr. Naveen Kumar	Comparative Cyto-morphological, Cyto-chemical and Cyto-enzymic studies on blood cells of domestic fowl, Guinea fowl and Pigeon	2019	Dr. Suresh Mehta

6.4.7. Feedback of stakeholders: Yes

Feedback from students is being taken at the end of every session.

6.4.8 Student Intake and Attrition in theProgramme:

Name of Degree Programme	Actual student admitted in last five years (From session 2016-17 to 2020-21)					Attrition (%)				
	Y1 2016-17	Y2 2017-18	Y 3 2018-19	Y4 2019-20	Y5 2020-21	Y 1	Y2	Y 3	Y4	Y5 2020-21
M.V.Sc (Department of veterinary Anatomy)	02 (04)	01 (04)	00 (04)	00 (04)	00 (04)	02 50 %	03 75%	04 100%	04 100%	04 100%

*****Data in parenthesis is the sanctioned strength of students in different year

6.4.9 ICT Application in CurriculaDelivery:

- All he lectures delivered through PowerPoint presentation with latest up gradation of Veterinary Anatomy and Histology
- The practical demonstrations are viewed with the help of different audio- visual aids like CD-ROM, You Tube, Videos, e-journals.
- The position and location of different organs percussion and auscultation site of nerve block, site of various operations are demonstrated regularly to the students with the help of LCD projector and computer.
- Guide the postgraduate students to collect the research materials and advanced study materials online.

6.4. Self-Study Report for M. V. Sc. DegreeProgrammein Veterinary Physiology

6.4.1 Brief History of the DegreeProgramme: The department came in its present shape of Veterinary Physiology in July 2014 as per the mandate of VCI guideline Department is offering M.V.Sc. in Veterinary Physiology separately from 2004.

Objective: (i.)To provides quality education to M.V.Sc. Students in Veterinary physiology

(ii.) To undertake research on recent area based on the need of the farmers.

(iii.) To provide diagnosis of clinical cases by hematobiochemical **tests**

Accomplishments:

(i.)Two M. V. Sc student passed

(ii.) The department is engaged in teaching of M.V.Sc. student of Veterinary Physiology and other Department**.**

6.4.2 FacultyStrength:

S.No.	Name of post	Sanctioned strength	Faculty in place	Vacant position	Faculty recommended by the ICAR/UGC/VCI/other regulatory bodies
1	University Professor	1	0	1	VCI
2	Associate Professor	2	0	2	VCI
3	Assistant Professor	2	2	0	VCI

6.4.3 Technical and Supportingstaff:

S. No.	Name of Post	Sanctioned strength	Staff in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/other regulatorybodies
1.	Lab. Technician 1	1	0	1	VCI
2.	Stenographer 1	1	0	1	VCI
3.	Asstt. Accountant 1	1	0	1	VCI
4.	Lab. Assistant 1	2	1	1	VCI
5.	Junior Assistant 2	2	0	2	VCI
6.	Animal Attendant	2	1	1	VCI

7.	Sweeper 1		0	1	VCI

6.4.4. Classrooms andLaboratories:

a) Details of Classrooms andLaboratories:

S. No	Particular	Number
1	UG laboratory	1
2	PG Laboratory	01

b) Lists of majorequipments:

S. No	Name of equipment	Number
1	Microscope	10
2	Distillation set	1
3	Centrifuge (5000 RPM)	2
4	Spectrophotometer	1
5	Kymograph	4
6	Autoclave	1
7	Heamometer	10
8	Refrigerator	1
9	Milipore	1
10	Sphygmomanometer	1

c) Theory and PracticalBatches:

S. No.	Courses	Theory Batch	Practical Batch
1	M.V.Sc	1	1

6.4.5 Conduct of Practical andHands-on-Training: Practical is conducted regularly**.**

6.4.6 Supervision of students in PGprogramme:

M.V.Sc.				
1.	Dr. Asha Lata Murmu	"Studies on the effect of meteorological variables on physiological, haemato-	2020	Dr. R. K. Verma

		biochemical and oxidative stress in Black Bengal goat".		

6.4.7. Feedback of stakeholders: The department of Veterinary Physiology provides quality teaching and research as per the need of local farmer requirement**.**

6.4.8 Student Intake and Attrition in theProgramme:

Name of Degree Programme	**Actual student admitted in last five years (From session 2016-17 to 2020-21)**					**Attrition (%)**				
	Y 1 2016-17	**Y2 2017-18**	**Y 3 2018-19**	**Y4 2019-20**	**Y5 2020-21**	**Y 1**	**Y2**	**Y 3**	**Y4**	**Y5 (Current Year)**
M.V.Sc.	NIL	1	Nil	Nil	1		100%			

*****Data in parenthesis is the sanction strength of students in different years

The total number of sanction strength of M.V.Sc. programme is for per year approved by academic council.

6.4.9 ICT Application in CurriculaDelivery:

- Developed power point slides to teach the postgraduatestudents. Yes
- Demonstrate different experiments to students by You Tubevideo.yes

6.4. Self-Study Report for M.V. Sc. Degree Programme in Livestock Production & Management (LPM)

6.4.1. Brief History of the DegreeProgramme: M.V.Sc. degree programme in the department was initiated in the year 1982.

Objective

1. Development of state-of-art Livestock and poultry management facilities.
2. To carry out teaching, research and extension activities in collaboration with different divisions, in the upstream areas of Livestock and poultry production.
3. To standardize the package of management practices and to demonstrate the state-of-the-art Livestock and poultry production system to clients.
4. To provide consultancy to the needy farmers and entrepreneurs for establishment of commercial Livestock and poultry farms.
5. Augmenting fodder production to meet the nutritional requirements of livestock.

Accomplishments:

- Provided quality teaching to PG students.
- Students cleared national level ICAR- NET examination and selected in variousGovt. sector.
- The department started functioning from 1982 and is playing a vital role for training to farmers for in the scientific management of livestock, to equip them for self- employment, to adopt livestock husbandry as profession.
- Four ICAR Projects (AICRP on Pig, AICRP on Goat, AICRP on Poultry and Farmers First Project Livestock sector) and one state Government project (TSP project) is currently running under the Department.
- Department is maintaining Instructional farms (Dairy, poultry (Guinea fowl, Emu, Quail), varietal birds, pig, Goat, Sheep, Rabbit) for practical education and research activities for M.V.Sc. students.

6.4.2. FacultyStrength:

S. No.	Name of Post	Sanctioned strength	Staff in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/other regulatorybodies
1.	University Professor	2	01	01	
2.	Associate Professor	2	0	02	
3.	Assistant Professor	3	0	03	

6.4.3. Technical and Supporting Staff:

At present no permanent staff is there. The work is getting executed by casual and contractual staff.

6.4.4 Classrooms andLaboratories:

d) Details of Classrooms andLaboratories:

S. No	Particular	Number
1	Classroom	01
2	Laboratory	01
3	Library	01
4	Conference hall with audio visual aid	01

e) Lists of majorequipments:

SL.NO.	NAME OF EQUIPMENT	Number
1	TRACTOR and TROLLEY	01
2	KONICA MINOLTA 287 PHOTOCOPIER	01
3	DE 628 REVERSE AUTOMATIC DOCUMENT EEDER	01
4	INTRACTIVE TOUCH PANEL TT55 75'' INTRACTIVE BOARD	01
5	ENAMEL TRAY(12''X10'')	04
6	ENAMEL TRAY (12'' X 8'')	04
7	ENAMEL TRAY (14'' X 19'')	04
8	PHYSICAL BALANCE	01
9	VERNIER CALIPER WITH VAL VEL BOX	02
10	SPHERO METER	02
11	SMALL SCREW GAUGE (BIG AND SMALL)	02
12	BURDIZZO CASTRATOR	01
13	AVERY PHYSICAL BALANCE	02
14	SPRING BALANCE (CAPACITY -10 KG)	02
15	COLD BRANDING	10

