MOST EXPECTED TOPICS

IMPORTANT TOPICS FOR 11th BIOLOGY SEND UPS

Chapter-01 (Cell and Sub-Cellular Organelles)

- * Cell wall (long + short qs)
- * Pathway of a signal [protein and steroid signalling] (Difference question)
- * Simple diffusion and Facilitated diffusion (short) { Difference }
- * Osmosis and Active transport (short)
- * Golgi Apparatus = Important organelle
- * Mitochondria = most Important organelle
- * Endoplasmic Reticulum = Important
- * Lysosome { Diagram analysis } (MCQ + short)
- * Peroxisomes and Glyoxysomes (Difference)
- * Prokaryotes and Eukaryotes (Difference)
- * Types of Stem Cells

- * Phagocytosis and Pinocytosis (Difference)
- * Endocytosis and Exocytosis (Difference)

Chapter - 2 (Biological Molecules)

* Properties of Water (Important) = Conceptual questions

* Monosaccharides Structure and Properties

* Conversion of Open structures to Close ring structures

* Glycosidic Bond in Disaccharides

* Proteins (v. Important) = It's structure and Difference b/w Essential and Non - Essential Amino acids

- * Formation of Peptide Linkage
- * Difference b/w Fibrous and Globular protein
- * Properties of Lipids
- * Steroids and Prostaglandin (v.v Important)
- * General Structure of Nucleotide

- * Difference of Nitrogenous bases in Nucleotides
- * Watson and Crick Model of DNA (Important)
- * Types of RNA (v. v Important)
- * Polymerisation of Nucleotides

Chapter - 3 (Enzymes)

- * Difference between Cofactors
- * Mechanism of Enzyme Action (v. v Important)

(Lock and key model)

(Induced fit model) Difference b/w them + their Structures

- * Activation Energy (short + Graph)
- * Effect of Temperature on Enzymes Action (MCQs + Graph)
- * Competitive and Non Competitive (Difference)
- * Classification of Enzymes (Important) = (
 Reaction type + Substrate)

Chapter - 4 (Bioenergetics)

- * Role of water = Neil Hypothesis (Important)
- * Difference in Absorption of Spectrum of Chlorophyll a and b (Important)
- * Cyclic and Non Cyclic Phosphorylation (Difference between them) Important
- * Calvin Cycle (Important)
- * Lactic Acid and Alcoholic Fermentation Difference (short)
- * Glycolysis (Important)
- * Oxidation of Pyruvate to Acetylene CoA (short)
- * Kreb Cycle
- * ETC
- * Chemiosmosis and Substrate level Phosphorylation (short)Chapter: 13

Chapter-05 (Acellular Life)

Classification based on host (important) Bacteriophage life cycle (important) HIV life cycle (important) Opportunistic diseases (important) Prions & VarroidsImportant Topics From Ch 14

Chapter-06 (Prokaryotes)

Cyanobacteria

Difference in cell wall of Gram Positive and Gram Negative bacteria

modes of nutrition in bacteria

structure of bacterial flagellum

phases of growth reproduction in bacteria bacterial Flora of humans

Chapter-07

Protist and fungi polyphyletic origin of protist

Mutualism and lichen Association in fungi pathogenic and beneficial role of fungi

Chapter-09 (Diversity in plant function)

Role of palisade and spongy meaophyll in exchange of gases difference between the Pathways of water transport

TACT theory

k+positive ions influx/eflux theory for opening and closing of stomata translocation

osmotic adjustment in plants living in different environments

annual rings

photoperiodism and mechanism of photo periodism

VERONIZATION

Chapter-08

Kingdom plantae General classification of kingdom plantae characteristic features of bryophyte and angiosperm and pteridophyte

Chapter-10 Animalia

Difference between protosomes and deutrosomes

difference between acoelomate pseudocoelomate and coelomate

phylum chordata

phylum Arthropoda

Phylum Platyhelminthes Phylum cnidaria and phylum Porifera

Chapter- 11 Reproduction

Male reproductive system reproductive system hormonal control of male reproductive system female reproductive cycle