

UNIT-3CELL- STRUCTURE AND FUNCTION

1. Name of cell organelles who discovered them and their functions.
2. Difference between plant cell and animal cell.
3. Difference between prokaryotic cell and eukaryotic cell.
4. Mitochondria Plasma membrane, Plastids and Ribosome.
5. Reducing vs Non-reducing sugar.
6. Saturated vs Non Unsaturated Lipids.
7. Enzymes - Active site, Properties, Factors
8. Compare mitosis and meiosis.
9. Cell cycle.

UNIT-4PLANT PHYSIOLOGY

1. Definition → Diffusion, Imbibition, Osmosis, Plasmolysis, Water Potential and DPD.
2. Apoplast - Symplast pathway
3. Transpiration vs Guttation
4. Nitrogen fixation
5. Light Reaction
6. Dark reaction
7. Difference between C<sub>3</sub> and C<sub>4</sub>-Cycle.
8. Glycolysis
9. Krebs's Cycle.
10. Fermentation
11. Functions of all 5 phytohormones.

UNIT-2  
STRUCTURAL ORGANISATION IN  
PLANTS AND ANIMALS

1. ROOT - TYPES, PART and MODIFICATION
2. STEM - MODIFICATION
3. LEAF - PHYLLOTAXY, VENATION and MODIFICATION
4. Flower - Aestivation, Placentation and Position of ovary.
5. Inflorrescence - Racemose vs Cymose
6. Floral formula and diagram
7. Diagram of monocot and dicot root
8. Diagram of monocot and dicot stem
9. Diagram of monocot and dicot Leaf.
10. Heart wood and Sap wood
11. Annual ring
12. Definition of meristem, parenchyma, collenchyma and sclerenchyma.
13. Earthworm - External Morphology  
 - Circulatory system  
 - Excretory system
14. Cockroach - Digestive system  
 - Circulatory system  
 - Reproductive system
15. Bone vs Cartilage
16. RBC and WBC
17. Neuron
18. Three types of muscles.

These are the most important topics to be asked in exam.

*Amith*