16	DOCKING MACHINE	03
17	TATTOOING FORCEP	01
18	HOT BRANDING (0-9)	10
19	HOT BRANDING (A-F)	06
20	COLD BRANDING (A-F)	06
21	SLIDE CALLIPER	02
22	HP LASER PRINTER MODEL 1005	01
23	HALOGEN HEATER	01
24	MILKING MACHINE	03
25	CHAFF CUTTER	01
26	EGG WASHING MACHINE	01
27	INCUBATOR (Setter + Hatcher + Brooder house)	01
28	REFRIGERATOR	03
29	DEEP FREEZER	02
30	KUDAL	02
31	BASULA	01
32	BALANCE	01
33	CALCULATOR	01
34	GRASS CUTTER	02
35	TORCH 2 CELL	01
36	BUCKET (STEEL)	08
37	SICKLE	02
38	BELCHA	08
39	STEEL CHAIR	02
40	GI TUB 36”	02
41	TUB 20”	16
42	CHAIR WITHOUT ARM + CHAIR WITH ARM	06
43	ENAMEL TRAY	02
44	AVERY INDIA SELF INDICATOR (10 KG)	01
45	REVOLVING CHAIR	03
46	FILE (RATEE)	02
47	BARDIZO CASTRATOR	03
48	SECTARIAN TABLE	02

49	GAMLA (ALUMINIUM)	06
50	FEEDER BIG	04
51	FEEDER SMALL	01
52	ELECTRICAL BALANCE	01
53	AVERY INDIA HANGING MACHINE (100 KG.)	02
54	GENERATOR	01
55	TROLLEY	02
56	BATTERY EXIDE	01
57	ROOM HEATER	01
58	B.N.C. JACK (C.C.T.V. CAMERA)	08
59	CAMERA	01
60	G.I. FEEDER TUB	14

f) Theory and PracticalBatches:

S. No.	Courses	Theory Batch	Practical Batch
1	Post graduate	01	01

6.4.5 Practical andHands-on-Training:

- Most of the practical classes are being conducted in the instructional farm according to the course.
- Hands on training is provided to the students by dividing in batches. Students are also instructed to present the things through power point presentation in conference room.
- We have prepared practical manuals and distributed among students for getting clear idea about the practical aspect.
- Theory class notes of different lecture are also provided to students.
- Students are satisfied practically during the hands-on training as per the syllabus.

6.4.6. Supervision of students in PGprogramme:

S. No.	Name of the students	Id. No.	Advisor	Admission year	Pass out year
1.	Dr. Niraj Kumar	V/BAU/20044/2013	Dr. Sushil Prasad	2013	2016

2.	Dr. Navin Kumar	V/BAU/4084 /2010	Dr. A.K. Srivastava	2015	2018
3.	Dr. Nirmala Minj	V/BAU/4259 /2011	Dr. Sushil Prasad	2016	2018
4.	Dr. Manmohan Kumar	V/BAU/4263 /2011	Dr. Sushil Prasad	2016	2018
5.	Dr. Mukesh Kumar	V/BAU/3953 /2009	Dr. Ravindra Kumar	2016	2018
6.	Dr. Pawan Kumar Verma	V/BAU/3891 /2009	Dr. Ravindra Kumar	2015	2019

6.4.7. Feedback of stakeholders

- Rice is the major crop in Jharkhand and rain fed agriculture is practiced. So farmers are unemployed during the off season so they are mainly dependent on livestock primarily Pig, backyard Poultry, Goat, Sheep etc.
- Department is providing 10 days training to the farmers as per the choice of farmers. After getting training farmers start the farming for employment.
- Educated and unemployed youth are coming to our department for getting advise and technical support for livestock farming.
- On an average we trained more than 1000 farmers (sponsored and unsponsored) in different livestock farm.
- Farmers are observed to be more inclined to piggery and backyard poultry farming.
- We have developed approximately 350 second line pig breeder in different district of Jharkhand for local supply of improved germplasm.
- After getting the feedback by the farmers regarding low productivity of indigenous pig and poultry we have developed a improved poultry variety named (**Jharsim**) and one improved pig variety named (**Jharsuk**) for better growth and reproductive performance at farmers door.
- We have discovered one indigenous pig breed named "**Purnea**". It has been registered to ICAR-NBAGR, Karnal in the year 2019.

6.4.8. Student Intake and Attrition in theProgramme:

Name of the degree programme	**Actual students admitted in last five years**					**Attrition (%)**				
	Y1	Y2	Y3	Y4	Y5 (Current year)	Y1	Y2	Y3	Y4	Y5 (Current year)
M.V.Sc.	01 (04)	- (04)	04 (04)	02 (04)	01 (04)	01 (25)	04 (00)	04 (0)	02 (50)	01 (25)

6.4.9 ICT application in curricula delivery: Department has audio visual aid in conference room as well as wifi connectivity for taking online classes of students through power point presentation. Students are also asked to make present through power point in different courses through online mode for better understanding.

6.4. Self-Study Report for Ph.D. Degree Programme in Livestock Production & Management (LPM)

6.4.4. Brief History of the Degree Programme: Ph.D. degree programme in the department was initiated in the year 2008.

Objective

6. Development of state-of-art Livestock and poultry management facilities.
7. To carry out teaching, research and extension activities in collaboration with different divisions, in the upstream areas of Livestock and poultry production.
8. To standardize the package of management practices and to demonstrate the state-of-the-art Livestock and poultry production system to clients.
9. To provide consultancy to the needy farmers and entrepreneurs for establishment of commercial Livestock and poultry farms.
10. Augmenting fodder production to meet the nutritional requirements of livestock.

Accomplishments:

- Provided quality teaching to PG students.
- Students cleared national level ICAR- NET examination and selected in variousGovt. sector.
- The department started functioning from 1982 and is playing a vital role for training to farmers for in the scientific management of livestock, to equip them for self- employment, to adopt livestock husbandry as profession.
- Four ICAR Projects (AICRP on Pig, AICRP on Goat, AICRP on Poultry and Farmers First Project Livestock sector) and one state Government project (TSP project) is currently running under the Department.
- Department is maintaining Instructional farms (Dairy, poultry (Guinea fowl, Emu, Quail), varietal birds, pig, Goat, Sheep, Rabbit) for practical education and research activities for M.V.Sc. students.

6.4.5. Faculty Strength:

S. No.	Name of Post	Sanctioned strength	Staff in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/other

					regulatorybodies
1.	University Professor	2	01	01	
2.	Associate Professor	2	0	02	
3.	Assistant Professor	3	0	03	

6.4.6. Technical and Supporting Staff:

At present no permanent staff is there. The work is getting executed by casual and contractual staff.

6.4.4 Classrooms and Laboratories:

g) Details of Classrooms and Laboratories:

S. No	Particular	Number
1	Classroom	01
2	Laboratory	01
3	Library	01
4	Conference hall with audio visual aid	01

h) Lists of major equipments:

SL.NO.	NAME OF EQUIPMENT	Number
1	TRACTOR and TROLLEY	01
2	KONICA MINOLTA 287 PHOTOCOPIER	01
3	DE 628 REVERSE AUTOMATIC DOCUMENT EEDER	01
4	INTRACTIVE TOUCH PANEL TT55 75'' INTRACTIVE BOARD	01
5	ENAMEL TRAY(12''X10'')	04
6	ENAMEL TRAY (12'' X 8'')	04
7	ENAMEL TRAY (14'' X 19'')	04
8	PHYSICAL BALANCE	01
9	VERNIER CALIPER WITH VAL VEL BOX	02
10	SPHERO METER	02

11	SMALL SCREW GAUGE (BIG AND SMALL)	02
12	BURDIZZO CASTRATOR	01
13	AVERY PHYSICAL BALANCE	02
14	SPRING BALANCE (CAPACITY -10 KG)	02
15	COLD BRANDING	10
16	DOCKING MACHINE	03
17	TATTOOING FORCEP	01
18	HOT BRANDING (0-9)	10
19	HOT BRANDING (A-F)	06
20	COLD BRANDING (A-F)	06
21	SLIDE CALLIPER	02
22	HP LASER PRINTER MODEL 1005	01
23	HALOGEN HEATER	01
24	MILKING MACHINE	03
25	CHAFF CUTTER	01
26	EGG WASHING MACHINE	01
27	INCUBATOR (Setter + Hatcher + Brooder house)	01
28	REFRIGERATOR	03
29	DEEP FREEZER	02
30	KUDAL	02
31	BASULA	01
32	BALANCE	01
33	CALCULATOR	01
34	GRASS CUTTER	02
35	TORCH 2 CELL	01
36	BUCKET (STEEL)	08
37	SICKLE	02
38	BELCHA	08
39	STEEL CHAIR	02
40	GI TUB 36”	02
41	TUB 20”	16
42	CHAIR WITHOUT ARM + CHAIR WITH ARM	06
43	ENAMEL TRAY	02

