Reg. No............................ Name..

M.SC DEGREE END SEMESTER EXAMINATION NOVEMBER 2016

SEMESTER – 1 : BOTANY
COURSE: 16P1BOTT01: MICROBIOLOGY AND PHYCOLOGY

Time: Three Hours   Max. Marks: 75

PART-A

I. Answer **any eight** questions briefly; each question carries 2 marks

1. What is heterocyst?
2. What are parasitic algae? Give an example.
3. Briefly describe algal bloom.
4. What is pyrenoid?
5. What is Diatomite?
6. Give an account on phytoremediation.
7. What are the peculiarities of cell wall of gram negative bacteria?
8. Give an account on chemoautotrophs.
9. Write an account on Mycoplasmas.
10. What are prions? Write a note on its significance.
11. What is lytic life cycle?
12. Write an account on SCP?   **(**2 x 8 = 16)

PART-B

II. Answer **any seven** questions; each question carries 5 marks

13. Explain the pigment constitution in Algae.
14. Briefly explain the various methods of asexual reproduction in Algae.
15. Briefly explain the occurrence and distribution of algae with examples
16. Compare the classification by F. E. Fritsch and G. M. Smith.
17. Briefly describe the procedure and application of algal culture.
18. With the help of suitable diagrams explain the reproductive structures of Xanthophyceae.
19. Explain the various types of food preservation techniques.
20. Explain the replication of genetic material in bacteria.
21. Give a detailed account on the ultra-structure of HIV
22. With the help of suitable diagrams explain the ultra-structure of Endospore of bacteria

                                                        (5 x 7 = 35)

PART-C

III. Answer **any two** questions; each question carries 12 marks

23. With the help of suitable diagrams explain the major patterns of life cycles and post

      fertilization changes in Rhodophyceae.

OR

24. Explain the thallus organization in Chlorophyceae with suitable illustrations.

25. Write an essay on Management of Agricultural Soil, Add a note on bio fertilizers and Bio-pesticides.

OR

26. Give a general account on classification of viruses. Add a note on viral genome, sub viral particles and their significance.

(12 x 2 = 24)

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