

Evaluative Report of the Department of Zoology

1. Name of the Department – Zoology
2. Year of Establishment – 1956
3. Is the Department part of the faculty of the university? – Yes
4. Names of Programs offered (UG, PG, M.Phil, Ph.D. Integrated Masters, Integrated Ph.D. D.Sc. D.Lit. etc) – M.Sc., M.Phil, Ph.D., D.Sc.
5. Interdisciplinary programmes and departments involved – Botany, Zoology, Chemistry
6. Courses in collaboration with other universities, industries, foreign, institutions, etc. – No
7. Details of programme discontinued, if any, with reasons – No
8. Examination System – Semester
9. Participation of the department in the courses offered by other departments – Yes
10. No. of teaching posts sanctioned, filled and actual.

	Sanctioned	Filled	Actual (CAS & MPS)
Professor	2	0	2 CAS + 2 MPS
Associate Professor	4	0	5 MPS
Asst. Professor	6	0	0
Others	0	0	0

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D.	No. of M. Phil.	No. of D.Sc
Prof Keshav Prasad Mishra	M.Sc, Ph.D.	Professor	Fish and Fisheries	37 years	0	0	0

Prof. Dr. Mahendra Prasad	M.Sc, Ph.D.	Professor	Entomology	39 years	6	2	0
Late Prof. N.S. Sen	M.Sc, Ph.D.	Professor	Entomology and Ecology	33 years	5	0	0
Prof. Amitabh Hore	M.Sc, Ph.D.	Professor	Reproductive Physiology Of Fish and Mammals	39 years	4	8	0
Prof. (Dr.) Manoranjan Prasad Sinha	M.Sc (Gold Medallist), Ph.D, DSc	Professor	Environmental Biology, Toxicology	33 years	8	5	0
Dr. Abhijit Dutta	M.Sc, Ph.D.	Assoc. Professor	Fisheries and Ecology	36 years	2	4	0
Dr. (Mrs.) Shamshun Nehar	M.Sc, (Zoo), M.Sc, (Bio-tech), Ph.D.	Assoc. Professor	Fisheries and Biotechnology	19 years	5	0	0
Dr. S.M. Shamim	M.Sc M.Phil, Ph.D.	Assoc. Professor	Entomology (Taxonomy)	32 years	2	0	0
Dr. (Mrs.) Suhashini Besra	M.Sc, Ph.D.	Assoc. Professor	Comparative endocrinology, Fisheries.	33 years	3	0	0
Dr. Manoranjan Kumar Jamuar	M.Sc, Ph.D.	Assoc. Professor	Environmental Science	32 years	3	4	0

12. List of senior visiting fellows, adjunct faculty, emeritus professors

– None

13. Percentage of classes taken by temporary faculty

– None

14. Programme-wise student Teacher Ratio.

Course	Student	Teacher
M.A.	26	1
M.Phil.	5	1
Ph.D.	4	1

15. No. of Academic support staff & administrative staff.

Non Teaching Staff	Sanctioned	Filled	Actual
Support Staff (Technical)	5 Class III Staff	5	5
Administrative Staff	13 Class IV Staff	10	10

16. Research thrust areas as recognized by major funding agencies

– Toxicology,
Insect Diversity,
Earthworm
Diversity.

- 17. Number of faculty with ongoing projects from**
(a) National (b) International funding agencies
& (c) Total grant received. Give the name of
funding agencies, project title & grants received
project wise.
- (a) No. of faculty with ongoing projects funded
by national funding agency – 4
- (b) No. of faculty with ongoing projects funded
by international funding agency – None
- (c) Name of the projects – Immuno-
competence,
Earthworm
Biodiversity and
its functional
significance
- (d) Total grants received – Rs. 1050000/-
- (e) Name of the funding agency – UGC
- 18. Inter-institutional collaborative projects**
& associated grants received
- (a) National Inter-Institutional Collaborative
Projects – None
- (b) National Inter-Institutional Collaborative
Project's Grants Received – None
- (c) International Inter-Institutional
Collaborative Projects – None
- (d) International Inter-Institutional
Collaborative Project's Grants Received – None
- 19. Department projects funded by DST-FIST,**
UGC-SAP/CAS, DPE, DBT, ICSSR, AICTE,
etc; total grants received
- (a) Departments Project Funded by – DST
- (b) Total Grants Received – Rs. 4.6 Lacs
- 20. Research facility center with**
- (a) Research Facility With State Recognition – Yes
- (b) Research Facility With National
Recognition – None
- (c) Research Facility With International
Recognition – None
- 21. Special research laboratories sponsored by/**
created by industry or corporate bodies – None