44	AVERY INDIA SELF INDICATOR (10 KG)	01
45	REVOLVING CHAIR	03
46	FILE (RATEE)	02
47	BARDIZO CASTRATOR	03
48	SECTARIAN TABLE	02
49	GAMLA (ALUMINIUM)	06
50	FEEDER BIG	04
51	FEEDER SMALL	01
52	ELECTRICAL BALANCE	01
53	AVERY INDIA HANGING MACHINE (100 KG.)	02
54	GENERATOR	01
55	TROLLEY	02
56	BATTERY EXIDE	01
57	ROOM HEATER	01
58	B.N.C. JACK (C.C.T.V. CAMERA)	08
59	CAMERA	01
60	G.I. FEEDER TUB	14

i) Theory and PracticalBatches:

S. No.	Courses	Theory Batch	Practical Batch
1	Post graduate	01	01

6.4.5 Practical andHands-on-Training:

- Most of the practical classes are being conducted in the instructional farm according to the course.
- Hands on training is provided to the students by dividing in batches. Students are also instructed to present the things through power point presentation in conference room.
- We have prepared practical manuals and distributed among students for getting clear idea about the practical aspect.
- Theory class notes of different lecture are also provided to students.
- Students are satisfied practically during the hands-on training as per the syllabus.

6.4.6. Supervision of students in Ph.D. Programmes:

Ph.D.

1.	Dr. Mukesh Kumar	"Study on production and reproduction performance and molecular characterization OF Black Bengal Goat suitable for farming system".	Thesis Submitted	Dr. Sushil Prasad
2.	Dr. Seema Agarwal	"Evaluation and charectrization of native chiken of Chhotanagpur Plateau of Jharkhand under intensive in village management system.	Thesis Submitted	Dr. Sushil Prasad

6.4.7. Feedback of stakeholders

- Rice is the major crop in Jharkhand and rain fed agriculture is practiced. So farmers are unemployed during the off season so they are mainly dependent on livestock primarily Pig, backyard Poultry, Goat, Sheep etc.
- Department is providing 10 days training to the farmers as per the choice of farmers. After getting training farmers start the farming for employment.
- Educated and unemployed youth are coming to our department for getting advise and technical support for livestock farming.
- On an average we trained more than 1000 farmers (sponsored and unsponsored) in different livestock farm.
- Farmers are observed to be more inclined to piggery and backyard poultry farming.
- We have developed approximately 350 second line pig breeder in different district of Jharkhand for local supply of improved germplasm.
- After getting the feedback by the farmers regarding low productivity of indigenous pig and poultry we have developed a improved poultry variety named (**Jharsim**) and one improved pig variety named (**Jharsuk**) for better growth and reproductive performance at farmers door.
- We have discovered one indigenous pig breed named "**Purnea**". It has been registered to ICAR-NBAGR, Karnal in the year 2019.

6.4.8. Student Intake and Attrition in theProgramme:

Name of the degree programme	**Actual students admitted in last five years**					**Attrition (%)**				
	Y1	Y2	Y3	Y4	Y5 (Current year)	Y1	Y2	Y3	Y4	Y5 (Current year)
Ph. D	02	00	02	01	01	01 (50)	00 (100)	02 (0)	1 (50)	01 (50)

6.4.9 ICT application in curricula delivery: Department has audio visual aid in conference room as well as wifi connectivity for taking online classes of students through power point presentation. Students are also asked to make present through power point in different courses through online mode for better understanding.

6.4. Self-Study Report for M.V. Sc. DegreeProgramme in Veterinary Pathology

6.4.1. Brief History of the DegreeProgramme:

Postgraduate programme in the department of veterinary pathology started in 1972. So far department has produced 26 postgraduate scholars. It also provides facilities to PG students from other departments in research and as minor / supportive subject.

Objective:

a) To produce competent Veterinary Pathologists.
b) To carry out need based research in the field of veterinary Pathology with applied value as well as engage in basic research to explore the science and understand pathogenetic mechanisms of important disease condition like Marek's Disease, Porcine rotavirus infection, staphylococcal mastitis, colibacillosis, etc.
c) To explore the harmful effect of pesticides like, cypermethrin, aldrin, benzalkonium chloride and other synthetic pyrethroid and toxicopathological studies.
d) To assist clinical subjects in understanding the altered physiology of different body system through clinical investigation which includes hematology, biochemistry, urine analysis etc.
e) To investigate oncogenetic pathway and proliferation behavior of cancer cells.
f) To explore the factor which makes treatment of mastitis difficult and interfere in the therapeutic efficacies of medicines.

Accomplishments:

a) Confirmation of free copper and iron as a new endogenous chemical mediator of inflammation (2016)
b) To assess proliferative behavior of tumors through studies on localization of zinc motif (2016)
c) Use of Zn- AGNOR dots for identification of different phase of cell cycle (2017)

d) Use of metal fixing preservatives for better expression and more reproducible intra nuclear details (2017)
e) Use of acridine orange staining to identify cells in different phases of cycle (2018)
f) Studies on induced hyperuricemia with inosine and its comparative amelioration by Allopurinol and Febuxostat with special reference to oxidative stress in the control of avian gout(2018)
g) Pancreatic pathology in poultry and its correlation with wasting diseases (2019)
h) Epidemiological studies on incidence of haemoprotozoan diseases in febrile ruminants of Jharkhand. (2019)
i) Studies on Lumpy Skin Disease (LSD) outbreak in Jharkhand (2020)
j) Studies on incidence of Elephant Endotheliotropic Herpesvirus infection. (2020)
k) Studies on season wise disease incidence in poultry (2020)

6.4.2. Faculty Strength:

S. No.	Name of Post	Sanctioned strength	Staff in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/other regulatorybodies
1.	Professor	1	00	01	01
2.	Associate Professor	1	00	01	01
3.	Assistant Professor	2	02	00	02
4.	Teaching Associate		01		

6.4.3. Technical and Supporting staff:

S. No.	Name of Post	Sanctioned strength	Staff in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/other regulatorybodies
1.	Lab. Technician	1	00	01	01
2.	Stenographer/computer assistant	1	01	00	01
3.	Asstt. Accountant	1	00	01	01
4.	Lab. Assistant	1	01	00	01

5.	Post-mortem Attendant	1	01	00	01
6	Sweeper	1	00	01	01

6.4.4. Classrooms and Laboratories:

Details of Classrooms and Laboratories:

S. No	Particular	Number
1.	PG Lab	02
2.	PM Room	01
3.	Museum Room	01
4.	Large animal PM shed	01

a) Lists of major equipments:

S. No	Name of equipment	Number
1	Rotary microtome	02
2	Microtome Knife sharpner	01
3	Paraffin floatation bath (55-65^0 C)	01
4	Paraffin bath/oven	01
5	Refrigerator	01
6	Monocular and Binocular microscopes	34
7	Fluorescent microscope	01
8	Hot air oven	02
9	Incubator	03
10	Laboratory Centrifuge	02
11	Microhematocrit Centrifuge	01
12	Microhematocrit reader	01
13	Hemocytometer	20
14	Hemoglobinometer	20
15	Wintrobe tube with stand	01
16	Westergren tube with stand	01
17	U.V.Spectrophotometer	01
18	Electronic digital Monopan balance	01
19	Urinometer	01
20	Refractometer	01
21	Glucometer	01
22	Autopsy table for small animals	02

23	Laminar flow	01
24	Autoclave	01
25	Digital Camera	01
26	Electrophoresis Unit	01
27	P^H Meter	01

b) Theory and Practical Batches:

S. No.	Courses	Theory Batch	Practical Batch
1	Postgraduate	01	01

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

Major emphases is laid for Hands-on-training of PG students through following means:

1. Clinical Pathology

A. Hematology

- Total leucocytic count
- Total Erythrocytic count
- Differential Leucocytic count
- Absolute Count
- Hemoglobin estimation
- Erythrocyte sedimentation rate
- Packed cell volume
- Erythrocyte indices (calculation of MCV, MCH and MCHC)
- Thrombocyte count
- Identification of morphological abnormalities in erythrocytes & leucocytes and platelets
- Remarks on peripheral blood smear
- Blood coagulation studies
- Blood milk and fluid electrophoretic studies for study of protein.

