

## B.Sc ZOOLOGY SYLLABUS UNDER CBCS

### I ..SEMISTER

#### CORE PAPER..I

#### ANIMAL DIVERSITY - INVERTEBRATES

##### **BLOCK – I PROTOZOA, PORIFERA, CNIDARIA**

- Unit –1 : Introduction to Animal Kingdom  
Unit –2 : Protozoa – General Characters and Classification up to classes .  
Type study – *Elphidium*; Protozoan Diseases  
Unit –3 : Porifera – General Characters and Classification up to classes .  
Type study – *Sycon* – Canal System in Porifera  
Unit –4 : Cnidaria – General Characters and Classification up to classes .  
Type study – *Aurelia* ; Polymorphism in Cnidaria

##### **BLOCK – II PLATYHELMINTHES, ASCHELMINTHES**

- Unit –5 : Platyhelminthes – General Characters and Classification up to classes.  
Important Trematode and Cestode parasites. Type study – *Fasciola hepatica*,  
*Taenia solium*.  
Unit –6 : Aschelminthes – General Characters and Classification up to classes .  
Types study – *Ascaris Lumbricoides*. Parasitic adaptations of  
Helminthes

##### **BLOCK – III ANNELIDA, ARTHROPODA**

- Unit –7 : Annelida – General Characters and Classification up to classes .  
Type study – *Hirudinaria granulose*. Metamerism, Nephridia and  
Coelomoducts  
Unit –8 : Arthropoda – General Characters and Classification up to classes .  
Onychophora (*Peripatus*) – Affinities.  
Unit- 9 : Type study *Palaemon*.

##### **BLOCK – IV MOLLUSCA, ECHINODERMATA, HEMICHORDATA**

- Unit –10 : Mollusca – General Characters and Classification up to classes:  
Type study – *Pila globosa*. Economic Importance of Mollusca.  
Unit –11 : Echinodermata – General Characters and Classification up to classes.  
Type study – *Asterias*. Echinoderm larvae and its significance.  
Unit –12 : Hemichordata – General Characters and Classification up to classes.  
Type study and Affinities – *Balanoglossus*

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**B.Sc PRACTICAL SYLLABUS FOR I SEMESTER  
ZOOLOGY- CORE PAPER..I  
ANIMAL DIVERSITY - INVERTEBRATES  
LABORATORY MANUAL & RECORD**

**BLOCK – I STUDY OF MUSEUM SLIDES/SPECIMENS/MODELS**

**( Classification up to orders)**

- Unit-1 : Protozoa: *Entamoeba histolytica* , *Euglena*, *Trypanosoma*, *Polystomella*,  
*Paramoecium*, *Paramoecium Binary fission and Conjugation*, *Vorticella* ,  
*Plasmodium vivax*
- Unit-2 : Porifera: *Sycon*, *Spongilla*, *Euplectella*, *Hylonema*, *Euspongia*, *Sycon - T.S & L.S*,  
Spicules.
- Unit - 3: Coelenterata: *Obelia – Colony & Medusa*, *Aurelia*, *Physalia*, *Porpita*, *Velella*,  
*Corallium*, *Gorgonia*, *Pennatula*, *Adamsia*
- Unit- 4 : Platyhelminthes: *Planaria*, *Fasciola hepatica*, *Fasciola larval forms – Miracidium*,  
*Redia*, *Cercaria*, *Echinococcus granulosus*, *Schistosoma haematobium*
- Unit- 5 : Nematelminthes: *Ascaris(Male & Female)*, *Drancunculus*, *Ancylostoma*,  
*Wuchereria*
- Unit- 6 : Annelida: *Nereis*, *Hetero neries*, *Aphrodite*, *Chaetopteurs*, *Hirudinaria*,  
*Trochophore larva*
- Unit- 7 : Arthropoda: *Lepas*, *Belanus*, *Cancer*, *Palaemon*, *Scorpion*, *Scolopendra*,  
*Sacculina*, *Limulus*, *Peripatus*, *Larvae - Nauplius*, *Mysis*, *Zoea*, *Mouth parts of  
male & female Anopheles and Culex*, *Mouthparts of Housefly and Butterfly*.
- Unit-8: Mollusca: *Chiton*, *Pila*, *Unio*, *Pteredo*, *Murex*, *Sepia*, *Loligo*, *Octopus*, *Nautilus*,  
*Glochidium larva*
- Uniy-9: Echinodermata: *Asterias*, *Ophiothrix*, *Echinus*, *Clypeaster*, *Cucumaria*, *Antedon*,  
*Bipinnaria larva*
- Unit-10 : Hemichordata: *Balanoglossus*, *Tornaria larva*

**BLOCK – II DISSECTIONS**

- Unit –11 : Prawn Nervous System
- Unit –12 : Prawn Appendages, Mounting of statocyst

Unit- 13 : Insect Mouth Par

1. Laboratory Record work shall be submitted at the time of practical examination.
2. An “Animal album” containing photographs, cut outs, with appropriate write up about the above mentioned taxa. Different taxa/ topics may be given to different sets of students for this purpose.
3. Computer aided techniques should be adopted – show virtual dissections

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