22. Publications

Name	No. of Papers: National	No. of Papers: International	Monographs	Chapters in Books	Edited Books	Books	Awards
Prof. Keshav Prasad Mishra	11	6	0	0	0	0	0
Prof. Dr. Mahendra Prasad	36	0	0	0	0	0	2
Late Prof. N.S. Sen	54	6	0	2	0	0	0
Prof. Amitabh Hore	19	11	0	7	0	0	2
Dr. Abhijit Dutta	6	39	0	12	1	4	2
Dr. (Mrs.) Shamshun Nehar	27	4	0	1	1	0	3
Dr. S.M. Shamim	14	1	0	2	0	2	1
Prof (Dr.) Manoranjan Prasad Sinha	57	20		12	9		
Dr. (Mrs.) Suhashini Besra	2	9	0	0	0	1	0
Dr. Manoranjan Kumar Jamuar	3	0	0	0	1	0	1

Name	No. listed in International Database	Citation Index	SNIP	SJR	Impact Factor	h-index
Late Prof. N.S.Sen	None	29	None	None	0.3-2.13	None
Dr. (Mrs.) Shamsun Nehar	None	43	None	None	None	None
Dr. S.M. Shamim	0	15	None	None	0.3-2.13	None
Prof (Dr.) Manoranjan Prasad Sinha	None	330			0.225 to 2.25	6

23. Details of patents and income generated**24. Areas of consultancy and income generated**

Prof (Dr.) Manoranjan Prasad Sinha	Base line data generation on environment for CCL Ranchi, Richardson and Kurdash, Chennai and Tata Steel, West Bokaro Income generated Rs 1.2 Lakh through Department
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25. Faculty selected nationally/internationally to visit other laboratories/institutions/industries in India and abroad

26. Faculty serving in

- (a) National committees – None
 (b) International committees – None
 (c) Editorial Boards

Prof Dr. Mahendra Prasad	Chief Editor Biospectra
Prof Amitabh Hore	1. Cell and Tissue Research 2. Indian Science Cruiser 3. BIOSPECTRA
Dr. (Mrs.) S. Nehar	Member Editorial Board Biospectra
Prof (Dr.) Manoranjan Prasad Sinha	1. Member of Editorial Board of Pollution Research 2. Member of Editorial Board of Nature Environmental and Pollution Technology 3. Executive Editor The Ecoscan 4. Executive Editor The Bioscan 5. Associate Editor of Journal of Ecology, Environment and Conservation.
Dr. Abhijit Dutta	Ranchi University Journal of Science and Technology

- (d) any other (please specify) – None

27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs).

Name	No. of Orientation/Refresher Courses Attended in the Last 4 Years	No. of Lectures Delivered as Resource Person in asc/any other Institution in the Last 4 Years
Prof Dr. Mahendra Prasad	0	3
Prof Amitabh Hore	0	8
Late Prof. N.S. Sen	0	5
Dr. (Mrs.) S. Nehar	2	2
Dr. S.M. Shamim	0	1
Prof (Dr.) Manoranjan Prasad Sinha		25
Prof. Keshav Prasad Mishra	0	1
Dr. Manoranjan Kumar Jamuar	0	27
Dr. Abhijit Dutta	3	12

28. Student Projects

- (a) **Percentage of students who have done in-house projects including inter departmental projects** – 20%
- (b) **Percentage of students doing projects in collaboration with other universities/ industries/institute** – 20%

29. Awards/recognitions received at the national international level by

- (a) **Faculty** – Gold medal awarded to Prof. A. Hore, Prof. M. Prasad, Prof. M.P. Sinha, Prof. N.S. Sen, Dr. A. Dutta, Dr. S. Nehar in National level seminars and symposium
- (b) **Doctoral/post doctoral fellows** – At least 10 doctoral students have been awarded the young scientist or Best paper presented at different symposia
- (c) **Students** – None

