

(FOR THE CANDIDATES ADMITTED
DURING THE ACADEMIC YEAR 2022 ONLY)

22PBY101

REG.NO. :

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI
END-OF-SEMESTER EXAMINATIONS : DECEMBER- 2022
COURSE NAME : M.Sc.-BOTANY **MAXIMUM MARKS: 50**
SEMESTER : I **TIME : 3 HOURS**

PART - III
PLANT DIVERSITY I
(Phycology, Mycology, Lichenology and Bryology)

SECTION – A **(10 X 1 = 10 MARKS)**

ANSWER THE FOLLOWING QUESTIONS. **(K1)**

1. Pyrenoids are involved in_____.
a) Nitrogen fixation b) Carbon fixation c) Potassium fixation d) Sodium fixation
2. The cell wall of Diatom is made of _____.
a) Cellulose b) hemicellulose c) pectin d) Silica
3. Trichoderma belongs to _____.
a) Basidiomycetes b) Ascomycetes c) Zygomycetes d) Deuteromycetes
4. Which one of the lichens are grouped as Leafy lichens _____.
a) fruticose b) crustose c) foliose d) gelatinous
5. In which plant the sporophyte is made up of only capsule ?
a) *Riccia* b) *Marchantia* c) *Calobryum* d) *Pelia*

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES. **(K2)**

6. Name the components of flagella.
7. Mention the pigments present in Nostoc.
8. Define: Oidium .
9. Mention any two pollution indicators of lichen.
10. Define: gemma cup.

SECTION – B **(5 X 3 = 15 MARKS)**

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K3)

11. a) Assess the kinds of vegetative reproduction in algae.
(OR)
b) Describe the structure of seaweed.
12. a) Illustrate the asexual reproduction in *Caulerpa*.
(OR)
b) Comment on fossil algae.
13. a) Describe the mode of nutrition in fungi.
(OR)
b) Write an account of ascocarps.

(CONTD.....2)

- 14.a) Write the classification of lichen.
(OR)
b) List the economic importance of lichen.
- 15.a) Examine the sporophyte of *Anthoceros*.
(OR)
b) Sketch the lifecycle of *Polytrichum*.

SECTION – C**(5 X 5 = 25 MARKS)****ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.****(K4 (Or) K5)**

16. a) Categorize the range of multicellular thallus organization in algae. K4
(OR)
b) Justify that algae are good source of fuels and drugs. K5
- 17.a) Compare the characteristics of Chlorophyceae and Rhodophyceae. K4
(OR)
b) Outline the cultivation method of fresh water algae. K4
18. a) Classify the fungi according to Alexopoulos and Mims (1979) . K4
(OR)
b) Evaluate the commercial importance of fungi in various fields. K5
- 19.a) Analyse the internal structure of lichens. K4
(OR)
b) Summarize the sexual reproduction in Basidiolichens. K5
- 20.a) Interpret the characteristic features of bryophytes. K4
(OR)
b) Give an account of the gametophyte of *Marchantia*. K5
