

**FOURTH SEMESTER B.Sc. DEGREE (SUPPLEMENTARY/IMPROVEMENT)
EXAMINATION, MAY 2016**

(UG CCSS)

Core Course – Botany

**BO4B04 -Microbiology, Mycology, Phycology,
Lichenology and Plant Pathology**

(2012 Admission onwards)

Time: Three Hours

Maximum: 30 Weightage

I. Objective type questions: Answer all questions

Choose the correct answer.

1. The genetic material in TMV is.

(a) Double stranded DNA	(b) Single stranded DNA
(c) Single stranded RNA	(d) None of the above
2. Prions are

(a) Proteins devoid of nucleic acids	(b) Nucleic acid without protein
(c) None of a and b	(d) Both a and b
3. The reserve food material in Phaeophyceae is:

(a) Starch	(b) Lamanarin
(c) Volutine	(d) Fats
4. Which of the following is not associated with fungi:

(a) Chlamyospores (b) Sporangiospores (c) Conidia (d) Aplanospores

Fill in the blanks:

5. The chloroplast is shaped in Oedogonium.
6. Fusion of two similar gametes is called
7. Viroids are sub viral particles consisting of short strands of naked
8. The fungi whose perfect stages are unknown are included under the group.....

Answer in a word

9. Common name for members of Myxomycota.
10. A colony having definite number of cells arranged in a definite manner.
11. The life cycle in which haploid and diploid plants are morphologically similar.
12. Causal organism of quick wilt of pepper.

(12X 1/4 = 3 weightage)

Turn Over

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II. Short answer questions. Answer all questions.

13. Identify all the structures of bacterium external to the cell wall.
14. Name the two microbiologists each, who discovered transduction and conjugation.
15. What are single cell proteins?
16. What is nannandrium?
17. Write a brief account in palmella stage in *Chlamydomonas*.
18. Differentiate between teleutospore and uredospore.
19. Discuss any four ecophysiological advantages of lichens.
20. Give the name of the causal organism and the symptoms of the disease qu wilt of pepper.
21. Differentiate between canker and necrosis.

(9X1= 9 weightage)

III. Short essay questions. Answer any five questions.

22. Write an account on pure culture techniques of bacteria.
23. Describe the role of bacteria in industry.
24. Discuss the important features of asexual reproduction in *Voucherio*.
25. Describe the vegetative characters of *Chara* with the help of suitable diagrams.
26. Discuss the harmful effects of algae.
27. Describe reproduction in *Cercospora*.
28. Discuss various types of control measures for plant diseases.

(5X2= 10 weightage)

IV. Essay questions. Answer any two questions

29. Describe the architecture and multiplication of bacteriophages.
30. With the help of diagrams describe the thallus structure and reproduction in *Sargassum*.
31. Give an account of the economic importance of fungi.

(2X4= 8 weightage)
