M.G. Science Institute (Autonomous) B.Sc. (Hons.) Zoology

ZOE123T- Animal diversity and type study (non-chordates)

Semester: II	Course Title:- Animal diversity and type study (non-chordates)	Credit: 2
Course No.: 123T	Minor-2(T)	Hours: 2/week

Course Outcomes: On successful completion of the course, the learner will be able to

COs	Cognitive Abilities	Course Outcomes
CO 1	Remembering	Recall classification and characteristics of invertebrate phyla with examples and justifications.
CO 2	Understanding	Describe features of Porifera, Coelenterata, and other non-chordates, linking them to their ecological roles.
CO 3	Applying	Explain the biology, structure, and functions of Hydra vulgaris.
CO 4	Analyzing	Identify and classify non-chordate specimens using practical and taxonomic knowledge.
CO 5	Evaluating	Evaluate case studies like Hydrozoa polymorphism and coral reefs, applying findings to conservation.
CO 6	Creating	Design innovative strategies, such as models for coral reef restoration or Hydra regeneration studies.

CO-PO Mapping:

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO 1	3	1		1			1	1	
CO 2	3	1	1	1	1	1		2	1
CO 3	3	1	1	2	1	2		2	1
CO 4	2	2	2		1	2	2		
CO 5	1	2	2	3	2	1	1		1
CO 6	1	3	2				2	2	2

Unit No.	Unit Contents	Sessions Allotted
1	**Animal diversity (Non-chordates) – Systematics:** · General characters, salient features and classification of Invertebrates, starting from kingdom up to class, giving reasons & suitable examples (as per practical syllabus): ▪ Porifera ▪ Coelenterata ▪ Platyhelminthes	15

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	▪ Aschelminthes	
2	**Animal diversity (Non-chordates):** **General topics**: · Spicules in porifera · Polymorphism in Coelenterata (Hydrozoa) · Types of coral reefs **Type study: Hydra (*Hydra vulgaris*):** · Systematic position · Habits and habitat · External Morphology · Internal structure (Coelenteron, Body wall) · Locomotion · Nutrition · Respiration · Nervous system · Reproduction (Asexual & Sexual) and Regeneration	15