

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

PART- A: Introduction

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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)	After successfully completing lab course the students will be able to- <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>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 <i>Pheretima</i> 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) :		

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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 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
End Semester Exam (ESE):	Laboratory / Field Skill Performance: On spot Assessment 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	Managed by Course teacher as per lab. status

Name and Signature of Convener & Members of CBoS: