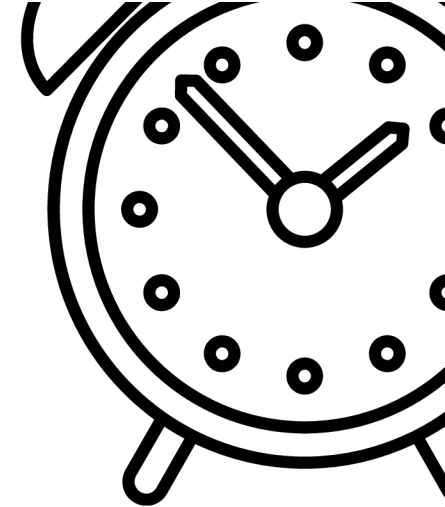


AMSAT

BIOLOGY SYLLABUS



Depth of Topics will be around CBSE, ICSE, NSO & IJSO examination standard

CELL BIOLOGY

Cell Structure & their functions.
Cell Cycle and cell division:
Mitosis, meiosis (restricted to the types of cells produced and their ploidy).
Structure and functions of molecules (and their monomers): carbohydrates, proteins, nucleic acids, lipids



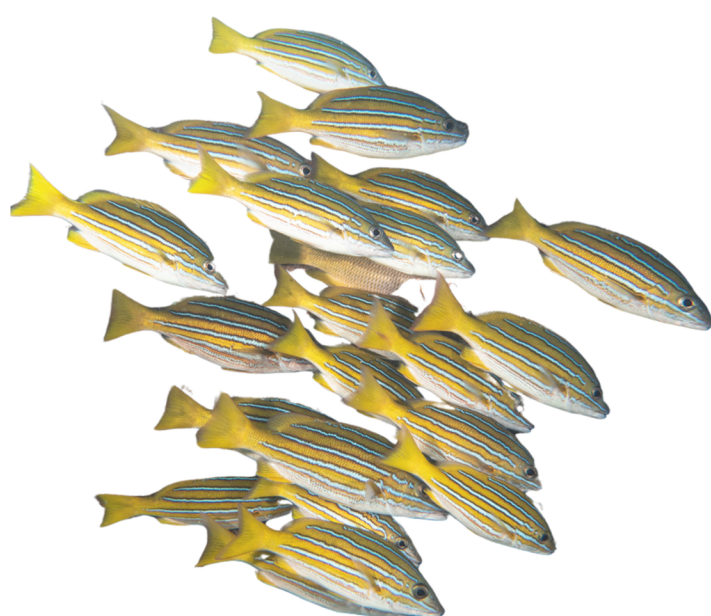
GENETICS & BIOLOGY APPLICATION

Chromosomal basis of inheritance and variation of traits, Gene, Replication of DNA, Mendel law of genetics (family pedigree, sex-linked inheritance in humans), Monohybrid crossing. PCR, ELISA, Basics of Biotechnology



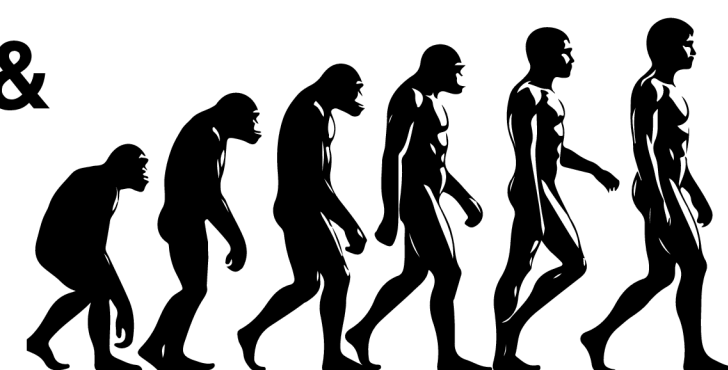
ANIMAL FORMS & PHYSIOLOGY

Animal Tissue, Digestive System, Body fluids & Circulation, Respiratory System, Excretory System, Skeletal System, Nervous System, Endocrine System, Reproductive System



EVOLUTION & DIVERSITY

Theory of evolution, Natural selection.

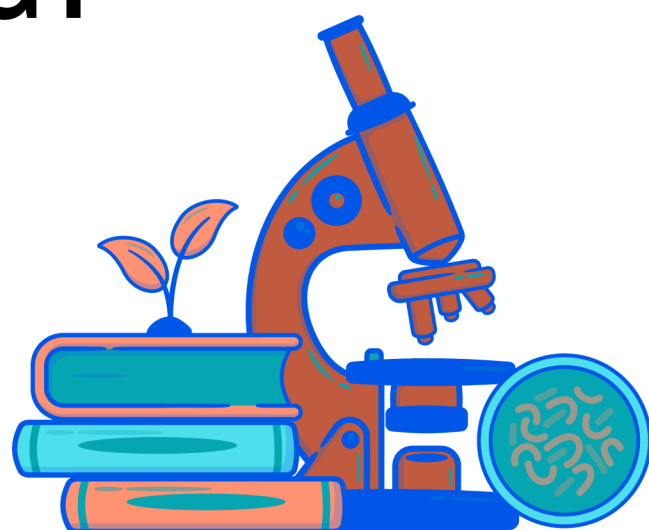


Diversity Part:

Characteristics of living organisms, Principles of taxonomy and classification of living organisms; Principle of phylogenetic trees and cladistics, Characteristics of Monera, Protists, Plants, Fungi, and Animals

PLANT BIOLOGY

Plant Tissue, Absorption by Roots, Transpiration, Photosynthesis, Respiration, Plant Movements, Plant Hormones, Plant Reproduction.



ECOLOGY & PREVENTIVE BIOLOGY

Biogeochemical cycles, Producers, consumers, and decomposers. Food chains and webs. Factors affecting ecosystems. Interactions between organisms (competition, predation, symbiosis) Protective function of the immune system and vaccination. Microorganisms causing common and infectious diseases HIV and AIDS

