**ST. JOSEPH’S COLLEGE (AUTONOMOUS), BENGALURU-560 027.**

**M.SC BOTANY –IV SEMESTER**

 **SEMESTER EXAMINATION –APRIL 2018.**

 **BO-0415 : ELECTIVE PAPER: MICROBIOLOGY**

**Time: 2½ Hours Max. Marks : 70**

**This question paper has ONE printed page and THREE parts.**

**Draw diagrams wherever necessary**

**A. Write on any TEN of the following in one or two sentences 10x2=20**

1. Autoimmunity

2. Respiratory burst

3. Haematopsis

4*. Bacillus thuringiensis*

5. Infection thread

6. Cold sterilization

7. Nodule gene

8. HTST

9. Wood smoke

10. Shigellosis

11. Steroids transformation

12. Bioleaching

**B. Write critical notes on any FIVE of the following: 5x6=30**

13. *Mycobacterium tuberculosis*

14. Adaptive versus innate immune reaction

15. Industrial production of lactic acid.

16. Monoclonal antibodies

17. Molecular techniques used in plant diseases

18. Prevention and control measures for bacterial food poisoning

19. Diversity of milk and milk products

**C. Give a comprehensive account on any TWO of the following 2x10=20**

20. MHC Class I and II pathways

21. Industrial production of Penicillin

22. Commercial production of biofertilizers

 BO-0415-C-18