B. Urine Analysis

- Physical examination of urine with respect to color, consistency, reaction, turbidity, volume etc.
- Chemical examination of urine for detection of glucose, protein, blood, bile salt, bile pigment, urobilinogen, calcium, sulfadrugs, ketone bodies, etc.
- Microscopic examination of urine for presence of epithelial cells,

leucocytes, erythrocytes, crystals, casts, parasitic ova etc.

C. Biochemical studies through estimation in plasma or serum.
   - Liver function test
   - Kidneys function test
   - Pancreatic function test
   - Lipid profile
   - Diabetic profile
   - Serum electrolyte estimation
   - Serum Inorganic phosphorus, Calcium

D. Cytological Histopathological study
   - For Cancer diagnosis
   - For differentiation between benign and malignant tumor
   - For early cancer diagnosis through cytology
   - For confirmatory cancer diagnosis by HPE and study of tumor marker
   - For staging and grading of tumour
   - For study of cellular pathology in infectious, non-infectious and neoplastic conditions.

E. Post mortem examination
   - To train the students to carry out methodical PM examination of large animals, small animals, poultry and laboratory animals for developing better understanding of animal body for exploration during research experiments.
   - Assignments are given to PG students to review latest developments in veterinary science. The PG students are required to give regular power point presentation on selected topics to enhance their oratory skill and communication skill.

F. Practical classes are conducted with the help of PPT, practical manuals, gross specimens and histopathological slides, clinical samples and biopsy samples.

6.4.7. Supervision of students in PGprogrammes:

M.V.Sc.				
1.	Dr. Brajesh Kumar	"Studies on pancreatic pathology and its correlation with different wasting disease condition of poultry"	2019	Dr. M. K. Gupta

6.4.5. **Feedback of stakeholders:**

Regular interaction is carried out with PG students to understand their difficulties so that required modification in teaching process could be made.

6.4.6. Student Intake and Attrition in the Programme:

Name of Degree Programme	**Actual student admitted in last five years (From session 2016-17 to 2020-21)**					**Attrition (%)**				
	Y 1	Y2	Y 3	Y4	Y5 (Current Year)	Y 1	Y2	Y 3	Y4	Y5 (Current Year)
M.V.Sc. (Veterinary Pathology)	0 (02)	1 (02)	1 (02)	0 (02)	0 (02)	00 NA	01 (100)	01 (0.00)	00 (NA)	00 (NA)

*****Data in parenthesis is the sanction strength of students in different years

6.4.9. ICT Application in Curricular Delivery:

a) Students are given lectures by power point presentations (PPT) with all recent updates and relevant gross and microscopic photographs.
b) The diagnostic tools used for disease diagnosis like clinical examination of blood, faeces, urine, skin scraping and synovial fluid are demonstrated regularly to the students with the help of projector and computer.
c) Post mortem examination and histopathological examination for gross and microscopic lesions are conducted and demonstrated regularly.
d) Biopsy samples and morbid materials are collected and processed followed by their demonstration with the help of microscopic assembly and projector.

6.4. Self-Study Report for Ph. D. Degree Programme in Veterinary Pathology

6.4.3. Brief History of the Degree Programme:

Postgraduate programme in the department of veterinary pathology started in 1972. So far department has produced 26 postgraduate scholars. It also provides facilities to PG students from other departments in research and as minor / supportive subject.

Objective:

g) To produce competent Veterinary Pathologists.

h) To carry out need based research in the field of veterinary Pathology with applied value as well as engage in basic research to explore the science and understand pathogenetic mechanisms of important disease condition like Marek's Disease, Porcine rotavirus infection, staphylococcal mastitis, colibacillosis, etc.

i) To explore the harmful effect of pesticides like, cypermethrin, aldrin, benzalkonium chloride and other synthetic pyrethroid and toxicopathological studies.

j) To assist clinical subjects in understanding the altered physiology of different body system through clinical investigation which includes hematology, biochemistry, urine analysis etc.

k) To investigate oncogenetic pathway and proliferation behavior of cancer cells.

l) To explore the factor which makes treatment of mastitis difficult and interfere in the therapeutic efficacies of medicines.

Accomplishments:

l) Confirmation of free copper and iron as a new endogenous chemical mediator of inflammation (2016)

m) To assess proliferative behavior of tumors through studies on localization of zinc motif (2016)

n) Use of Zn- AGNOR dots for identification of different phase of cell cycle (2017)

o) Use of metal fixing preservatives for better expression and more reproducible intra nuclear details (2017)

p) Use of acridine orange staining to identify cells in different phases of cycle (2018)

q) Studies on induced hyperuricemia with inosine and its comparative amelioration by Allopurinol and Febuxostat with special reference to oxidative stress in the control of avian gout(2018)

r) Pancreatic pathology in poultry and its correlation with wasting diseases (2019)

s) Epidemiological studies on incidence of haemoprotozoan diseases in febrile ruminants of Jharkhand. (2019)

t) Studies on Lumpy Skin Disease (LSD) outbreak in Jharkhand (2020)

u) Studies on incidence of Elephant Endotheliotropic Herpesvirus infection. (2020)

v) Studies on season wise disease incidence in poultry (2020)

6.4.4. Faculty Strength:

S. No.	Name of Post	Sanctioned strength	Staff in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/other regulatorybodies
1.	Professor	1	00	01	01
2.	Associate Professor	1	00	01	01
3.	Assistant Professor	2	02	00	02
4.	Teaching Associate		01		

6.4.3. Technical and Supporting staff:

S. No.	Name of Post	Sanctioned strength	Staff in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/ other regulatorybodies
1.	Lab. Technician	1	00	01	01
2.	Stenographer/computer assistant	1	01	00	01
3.	Asstt. Accountant	1	00	01	01
4.	Lab. Assistant	1	01	00	01
5.	Post-mortem Attendant	1	01	00	01
6	Sweeper	1	00	01	01

6.4.4. Classrooms and Laboratories:

Details of Classrooms and Laboratories:

S. No	Particular	Number
1.	PG Lab	02
2.	PM Room	01
3.	Museum Room	01
4.	Large animal PM shed	01

c) Lists of major equipments:

S. No	Name of equipment	Number
1	Rotary microtome	02
2	Microtome Knife sharpner	01
3	Paraffin floatation bath (55-65^0 C)	01
4	Paraffin bath/oven	01
5	Refrigerator	01
6	Monocular and Binocular microscopes	34
7	Fluorescent microscope	01
8	Hot air oven	02
9	Incubator	03
10	Laboratory Centrifuge	02
11	Microhematocrit Centrifuge	01
12	Microhematocrit reader	01
13	Hemocytometer	20
14	Hemoglobinometer	20
15	Wintrobe tube with stand	01
16	Westergren tube with stand	01
17	U.V.Spectrophotometer	01
18	Electronic digital Monopan balance	01
19	Urinometer	01
20	Refractometer	01
21	Glucometer	01
22	Autopsy table for small animals	02

23	Laminar flow	01
24	Autoclave	01
25	Digital Camera	01
26	Electrophoresis Unit	01
27	P^H Meter	01

d) Theory and Practical Batches:

S. No.	Courses	Theory Batch	Practical Batch
1	Postgraduate	01	01

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

Major emphases is laid for Hands-on-training of PG students through following means:

2. Clinical Pathology

G. Hematology

- Total leucocytic count
- Total Erythrocytic count
- Differential Leucocytic count
- Absolute Count
- Hemoglobin estimation
- Erythrocyte sedimentation rate
- Packed cell volume
- Erythrocyte indices (calculation of MCV, MCH and MCHC)
- Thrombocyte count
- Identification of morphological abnormalities in erythrocytes & leucocytes and platelets
- Remarks on peripheral blood smear
- Blood coagulation studies
- Blood milk and fluid electrophoretic studies for study of protein.

H. Urine Analysis

- Physical examination of urine with respect to color, consistency, reaction, turbidity, volume etc.
- Chemical examination of urine for detection of glucose, protein, blood, bile salt, bile pigment, urobilinogen, calcium, sulfadrugs, ketone bodies,

etc.

- Microscopic examination of urine for presence of epithelial cells, leucocytes, erythrocytes, crystals, casts, parasitic ova etc.

I. Biochemical studies through estimation in plasma or serum.
   - Liver function test
   - Kidneys function test
   - Pancreatic function test
   - Lipid profile
   - Diabetic profile
   - Serum electrolyte estimation
   - Serum Inorganic phosphorus, Calcium

J. Cytological Histopathological study
   - For Cancer diagnosis
   - For differentiation between benign and malignant tumor
   - For early cancer diagnosis through cytology
   - For confirmatory cancer diagnosis by HPE and study of tumor marker
   - For staging and grading of tumour
   - For study of cellular pathology in infectious, non-infectious and neoplastic conditions.

K. Post mortem examination
   - To train the students to carry out methodical PM examination of large animals, small animals, poultry and laboratory animals for developing better understanding of animal body for exploration during research experiments.
   - Assignments are given to PG students to review latest developments in veterinary science. The PG students are required to give regular power point presentation on selected topics to enhance their oratory skill and communication skill.

L. Practical classes are conducted with the help of PPT, practical manuals, gross specimens and histopathological slides, clinical samples and biopsy samples.

6.4.6. Supervision of students in PGprogramme:

Ph.D.				
1.	Dr. Sanjiv Kumar	"Studies on induced hyperuricemia and its comparative amelioration by allopurinol and febuxostat with special reference to oxidative stress in broilers"	2020	Dr. M. K. Gupta

6.4.7. **Feedback of stakeholders:**

Regular interaction is carried out with PG students to understand their difficulties so that required modification in teaching process could be made.

6.4.8. Student Intake and Attrition in the Programme:

Name of Degree Programme	**Actual student admitted in last five years (From session 2016-17 to 2020-21)**					**Attrition (%)**				
	Y 1	Y2	Y 3	Y4	Y5 (Current Year)	Y 1	Y2	Y 3	Y4	Y5 (Current Year)
Ph.D. (Veterinary Pathology)	0 (02)	1 (02)	1 (02)	0 (02)	0 (02)	00 NA	01 (100)	01 (0.00)	00 (NA)	00 (NA)

*****Data in parenthesis is the sanction strength of students in different years

6.4.9. ICT Application in Curricular Delivery:

e) Students are given lectures by power point presentations (PPT) with all recent updates and relevant gross and microscopic photographs.

f) The diagnostic tools used for disease diagnosis like clinical examination of blood, faeces, urine, skin scraping and synovial fluid are demonstrated regularly to the students with the help of projector and computer.

g) Post mortem examination and histopathological examination for gross and microscopic lesions are conducted and demonstrated regularly.

h) Biopsy samples and morbid materials are collected and processed followed by their demonstration with the help of microscopic assembly and projector.

6.4. Self-Study Report for M.V.Sc. DegreeProgrammeinVeterinary Pharmacology & Toxicology

6.4.1. Brief History of the DegreeProgramme:

Post-graduate programme in Veterinary Pharmacology& Toxicology was started in the year 1978 under RAU and Late Dr. N.C. Banerjee was the first head of Department.

Objective:

The main objectives of the department is to produce best human resource, who can give best treatment to the diseased animals. The department is also continuous running externally and Institutional funded project in of search of new molecule and patent and also consistently working in the area of kinetics, dynamics, therapeutics and toxicity including screening studies of medicinal and toxic plants and herbs.

Accomplishments:

- **Forty M.V.Sc** degree were awarded by this department since the initiation of Post-graduate programme.
- For the first time a **'goat fever model'** was standardized and biokinetic evaluation studies of several compounds were conducted under febrile condition.
- Tissue and organ disposition of sulfonamides, ampicillin, mebendazole, nitrated furan derivatives have been determined in birds.
- Excretion of various drugs through milk have also been studied.
- Psychochemical screening of different extracts of various plants found in Jharkhand region have been evaluated under indigenous technical knowledge.
- Around 100 research articles were published in national and International journals of repute by the department.
- The data base is developed of heavy metals residues like As, Cd, Cu, Mn etc in fresh cow milk of 20 districts in Jharkhand state were completed under ICAR sponsored Project **"Outreach Programme on "Monitoring of Drug Residues and Environmental Pollutants" started 2009-10.**Sub acute toxicity studies on *Centella asiatica* indicated liver and kidney damage in rats.

6.4.2. FacultyStrength:

S. No.	Name of Post	Sanctioned strength	Staff in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/other regulatorybodies
1.	Professor	1	Nil	1	1
2.	Associate Professor	2	Nil	2	2
3.	Assistant Professor	4	2	2	4

6.4.3. Technical and Supportingstaff:

S. No.	Name of Post	Sanctioned strength	Staff in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/other regulatorybodies
1.	Stenographer	1	0	1	1
2.	Animal Attendant	1	0	1	1
3.	Sweeper	1	1	0	1

6.4.4. Classrooms andLaboratories:

Details of Classrooms andLaboratories:

S. No	Particular	Number
1.	PG lab	4
2.	PG seminar room	1

a) Lists of majorequipments:

S. No	Name of equipment	Number
1.	High performance liquid chromatography (HPLC)	1

2.	High performance thin layer chromatography without densitometer (HPTLC)	1
3.	Atomic absorption spectrophotometer (AAS)	1
4.	Thermal cycler with gel documentation system	1
5.	Cooling centrifuge	1
6.	Millipore water filtration system for HPLC grade water	1
7.	Desktop computer with photocopier, printer and scanner with wi-fi facility	3
8.	Deep freezer (-20 degree)	1
9.	10 KVA online UPS	2
10.	Hot air oven	1
11.	Circulating water bath	1
12.	Digital spectrophotometer	1
13.	Digital plethysmometer	1
14.	Biochemical autoanalyzer	1
15.	Digital research microscope with imaging software	1
16.	Digital balance	2
17.	Sonicator	1

b) Theory and PracticalBatches:

S. No.	Courses	Theory Batch	Practical Batch
1	Postgraduate	1	1

6.4.5. Conduct of Practical andHands-on-Training:

Students are regularly exposed with practicals and hands on training as per curriculum mentioned in ICAR guidelines. Some experiments are demonstrated on computers with the help of software. M.V.Sc. students are trained in handing, drug administration and collection of blood sample in lab animals like rat and mice.

- Hot plate and tail flick analgiometer is used to demonstrate analgesic effect in rat.
- Convulsiometer is used to demonstrate anticonvulsant effect.
- Plethysmometer is used to demonstrate anti-inflammatory effect.
- Rota rod apparatus is used to demonstrate muscle relaxant effect.
- Pole climbing response apparatus is used to demonstrate condition avoidance response.

