

Reg. No.....

Name.....

B.Sc. DEGREE END SEMESTER EXAMINATION OCTOBER/NOVEMBER 2017**SEMESTER –1: BOTANY (CORE COURSE)****COURSE: 15U1CRBOT1: MICROBIOLOGY AND PHYCOLOGY***(Common for Regular 2017 admission and Supplementary/Improvement 2016 & 2015 admission)*

Time: Three Hours

Max. Marks: 60

PART AI. Answer **ALL** questions; each question carries ONE mark.

1. What are Mesosomes?
2. Define Bacterial Transformation?
3. What is Capsid?
4. Define Mycoplasma.
5. Name two nitrogen fixing bacteria.
6. What is biogas?
7. What is algal bloom?
8. What is Agar Agar?

(1 x 8 = 8)

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

9. Give a detailed account on the ultra structure of TMV.
10. Write a brief account of cell wall of bacteria.
11. Give the occurrence and distribution of algae with examples.
12. What are red tides?
13. What is bioremediation?
14. Write any two characteristic features of Archaeobacteria.
15. What are Phycobilins?
16. What is a hapton?
17. Differentiate Rhizoidal cell and Cap cell
18. What is cyclosis?

(2 x 6 = 12)

PART CIII. Answer **ANY FOUR** questions; each question carries FOUR marks.

19. Write a brief account of Single Cell Proteins.
20. With the help of a diagram explain the structure of bacterial flagellum.
21. Briefly explain the general characters of Mycoplasma.
22. Briefly explain the reproduction of *Nostoc*.
23. Write a brief account of bacterial biofertilizers.
24. Give an account on toxicity of algae.

(4 x 4 = 16)

PART D

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

25. Explain in detail bacterial transformation , conjugation and transduction with suitable sketches

OR

26. Explain the scope of Microbiology with reference to biogas production and bioremediation

OR

27. Explain in detail the structure reproduction and life cycle of *Polysiphonia*

OR

28. Explain the economic importance of algae

(12 x 2 = 24)
