

BHARATHIAR UNIVERSITY, COIMBATORE

B.Sc. Zoology(Wild Life Biology) Degree Course (Affiliated Colleges)

(For the students admitted from the academic year 2017-2018 and onwards)

Note: The revised syllabus for the Semester I:Core Paper I - BIODIVERSITY OF INVERTEBRATES is furnished below be followed and there is no change in the existing scheme of examination and syllabi of remaining papers.

Semester – I core paper – I BIODIVERSITY OF INVERTEBRATES

Objectives: 1. To understand Biodiversity, Habitat, Adaptation organization and taxonomic status of invertebrates.
2. Explaining the basic aspects of classification, structural and functional details of Invertebrates.

Unit I:

Protozoa : Classification up to orders and their characters with suitable Indian examples
Type study : Paramecium
General topic : Protozoan diseases and their control (Plasmodium Life cycle in detail)
Kingdom : Animalia
Porifera : Classification up to orders and their characters with suitable Indian examples.
Type Study : Leucosolenia
General topic : Economic Importance of sponges.

Unit II:

Coelenterate : Classification up to order and their characters with suitable Indian examples.
Type Study : Obelia
General topic : Coral reefs, Polymorphism in Coelenterates.

Unit III:

Helminthes : Classification up to order and their characters With suitable Indian examples.
Type Study : Taenia solium
General topic : Nematode parasite and their parasitic adaptation
Annelida : Classification up to order and their characters with suitable Indian examples.
Type Study : Earth Worm
General topic: Filter feeding in polychaetes.

Unit IV:

Arthropoda : Classification up to order and their distinguishing characters with suitable Indian examples.
Type Study : Cockroach
General topic : Crustacean larvae and their significance. Detailed study of peripatus and affinities, Economic importance of insects.

Unit V:

Mollusca : Classification up to order and their Distinguishing characters with suitable Indian examples.

Type Study : Pila globosa

General topic : torsion in Gastropoda, Economic importance of Mollusca

Echinodermata : Classification up to order and their Distinguishing characters with suitable Indian examples.

Type Study : Star fish

General topic : Larval forms and their significance.

Text books for study:

1. Ekambaranatha Ayyar & T.N. Ananthakrishnan (1992) Manual of Zoology Vol – I , part I & II S.Viswanathan Pvt. Ltd. Chennai.
2. Jordan. E.L & Verma. P.S Invertebrate zoology S.Chand & co. New Delhi.
3. Ebanasar and Sheeja 2006 outlines of five kingdoms of life, “Shine and twinkle publication”.

Books for reference:

1. Barnes R.D (1992) Invertebrate Zoology IV Edn. Holt saunders International Edn.
2. Barrington E.J.W (1979) Invertebrate structure and function 2nd Edition ELBS & Nelson.
3. Kotpal R.L, S.K.Agarwal, R.P.R.Khetarpal (1989) Modern text book of zoology Rastogi Publications
4. Rajesh Karyakarle and Ajit Damle – 2005 Medical Parasitology Books & Allied (P) Ltd. Kolkata.