30. Seminar/Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.

5th International Conference held at Karnataka State Sericulture Research and Development Institute (KSSR-DI) Bangalore from 22.10.2013 to 24.10.2013. Funded by NABARD and (KSSRDI) amount 5 Lakh	Bio Science Research for Sustainable livelihood through sericulture	22.10.2013
Held at ICAR-IINRG, Namkum, Ranchi NABARD and IINRG 10 lakhs	Bioscience Research for National Security Environmental Conservation & Human Health in Rural. India-ICBNEHRI-2014	22/12/2014

Organised by Department of Zoology, RU & Zoology & Botany ST.Xaviers College Ranchi	Anthropogenic impact on environment and conservation strategy (ICAIECS 2012)	02/11/2012
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31. Code of ethics of research followed by the departments

– Yes, U.G.C. code of ethics is followed by the Department.

32. Student profile programme-wise:

Name of the programme	Applications Received	Selected		Pass Percentage		
		Male	Female	Male	Female	
M.Sc. 2015-2016	220	4	48			Ongoing
M.Phil	80	12	27			
Ph.D.	30	5	25	100	100	
M.Sc. 2014-2015	168	11	54	87	92	
M.Sc. 2013-2014	139	7	46	82	97	
M.Sc. 2012-2013	142	4	46	87	98	
M.Sc. 2015-2016 2nd shift	113	5	45			Ongoing
M.Phil. 2012-13	188	10	44	84	100	

33. Diversity of students:

Name of the Programme	% of Students from the same University	% of Students from other Universities with the State	% of Students from other Countries
M.Sc.	90	10	0
M.Phil	90	10	0
Ph.D.	75	25	0

34. How many students have cleared Civil Services and Defense Service examinations, NET, SET, GATE, and other competitive examinations? Give details category-wise.

Examination	Numbers
Civil Services Examinations	0
Defence Services Examinations	0
NET	5
SET	0
GATE	0
Other Competitive Examinations	4

35. Student Progression:

Student Progression	% Against Enrolled
UG to PG	NA
PG to M.Phil	13%
PG to Ph.D	10%
Ph.D to Post-Doctoral	0%
Employed	
• Campus Selection	60
• other	

36. Diversity of staff:

Percentage of Faculty who are Graduates	
of the same university	80
from the other universities within the state	15
from universities from other state	5
from universities outside the country	0

37. No. of faculty who were awarded M.Phil, Ph.D., D.Sc., and D.Litt. during the assessment period

– None

38. Present details of departmental infrastructural facilities with regard to**(a) Library**

– Department Library having 6000 books and journals

(b) Internet facilities for staff and students

– Yes

(c) Total number of class rooms

– 5

(d) Class rooms with ICT facility

– 2

(e) Student laboratories

– 4

(f) Research laboratories

– 5

39. List of Doctoral, Post-doctoral students & Research Associates

Sl. No	Name	Supervisor	Topic	Date
1.	Snehlata	Dr. A. Alim	Studies on histophysiology of pineal gland of some Teleost Fishes.	16/09/11
2.	Sangeeta Kumari	Dr. Kanak Lata	The Effect of Fluoride on ovarian cycle of Fish <i>Clarias batrachus</i> linn.	16/09/11
3.	Pinki Raj Sahu	Dr. M.P. Sinha	Screening of antibacterial activity of selected medicinal plants on urinary tract infecting bacteria and profiling of their antibiotic resistance.	29/11/11

