

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

**23UBY101**

**REG.NO. :**

**N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI  
END-OF-SEMESTER EXAMINATIONS : NOVEMBER-2023  
COURSE NAME: B.Sc.-BOTANY  
SEMESTER: I**

**MAXIMUM MARKS: 75  
TIME : 3 HOURS**

**PART - III  
PLANT DIVERSITY – I  
(PHYCOLOGY, MYCOLOGY AND BRYOLOGY)**

**SECTION – A (10 X 1 = 10 MARKS)**

**ANSWER THE FOLLOWING QUESTIONS.**

**MULTIPLE CHOICE QUESTIONS.**

**(K1)**

1. Heterosis is found in \_\_\_\_\_.  
(a) Nostoc      (b) Oedogonium    (c) Sargasam    (d) Chara
2. Agar-agar is obtained from various members of \_\_\_\_\_.  
(a) Green algae    (b) Brown algae    (c) Red algae    (d) Blue green algae
3. The youngest conidium is present at the base of the conidiophore are called as \_\_\_\_\_.  
(a) Acropetal      (b) Basipetal      (c) Spiral      (d) Bead like
4. The mutualistic association of algal and fungi are called as \_\_\_\_\_.  
(a) Fungi      (b) Algae      (c) Lichen      (d) Bryophytes
5. The fungi cell wall are composed of \_\_\_\_\_.  
(a) Starch      (b) Pectin      (c) Cellulose    (d) Chitin

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

6. Diplontic life cycle .
7. Define Thallus.
8. Saprophytes
9. Foliose lichen.
10. List any two vegetative features of bryophytes.

**SECTION – B (5 X 5 = 25 MARKS)**

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

11. a) List out the general characters of algae.  
**(OR)**  
b) Describe the various reproductions found in *Nostoc*.
12. a) Demonstrate the reproduction of *Cyclotella* .  
**(OR)**  
b) List out the economic importance of algae.

**(CONTD.....2)**

13. a) Discuss the different mode of nutrition in fungi.

**(OR)**

b) Briefly explain the economic importance of fungi.

14. a) Illustrate the morphology of lichens .

**(OR)**

b) Organize the economic importance of lichen.

15. a) Prepare the general characters of bryophytes.

**(OR)**

b) Demonstrate the important features in Reimers classification of bryophytes.

### **SECTION – C**

**(5 X 8 = 40 MARKS)**

**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.**  
**(K4 (Or) K5)**

16. a) Classify the algae by Fritsch system.

**(OR)**

b) Demonstrate the reproduction of *Sargassum*.

17.a) Explain the reproductive structure in *Polysiphonia*.

**(OR)**

b) Explain the reproduction and lifecycle of *Pinnularia*.

18. a) Classify the fungi according to Alexopoulos,1972.

**(OR)**

b) Explain the structure and Asexual reproduction in *Penicillium*

19.a) Evaluate life cycle of *Puccinia*.

**(OR)**

b) Write an essay on reproduction methods in Lichens.

20.a) Describe the structure and development of Antheridium in *polytrichum*.

**(OR)**

b) Write an essay on sexual reproduction found in *Riccia*.

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