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

22UBY101

REG.NO. :

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI

END-OF- SEMESTER EXAMINATIONS : DECEMBER-2022

COURSE NAME: B.Sc.-BOTANY

MAXIMUM MARKS: 50

SEMESTER: 1

TIME : 3 HOURS

PART - III

PLANT DIVERSITY (PHYCOLOGY, MYCOLOGY AND BRYOLOGY)

SECTION – A (10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS. (K1)

MULTIPLE CHOICE QUESTIONS.

1. Select the alga which contains a specialized cell that is called Heterocyst _____
a) *Nostoc* b) *Chamydomonas* c) *Fucus* d) *Polysiphonia*
2. Identify the source of Agar- Agar from the genus _____.
a) *Volvox* b) *Coleochate* c) *Gracelaria* d) *Fucus*
3. Choose the enzyme responsible for fermentation by yeast cell _____.
a) Zymase b) Polymerase c) Chitinase d) Ligase
4. Which one of the following is named as a pink mold?
a) *Mucor* b) *Sclerospora* c) *Aspergillus* d) *Neurospora*
5. Tell the gemma cup found in _____ amphiphic plant
a) *Marchantia* b) *Funaria* c) *Sphagnum* d) *Notothyles*

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

6. Name the sex organs of *Chara*.
7. Define Carposporophyte.
8. Illustrate Conidiophore.
9. Comment on Soredia.
10. Differentiate smooth from tuberculate rhizoids.

SECTION – B (5 X 3 = 15 MARKS)

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

11. a) Describe the thallus structure of *Nostoc*.
(OR)
b) Illustrate the vegetative structures of *Oedogonium*

12.a) Examine the life cycle of *Polysiphonia*
(OR)
b) Investigate the alternation of generations of *Cyclotella*.

13. a) Mention the various mode of nutrition of fungi.
(OR)
b) Discuss the somatic structure of *Mucor*

14.a) List the economic importance of fungi.
(OR)
b) Point out the dual nature of Lichens

15. a) Outline the classification of bryophytes by Reimers
(OR)
b) Describe the gametophytic structure 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) List the general characters of algae. **(OR)**
b) Present the life cycle pattern of *Sargassum*.

17. a) Investigate the life cycle of *Pinnularia*. **(OR)**
b) Enumerate economic importance of algae.

18. a) Outline the classification of fungi by Alexopoulos. **(OR)**
b) Evaluate the vegetative reproduction of yeast.

19.a) Defend the structure and reproduction of *Puccinia*. **(OR)**
b) Summarize the thallus structure of lichens.

20.a) Analyze the structure and reproduction of *Anthoceros*. **(OR)**
b) Discuss the structure and reproduction of *Riccia*
