

**PART – A**

(20 marks)

**Answer ALL the questions**

**I. Choose the correct answer**

**(5 X 1 = 5)**

1. Match with

A) Rhodophyceae      B) Phaeophyceae      C) Chlorophyceae      D) Myxophyceae

i) cyanophycean starch    ii) Mannitol & laminarin    iii) Floridean starch    iv) starch

a. A-IV ,B-III , C-II , D – I

b. A – III ,B – II ,C- IV , D – I

c. A – II , B – III , C – I , D – IV

d. A – I ,B – II , C – III , D – IV

2. Statement 1: *Polysiphonia* does not exhibit siphonous thallus.

Statement 2: *Polysiphonia* carpospores are haploid structures.

a. Statement 1 & 2 are incorrect

b. Statement 1 is incorrect but Statement 2 is correct

c. Statement 1 is correct but  
-statement 2 is incorrect

d. Statement 1 & 2 are correct

3. Pick the odd one out.

a. Acervulus

b. Synnemata

c. Apothecium

d. Pycnidia

4. Statement 1: *Puccinia* is a heteroecious fungus.

Statement 2: In *Puccinia*, uredial and telial stages are found in primary host.

a. Statement 1 is true but 2 is false.

b. Statement 1 is false but 2 is true.

c. Statement 1&2 are false.

d. Statement 1 & 2 are true.

5. Pseudoelaters are found in the sporophytes of

a. *Anthoceros*

b. *Riccia*

c. *Funaria*

d. *Marchantia*

**II. State whether the following statements are True\False.**

**(5x1=5)**

6. Diplobiontic life cycle is found in *Polysiphonia*.

7. In *Ectocarpus* the plurilocular gametangia are produced upon the plants which are developed from the zoospores of unilocular sporangia.

8. Ascocarp is the name of the fruit body in Basidiomycetes.

9. Perithecium is present in *Neurospora*.

10. In *Funaria* the sporophyte is differentiated into stem & leaves.

**III. Complete the following**

**(5x1=5)**

11. The nutrition of algae is said to be \_\_\_\_\_.

12. \_\_\_\_\_ stage of *Volvox* consists of 8 cells.

13. \_\_\_\_\_ are present in *Albugo* for the absorption of food materials from the host.

14. Wheat rust disease is caused by \_\_\_\_\_.

15. *Nostoc* colonies are present in the thallus of \_\_\_\_\_.

**IV. Answer ALL, each in about 50 words.**

**(5x1=5)**

16. What are *heterokont flagella*?
17. Write two points about Algal Biofertilizer.
18. Enumerate any two points about Mycelia of Basidiomycetes.
19. What is a Lichen? Give one example.
20. Mention any two economic importance of Bryophytes.

**PART-B**

**Answer the following, each within 500 words, draw diagrams or flowcharts wherever necessary**

**(5 x 7 = 35 marks)**

21. a. What are the different habitats of Algae?  
Or  
b. Draw a labeled sketch of a yeast cell.
22. a. Describe the structure and reproduction of *Anabaena*.  
Or  
b. Explain the asexual reproduction in *Vaucheria*.
23. a. Enumerate the characteristic features of Ascomycetes.  
Or  
b. Explain the nutrition of fungi.
24. a. Write any seven economic importance of Fungi.  
Or  
b. Give an account on the types of Lichens.
25. a. Draw and describe the external and internal structure of *Anthoceros* thallus.  
Or  
b. Draw a labeled sketch of L.S. of Capsule of *Funaria*.

**PART -C**

**Answer any THREE of the following, each within 1200 words, draw diagrams or flowcharts wherever necessary**

**(3 x 15 = 45 marks)**

26. Enumerate the salient features of any three algal divisions.
27. Write an essay on the economic importance of Algae.
28. Describe the types of sexual reproduction in Fungi.
29. Draw and describe the life- cycle of *Puccinia*.
30. What is "Alternation of generations"? Explain it with reference to *Marchantia*.

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