



Govt. of Jammu & Kashmir
CLUSTER UNIVERSITY SRINAGAR
P.G DEPARTMENT OF ZOOLOGY
S.P.COLLEGE SRINAGAR

NAAC Re-Accredited Grade A

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شہری پرتاپ کالج

Course Code: PGZOL-17C-102

Title: Structure and Function of Invertebrates

Total Credits: 4 (4 lecture+0Tutorial+0 practical)

Maximum Marks: 60

Unit I: Protozoa and Porifera

- 1.1 General account of Protozoa- classification and Nutrition
- 1.2 Locomotion, Reproduction and economic importance of Protozoa
- 1.3 Origin, affinities and classification of Porifera
- 1.4 Canal system, skeleton and reproduction in Porifera

Unit II: Coelenterata and Platyhelminths

- 2.1 Introduction to coelenterate, coral reefs
- 2.2 Polymorphism in Coelenterata
- 2.3 Introduction to Platyhelminths
- 2.4 Larval forms of Cestodes and Trematodes

Unit III: Organization of Coelom, Annelida and Arthropoda

- 3.1 Acoelomata, Pseudocoelomata, Coelomata, theories of origin of coelom
- 3.2 Annelida: Introduction, Classification, adaptive radiation in polychaetes, trochophore larva and its evolutionary significance
- 3.3 Arthropoda: Introduction, classification, Crustacean larvae and their significance, Importance of Peripatus
- 3.4 Respiration in Arthropods (Aquatic and terrestrial, Excretion in Arthropods)

Unit IV: Mollusca and Echinodermata

- 4.1 Mollusca: Introduction & General Characteristics, Respiration, Nervous system (Cephalopoda) and General account on colouration & ink in Mollusca
- 4.2 Modification of foot, Shell in Mollusca, Torsion in gastropods and Economic importance of Mollusca.
- 4.3 Echinodermata: General character and Taxonomic history, Skeleton & Coelom, Water vascular system, Autotomy & Regeneration.
- 4.4 Echinodermata: Larval forms and their significance.

Suggested Books / Reading Material

1. Barnes: Invertebrate Zoology (Holt-Saunders International, 4th edition, 1980)
2. Barnes: The invertebrates - A synthesis, 3rd edition, Blackwell, 2001
3. Hunter: Life of invertebrates, Collier Macmillan Pub. 1979
4. Invertebrate Zoology Jordon .Verma
5. Invertebrate Zoology P.S.Verma
6. Marshall: Parker & Haswell Text Book of Zoology, Vol. I, 7th edition, Macmillan, 1972
7. Modern Text Book of Zoology: Invertebrates Prof. R.L.Kotpal .
8. Moore: An Introduction to the Invertebrates, Cambridge University Press, 2001