

SECTION "A" (MULTIPLE CHOICE QUESTION)

1. Choose the correct answer for each from the given options:
- The process of absorption of water and swelling up of hydrophilic substances is known as:
 * Plasmolysis * Osmosis * Imbibition * Deplasmolysis
 - The fungus phytophthora causes a disease known as:
 * late blight of Potato * Late blight of Tomato
 * Early blight of Potato * Early blight of Tomato
 - Photosynthetic Bacteria liberate:
 * CO_2 * O_2 * S * H_2S
 - Hydathodes take part in the process of:
 * Transpiration * Guttation * Ascent of sap * Translocation
 - The member of pteridophyte, which is commonly called 'Horse tails', its example is:
 * Selaginella * Equisetum * Psilotum * Adiantum
 - Hepatitis-type which passes through blood from mother to child during pregnancy is:
 * A * B * C * E
 - Fertilization in spermatophytes does not need water because of:
 * Style * Anther * Pollen tube * Stigma
 - The hollow filamentous appendages that help during conjugation are called:
 * Flagella * Pilli * Cilia * Capsule
 - Yeast are unicellular and belong to:
 * Deutromycota * Ascomycota
 * Basidiomycota * Zygomycota
 - Herpes, Shingles, Cancer and Poxes in human beings are caused by:
 * Bacteria * Fungi * Viruses * Yeast
 - Fixation of CO_2 is catalyzed by:
 * Decarboxylase * Rubisco * PEPC * Pepsin
 - Muscle fatigue may be caused by the accumulation of:
 * Citric acid * Lactic acid
 * Hydrochloric acid * Nucleic acid
 - In Electron Microscope, the source of light is:
 * Ordinary light * Infrared light
 * Electron beam * Ultra violet light
 - The Fungi, in which sexual Reproduction is Lacking, belong to the class:
 * Zygomycota * Basidiomycota
 * Deutromycota * Ascomycota
 - The basic unit of Biological classification is:
 * Division * Species * Class * Order
 - Almond belongs to the family:
 * Poaceae * Fabaceae * Rosaceae * Solanaceae
 - Ovary is slightly obliquely placed in this family:
 * Caesalpiniaceae * Solanaceae * Rosaceae * Poaceae
 - Chloroplast contains densely packed stacks of thylakoids known as:
 * Stroma * Grana * Frets * Matrix

SECTION 'B' (SHORT-ANSWER QUESTIONS) (22)**NOTE: Answer 11 questions from this section.**

- Name four groups of Fungi with their reproductive organs.
- What is the cause of Lysosomal storage diseases? Name them.
- Write the salient features of Cyanobacteria.
- Write the botanical names of any four of the following: Brinjal, Tomato, pear, sweet pea, Rice.
- Distinguish between any one of the following:
 - Angiosperm and Gymnosperm
 - Photosynthesis and Respiration
- Name major groups of Vascular plants with examples.
- Write note on the Evolution of Leaf or seed.
- Describe the deficiency symptoms of Nitrogen or Potassium in plants.
- Write a note on Nucleus or Endoplasmic reticulum.
- What are the three different pathway available in root for water to enter Xylem?
- Define any two of the following:
 - Plasmolysis
 - Osmosis
 - Imbibitions
- Define Transpiration. Describe its various types in plant.
- Methods of Genetic recombination in Bacteria.
- Write a note on oxidative phosphorylation.
- Write the economic importance of fermentation.
- Write a note on Alternative mechanism of CO_2 fixation.

SECTION 'C' (DETAILED- ANSWER QUESTIONS)**NOTE: Answer 2 question from this section(14)**

- Describe floral character, floral formula, floral diagram and economic importance of family Solanaceae or Fabaceae.
 - Describe the life cycle of Fern.
 - With the help of Fluid Mosaic Model write the structure, properties and functions of plasma membrane.
- OR** Define Photosynthesis. Describe the light dependent reactions of Photosynthesis.