

DEPARTMENT OF ZOOLOGY				CLASS: I B.Sc. Zoology				
Sem	Course Type	Course Code	Course Title	Credits	Contact Hours/week	CIA	Ext	Total
II	Major	20U1ZMP2	Major Practical – II	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 Chordates.

Mountings

Placoid scales of Shark
 Cycloid scales of fin fish
 Brain of frog (Procedure with illustration)

Dissections

Digestive system of fish
 Respiratory system of fish
 V cranial nerve of Frog (Procedure with illustration)
 Metamorphosis in Bufo bufo
 Nervous system in Calotes (V & VII cranial nerves)
 Pneumatic bones in Pigeon

Observation

Poisonous and non-poisonous snakes
 Air sacs in Pigeon

Spotters:

Amphioxus, Balanoglossus, Ascidian, Doliolum, Petromyzon, Narcine, Trygon, Hippocampus, Echeneis, Exocoetes, Cynoglossus, Rhacophorus, Uracotyphlus, Axolotle, Tadpole larva, Draco, Chameleon, Typhlops, Bungarus, Naja, Viper, Enhydrina, Eudynamys, King fisher, Ant eater, Loris and Pteropus.

Books for References

1. Jayasurya, Thangamani A, Arumugam N, Prasanakumar S and Narayanan L.M, 2013. *Practical Zoology Vol. 2 Chordata*, 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=xSu7jeOuPDK>
<https://www.youtube.com/watch?v=sCWUZiRaBbA>
<https://www.youtube.com/watch?v=xuSckL-IPhg>
https://www.youtube.com/watch?v=PKK_ExR2SkY

Pedagogy

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

Rationale

This course provides basic knowledge on diversity of Chordates, structure and functions of organisms, identify 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 Chordates, 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 Chordates.	K1
CLO-2	Understand the structure and functions of the organism.	K2
CLO-3	Apply the knowledge to identify the Chordate fauna based on their unique characters.	K3
CLO-4	Analyse the organs/systems and their role in Chordates.	K4
CLO-5	Examine the role of Chordates 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