



Register Number:

Date: XX/10/2019

**ST. JOSEPH'S COLLEGE (AUTONOMOUS), BANGALORE-27**  
**B.Sc. BOTANY - I SEMESTER**  
**SEMESTER EXAMINATION: OCTOBER 2019**  
**BO 118 - Microbiology and Algae**

**Time- 2 ½ hrs**

**Max Marks-70**

**This paper contains ONE printed page and THREE parts**  
**Draw diagrams wherever necessary**

**A. Define any TEN of the following**

**10x2=20**

1. Robert Koch
2. Hypersensitivity
3. HIV
4. Peptidoglycan
5. Hypnospores
6. Agar-Agar
7. Nucule
8. Monoclonal antibody
9. Parasitic algae
10. Diplontic cycle
11. Akinetes
12. Transposons

**B. Write critical notes on any FIVE of the following**

**5x6=30**

13. Multiplication of TMV.
14. Ultrastructure of flagella in bacteria.
15. General characteristics of mycoplasma.
16. Structure and reproduction in *Spirulina*.
17. Thallus organization in algae.
18. Conjugation in *Spirogyra*.
19. Economic importance of algae.

**C. Give a comprehensive account of any TWO of the following**

**2x10=20**

20. Transformation in Bacteria.
21. Sexual reproduction in algae.
22. Give the graphical life cycle of *Batrachospermum*.