

1. All questions are compulsory.
2. All questions carry equal marks.
3. Draw neat, labelled diagrams wherever necessary.

Q1. A. Choose the correct option & rewrite the statements:**(10 Marks)**

1. In *Spirogyra*, Vegetative reproduction takes place by _____ method.
a. Binary fission b. Spore formation c. Fragmentation d. Budding
2. *Nostoc* belongs to Class _____.
a. Cyanophyceae b. Rhodophyceae c. Chlorophyceae d. Phaeophyceae
3. Zoospores are produced in any vegetative cell of the thallus or specialized cell is called as _____.
a. Zoosporangia b. Akinetes c. Archegonia d. Antheridia
4. *Mucor* is a _____.
a. parasitic fungus b. saprophytic fungus c. facultative saprophytic fungus d. autotrophic
5. Which of the fungi produces toxins in crop plants?
a. *Collectrichum* b. *Aspergillus* c. *Rhizopus* d. Ergot
6. Aspergillosis is recognized in tissue by the presence of _____.
a. Metachromatic granules b. Pseudohyphae c. septate hyphae d. Budding cells
7. There are _____ number of neck canal cells in the archegonium of *Riccia*.
a. One b. Two c. Three d. Four
8. Sporophyte of *Riccia* is _____ on gametophyte.
a. Complete parasite b. Partially parasite c. Independent d. Not attached
9. There are _____ types of rhizoids in *Riccia*.
a. One b. Two c. Three d. Four
10. Antherozoids of *Riccia* are _____.
a. Uniflagellate b. Biflagellate c. Triflagellate d. Quadriflagellate

Q1 B. Answer the following in one sentence**(10 Marks)**

1. What is a Conjugation tube?
2. How many types of reproduction takes place in *Nostoc*?
3. Which class does *Rhizopus* belong to?
4. What is the common name of *Aspergillus niger*?
5. Rosette arranged of *Riccia* thallus?

Q2. Answer any TWO of the following questions**(20 Marks)**

1. Give the systematic position of *Nostoc* with suitable reasons. Add a note on the colony structure of *Nostoc*.
2. Give the systematic position of *Spirogyra* with suitable reasons. Add a note on its vegetative reproduction.
3. Explain the different characteristics of Chlorophyta.
4. Explain the Economical and Ecological uses of Algae.

Q3. Answer any TWO of the following questions**(20 Marks)**

1. Write useful and harmful activities of fungi.
2. Write in brief, various modes of Nutrition in Fungi.

3. Give in details the life cycle of Rhizopus.
4. Explain various modes of reproduction of Aspergillus.

Q4. Answer any TWO of the following questions

(20 Marks)

1. Explain the internal structure of thallus of *Riccia*.
2. Salient features of class Hepaticae.
3. Explain the external structure of thallus of *Riccia*.
4. Explain the alternation of gametophytic and sporophytic generations in *Riccia*.

Q5. Short Notes (any FOUR)

(20 Marks)

1. Add a note on different types on reproduction takes place in Algae
2. Structure of *Spirogyra* thallus
3. Ascocarp
4. Systematic position of Aspergillus.
5. Sporophyte of *Riccia*.
6. Vegetative reproduction in *Riccia*.