6.4.6. Supervision of students in PGprogrammes:

S. No.	Name of the students	Title	Advisor	Pass out year
1	Dr. Manisha	Evaluation of wound healing potential of polyherbal formulation (*Clerodendroninfortunatum + Curcuma longa + Aloe vera) in diabetic rats*	Dr.Raju Prasad	2020
2.	Dr. Dipshikha	Ameliorative efficacy of *Clerodendroninfortunatum* on Cadmium induced sub-acute toxicity in poultry	Dr.Raju Prasad	2018

6.4.7 Feedback of stakeholders: NIL

6.4.9. Student Intake and Attrition in theProgramme:

Name of Degree Programme	Actual student admitted in last five years (From session 2016-17 to 2020-21)					Attrition (%)				
	Y 1	Y2	Y 3	Y4	Y5 (Current Year)	Y 1	Y2	Y 3	Y4	Y5 (Current Year)
M. V. Sc. (Veterinary Pharmacology and Toxicology)	1 (04)	0 (03)	0 (03)	0 (03)	0 (03)	3 (75)	3 (100)	3 (100)	3 (100)	3 (100)

*****Data in parenthesis is the sanction strength of students in different years

6.4.9. ICT Application in CurriculaDelivery:

- Faculties of the Department of Vety Pharmacology and Toxicology is well versed with smart classes and use to take virtual classes through various online platform like google meet, Zoom, Webexetc

- Subject related notes, videos from you tube, power point presentations have been shared in the what'sapp group of students.
- Interactive sessions and quiz used to be organized through online platforms.

6.4. Self-Study Report for M.V.Sc. Programme in VeterinarySurgery and Radiology

6.4.1. Brief history of degree programme:

Post graduate teaching has been started in the department since 1978. Since then more than 50 M.V.Sc. Degree.

Objectives:

1. Teaching of postgraduate students
2. To conduct basic and applied research in areas of Veterinary Surgery and Radiology.
3. Practical training of PG students to develop clinical case treatment and surgical skill among them.
4. To impart basic ideas and technical skill in the students for different laboratory works related to Haemato-biochemical estimation techniques.
5. To impart knowledge in students regarding essential diagnostic imaging techniques and to develop basic working skill in this field.
6. To impart technical skill in the P.G students for presentation of their research and work through PPT presentation and proper research paper writing

Accomplishments:

1. A good no. of postgraduate students completed their degree engazed in state Animal husbandry dept., Academics (state and central govt.) as well as in private sectors and some of them are occupying high positions in India and Abroad.
2. A Modified instrument for teat polyp extraction in dairy animals was developed
3. Cryoapplicators of 18-20 inches long of with iron blocks of different shapes like rectangle, circular, square and cone have been fabricated for the treatment of intractable lesions using liquid nitrogen.
4. In terms of early healing of wound, easy availability and cost effective, Sunflower seed oil can be recommended to be used as topical wound healing agent in comparison to Moringa oleifera and olive oil.
5. Topical application of cow urine in goats enhances the wound healing.
6. The fresh fish air sac was observed to disintegrate by 28^{th} post – operative day of cystoplasty. Hence considered as suitable scaffold for regrowth of all the layer of the urinary bladder.
7. Infrared therapy was considered as better and effective treatment for early recovery of arthritis patient in buffalo.
8. Lignocaine along with tramadol and butorphanol can be recommended as better epidural anesthetic condition of operative surgery in a goats.
9. Wound healing was better and early with platelet rich plasma treated with ultraviolet therapy.

10. Epidural ropivacaine along with dexmedetomidine and fentanyl citrate could be better regional analgesics for long duration operative surgery in goats.
11. Continuous rate infusion (CRI) techniques of propofol @ 0.3 mg/kg/min. as maintenancewas found to be effective, satisfactory and feasible method for achieving surgical anesthesia in all the groups. However, tramadol or butorphanol in combination with xylazine and propofol may be recommended to be used as analgesic in pet animals for common surgical procedures.
12. Tube cystostomy is a quick, practicable and reliable procedure of choice for the management of obstructive urolithiasis in young male goats and calves of any age groups at field level. This technique is also effective in faster decrease in oxidative stress and helpful in early recovery by repair of damage cells and removal of toxic substances.
13. Management of unstable long bone fracture has been instituted with use of tricalcium orthophosphate in combination with autologous cancellous bone graft
14. Anesthetic technique of achieving general anesthesia with use of midazolam as preanesthetic incombination of ketofol has been developed and recommended in piglets surgery affected with umbilical hernia.
15. Treatment of various surgical operations in companion, domestic and wild animals

6.4.2. Faculty strength:

S. No.	Name of Post	Sanctioned strength	Staff in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/other regulatorybodies
1	Professor	1	Nil	1	1
2	Assoc. Professor	1	Nil	1	1
3	Asstt. Professor	3	1	2	3*

*One Teaching Associate and one Asstt. Professor on contract basis has been kept for 1years for teaching of undergraduate and treatment of clinical cases reported at dept. of Vet. Surgery and Radiology

6.4.3. Technical and supporting staff: No technical staff in the dept.

Supporting Staff

S. No.	Name of Post	Sanctioned strength	Staff in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/other regulatorybodies
1	Office Assistant	1	1	0	1
2	OT Assistant	2	2	0*	2
3	Lab Attendant	4	2	2	0
4	Radiographer	1	1	0	1
5	Sweeper	1	1	0	1

*****In lieu of permanent technical Asstt., One lab attendant has been provided to the department to accomplish the work of Technical Asstt. Apart from this, five casual workers have been engaged in the department to maintain cleanliness as well as for maintenance of experimental animals, and provide help during casting and treatment of the animals brought to the hospital for surgical operation.

6.4.4. Classroom and Laboratories: Insufficient in the department.

No. of Classroom	No. of laboratories
Nil*	1

*One lecture hall cum amphitheatre is used for taking theory and practical classes.

A separate lecture hall is necessary as amphitheatre hall is most of the time engaged during treatment of animals.

a) List of Major equipments:

Sl.no	Name of the equipment	No. of equipment
1	General surgical instruments	2sets
2	Orthopedic surgery instruments	1 set
3	Shadowless lamp (two pedestal and one ceiling)	3
4	Electrocautery setup	1
5	Physiotherapy equipments (Diathermy, therapeutic ultrasound Infrared lamp,UV lamp)	1 each
6	Endoscopy	1
7	BPL oxygenator	1
8	BPL ECG machine	1
9	NIBP machine	1
10	Conventional x- ray machine (ceiling model)	1
11	Autoclave	1
12	Hot air oven	1

13	Centrifuge	1
14	Soxhlet apparatus	1
15	Semi autoanalyser	1
16	Laryngoscope	1
17	Binocular microscope	1
16	Diagnostic ultrasound	1 repairable
17	Hydroulic table (Large Animal)	1 (repairable)
18	Mobile x- ray machine (100 ma)mobile	1 (repairable)

b) Theory and PracticalBatches:

S. No.	Courses	Theory Batch	Practical Batch
1	Postgraduate	1	1

6.4.5. Conduct of practical and Hands on training:

- **Practical Classes:** Practical demonstrations are also conducted in the farm animals. Students have been involved for suturing practice in cloths and cadaver.
- **OPD:** Students are involved in daily clinical case treatments to develop better practical knowledge and treatment skill. They perform various frequent activates like catheterization, ear cleaning, suture removal etc. Students are encouraged to perform minor surgeries like wound debridement, excision of urethral process etc and external fracture fixation by POP coaptation.
- **Operation Theatre:** students are allowed for assistance in major surgeries regularly (batchwise) to improve their surgical skills under the guidance of professor. Students are also encouraged to learn other routine activities like surgical pack preparation and sterilization.
- **Laboratories:** Various essential laboratory works as a part of students' research and clinical cases are conducted by students on regular basis under the guidance of professor to impart general idea and technical skill among them.
- **Diagnostics:** Occasional practical knowledge and hand on training is being imparted in students regarding various diagnostic imaging techniques present in the department.
- **Others:** Students are also getting knowledge and learn about the surgical condition by PPT presentation and own prepared surgical videos. Their Skills for presentation and research paper writing has been regularly imparted in students by encouraging PPT presentation of different case studies and Research and case study paper writing by them.

6.4.6. Supervision of students in PGprogramme: At a time 4 students are enrolled for 2 year post graduate programme with one qualified teacher. The students of pgprogramme are supervised by Major advisor and members of advisory committee from time to time.

