

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

PART- A: Introduction

Program: Bachelor in life Science (Diploma / Degree/ Honors)		Semester - III	Session: 2024-2025
1	Course Code	ZOSC-03P	
2	Course Title	Diversity of Invertebrates	
3	Course Type	Discipline Specific Lab Course	
4	Pre-requisite (if, any)	<i>As per Program</i>	
5	Course Learning Outcomes (CLO)	<p>After successfully completing lab course the students will be able to-</p> <ul style="list-style-type: none"> ➤ Develop understanding on the diversity of life with regard nonchordates. ➤ Gain Knowledge of grouping of animals on the basis of their morphological characteristics. ➤ Develop critical understanding how animals have changed from simple form to complex body plan. ➤ Acquired the detailed knowledge to think and interpret different animal species individually. 	
6	Credit Value	1 Credits	<i>Credit =30 Hours Laboratory or Field learning/Training</i>
7	Total Marks	Max. Marks: 50	Min Passing Marks: 20

PART -B: Content of the Course

Total No. of learning-Training/performance Periods: 30 Periods (30 Hours)

Module	Topics (Course contents)	No. of Period
Lab./Field Training/ Experiment Contents of Course	<p style="text-align: center;">List of labs to be conducted</p> <ul style="list-style-type: none"> • Study of different non-chordate taxa animals through models, slides and museum specimens in the laboratory. Emphasising classification, biogeography and diagnostic features of: Protozoa, Porifera, Coelenterata (also with special reference to Corals of Cnidarians), Helminthes, Annelida, Arthropoda, Mollusca and Echinodermata. • Histological slides of different Non chordate Taxa, slides of various larval forms of Helminthes, Crustacea and Echinodermata • Dissection of Pheretima to expose Alimentary canal and circum pharyngeal ganglia through Alternative methods of dissection. • Dissection of <i>Periplaneta</i> to expose the digestive system, salivary glands and Mouth Parts through Alternative methods of dissection. • Dissection of Prawn to expose appendages and statocyst through Alternative methods of dissection • Dissection of <i>Pila</i> to expose Nervous System through Alternative methods of dissection. • Study of Invertebrate animals in nature during a survey of a National Park/ Forest area/College campus. • Group discussion/Viva or Seminar presentation on two related topics: Polymorphism, Parasitic adaptations, Freshwater sponges, Biodiversity and climate change, Tree of Life, Marine zooplanktons and their ecological importance including oxygen evolution. • An “animal album or Practical Record” containing sketches, photographs, cut outs, with appropriate write up about the above mentioned taxa. • Study of some videos to develop understanding on the animals of different taxa. 	30
Keywords	<i>Museum specimens, Histological slides, Alternative of Dissection, Animal album</i>	

Signature of Convener & Members (CBoS) :

PART-C: Learning Resources

Text Books, Reference Books and Others

Text Books Recommended –

- S.S. Lal, Practical Zoology, Invertebrate. 12th Edition Rastogi Publications, Meerut, New Delhi.
- A manual of practical Zoology. Dr. P.S Verma, S. Chand Publication, New Delhi

Reference Books Recommended-

- Barrington, E.J.W. (1979). Invertebrate Structure and Functions. II Edition. E.L.B.S. and Nelson.
- Hyman, L H. (1940-67). The Invertebrates, Vol. I-VI. McGraw-Hill, New York.

Online Resources–

- <https://www.youtube.com/watch?v=GC5Ua6m873I>
- <https://www.youtube.com/watch?v=-qyM2Hskj84>

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

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

Name and Signature of Convener & Members of CBoS:

S. Rahalkar

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