First Year

Zoology

Paper I – SYSTEMATICS AND ANATOMY OF INVERTEBRATES MAXIMUM MARKS :30 ANSWER ALL QUESTIONS

- 1. (a) Give an account on the general organization and classification of the phylum Porifera.
 - (b) Write short notes on
 - (i) Various types of reproductive processes in protozoa
 - (ii) Classification of protozoa.
- 2. (a) Give an account on the parasitic adaptations in Platyhelminthes.
 - (b) Write short notes on
 - (i) Polymorphism in coelenterates
 - (ii) General organization of phylum Nemathelminthes
- 3. (a) Give an account on the general organization and classification of the phylum Annelida.
 - (b) Write short notes on
 - (i) Evolutionary significance of Trochophore larvae
 - (ii) Classification of Annelida

(DZOO01)

ASSIGNMENT-2 M.Sc. DEGREE EXAMINATION, MAY/JUNE-2025

First Year

Zoology

Paper I – SYSTEMATICS AND ANATOMY OF INVERTEBRATES MAXIMUM MARKS :30 ANSWER ALL QUESTIONS

- 1. (a) Describe the larval forms of echinoderms.
 - (b) Write short notes on
 - (i) General organization of phylum Mollusca
 - (ii) Classification of Echinodermata
- 2. (a) Give an account on the general organization of Rotifera.
 - (b) Write short notes on
 - (i) Ectoprocta
 - (ii) Sipuncula.

First Year

Zoology

Paper 2 – Systematics & Anatomy of Chordates & Gamete Biology MAXIMUM MARKS :30 ANSWER ALL QUESTIONS

- 1. (a) Give an account on Urochordata.
 - (b) Write short notes on
 - (i) General characters of chordates
 - (ii) Specierlized characters of Proto chordates
- 2. (a) Write an essay on the migration of fishes
 - (b) Write short notes on
 - (i) Characters of amphibia
 - (ii) Non Poisonous snakes
- 3. (a) Give an account on the adaptation of birds to flight.
 - (b) Write short notes on
 - (i) Flight less birds
 - (ii) Feathers in birds

First Year

Zoology

Paper 2 – Systematics & Anatomy of Chordates & Gamete Biology MAXIMUM MARKS :30 ANSWER ALL QUESTIONS

- 1. (a) Give an account on general characters of mammals
 - (b) Write short notes on
 - (i) Adaptative radiation in Mammals
 - (ii) Aquatic mammals
- 2. (a) Give an account on parental care in fishes
 - (b) Write short notes on
 - (i) Patterns of cleavage
 - (ii) Marsupials

First Year

Zoology

Paper III – CELL BIOLOGY, GENETICS AND EVOLUTION MAXIMUM MARKS :30 ANSWER ALL QUESTIONS

- 1. (a) Give an account on the Endoplasmic reticulum.
 - (b) Write short notes on
 - (i) Mitochondria
 - (ii) Plasma membrane
- 2. (a) Give an account on the DNA as genetic material.
 - (b) Write short notes on
 - (i) mRNA
 - (ii) Protein synthesis
- 3. (a) Give an account on the abnormalities of the chromosomes.
 - (b) Write short notes on
 - (i) Giant chromosomes
 - (ii) Meiosis

(DZOO03)

ASSIGNMENT-2 M.Sc. DEGREE EXAMINATION, MAY/JUNE-2025

First Year

Zoology

Paper III – CELL BIOLOGY, GENETICS AND EVOLUTION MAXIMUM MARKS :30 ANSWER ALL QUESTIONS

- 1. (a) Give an account on the sex determination and sex linked inheritance.
 - (b) Write short notes on
 - (i) Multiple alleles
 - (ii) Interaction of genes
- 2. (a) Describe the theories of evolution.
 - (b) Write short notes on
 - (i) Species concept
 - (ii) Hardyweinberg law.

First Year

Zoology

Paper IV — ANIMAL ECOLOGY AND WILDLIFE MAXIMUM MARKS :30 ANSWER ALL QUESTIONS

- 1. (a) Give an account on the light penetration and the factors affecting light availability in natural waters.
 - (b) Write short notes on:
 - (i) Life supporting properties of water
 - (ii) Structure and functions of ecosystem
- 2. (a) Give an account on the biogeochemical cycles of carbon and nitrogen.
 - (b) Write short notes on:
 - (i) Concept of productivity
 - (ii) Shelford's law of tolerance
- 3. (a) Give an account on the concepts of habitat and ecological niche.
 - (b) Write short notes on:
 - (i) Commenslism
 - (ii) Allelopathy

First Year

Zoology

Paper IV — ANIMAL ECOLOGY AND WILDLIFE MAXIMUM MARKS :30 ANSWER ALL QUESTIONS

- 1. (a) Write an essay on energy partitioning and optimization.
 - (b) Write short notes on:
 - (i) Properties of the population group
 - (ii) r and k-selection
- 2. (a) Give an account on the IUCN classification of rare animals.
 - (b) Write short notes on:
 - (i) Hot spots
 - (ii) Biosphere reserves.