S.No.	Name of Students and Advisor	Title of Thesis	Year of Passing
1	Pankaj Kumar and Dr.A.K.Sharma	Evaluation of liver and kidney disorders with the use of ultrasound guided biopsy technique in dogs	2018
2	Saurav Kr Singh and Dr. A.K.Sharma	Evaluation of wound healing potential of platelet rich plasma with or without ultraviolet therapy in dogs	2018
3	Sneha Kumari and Dr. A.K.Sharma	Clinical Management of Urolithiasis in Ruminants by Tube Cystostomy with special reference to Oxidative Stress Evaluation	2018
4	Bidya Bhushan Kumar and Dr. A.K.Sharma	Management of unstable long bone fracture with internal fixation in combination with tricalcium phosphate and autologous cancellous bone graft in dogs	2018
5	Rashmi Kumari	Comparative evaluation of midazolam and dexmedetomidine as preanaesthetic in etomidate and ketofol anaesthesia in umbilical herniorrhaphy of piglets.	2019

6.4.7. Feedbackstakeholders (Students/parents/industries/employers etc): Proper mechanism has not been used for taking feedback.

6.4.8. Student's intake and Attrition in the programme for last 5 years

Name of degree programme	Actual students admitted in last 5years					Attrition percentage				
	Y1 (2016-17)	Y2 (2017-18)	Y3 (2018-19)	Y4 (2019-20)	Y5 (2020-21)	Y1 (2016-17)	Y2 (2017-18)	Y3 (2018-19)	Y4 (2019-20)	Y5 (2020-21)
PG programme	2 (2)	1 (2)	0 (2)	2 (2)	2 (2)	0	50	100	0	0

6.4.9.ICT Application in Curricula Delivery:

Power point presentation are used for teaching through offline and online mode. Own prepared video of surgical operations has also been made for teaching purpose.Surgical video from YouTubeare also used for enhancing the practical knowledge of the students. Professor/scientist of departments are always get ready to provide expert advise to animal's owners/farmers through telephonically as well through what supgroup. A what sup group of member of Indian society for vet surgery as well as Head of departments has already present , through that a newer techniques and ideas has been shared by different scientist and faculty members of different colleges.

6.4. Self-Study Report for M. V. Sc.Degree Programmein VeterinaryMedicine

6.4.1. Brief History of the Degree Programme:

The postgraduate programme in the department was started in the year1972. A total of 57 M.V.Sc degree has been completed from this department, till date.

Objective:

1. Teaching Veterinary Medicine to the postgraduate students.
2. Imparting training in diagnosis, treatment, prevention, and control of diseases in animals.
3. Enhancing the skills and techniques related to modern and advanced veterinary practices.

Accomplishments:

1. Establishment of hemodialysis and peritoneal dialysis techniques for management of renal disorders especially in canines".
2. Development and application of ethnoveterinary medicine for the treatment of common ailment of livestock diseases particularly colibacillosis in calves.
3. Standardization of herbal extracts in the therapeutic management of mastitis in bovine.".
4. Establishment and standardization of techniques for Electrocardiography in canine.
5. Formulation of area-specific mineral mixture for management of metabolic and deficiency diseases in Jharkhand.
6. Weather-based epidemiological studies of important infectious diseases of livestock in Jharkhand.
7. Formulation of herbal preparations and their application in the management of canine parvovirus infection and gastrointestinal nematodiasis in sheep.
8. Establishment and standardization of blood transfusion techniques in large as well as in small animals.
9. Standardization of acridine orange fluorescent technique for the diagnosis and treatment of bovine mastitis.
10. Standardization of ethnoveterinary medicine for the treatment of parasitic infestation in goats.

6.4.2. Faculty Strength:

S. No.	Name of Post	Sanctioned strength	Staff in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/ other regulatorybodies
1.	Professor	1	00	01	01
2.	Associate Professor	2	00	02	02
3.	Assistant Professor	4	04	00	05

6.4.3. Technical and Supporting staff:

S. No.	Name of Post	Sanctioned strength	Staff in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/other regulatorybodies
1.	Junior Assistant	1	01	00	01
2.	Lab Technician	2	01	01	02
3.	Steno	1	00	01	01
4.	Lab Assistant	2	02	00	02
5.	Animal Attendant	2	01	01	02
6.	Sweeper	1	01	00	01

6.4.4. Classrooms and Laboratories:

Details of Class rooms and Laboratories:

S.No	Particular	Number
1.	PG Lab.	02
2	Digital PG Class-cum-Seminar Room	01
3	Autoclave and Distillation Room	01

a) Lists of minor and major equipment:

S.No	Nameof equipment	Number
1.	Autoclave	02
2.	Balance	04
3.	Hot Air Oven	01
4	Incubator	01
5.	Microscope Monocular	08
6.	Binocularmicroscope	12
7.	Haemometer	03
8.	Haemocytometer	03
9.	ELISA Reader	01
10	Hi-Speed Centrifuge Machine	01
11.	Serologicalwaterbath	01
12	Hemodialysis Machine	01
13	ECG Machine	01
14	Ultrasound Machine	01
15	Oxygenator	01
16	Fully automatic autoanalyzer	01
17	Semi-automatic autoanalyzer	01
18	Endoscopy Machine	01
19	Hematoanalyzer	01
20	Laminar Flow	01
21	Defibrillator	01

b) Theory and Practical Batches:

S.No.	Courses	TheoryBatch	PracticalBatch
1.	Postgraduate	01	01

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

- Practical classes and hands- on training are conducted regularly in the department on different aspects related to advanced diagnostic instruments:
    - Blood and Serum biochemical and hematological analysis.
    - ECG recording in animals and its interpretation especially in canines.
    - Ultrasonography of patient and its interpretation especially in canines.
    - Blood Transfusion in Small and Large animals and its consequences

- Peritoneal Dialysis/Hemodialysis in the management of renal diseases.
- Diagnosis and therapeutic management of various veterinary emergencies in farm and companion animals.
- Study of diagnostic protocol and procedure for various diseases of farm and companion animals.
- Restrain, Nutrition, and health management of Zoo Wild and Laboratory Medicine.
- Study of vetero-legal aspects of Post-mortem examination and familiarize students with various aspects of Veterinary Forensic Medicine.
- Advances in diagnosis, therapy, and control of dermatological disorders.
- Management of fluid and electrolyte imbalances in critically ill patients.

- Attention is given to individual students in handling animals and recording data as per scheduled practical.

6.4.6. Supervision of students in PG programme:

S.No.	Name of the students	Title of thesis	Advisor	Admission year	Pass out year
1.	Dr. Ajit Kumar	Studies on effect of chlorpromazine alone and in combination with ciprofloxacine on bovine staphylococcal mastitis	Dr. Abhishek Kumar	2014	2017
2.	Dr. Piyush Kumar	Therapeutic efficacy of coriandrum sativum in bovine mastitis	Dr. Swati Sahay	2017	2019
3.	Dr. Lovelin Shweta Xaxa	Ameliorative Effect OfCentella Asiatica and Andrographis paniculata in the treatment of the Parvo Viral infection of pups with special refrence to Oxidative Stress	Dr. Praveen Kumar	2017	2019

6.4.7. Feedbackofstakeholders:Yes

- Students are given lectures by PowerPoint presentations with all recent updates, required photographs and videos.
- The pictures of cases are also received from owners and veterinarians or shared within veterinarians for the best possible treatment modalities. These are discussed with the students to increase their exposure.

6.4.8. Student Intake and Attrition in the Programme:

Name ofDegree Programme	Actualstudentadmittedinlastfiveyears (From session 2016-17 to2020-21)					Attrition (%)				
	Y1	Y2	Y3	Y4	Y5 (Current Year)	Y1	Y2	Y3	Y4	Y5 (Current Year)
M.V.Sc. (Veterinary Medicine)	3	1	3	3	6 (8)	1 (33%)	1(0.00 %)	2 (66 %)	3(0.00 %)	6(0.00%)

*****Data in parenthesis is the sanctioned strength of students in different years

6.4.9. ICT Application in Curricular Delivery:

- Students are given lectures by PowerPoint presentations with all recent updates, required photographs and videos.
- The pictures of cases are also received from owners and veterinarians or shared among veterinarians for the best possible treatment modalities. These are discussed with the students to increase their exposure.

