

# MAR IVANIOS COLLEGE (AUTONOMOUS) THIRUVANANTHAPURAM

Reg. No.:...

Name:....

Third Semester B.Sc. Degree Examination, November 2015 First Degree Programme under CBCSS

**Core Course: Botany – II** 

AUBO341: Microbiology, Phycology, Mycology, Lichenology and Plant Pathology Time: 3 Hours Max. Marks: 80

**SECTION – A** 

Write short notes on ALL the following.

- 1. Heterocysts
- 2. Palmella stage
- 3. Pigments in Phaeophyceae
- 4. Fairy rings
- 5. Causative organism of blast disease of Paddy
- 6. Cap cells
- 7. Mycoplasma
- 8. Pasteurization
- 9. Chlamydospores
- 10. Biofertilizers

 $(10 \times 1 = 10 \text{ Marks})$ 

#### **SECTION – B**

Answer any **EIGHT** questions, not exceeding one paragraph.

- 11. Distinguish between isogamy and oogamy.
- 12. Describe the structure of TMV.
- 13. Draw a labelled diagram of the apothecium of Peziza.
- 14. What are phytoalexins ?

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- 15. Write a short note on root wilt of Coconut.
- 16. What is diatomaceous earth?
- 17. Explain the thallus structure of Sargassum.
- 18. What is carrageenin ?
- 19. What are algal blooms ?
- 20. Describe the preparation of an organic fungicide.
- 21. Write a note on symbiotic nitrogen fixation.
- 22. Differentiate between isidia and soredia.

 $(8 \times 2 = 16 \text{ Marks})$ 

#### **SECTION – C**

Short essay type : Answer any SIX questions.

- 23. Explain the process of conjugation in bacteria.
- 24. Write a note on the sex organs in *Chara*.
- 25. Describe the internal structure of the thallus of Usnea.
- 26. Write a note on any four methods of food preservation.
- 27. What is Bordeaux mixture ? How is it prepared ?
- 28. What are the characteristic features of Basidiomycotina?
- 29. Give an account on the economic importance of fungi.
- 30. Describe the methods of asexual reproduction in Asomycotina.
- 31. Describe with diagram the morphology of the basidiocarp of Agaricus.

(6 × 4 = 24 Marks)

### **SECTION – D**

#### Long essay type : Answer any Two questions.

- 32. With illustrations, explain the structure and reproduction in bacteriophages.
- 33. Explain the life cycle of *Polysiphonia* with diagrams.
- 34. Write an essay on the various types of life cycles in *Saccharomyces* with illustrations.
- 35. Describe the life cycle of *Puccinia* with suitable diagrams.

$$(2 \times 15 = 30 \text{ Marks})$$