

B.Sc. BOTANY
FIRST SEMESTER (REPEAT)
PHYCOLOGY & LICHEN
BSB-101
[USE OMR FOR OBJECTIVE PART]

SET
A

Duration: 3 hrs.

Full Marks: 70

Time: 30 mins.

Marks: 20

(Objective)

Choose the correct answer from the following:

1 × 20 = 20

- The algal component of Ascolichens belongs to:
 - Myophyceae
 - Chlorophyceae
 - Myophyceae and Chlorophyceae
 - Bacillariophyceae
- Lichen whose fructification is an apothecium is called as:
 - Gymnocarpae
 - Pyrenocarpae
 - Fruticose
 - Foliose
- Attachment of thallus to substratum in Foliose lichen is called as:
 - Rhizoids
 - Roots
 - Rhizines
 - Rhizones
- Shrubby lichens are:
 - Foliose lichen
 - Crustose lichen
 - Fruticose lichen
 - Basidiolichen
- 24-45% of bio oil have been reported from:
 - Dunaliella sp.*
 - Scenedesmus sp.*
 - Spirulina sp.*
 - Laminaria sp.*
- In *Vaucheria*, a branched rhizoidal system attaching thallus to the substratum is known as:
 - Penteron
 - Hapteron
 - Coenocytic thallus
 - Rhizoids
- "Gongrosira stage" is found in:
 - Ectocarpus*
 - Chara*
 - Pinnularia*
 - Vaucheria*
- Vegetative reproduction in *Chara* takes place by:
 - Bulbils
 - Amylum stars
 - Both of the above
 - None of the above
- Chlorella* belongs to:
 - Green algae
 - Yellow green algae
 - Blue green algae
 - Brown algae
- An algae rich in protein is:
 - Spirulina*
 - Chara*
 - Pinnularia*
 - Nostoc*

11. Coenobial colony is found in:
 - a. *Anabaena*
 - b. *Volvox*
 - c. *Chara*
 - d. *Chlorella*
12. Red snow ball of Alpine region is:
 - a. *Volvox*
 - b. *Haematococcus*
 - c. *Polysiphonia*
 - d. *Batrachospermum*
13. Jewels of the plant world is called:
 - a. *Volvox*
 - b. *Anabaena*
 - c. Diatom
 - d. *Batrachospermum*
14. Haploid carposore is found in
 - a. *Ectocarpus*
 - b. *Fucus*
 - c. *Batrachospermum*
 - d. *Polysiphonia*
15. Phycocyanin is the special pigment found in:
 - a. *Volvox*
 - b. *Anabaena*
 - c. *Cladophora*
 - d. *Pinnularia*
16. Diatomin is found in:
 - a. *Volvox*
 - b. *Cladophora*
 - c. *Anabaena*
 - d. Diatom
17. Haplontic type of life cycle is found in:
 - a. *Volvox*
 - b. *Cladophora*
 - c. *Ectocarpus*
 - d. *Polysiphonia*
18. Plurilocular sporangia are found in:
 - a. *Volvox*
 - b. *Ectocarpus*
 - c. *Fucus*
 - d. *Batrachospermum*
19. Mac Donald Pfizers law of dimunition is related with:
 - a. *Ectocarpus*
 - b. *Fucus*
 - c. *Diatom*
 - d. *Polysiphonia*
20. Cystocarp is produced in the receptacle of sporophytic plant of:
 - a. *Ectocarpus*
 - b. *Fucus*
 - c. *Batrachospermum*
 - d. *Polysiphonia*

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(Descriptive)

Time : 2 hr. 30 mins.

Marks : 50

[Answer question no.1 & any four (4) from the rest]

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| 1. Write the vegetative and sexual reproduction in Lichen with suitable diagram. | 5+5=10 |
| 2. Write the different habitats of Algae with examples. | 8+2=10 |
| 3. Describe the sexual reproduction of <i>Batrachospermum</i> and its post fertilization changes with diagrams. | 3+4+3=10 |
| 4. Describe <i>Ectocarpus</i> with reference to its alternation of generations. | 7+3=10 |
| 5. Write the Fritsch classification of algae. | 10 |
| 6. Explain the Asexual and Sexual life cycle of <i>Vaucheria</i> with suitable diagram. | 5+5=10 |
| 7. a) Write the habit and occurrence of Lichen.
b) Describe the classification of lichen on the basis of type of thallus and mode of occurrence. | 5+5=10 |
| 8. Write a note on biotechnological application of algae. | 10 |

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