6.4. Self-Study Report for M.V. Sc. DegreeProgramme in Veterinary and Animal Husbandry Extension Education

6.4.1. Brief History of the Degree Programme:

The Animal Husbandry Extension came into existence and undergraduate courses were offered since the inception of the college in the year 1961. The Post Graduate Department was started in the year 1976. At the advent of VCI Regulation during the year 1995-96 the department was renamed as Veterinary and Animal Husbandry Extension Education. Since then it is carrying out Teaching, Research and Extension activities for the benefit of veterinary profession in general and Veterinary graduates and livestock farmers in particular.

Mandate:

- To impart Veterinary & A. H. Extension Education courses in U.G., P.G. Programme.
- To Carry out basic and strategic research in the area of Veterinary & A. H. Extension Education.
- To carry out refresher training programme for field veterinarians and paravets.
- To carry out regular and sponsored training programme to impart knowledge and skills to the farmers in field of dairy, piggery, goatry, fisheries, poultry and animal husbandry.
- To organize extension activities in adopted villages of BAU.
- To render advisory and consultancy services to the farmers.

Research Thrust Area:

i. Existing Farming System Analysis
ii. Adoption and Diffusion Studies
iii. Research for promotion of livestock and poultry business and Rural Entrpreneurship
iv. Development of scales and indices for estimation of adoption level in various enterprises
v. Impact study of training and ongoing development programmes
vi. Resarch on communication methods, channels and ICTs

6.4.2 **Faculty Strength**:

S. No.	Name of Post	Sanctioned strength	Staff in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/other regulatorybodies
01.	University Professor cum Chief Scientist	1	0	1	01

02.	Associate Professor cum Senior Scientist	2	0	2	02
03.	Assistant Professor cum Jr. Scientist	5	2	3	05

6.4.3. Existing Technical and Supporting Staff:

- Lab Technician - 01
- Supporting Staff- 01

6.4.4. Classrooms and Laboratories:

- Computer Lab with 15 Computers - 01
- Mini seminar room - 01
- Museum-cum-live-stock advisory unit cum projection unit - 01

List of major equipments available in the Department of Veterinary and Animal Husbandry Extension Education, namely: -

- Overhead Projector with Screen 72" ×96" 1
- LCD projector with screen 1
- Multimedia Projector 1
- Public address system 1
- Computer lab with internet facilities 15 computers
- Interactive Panel 1
- Digital camera 1
- Vehicle for field visit (35 seaters) Optional 1
- LED 30" Monitor 1

6.4.5. **Conduct of Practical and Hands-on-Training / Extension Activities:**

- Organization of group discussion for the farmers.
- Visit to livestock market, commercial livestock and poultry farms etc.
- Visit to dairy cooperatives societies and dairy plant

6.4.6. Supervision of PGprogrammes:

M.V.Sc.

1.	Dr. Mithun Kumar Anand	"Impact of Animal Husbandry Training Programmes Imparted by KVKs in South Chotanagpur Division".	2016	Dr. J. Oraon
2.	Dr. Anu Kumari	"Impact of Information Media on Livelihood	2016	Dr. J. Oraon

		Support of Livestock Farmers in Ranchi District".		
3.	Dr. Bhush Kumar Singh	"Dairy Animal Welfare Practices in Jamtara District of Jharkhand".	2017	Dr. J. Oraon
4.	Dr. Jyoti Kisku	"Study on Backyard Poultry Farming Among Rural Women of Giridih District of Jharkhand".	2017	Dr. J. Oraon
5.	Dr. Shobha Kumari	"Effectiveness of Different Communication Sources with Special Reference to ICTs FOR Transfer of Animal Husbandry Technology".	2019	Dr. A. Pandey
6.	Dr. Kumari Nandita Bera	"Assessment and Economic Analysis of Livestock Based Integrated Farming Systems Adopted by the Farmers of Ranchi District of Jharkhand".	2019	Dr. A. Pandey
7.	Dr. Gyan Ranjan Sinha	"A Comparative Study on Adoption of Improved Dairy husbandry practices between members and non members of dairy Co-operative societies in Ranchi District of Jharkhand".	2020	Dr. A. Pandey

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

Farmer's feedback on livestock and poultry training are regularly taken.

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

Name of the Degree Programme	**Actual student admitted in last five years**					**Attrition (%)**				
	Y1	**Y2**	**Y3**	**Y4**	**Y5 (Current Year)**	**Y1**	**Y2**	**Y3**	**Y4**	**Y5 (Current Year)**
M.V.Sc.	02	02	-	-	-	00	00			

6.4.9. ICT Application in Curricula Delivery:

All the classes during the Covid period are being held through online mode.

6.4. Self-Study Report for Ph.D. Degree Programme in Veterinary and Animal Husbandry Extension Education

6.4.1. Brief History of the Degree Programme:

The Animal Husbandry Extension came into existence and undergraduate courses were offered since the inception of the college in the year 1961. The Ph.D. Department was started in the year 1976. At the advent of VCI Regulation during the year 1995-96 the department was renamed as Veterinary and Animal Husbandry Extension Education. Since then it is carrying out Teaching, Research and Extension activities for the benefit of veterinary profession in general and Veterinary graduates and livestock farmers in particular.

Mandate:

- To impart Veterinary & A. H. Extension Education courses in Ph.D. Programme.
- To Carry out basic and strategic research in the area of Veterinary & A. H. Extension Education.
- To carry out refresher training programme for field veterinarians and paravets.
- To carry out regular and sponsored training programme to impart knowledge and skills to the farmers in field of dairy, piggery, goatry, fisheries, poultry and animal husbandry.
- To organize extension activities in adopted villages of BAU.
- To render advisory and consultancy services to the farmers.

Research Thrust Area:

vii. Existing Farming System Analysis
viii. Adoption and Diffusion Studies
ix. Research for promotion of livestock and poultry business and Rural Entrepreneurship
x. Development of scales and indices for estimation of adoption level in various enterprises
xi. Impact study of training and ongoing development programmes
xii. Resarch on communication methods, channels and ICTs

6.4.2 **Faculty Strength**:

S. No.	Name of Post	Sanctioned strength	Staff in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/other regulatorybodies
01.	University Professor cum Chief Scientist	1	0	1	01
02.	Associate Professor cum Senior Scientist	2	0	2	02
03.	Assistant Professor cum Jr.	5	2	3	05

	Scientist				

6.4.3. Technical and Supporting Staff:

- Lab Technician - 01
- Supporting Staff- 01

6.4.4. Classrooms and Laboratories:

- Computer Lab with 15 Computers - 01
- Mini seminar room - 01
- Museum-cum-live-stock advisory unit cum projection unit - 01

List of major equipments available in the Department of Veterinary and Animal Husbandry Extension Education, namely: -

- Overhead Projector with Screen 72" ×96" 1
- LCD projector with screen 1
- Multimedia Projector 1
- Public address system 1
- Computer lab with internet facilities 15 computers
- Interactive Panel 1
- Digital camera 1
- Vehicle for field visit (35 seaters) Optional 1
- LED 30" Monitor 1

6.4.5. **Conduct of Practical and Hands-on-Training / Extension Activities:**

- Organization of group discussion for the farmers.
- Visit to livestock market, commercial livestock and poultry farms etc.
- Visit to dairy cooperatives societies and dairy plant

6.4.6. Supervision of PhD programmes:

Ph.D.				
1.	Dr. Pankaj Kumar	"Effectiveness of Communication Pattern for Animal Disaster Management in Bihar".	2017	Dr. J. Oroan
2.	Dr. Komal Chandraker	"A study on behavioral characteristic of livestock entrepreneur in Jharkhand and Chhattisgarh".	2020	Dr. A. K. Pandey

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

Farmer's feedback on livestock and poultry training are regularly taken.

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

Name of the Degree Programme	**Actual student admitted in last five years**					**Attrition (%)**				
	Y1	**Y2**	**Y3**	**Y4**	**Y5 (Current Year)**	**Y1**	**Y2**	**Y3**	**Y4**	**Y5 (Current Year)**
Ph. D.		01					00			

6.4.9. ICT Application in Curricula Delivery:

All the classes during the Covid period are being held through online mode.