

ZOOLOGY

1. General characters and classification of non-chordates (upto classes) and chordates (upto order) of the following :
Protozoa, Porifera, Coelenterata, Platyhelminthes, Nematel-minthes, Annelida, Arthropod Mollusca, Echinodermat and chordeta.
2. Anatomical structures and their functions and life history of the following types :
Paramlecium, Plasmodium, Euglena, Entamoeba, Sycon, Obelia, Liver, Fluke, Ascaris, Leech, Nereis, Prawn, Cock-roach, Pila, Unio, Starfish, Amphioxus, Scoliodon, Toad, Calotecs, Pigeon and Rat.
3. Structure of an animal cell, Structure and function of cell organelles, Mitosis and Meiosis cell division.
4. Biotic and abiotic factors, Eco-system, Food chain, Pollution in air, water and land.
5. Wild life of India with special reference to N.E. India. endangered species.
6. Comparative study of integument, Pectoral and felvic girdles heart and urinogenital system of vertebrates.
7. Beneficial and harmful insects, Life history and culture of Eri, Muga and Honey Bee.
8. Nucleic acid and biosynthesis of protein.
9. Mendelian Laws of inheritance, Linkage and crossing over mutation.
10. Evidences and theories of evolution.
11. Fossil and fossil dating
12. Nature and function of enzymes.
13. Physiology of digestion, respiration and excretion of mammal.
14. Composition of blood, blood grouping in man and coagulation of blood.
15. Histophysiology of pancrease, pituitary and thyroid glands.
16. Gametogenesis.
17. Fertilization, cleavage and gastrulation.
18. Formation of Foetal membrances in chick and mammals.
19. Zoogeographical realms of the world and its fauna.
20. Concept of species and sub-species, Binomial nomenclature and international code.