B.Sc. DEGREE END SEMESTER EXAMINATION OCTOBER 2016

SEMESTER - **1: BOTANY (CORE COURSE)**

COURSE: 15U1CRBOT1**: MICROBIOLOGY AND PHYCOLOGY**

Common for Regular (2016 Admission) & Supplementary / Improvement (2015 Admission)

Time: Three Hours   Max Marks: 60

PART A

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

1. Give the name of a colonial green alga studied by you.
2. What are aplanospores?
3. Name the dominant pigment present in blue green algae.
4. Give an example for RNA virus
5. Name the protein coat that encloses viral genes.
6. What are mesosomes?
7. Name the female reproductive organ of Chara.
8. Name an alga which helps to increase soil fertility.   (1 x 8 = 8)

PART B

II. Answer **ANY SIX** questions; each question carries TWO marks.

9. Comment on dwarf males in Oedogonium
10. Explain cell structure in Bacillariophyceae
11. Give the cell structure of Chlamydomonas
12. Write notes on asexual reproduction in Nostoc.
13. Explain binary fission in bacteria
14. What is a retro virus?
15. What is putrefaction?
16. Explain the structure of globule in Chara.
17. What are the general characters of mycoplasma
18. Comment on algal blooming.   (2 x 6 = 12)

PART C

III. Answer **ANY FOUR** questions; each question carries FOUR marks.

19. With suitable diagram, explain the sexual reproduction in Spirogyra
20. Describe the structure and reproduction in bacteriophages.
21. Give an account of the role of microorganisms as biofertilizers.

22. Explain sexual reproduction in Sargassum

23. Explain Post fertilization changes in Polysiphonia

24. What is Diatomaceous earth? Give their importance.   (4 x 4 = 16)

PART D

IV. Answer **ANY TWO** questions; each question carries TWELVE marks.

25. Write an essay on the industrial uses of microorganisms.

OR

26. With suitable diagrams, explain genetic recombination in bacteria.

27. With the help of labeled diagrams describe the structure and reproduction in *Vaucheria*.

OR

28. Write an essay on the economic importance of algae

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