

# ***Department of Zoology***

## **About Department**

The department of zoology was established in 1983 with graduate level classes and postgraduate classes were started from session 2015-16 after the department of higher education was allowed to started postgraduate classes from session 2014-15. Presentably undergraduate and postgraduate classes are being conducted under HemchandYadav University Durg. There are two full time faculty members working in the department. This department has been organizing many co-curricular activities for students like Poster Presentation Competition, Science Quiz Competition, Competitive Exam, Remedial coaching for slow learners etc. The faculty of Department actively participates in the extension services in college such as, Science Association, Examination Work, College academic & Research Cell, Soft Skills Development Program. Apart from teaching, all the faculty members of the department are actively involved in research and development.

## **OBJECTIVES OF THE PROGRAMME**

The primary objective of the department is to provide quality education in the subject of zoology as a basic science and attract outstanding students from rural areas towards the subject of Zoology.

- To provide quality education offering skill based programs and motivate the students for self-employment in applied branches of Zoology.
- To build students ability to put basic principles and gain knowledge of animal classification system.
- To inculcate the value based education and entrepreneurial skills among the students.
- To create awareness among students towards the society, welfare and environment issues.
- To provide consultancy and organize extension activities.
- To inspire the students for competitive examinations

## **Vision**

- The build strong foundation for the holistic development of student.
- To create on enhanced learning environment to develop young professional and entrepreneurs in zoology with a profound knowledge.
- The skill in all aspects of Life sciences for the benefit of humunity.

## **Mission**

- To inculcate the highest several of life provide a strong foundation in the basis of zoology and promote critical thinking and analytical skills to comprehend multidisciplinary in interaction in life science.
- Provide inexpensive educational services, inspire to all the section of society to get expertise /skills at P.G.
- To bring about an awareness regarding nature and biodiversity and help to solve different problems to establish sound and peaceful environment and life for community and society.

## **Conducted Course**

<b>Name of Programme</b>	<b>B.Sc. Zoology</b>
<b>Duration</b>	<b>3 Yearly</b>
<b>Syllabus</b>	<b>B.Sc. I, II, III</b>

<b>Name of Programme</b>	<b>M.Sc. Zoology</b>
<b>Duration</b>	<b>2 Years</b>
<b>Syllabus</b>	<b>M.Sc.I,M.Sc.II</b>

## **Facilities**

List of equipment's procured through various funding agencies:

1. Colorimeter
2. PH meter
3. Mini centrifuge
4. Hot plates
5. Hot water bath
6. Student microscope
7. Binocular microscopes
8. Soil Testing
9. Spectrophotometer

**Library**- Number of books Departmental: 106

## **ICT in Zoology Teaching**

The department has LCD projector and LCD TV facility in addition to desktops and internet connection.

### **Various ICT methods are used for teaching purpose:**

- PowerPoint presentations
- Animation videos
- YouTube videos

Video lectures on different concepts in zoology are shown to study on LCD TV during practical session. Videos of animal dissection demonstrations are shown to the students.

### **Lecture Methods**

There will be three lectures per week for each First Year B.Sc. course and three lectures per week for Second Year B.Sc. and Third Year B.Sc. per Course. Total Duration for per lecture is 40 minutes.

For M.Sc. Programme the lecture duration is 40 minutes. There are 2,3 and 4 lectures per week.

### **Laboratory Work**

There are practical course assigned to each year of study. First year and second year undergraduate will have one practical course. Third year

undergraduate will have three practical courses. During practical work student will perform only one practical per week for each practical course.

For the M.Sc. Programme is theory course has a corresponding practical course.

## **Participative Learning:**

The department conducts various participative learning methodology for the holistic development of the students. These activities based learning mode involves:

- Group discussion on various syllabus related topics
- Debate on relevant topics like ban on dissection, use of social media in learning etc.
- Seminar and extempore for presentation of topics from syllabus
- Quiz on life sciences, zoology, environmental sustainability, animals and nature
- Guest lecture
- Educational tour

- Class seminar
- Departmental workshop

**M.Sc. ZOOLOGY FIRST BATCH SESSION-2015**



## Guest lecture

Session	Topic	Resource Person
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2016-17	Parental Care in Amphibia	Prof. M.K. Meshram (Govt. KRDM Girls College - Rajnandgoan)
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Session

2017-18	Mitosis Cell	Dr. S.R. Kunjam (Govt. Science College - Rajnandgoan)
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	<b>Division</b>	<b>Durg)</b>
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## Clay Model Workshop



