REV-01
MMB/01/05

2024/06

**SET A**

# M.Sc. MICROBIOLOGY
## SECOND SEMESTER (IMPROVEMENT)
## PHYCOLOGY AND MYCOLOGY
## MMB-202
[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs. | Full Marks: 70

**Objective** | Marks: 20

Time: 30 mins. | *1×20=20*

***Choose the correct answer from the following:***

1. An example of hyperplastic symptom is:
   a. Witches' broom
   b. Anthracnose
   c. Rot
   d. Die back

2. "Target board effect" is related to:
   a. Mucor
   b. Alternaria
   c. Puccinia
   d. Phytophthora

3. Famous Irish Famine was associated with:
   a. Wilt of arahar
   b. Early blight of potato
   c. Late blight of potato
   d. Red rot of sugarcane

4. Teleospores are formed on.....
   a. Uredia
   b. Dikaryotic mycelium
   c. Pycnia
   d. Both a and b

5. Acervuli are related to.....
   a. Early blight of potato
   b. Stem rust of wheat
   c. Late blight of potato
   d. Red rot of sugarcane

6. Auxospore formation is found in:
   a. Cyanophyceae
   b. Brown algae
   c. Bacillariophyceae
   d. Rhodophyceae

7. Reserve food of Rhodophyceae is/are:
   a. Trehalose
   b. Starch
   c. Floridian starch
   d. Oil droplets

8. Pigments are distributed in .....of cyanophyceae.
   a. Cytoplasm
   b. Nucleus
   c. Centroplasm
   d. Chromoplasm

9. Bird nest fungi are included under:
   a. Ascomycetes
   b. Deuteromycetes
   c. Slime moulds
   d. Basidiomycetes

10. Blue green algae contains.....
    a. Starch
    b. Cyanophycean granules
    c. Floridian starch
    d. Any polysaccharides

11. Myxamoebae is observed in the life cycle of.....
    a. Slime moulds
    b. Deuteromycetes
    c. Basidiomycetes
    d. Ascomycetes

12. Fungi imperfectii is also known as:
    a. Imperfect fungi
    b. Zygomycetes
    c. Deuteromycetes
    d. Both a and c

13. Chitin is present in:
    a. Cell wall of Aspergillus
    b. Cell wall of Mucor
    c. Cell wall of Phaeophyceae
    d. Both a and b

14. Silica is present in the cell wall of:
    a. Phaeophyceae
    b. Chlorophyceae
    c. Rhodophyceae
    d. Bacillariophyceae

15. Sexual reproduction is totally absent in:
    a. Phaeophyceae
    b. Chlorophyceae
    c. Cyanophyceae
    d. Rhodophyceae

16. A heterocyst is .....layered structure.
    a. Single
    b. Double
    c. Triple
    d. Zero

17. Scald is injury to:
    a. Skin of fruits
    b. Leaves
    c. Roots
    d. Both a and b

18. Vein clearing occur due to:
    a. Fungi
    b. Virus
    c. Nematode
    d. Bacteria

19. Mycorrhiza is an association between:
    a. Algae and fungi
    b. Fungi and roots of higher plants
    c. Bacteria and leguminous plant
    d. Algae and roots of higher plants

20. .....is also known as conjugative fungi.
    a. Ascomycetes
    b. Deuteromycetes
    c. Zygomycetes
    d. None of the above

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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. | How VAM enhances plant growth? Draw the flow charts for isolation of mycorrhizal biofertiliser from soil sample. Write a note on its applications. | 2+6+2=10 |
| 2. | Write general features of lichen. Discuss the detailed internal structure of a lichen with suitable diagram. | 3+7=10 |
| 3. | Discuss reproduction in zygomycetes with neat labelled diagram. | 10 |
| 4. | Describe briefly the occurrence, vegetative structure and reproduction in Chlorophyta. | 10 |
| 5. | Write short notes on:<br>a) Fritsch classification of algae<br>b) General features of fungi | 5+5=10 |
| 6. | Explain briefly about the various symptoms of plant diseases. | 10 |
| 7. | Draw a neat labelled diagram of a Kelp thallus. Discuss general characteristics of Brown algae. | 3+7=10 |
| 8. | Describe briefly the Early blight of Potato with suitable diagrams. | 10 |

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