

Write the following information in the first page of Answer Script before starting answer

**ODD SEMESTER EXAMINATION: 2020-21**

Exam ID Number \_\_\_\_\_

Course \_\_\_\_\_ Semester \_\_\_\_\_

Paper Code \_\_\_\_\_ Paper Title \_\_\_\_\_

Type of Exam: \_\_\_\_\_ (Regular/Back/Improvement)

**Important Instruction for students:**

1. Student should write objective and descriptive answer on plain white paper.
2. Give page number in each page starting from 1<sup>st</sup> page.
3. After completion of examination, Scan all pages, convert into a single PDF, rename the file with Class Roll No. (2019MBA15) and upload to the Google classroom as attachment.
4. Exam timing from 10am – 1pm (for morning shift).
5. Question Paper will be uploaded before 10 mins from the schedule time.
6. Additional 20 mins time will be given for scanning and uploading the single PDF file.
7. Student will be marked as ABSENT if failed to upload the PDF answer script due to any reason.

**B.Sc. MICROBIOLOGY  
FIRST SEMESTER  
PHYCOLOGY & MYCOLOGY  
BMB – 103[REPEAT]**

Duration : 3 hrs.

Full Marks : 70

( PART-A: Objective )

Time : 20 min.

Marks : 20

***Choose the correct answer from the following: 1×20=20***

1. The cell wall of\_\_\_\_\_ made up of silica.  
a. Polysiphonia  
b. Chara  
c. Diatoms  
d. Nostoc
2. A characteristic feature of thallophyta is  
a. Presence of embryonic stage  
b. Absence of embryonic stage  
c. Both a) and b)  
d. Presence of vascular tissue
3. Storage form of food in Red algae is  
a. Glycogen  
b. Laminarin  
c. Floridean starch  
d. Starch
4. The Spermocarp formation in Coleochaete is during  
a. Fertilisation  
b. Asexual reproduction  
c. Before asexual reproduction  
d. After Fertilisation
5. Who first coined the term algae?  
a. Linnaeus  
b. Fritsch  
c. Chapman  
d. Singh
6. Pennales show  
a. Bilateral symmetry  
b. Radial symmetry  
c. Only radial symmetry  
d. Both a) and b)
7. In Ectocarpus zoospores are produced in  
a. Globule  
b. Nucule  
c. Unilocular and plurilocular sporangia  
d. Perizonium
8. In algae, starch are stored in\_\_\_\_\_  
a. Chromatophore  
b. Pyrenoids  
c. Cell wall  
d. rhizoids
9. Fritsch classified algae into\_\_\_\_\_classes.  
a. 7  
b. 9  
c. 5  
d. 11
10. Algae used as biofertiliser  
a. Rhizobium  
b. Nostoc  
c. Anabaena  
d. Both b) and c)

11. Lichen show.....
- |   |  |
|---|--|
| a. Parasitic relation of fungi on algae | b. Mycorrhizal relationship of algae & Fungi |
| c. Symbiosis of algae & Fungi           | d. Commensalism                              |
12. Mycorrhiza is an association between roots of higher plant and fungus. It is an example of.....
- |              |                   |
|--------------|-------------------|
| a. Symbiosis | b. Myremecophilly |
| c. Helotism  | d. Parasitism     |
13. The algal partner of the lichen thallus is known as
- |               |                 |
|---------------|-----------------|
| a. Mycobiont  | b. Basidiobiont |
| c. Phycobiont | d. Lichenobiont |
14. Common bread mould is.....
- |             |          |
|-------------|----------|
| a. Yeast    | b. Mucor |
| c. Bacteria | d. Virus |
15. Aflatoxin is produced by
- |                     |                     |
|---------------------|---------------------|
| a. Alternaria spp.  | b. Penicillium spp. |
| c. Aspergillus spp. | d. None of these    |
16. .... used for alcohol production
- |                             |                            |
|-----------------------------|----------------------------|
| a. Saccharomyces sereviceae | b. Bacillus subtilis       |
| c. None of these            | d. Penicillium chrysogenum |
17. Central part of the lichen thallus is called.....
- |                |                  |
|----------------|------------------|
| a. Algal layer | b. Cortex        |
| c. Medulla     | d. None of these |
18. Mucor belongs to order -
- |               |                |
|---------------|----------------|
| a. Oomycetes  | b. Zygomycetes |
| c. Mucoraceae | d. Mucorales   |
19. Sporangiospores of mucor is -
- |             |              |
|-------------|--------------|
| a. Haploid  | b. Diploid   |
| c. Triploid | d. Polyploid |
20. Genus Penicillium belong to the class
- |                   |                   |
|-------------------|-------------------|
| a. Basidiomycetes | b. Ascomycetes    |
| c. Phycomycetes   | d. Deuteromycetes |

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**( PART-B : Descriptive )**

Time : 2 hrs. 40 min.

Marks : 50

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

1. Discuss general characteristics of an algae. Write a short note on Rhodophyceae. 5+5=10
  
2. Write short notes on 5+5=10
  - a. Vegetative reproduction in chara
  - b. Structure of Volvox
  
3.
  - a. With a neat labelled diagram discuss the thallus structure of Polysiphonia. 5+5=10
  - b. Describe briefly the development of Carpoponium in Polysiphonia
  
4.
  - a. Draw a neat labelled diagram of Nostoc. Write a note on Reproduction in Nostoc. 3+5+2  
=10
  - b. Write a short note on Application of algae in agriculture.
  
5. Write short notes on 5+5=10
  - a. General characteristics of fungi.
  - b. Heterothallism in Fungi.
  
6.
  - a. What is mucor? Write the characteristics of mucor. 2+3+5  
=10
  - b. Explain the sexual reproduction of mucor with diagram.
  
7.
  - a. What are lichens? What are the types of lichens? 2+3+5  
=10
  - b. Briefly describe the thallus structure of lichens with diagram.
  
8.
  - a. Briefly discuss the economic importance of fungi. 5+2+3  
=10
  - b. What are mycotoxins? How can we minimise the risk from mycotoxins?

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