

PRACTICAL -1
LIFE AND DIVERSITY OF INVERTEBRATES AND CHORDATES

Semester	Subject Code	Category	Practical		Theory	Practical	Credits
			Hrs/ week	Total Hours/ Semester			
II	21CPZO21	Core Practical-I	4	60	Nil	60	4

COURSE OBJECTIVES:

- To identify and study of selected Protozoans
- To understand the evolution /different types of coelom.
- To dissect and mount the digestive system of insects
- To Study of the specimens and their adaptive features for their respective modes of life
- To Study of the skull types with reference to jaw suspensions

INVERTEBRATA

30 Hours

Identification and study of selected Protozoans (*Entamoeba histolytica*, *Plasmodium vivax*) and Helminthes (*Taenia solium*)

Different Types of Coelom

Identification and study of sections of available animals from Cnidaria (*Hydra*), Aschelminthes (*Ascaris lumbricoides*- Male and Female) and Annelida (*Nereis*) Identification and study of larval forms (Crustaceans and Echinoderms) of major phyla of Invertebrates.

Major Practical-Dissection

Dissection of digestive system of insect (Cockroach), *Sepia*.

Dissection of nervous system of Prawn, insect (Cockroach), and *Sepia*.

Dissection of reproductive system of insect (Cockroach)

Minor Practical -Mounting

Mouth parts of Honey bee, Housefly, Mosquito

Appendages of Prawn

Sting apparatus of Honeybee

Radula of Phyla

Study of prepared slides - mouthparts of bug and Butterfly to relate their structure and function.

CHORDATA

30 Hours

To study of the following specimen to bring out their affinities:

- a. Amphioxus
- b. Balanoglossus
- c. Ascidian

To study of the following specimens with reference to their adaptive features for their respective modes of life

- d. Echineis
- e. Ichthyophis / Uraeotyphlus
- f. Hyla
- g. Draco
- h. Pigeon
- i. Bat

To study of the following skull types with reference to jaw suspensions

- j. Fish
- k. Frog
- l. Calotes
- m. Snake
- n. Rat/Rabbit

Dissection and mounting

Webberian ossicles in Cat fish.

Aortic arches in Teleost

IX and X Cranial nerves of Cat fish.