4.	Sabbiya Farooqui	Dr. Abhijit Dutta	Studies on the impact of Nerium olendar linn. On cellular and biomolecular profile of <i>Hydrophilus olivaceons</i> Faler.	13/01/12
5.	Musarrat Naaj	Dr. Abhijit Dutta	Study on the effect of cecropin and hen egg lysosyene on microbial infection in <i>Antheraea mylitta</i> Drury.	28/03/12
7.	Abhijeet Ghosh	Dr. Abhijit Dutta	Studies on the impact of flower extracts of <i>Hibiscus rosa sincnsis</i> (L) on lipid profile of non-obase diabetes in based Wistar rats. (WNN)	31/08/13
8.	Karan Kumar Kant	Dr. Namita Lal	Study on the effect of cumia and corian-der arsenic includes toxicity in rats.	31/08/13
9.	Arvind Kumar Sahu	Dr. A.K. Choudhary	Comparative studies on plankton diversity in relation to physiochemical features of kanke dam and rukka dam of ranchi, Jharkhand.	27/11/13
10.	Heena Kausar	Dr. S. Nehar	Study on the effect of <i>Daucus carota</i> seed extract on anti-steroidogenesis in male albino rats.	25/03/15
11.	Sweta Kumari	Dr. Nayani Saxena	Studies on the effect of daidzein on same biochemical parameters of male Wistar rat.	28/04/15
12.	Sukumar Dandapat	Dr. M.P. Sinha	Synthesis, Characterization and validation of medicinal impact of macrofungi mediated nano particle.	28/04/15
13.	Manoj Kumar	Dr. M.P. Sinha	Synthesis, Characterization of plant mediated green nano particles and validation of medicinal impact on mammalian model.	28/04/15
14.	Sophy Jose	Dr. M.P. Sinha	Studies on Some aspects of efficacy of <i>Schleichera obosa</i> and <i>Scoparia duties</i> leaf extracts on wister rats.	13/05/15
15.	Niwas Kumar	Dr. M.P. Sinha	Studies on cell-line based anticancerus and pharmacological efficacy of fungi (<i>Phellimus gileus</i> and <i>Claviria cristata</i>).	13/05/15
16.	Sanjay Xaxa	Dr. Neeta Lal	Studies on the hepatoprotective effects of <i>Solanum torum Swartz</i> in CCl ₄ induced experimental toxicity in wister rats.	06/10/15
17.	Priyanka Srivastava	Dr. S. Nehar	Studies on the effect of imperial en-posure of Allethrin and prallethrin in male Wistar albuin rats.	21/12/15
18.	Indu Mahato	Dr. Seema Kesari	Studies on the distribution, abundance and richness of same heteropteran insects of ranchi, Jharkhand.	22/01/16
19.	Betul Sudharm	Dr. Neeta Lal	Studies on the effects of paracetamol, alone and with papaya seed extract on the kidney function of male Swiss strain albino mice.	22/01/16
20.	Anamika	Dr. M.K. Jamuar	Behaviour of <i>Axis axis</i> in captive chitals in Birsa Munda Biological park, Ranchi.	15/03/16

21.	Khushbu Kumari	Dr. M.K. Jamuar	Ecosystem Services from sacred groves in Jharkhand.	15/03/16
22.	Amar Kumar	Dr. M.K. Jamuar	Studies on some aspects of pharmacological efficacy of edible fungi on albino rat.	02/04/16

40. No. of post graduate students getting financial assistance from the university

1. 4 BPL students have their fees waved and Rs. 500.00/- month is given as scholarship,
2. Topper of M.Sc. serves as Teaching Assistant with a remuneration of Rs. 4000.00/- month for one year
3. Topper of Ph.D. is given financial assistance of Rs. 5000.00/- month for two years to pursue the Ph.D. research work.

41. Was any need assessment exercise undertaken before the development of new programmes?

if so, highlight the methodology – Not Undertaken

42. Does the department obtain feedback from

- (a) faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback? – Yes, Periodical feedback with suggestive measures
- (b) students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback? – Yes. By mass participation by faculty and students
- (c) alumni and employers on the programmes offered and how does the department utilize the feedback? – Yes. By arranging special lectures on various subjects by distinguished alumni.

43. List of Alumni

Name	Post
Dr. V.R.P. Sinha	Former Director and VC
Dr. D. Chakroborty	Former Director
Dr. R. Ramani	Director, IINRG
Dr. Rajeev Kumar	Director
Dr. G.P. Tulsyan	Ex-Prof. & Head
Dr. V.S. Jha	Ex-Principal
Prof. M.F. Ahmad	VC

