Reg. No…….. Name…… **18U124**

B.Sc. DEGREE END SEMESTER EXAMINATION OCTOBER/NOVEMBER 2018

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

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

(Common for Regular 2018 admission and improvement 2017/supplementary 2017/2016/2015 admission)

Time: Three Hours Max. Marks: 60

PART A

I. Answer ***ALL*** questions; each question carries ***1*** mark.

1. What are mesosomes?
2. What is a globule?
3. What is single cell protein?
4. Give an example for gram negative bacteria
5. What is agar-agar?
6. What is isogamy?
7. Name an endophytic alga
8. What are akinetes? (1 x 8 = 8)

PART B

II. Answer ***ANY SIX*** questions; each question carries ***2*** marks.

9. Write a short note on the structure of Tobacco Mosaic Virus?
10. What is protonema?
11. What are plasmids?
12. Write a short note on bacterial transformation.
13. What are the functions of Pili?
14. What is a coenobium?
15. What are hormogones?
16. Explain the thallus structure of *Nostoc.*
17. What is the cell wall composition of archaebacteria?
18. What is bioremediation? (2 x 6 = 12)

PART C

III. Answer ***ANY FOUR*** questions; each question carries ***4*** marks.

19. Write note on conjugation in bacteria.
20. Briefly explain biogas production.
21. Write note on the Cystocarp of *Polysiphonia*?
22. Explain sexual reproduction in *Vaucheria*
23. Describe the anatomy of *Sargassum* axis with diagram.
24. With the help of diagrams explain the cell structure of a diatom. (4 x 4 = 16)

PART D

IV. Answer ***ANY TWO*** questions; each question carries ***12*** marks.

25. Explain the ultra structure of bacteria with suitable diagrams.

OR

26. Write a brief account on virus multiplication.

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

OR

28. Economic importance of algae with examples (12 x 2 = 24)