



**Section "A" (COMPULSORY)**

**MULTIPLE CHOICE QUESTIONS (MCQ'S) 22 Marks**

**Q1. Choose the correct answer for each from the given options:**

- i. Cellulose is used to manufacture:  
\* Plastic                      \* Fibre                      \* Gel                      \* Paper
- ii.. Thylakoid stacked together to form:  
\* Lamella                      \* Stroma                      \* Grana                      \* Both b & c
- iii.. Yellow fever & dengue are caused by:  
\* Paramyxovirus                      \* Rhabdovirus                      \* Rhinovirus                      \* Arbovirus
- iv. Blood poisoning is called  
\* Anemia                      \* Hemiplegia                      \* Leukaemia                      \* Septicaemia
- v. Temperate phage may exist as  
\* Retrovirus                      \* capsid                      \* Prophage                      \* virioid
- vi. Feed on dead organic matter, bacteria is called  
\* Saprophytic                      \* Parasitic                      \* Symbiotic                      \* Autotrophic
- vii. The organisms with no chlorophyll but having cell wall called:  
\* Animals                      \* Plants                      \* Algae                      \* Fungi
- viii. The bioindicators of air pollution are:  
\* Breadmolds                      \* Lichen                      \* Mycorrhiza                      \* Rhizopus
- ix. The breadmolds are called:  
\* Rust and smut                      \* Mucor and Rhizopus  
\* Slime mold                      \* Penicillium and Phytophthora
- x. Mushrooms belong to:  
\* Basidiomycota                      \* Ascomycota                      \* Deuteromycota                      \* Zygomycota
- xi. Mycotoxin, a carcinogenic aflatoxin is produced by:  
\* Yeast                      \* Penicillium                      \* Aspergillus                      \* Mildew
- xii. Ascocarp having small opening at the apex are called:  
\* Apothecium                      \* Perithecium                      \* Cleistothecium                      \* None of these
- xiii. Euglena has:  
\* Cell wall                      \* Chlorophyll                      \* both of these                      \* none of these
- xiv. Ulva has \_\_\_\_\_ alternation of generation.  
\* Heteromorphic                      \* heterogametic                      \* Isomorphic                      \* Conjugating
- xv. A polymer that is resistant to all kinds of environmental damage:  
\* Cellulose                      \* Sporopollenin                      \* Cutin                      \* None of these
- xvi. \_\_\_\_\_ is heterosporous plant:  
\* Equisetum                      \* Lycopodium                      \* Psilotum                      \* Selaginella
- xvii. The gametophyte of fern is called:  
\* Protoandry                      \* Prothallus                      \* Ascocarp                      \* Pericarp



**Section "B" Short Question Answer Section (14 Marks)**

**Q2. Attempt any six part questions. Each question carries one mark. Give answer not more than two lines.**

- i. Name the Lysosomal Storage Diseases and their consequences.
- ii. Chloroplast in an Energy converting organelle Justify.
- iii. Why viruses are appeared to be on the borderline between living and non-living world.
- iv. Among five kingdoms, which one is known as polyphyletic group of organisms and why? OR Why do Insectivorous plants use insects as food?
- v. Write two strong differences between Plasmolysis and Deplasmolysis. OR Viroids and Prions.
- vi. Define Isomorphic Alternation of Generation.
- vii. Name four groups of fungi with their reproductive organ. Also mention that which group of fungi is called Fungi Imperfecti? OR Name the different types of Ascocarps and also mention their differences.
- viii. Describe the role of Potassium (K) ion in opening and closing of stomata. OR Define any two: Imbibition, double fertilization, diffusion, Homosporous
- ix. Why yeast is placed in fungi when it is unicellular. OR ATP is called energy currency why?

**Q3. Attempt any four part questions. Each question carries two marks. Answer should not exceed 5 to 6 lines.**

- i. Write a note on any one: Rhynia, Nucleus, Mycelium, Mitochondria
- ii. What are the four main events take place during light reaction of photosynthesis. OR Explain the viral diseases with their causative agents.
- iii. Differentiate between prokaryotes and Eukaryotes. OR Write a technique through which cell components are isolated by centrifugation.
- iv. Draw a diagram of any one: Bacteriophage, L.S of Ovule, T.S of marchantia thallus, L.S of female cone of pinus
- v. Explain the evolution of leaf or seed. OR Explain the role of water OR chlorophyll during photosynthesis.
- vi. Draw an outline of kingdom plantae OR Define Heteropory, lichens, Binomial Nomenclature.

**Section "C" DETAILED ANSWER QUESTIONS (09 Marks)**

**Note: Attempt any two question from this section. All questions carries equal marks.**

- Q4.** Describe Glycolysis in detail. OR Describe Calvin Benson Cycle (Dark reaction) (C3 cycle/carbon fixation in C3 plants)
- Q5.** Define transpiration and its types. Explain the stomatal transpiration and mechanism of opening and closing of stomata. OR Describe Mechanism of Ascent of Sap.
- Q6.** Describe Life cycle of fern OR Moss.
- Q7.** Define fungi. Describe in detail Basidiomycota or Ascomycota.