**Poster making**





## Quiz







## NUMBER OF BOOKS:

Sr. No.	Name of books	Authour	Number of copies
1	Cytology Genetics Evolution & Ecology	P.K. Gupta	01
2	Essential of Animal Physiology	S.C. Rastogy	01
3	Invertebrate Zoology part 02	Satguru Prasad	03
4	Biology of Non chardata	Dr. Ravi Prasad	01
5	Zoology Practical Part 02	Baijal	01
6	Protozoa	KanahayaLal Sharma	01
7	Arthropoda	R. L. Kotpal	01
8	Invertebrate Zoology	S.N. Prasad	01
9	Minor Phyllum	R.L. Kotpal	03
10	Elements of Ecology	P.D. Sharma	01
11	Protozoa	R.L.KOtpal	02
12	Porifera	-	01
13	Helminthis	-	01
14	Coelenterata	-	02
15	Helminthes	-	04
16	Mollusca	-	02
17	Annielida	-	01
18	Echinodermata	-	02
19	Ecology EvsBology	Baijal	01
20	Microbiology Practical	-	01
21	Zoology Science Part 3	Pawar	02
22	New Animal Science	R.C. Rasela	02
23	Genetic Cell Physiology ,Bio chemical, Biotechnology&Biotech	H. N. Baijal	01
24	Zoology Part-2	Baijal	02

25	Comparative Anatomy Physiology	Baijal	02
26	Practical Vertebrate Animal Science	Baijal	01
27	Animal Physiology & Biochemistry	Baijal	01
28	Genetic classical to modern	Gupta P.K.	01
29	Cell And Molecular Biology	Gupta P.K.	01
30	Molecular Biology & Genetic Engineering	Gupta P.K.	01
31	Biotechnology And Genomic	Gupta P.K.	01
32	Environ Mental Biotechnology	Ranna	01
33	LaboratoryManual	-	01
34	Bio technique Theory &Practice	Ranna	01
35	Microbiology	Sharma P.D.	02
36	Cell Biology	Singh S.P.	01
37	Cytology Genetic And Evolution	Gupta P.K.	01
38	The Biotech	Kotpal R.L.	01
39	Modern Text Book of Zoology Invertebrate	Kotpal R.L.	01
40	Modern Text Book of Zoology Vertebrate	Kotpal R.L.	02
41	Fish And Fisheries	Pandey&Shukla	01
42	Regulatory Mechanism in Vertebrate	Pandey&Shukla	01

43	Animal Physiology	Gupta P.K.	01
44	Economic Zoology	Shukla&Upadhyay	01
45	Practical Zoology Invertebrate	Dr.Lal S.S.	03
46	Practical Zoology vertebrate	Dr.Lal S.S.	05
47	Biochemistry	Gupta S.M.	01
48	Element & Biochemistry	H.S. Srivastava	01
49	Element & Biotechnology	P.K.Gupta	01
50	Fundamental of Ecology	P. Odum	01
51	Immunology	Kubey	01
52	Immunology	S. Kumar	01
53	Theory & Practice of Animal Taxonomy & Biodiversity	V.C.Kapur	01
54	Ecology And Environment	P.D. Sharma	01
55	Bio technique Theory And Practice	Rana	01
56	Molecular Cell Biology	Harvey, Lodish	01
57	Animal Behaviour	M.P. Arora	01
58	Human Physiology	Nitin Ashok	02
59	Embryology	M.P. Arora	01
60	Advanced Biotechnology	Praveen Sharma	01
61	Advanced Developmental Biology	Abhilash Jain	01
62	Advanced Practical Chordate Zoology	G.S. Sandhu	01
63	Advanced Practical Invertebrate Zoology	G.S. Sandhu	01
64	An Introduction to Coelentreta	G.S. Sandhu	01
65	Animal Embryology	G.S.Sandhu	01

66	Applied Biology	Y.K. Parasher	01
67	Behaviour & Ecology	Shobha Mitra	01
68	Biodiversity: Concepts & Conservation	B.B. Hoshtti	01
69	Comparative Anatomy of Fish & Amphibia	Shailendra Singh	01
70	Ecology	Harshvardhan	01
71	Fish Harvesting & Processing	B.R. Selvamani	01
72	Objective Chordate Zoology	G.S. Sandhu	01
73	Organic Evolution	Bipin Kumar	01
74	Text Book of Embryology	P.R. Yadav	01
75	Textbook of Genetics	Harshvardhan	01
76	Tools & Techniques of Microbiology	Ramakant Naidu	01
77	Genes & Evolution	Shailendra Singh	01
78	Introduction to Animal Behaviour	Rishikesh Gupta	01
79	Chordates Vol.-1,2	H.V. Bhaskar	02
80	Evolutionary Biology	S.N. Prasad	01
81	Manual of Practical & Endocrinology	Harshvardhan Bhaskar	01