MSc DEGREE END SEMESTER EXAMINATION – NOVEMBER 2015

SEMESTER : 1 , SUBJECT – BOTANY

COURSE: P1BOTT01 -MICROBIOLOGY AND PHYCOLOGY

(Regular, Supplementary / Improvement)

Time: Three Hours   Max. Marks: 75

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

1. What are Mesosomes ? What is its role ?
2. What are Mycoplasma? Name two diseases caused by Mycoplasma
3. What are endospores ? How it differ from cysts?
4. What is Koch's postulates?
5. What is pinocytosis?
6. What are Transmissible Spongiform Encephalopathies or *tse* ?
7. What are rickettsias? How it transmitted?
8. Define Capsid? What are the types of capsids found in viruses
9. What are blepharoplast and paradesmose ?
10. Define axoneme.
11. What are magnetosomes?
12. Polar pyrenoid   (8 x 2 = 16)

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

13. Write a brief account of contributions of Indian Phycologists
14. With the help of suitable diagram explain the types, characteristics and functions of bacterial flagellum.
15. Give the occurrence and distribution of algae with examples.
16. What is the symmetry in viruses? Explain any two type of virus symmetry
17. What is lyophilization?
18. Give an account of nutritional classification of bacteria. Write on photosynthetic bacteria
19. Write short notes on:-
     (i) Twort d' Herelle phenomenon   (ii) biological status of viruses and   iii)tulipomania
20. Give a detailed account on the ultra structure of TMV
21. Give a detailed account on the cell wall characteristics of bacteria
22. Write a brief account of phylogenic relationship in chlorophyceae   (7 x 5 = 35)

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

23. Define Transposons? Explain in detail the different recombinations in bacteria and phages.

                              OR

24. Write a note on the vegetative multiplication and modes of perennation in algae .

25. Define viral ongogenesis? Explain in detail with suitable diagram the structure HIV,HPV and its transmission.

                              OR

26. Give a detailed account on the economic importance of algae with special reference to red algae

                                                                                      (12 x 2 = 24)