44. Give details of student enrichment programmes (special lectures/ workshops/Seminar) involving external experts

Name & Address	Sub. of Lecture	Date
Prof. G. Chandra, Professor, Dept. of Zoology Burdawan University, Burdawan	Taxonomy of Mosquitoes as Carriers of Malarial diseases	06/02/2012
Prof. S.P. Sinha (Retd) Dept. of Zoology T.M. Bhagalpur University, Bhagalpur, Bihar	Genetics of Evolution	27/03/2012
Prof. M.C. Dash (Retd) Dept. of Zoology Sambalpur University	Climate Change & need of forest Conservation	16/05/2012
Prof. M.C. Dash (Retd) Dept. of Zoology Sambalpur University	The concept & practice of sustainable development	16/05/2012
Prof. M.C. Dash (Retd) Prof of Zoology Sambalpur University	Origin of humans & Indians	17/05/2012
Prof. M.C. Dash (Retd) Prof. of Zoology Sambalpur University	Indian Laws of Cooperation of Wildlife	17/05/2012
Sri Deepak Kumar Regional Direction N.S.S. Jharkhand	Personality Development & Skill Management through-N.S.S. actuates.	17/05/2012
Prof. M.C. Dash (Retd) Prof.of Zoology Sambalpur University	Bioscience in Post genomic era	18/05/2012
Prof. M.C. Dash (Retd) Prof. of Zoology Sambalpur University	Global-Warming facts & Politics	18/05/2012
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45. List the teaching methods adopted by the faculty for different programmes.

- By conventional method
- By using ICT
- One to one counseling

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored? – Through periodic Departmental Council Meetings

47. Highlight the participation of students and faculty in extension activities.

- 80 to 100% participation
- Field Work, Educational Trip

48. Give details of “beyond syllabus scholarly activities” of the department

- Regular arrangement of Seminar for M.Sc. students, Mid Term progress seminar for Ph.D. and M.Phil. students.
- Imparting Lectors in HRD Center in Refresher Orientation & Summer/Winter Programs as Programs of Ranchi University

49. State whether the programme/department is accredited/graded by other agencies? If yes, give details.

– No

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

– Expertise of the faculties and students have been used by research students of other universities

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Title	Description
Challenges	Managing the increasing number of students of first and second shifts
Challenges	Provide sufficient books and journals to different sections of students
Challenges	Fund crunch for zoological excursions
Challenges	Lack of sophisticated laboratory for research
Challenges	Help the state in proper utilization in faunal resources.
Opportunities	Forest rich and hill streams hinterland of the Ranchi provides research openings of contemporary level.
Opportunities	To work as development partner of the State by assimilation of intellectual inputs of the Faculties
Opportunities	Jharkhand is fortunate to have one of the richest tracts of Sal Forest and as such there are immense opportunities for researches of Ecology in this field.
Opportunities	Opportunity for sustainable researches and application of best practices in life science.

Strengths	The Department has qualified and experienced Faculty Members.
Strengths	The faculty members are dedicated for capacity building of the students in this tribal region of Jharkhand
Strengths	Very strong alumni base stationed in and around Ranchi which provide direct field, advance laboratory and recent scientific developments to our students through direct interaction programmes.
Strengths	The faculties form resource base for researchers of allied institutions.
Strengths	In addition to the basic subject taught, the department run several vocational courses.
Weaknesses	The department lacks adequate number of Teaching as well as the Grade-III and Grade-IV Staff.
Weaknesses	The infrastructure development is not sufficient as per need of the hour.
Weaknesses	Due to financial constraints, many plans of the department could not be implemented
Weaknesses	Lack of adequate number of teaching faculties
Weaknesses	Lack of sufficient number of books and journals to cater the need of ever increasing number of students of morning and evening shifts

52. Future plans of the department.

- The department is planning to get Centre for Advance Studies status from UGC, New Delhi in near future after completion of SAP programme of UGC.
- The Department is very serious to implement the inter disciplinary approach in the field of higher research particularly in Ph.D./D.Sc. programme.
- The Department is also planning to develop academic interaction with the other universities in India and abroad.
- The latest teaching methods shall be applied for the benefits of the student.
- The Department plans to organize special lecture by the eminent intellectuals of national and international repute.
- The Department plans to encourage faculty member to participate in international/National seminars every year
- Efforts will be made to get major research project for every teacher from U.G.C, DST and other funding agencies.
- The department is planning to organize several practical workshops on contemporary field of zoology to facilitate the teachers of all the colleges in the light of CBCS to be implemented soon.