

(FOR THE CANDIDATES ADMITTED
DURING THE ACADEMIC YEAR 2023 ONLY)

23PBY101

REG.NO. :

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI
END-OF-SEMESTER EXAMINATIONS : NOVEMBER-2023
COURSE NAME: M.Sc.-BOTANY **MAXIMUM MARKS: 75**
SEMESTER: I **TIME : 3 HOURS**

PLANT DIVERSITY - I

SECTION – A (10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS.

MULTIPLE CHOICE QUESTIONS.

(K1)

1. Agar-agar is produced from _____.
a. Gracilaria b. Diatom c. Ulva d. Caulerpa
2. The main role of Heterocyst is _____.
a. Water absorption b. Nitrogen fixation c. Vegetative reproduction d. Storage of food
3. Chief biochemical component of Fungal cell wall _____.
a. Chitin b. Cellulose c. Ascorbic acid d. Acetic acid
4. Algal partner in Lichen Thallus is known as _____.
a. Cycopiant b. Mycopiant c. Phycopiant d. Licopiant
5. _____ is helps to dispersal of spore in sporocarp.
a. Elators b. Rhizoids c. Gemma d. Seta

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

6. Thallus
7. Heterocyst.
8. Ascospore.
9. Rhizene.
10. Gemma cup

SECTION – B (5 X 5 = 25 MARKS)

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

11.a. Illustrate the ultrastructure of flagella.

(OR)

b. Relate the algal bioinoculants in Agriculture.

12.a. Illustrate the life history of *Padina*.

(OR)

a. Explain the various steps involved in marine algal cultivation.

13.a. Outline the mode of nutrition in fungi.

(OR)

b. Explain the role of mycorrhizae in plant growth. **(CONTD.....2)**

14. a. Summarise the general characters of lichen.
(OR)
b. Discuss the lichens as pollution indicator.
15. a. Point out the general characters of Bryopsida.
(OR)
b. Describe the internal structure of *Marchantia thallus*.

SECTION – C**(5 X 8 = 40 MARKS)****ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.****(K4 (Or) K5)**

- 16a. Elucidate the thallus evolution of green Algae.
(OR)
b. Elucidate the life cycle patterns of Algae.
- 17a. Explain the structure and life cycle of *Caulerpa*.
(OR)
b. Explain the structure and life history of *Nostoc*.
- 18a. Summarize the economic importance of Fungi.
(OR)
b. Explain the reproduction methods in Fungi.
- 19a. Describe the various types of lichens based on Thallus.
(OR)
b. Write an essay on vegetative propagation found in lichens,
- 20a. Analyze the gametophyte of *Hepaticopsida*.
(OR)
b. Illustrate the sporophyte of Bryopsida.
