

**FOUR YEAR UNDERGRADUATE PROGRAM(2024 – 28)**  
**DEPARTMENT OF ZOOLOGY**  
**COURSE CURRICULUM**

<b>PART-A: Introduction</b>		
<b>Program:</b> Bachelor in Life Science(Diploma / Degree/ Honors)		<b>Semester -IV</b>
		<b>Session:</b> 2024-2025
1	CourseCode	ZOSE-02P
2	CourseTitle	Ecology and Wildlife Conservation & Management
3	CourseType	Discipline Specific Elective Lab Course
4	Pre-requisite(if, any)	<i>As per Program</i>
5	Course Learning Outcomes(CLO)	<p>After successfully completing this course, the students will be able to:</p> <ul style="list-style-type: none"> <li>➤ Understand practical fieldwork skills, including sampling techniques, data collection and methods of analysis used in ecological research.</li> <li>➤ Learn to design and implement ecological experiments.</li> <li>➤ Understand soil profile and characteristics.</li> <li>➤ Analyse chemical parameters of various water bodies.</li> <li>➤ Create awareness about local faunaand evaluate biodiversity of an area.</li> </ul>
6	CreditValue	1 Credits <i>Credit =30 Hours Laboratory or Field learning/Training</i>
7	TotalMarks	Max.Marks:50 <b>Min Passing Marks:20</b>
<b>PART -B: Content oftheCourse</b>		
TotalNo.of learning-Training/performancePeriods:30 Periods (30 Hours)		
Module	Topics(Coursecontents)	No. of Period
Lab./Field Training/ Experiment Contents of Course	<ul style="list-style-type: none"> <li>• Study of biodegradable and non-biodegradable pollutants in the locality.</li> <li>• Study of a representative type of ecosystem.</li> <li>• Determination of pH of water samples from various water bodies.</li> <li>• To determine the transparency of water of Pond ecosystem by Secchi disc.</li> <li>• To study the profile of soil in the field/ Soil sampling by V- cut method.</li> <li>• To study the zooplankton communities in a fresh water ecosystem.</li> <li>• To prepare a checklist of birds/Insects in and around college campus.</li> <li>• Estimation of ecological density, diversity and frequency of college premises by quadrat method.</li> <li>• Estimation of Shannon – Weiner index of a given area.</li> <li>• Estimation of Simpson– biodiversity index of a given area.</li> <li>• Study of strategy for preventing and managing human-wildlife conflicts.</li> <li>• Project Work / Quiz / Poster / Model preparation/Viva.</li> <li>• Practical Record</li> </ul>	30
Keywords	<i>Density, Diversity, Frequency, Biodegradable, Non- biodegradable, Pollutants, Secchi disc,</i>	
<b>SignatureofConvener&amp;Members (CBoS):</b>		

## PART-C: Learning Resources

### Text Books, Reference Books and Others

#### Text Books Recommended –

- Yadav Vikas, Yadav Parul; 2022 Modern Practical Zoology; Kedar Nath Ram Nath.
- Verma P.S. A Manual of Practical Zoology Chordates, S.Chand.
- Lal S.S. Practical Zoology Vertebrate; Rastogi Publications.
- Jayasurya, Arumugam N.; Practical Zoology; Saras Publication.

#### Reference Books Recommended –

- Odum, E.P. 1971 Fundamentals of Ecology; W.B. Saunders
- Beard, J.M. 2013 Environmental Chemistry in Society (2<sup>nd</sup> Edition). CRC Press.

#### Online Resources–

- <https://www.statology.org/simpsons-diversity-index/>
- <https://www.statology.org/shannon-diversity-index/>

#### Online Resources–

- [https://epgp.inflibnet.ac.in/epgpdata/uploads/epgp\\_content/S000014ER/P000280/M026066/ET/1520505951paper10 Module27 etext.pdf](https://epgp.inflibnet.ac.in/epgpdata/uploads/epgp_content/S000014ER/P000280/M026066/ET/1520505951paper10 Module27 etext.pdf)

## PART-D: Assessment and Evaluation

### Suggested Continuous Evaluation Methods:

Maximum Marks: 50 Marks

Continuous Internal Assessment (CIA): 15 Marks

End Semester Exam (ESE): 35 Marks

<b>Continuous Internal Assessment (CIA):</b> (By Course Teacher)	Internal Test / Quiz-(2): 10 & 10 Assignment/Seminar + Attendance- 05 Total Marks -15	Better marks out of the two Test / Quiz + obtained marks in Assignment shall be considered against 15 Marks
<b>End Semester Exam (ESE):</b>	<b>Laboratory / Field Skill Performance: On spot Assessment</b> A. Performed the Task based on lab. work - 20 Marks B. Spotting based on tools & technology (written) – 10 Marks C. Viva-voce (based on principle/technology) - 05 Marks	<b>Managed by</b> Course teacher as per lab. status

Name and Signature of Convener & Members of CBOS:

*Shahid* *h* *Prof* *saye* *band*  
*ash* *onim*