

FY CBZ  
Bio chem  
expt

Note:

1. All the questions are compulsory.
2. Draw neat & suitable diagrams wherever necessary.
3. Figures to the right indicate full marks.

**Q 1. A. Choose the correct option & rewrite the statements:****(10 Marks)**

1. \_\_\_\_\_ shaped chloroplast observed in *Spirogyra*.  
a. Girdle                      b. Star                      c. Spiral                      d. Cup
2. Nostoc shows \_\_\_\_\_ type of relationship with other plants.  
a. Symbiosis                      b. Ammensalism                      c. Commensalism                      d. Parasitism
3. When both the gametes are dissimilar in morphological and physiological condition, then it is called as \_\_\_\_\_ reproduction.  
a. Isogamous                      b. Anisogamous                      c. Oogamous                      d. Asexual
4. Asexual reproduction in *Rhizopus* is by the formation of \_\_\_\_\_.  
a. Chlamydospores                      b. Aplanospores                      c. Sporangiospores                      d. All of the above
5. \_\_\_\_\_ is commonly known as black bread mould.  
a. *Rhizobium* sp                      b. *Rhizopus oryzae*                      c. *Rhizopus nedosus*                      d. *Rhizopus stolonifer*
6. Absorptive heterotrophic mode of nutrition is present in \_\_\_\_\_.  
a. Pteridophytes                      b. Bryophytes                      c. Fungi                      d. Algae
7. *Aspergillus* has \_\_\_\_\_ hyphae.  
a. aseptate and uninucleate                      b. aseptate and multinucleate                      c. septate and uninucleate                      d. septate and multinucleate
8. \_\_\_\_\_ are also known as amphibians of the plant kingdom.  
a. Algae                      b. Fungi                      c. Bryophytes                      d. Pteridophytes
9. \_\_\_\_\_ is flask shaped in *Riccia*.  
a. Antheridium                      b. Scales                      c. Rhizoids                      d. Archegonium
10. There are \_\_\_\_\_ number of flagella in antherozoids of *Riccia*.  
a. One                      b. Two                      c. Three                      d. Four

**Q 1. B Answer the following in one sentence****(10 Marks)**

- a. Explain isogamous type of reproduction.
- b. *Nostoc* belongs to which family?
- c. Which class of fungi shows zygosporangium formation?
- d. Which fungi is called a Sac- fungi?
- e. Types of rhizoids in *Riccia*.



**Q 2. Answer the following questions (ANY TWO) (20 Marks)**

- Enlist the characteristics of Chlorophyta.
- Write down the Systematic position of *Nostoc* with reasons and add a note on its Cell structure.
- Describe the Scalariform conjugation of Spirogyra
- Enlist the Ecological importance of Algae.

**Q 3. Answer the following questions (ANY TWO) (20 Marks)**

- Explain the general Characteristics of Phycomycetes.
- Describe the structure of *Aspergillus* with a suitable diagram.
- Write Economic importance of Fungi.
- Explain the life cycle of *Rhizopus*.

**Q 4. Answer the following questions (ANY TWO) (20 Marks)**

- Explain with the help of a diagram, how two generations alternate with each other in *Riccia*.
- External structure of *Riccia*.
- V.S. of thallus in *Riccia*.
- Distinguishing characters of class Hepaticae

**Q 5. Short Notes (ANY FOUR) (20 Marks)**

- Asexual reproduction in *Nostoc*
- Types of reproduction in Chlorophyta
- Stolons
- Ascocarp
- How does *Riccia* reproduce vegetatively?
- Archegonium in *Riccia*.

-X-X-X-X-X-X-