

**BSc DEGREE EXAMINATION - OCTOBER 2015**

SEMESTER - 1: BOTANY (CORE COURSE)

COURSE: 15U1CRBOT1: MICROBIOLOGY AND PHYCOLOGY

Time: Three Hours

Max. Marks: 60

**PART A**

I. Answer **ALL** questions; each question carries ONE mark.

1. What is heterocyst?
2. In which algae palmella stage is reported?
3. Name the characteristic pigment of Rhodophyceae.
4. What is the chemical nature of bacterial cellwall ?
5. What is single cell protein?
6. What is globule?
7. Name a parasitic alga.
8. Commercial agar is produced from which algae?

(1 x 8 = 8)

**PART B**

II. Answer any **Six** questions; each question carries TWO marks.

9. What are the general characteristics of Cyanophyceae?
10. Write a short note on anisogamy
11. What is a cystocarp?
12. Write notes on amyllum stars.
13. Explain the classification of bacteria based of flagella
14. Give the harmful effects of bacteria
15. What are Archebacteria?
16. Explain the variation of chloroplast in Chlorophyceae.
17. What are the importance of diatomaceous earth?
18. Give an account on virus replication.

(2 x 6 = 12)

**(PTO)**

**PART C**

III. Answer any **Four** questions; each question carries FOUR marks.

19. With suitable diagram, explain the vegetative reproduction in Diatoms.
20. Comment on algae as primary producer.
21. Describe bacterial staining.
22. Explain sexual reproduction in Sargassum.
23. Give an account on the economic importance of algae.
24. Describe the structure and reproduction in bacteriophage. (4 x 4 = 16)

**PART D**

IV. Answer any **two** questions; each question carries TWELVE marks.

25. Write an essay about the economic importance of bacteria.

**OR**

26. Explain the genetic recombination in bacteria.
  
27. With the help of labeled diagram describe the thallus structure and post fertilization changes in Polysiphonia.

**OR**

28. Give an account on the classification of algae by F.E. Fritsch. (12 x 2 = 24)

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