

DEPARTMENT OF ZOOLOGY				CLASS: I B.Sc. Zoology				
Sem	Course Type	Course Code	Course Title	Credits	Contact Hours/week	CIA	Ext	Total
I	Major	20U1ZMP1	Major Practical – I	2	3	40	60	100

Nature of Course			
Knowledge and skill			Employability oriented
Skill oriented	✓		Entrepreneurship oriented

Course Objectives

By the end of the course, students will be able:

1. To learn the dissection and mounting techniques.
2. To understand the different organisms of Invertebrates.

Mountings

Body Setae of Earth worm
Mouth parts of Cockroach
Salivary glands of Cockroach

Dissections

Digestive system of Cockroach
Nervous system of Cockroach
Reproductive system of Cockroach

Spotters:

Amoeba, Euglena, Paramecium, Trypanosoma, Elphidium, Noctiluca, Spicules, Obelia, Physalia, Porpita, Pennatula, Adamsia, Fungia, Tape worm, Redia larva, Cercaria, Liver fluke, Planaria, Ascaris, Dracunculus, Chaetopterus, Arenicola, Aphrodite, Leech, Sacculina, Albunea, Scolopendra, Limulus, Scorpion, Aplysia, Vaginulus, Pinctada, Octopus, Nautilus, Chiton, Dentalium, Star fish, Bipinnaria larva.

Books for References

1. Jayasurya, Nair N.C, Soundarapandian N, Arumugem N, Leelavathy S and Murugan T, 2013. *Practical Zoology Vol. 1 Invertebrata*, Saras publication, Nagercoil.
2. Sinha J, Chatterjee A.K and Chattopadhyay P, 2011. *Advanced practical zoology*, Books and Allied (P) Ltd., Kolkata.

Web Resources

<https://www.youtube.com/watch?v=wF7ew2w24as>

Pedagogy

PPT, group discussion, interaction, quiz, tutorial and virtual labs.

Rationale

This course provides basic knowledge on diversity of Invertebrates, structure and functions of organisms, identify the unique features and finally their role in biological communities.

Activities having direct bearing on employability / Skill development / Entrepreneurship

The knowledge gained provides the skill to identify Invertebrates, unique structures and its functions, analyse their role in the ecological system.

Course Learning Outcomes:

CLOs	CLO Statement	Knowledge level
CLO-1	Recall the diversity of Invertebrates.	K1
CLO-2	Understand the structure and functions of the organism.	K2
CLO-3	Apply the knowledge to identify the Invertebrates fauna based on their unique characters.	K3
CLO-4	Analyse the organs/systems and their role in Invertebrates.	K4
CLO-5	Examine the role of Invertebrates in biological communities and ecological interactions.	K4

Mapping with Programme Specific Outcomes

	PSO-1	PSO-2	PSO-3	PSO-4	PSO-5	PSO-6	PSO-7	PSO-8
CLO-1	2	2					1	
CLO-2	1	2	3				3	
CLO-3	1	3	2	1			3	
CLO-4	1	3	3	2			3	
CLO-5	1	2	3	2			3	

3- Advance application; 2- Intermediate level; 1- Basic level

Mapping with Programme Outcomes

	PO-1	PO-2	PO-3	PO-4	PO-5
CLO-1	2	2		2	2
CLO-2	2	2	1	2	2
CLO-3	2	3	2	3	2
CLO-4	2	2		2	
CLO-5	2	2	1	3	3

3- Advance application; 2- Intermediate level; 1- Basic level