

ZOOLOGY

CODE-27

NON-CHORDATE AND CHORDATE

PAPER-1

1. A general survey, classification and relationship of various phyle.
2. Protoza:-Study of structure, life history of Pharamaceium, vorticella, Monoeystis Malarial Parasite luglena Trpyansoma.
3. Porifera:-Study of structure of sycon, canal system and skeleton and inporiferal.
4. Coclentaterata : OBELIA AURELIA (Structure and Life History), Polymorphism in Hydrozoa coral formation, Metgensis.
5. Helminthes: PLANARIA,FASCIOLA TAENIA Prasitism and Parastice adoption, Evolution (Structure and Life History) of Parasitism.

ASCARIS (Structure and Life History) Helminthes in relation to Man:

6. An nelida- Neries, Barthworm, Leech (detailed study).
7. Arthropode- Palaemon, Scorpion, Cockroach, Crustacean Larve, Economical importance of Insects.
8. MOLLUSCA: UNIO,PILA, TORSION and detossion in Gastropeda.
9. Echinadermata- STARFISH, Larnal form of Echinadermata.
- 10 Structure and bionomics and classification of the following:-
Balnoglossus,Herdmaina,Branchiostoma,Scoliodon, Frog,Urmastax,Pigeon,Rabit.
11. Comparative account of the various system of vertebrater (Digestive system, Respiratory system, Nervous system, Receptor system, Circulatory system, Urinogenital system).
12. Retrogressive Metamorphosis,Coclom in Branchiostoma:

PAPER-II

(CELL BIOLOGY, GYTOEGNETICS, ANIMAL PHISIOLOGY, EVOLUTION EMBROLOGY AND HISTOLOGY)

1. Cell Biology:- Cell, theory, structure and function of cell and evloplasmic constituents structure of Plasma Mumbrane, Endoplasmic reticulum. Golgi Bodies Mitochondria, ribosomes Nucleus.

Cell Division:- Mitosis and Melosis.

GENE STRUCTURE AND FUNCTION, WATSON AND CRICK MODEL OF DNA, REPLICATION OF DNA

2. cytogenetics:- Mendelian Laws of inheritance, Recombination, Multiple Allele, Mutation, natural and Induced Polyploidy Sex determination, Cytoplasmic inheritance.
3. Physiology:- Chemical composition of Protoplasm. Animal Physiology; Digestion and Absorption Respiration (including Cell respiration), Kidney and Physiology of Excretions, Physiology of Nervous impulse Physiology of Muscular contraction, Physiology of Endocrine gland, Physiology of Osmoregulation.
4. Evolution:-Origin of life, history of evolutionary thought, Evidences of Evolution (anatomical Embryological comparative Physiology evidence for geographical distribution, Palaeontological evidence). Theories of evolution: Lamarckism, Neolamarckism, Darwinism, New Darwinism, Hardy Weinberg law.
5. Embryology and Histology:- Gametogenesis, Fertilisation, Types of eggs, cleavage, Development upto gastrulation in Branchiostoma, Frog and Chick, Fate maps of Frog and Chick, Metamorphosis in Frog, Formation and fate of extra embryonic membranes in chick, formation of allantois, amnion and types of placenta in Mammal.

Histology of the following Tissues and Organs of Mammals:-

1. Epithelial Tissue, Connective tissue (connective tissue proper, cartilage bone, blood and lymph). Muscular tissue and Nervous tissue. HISTORY OF SKIN, STOMACH, INTESTINE, LIVER, PANCREAS, LUNG, KIDNEY, TESTIS, Ovary, SPLEEN.