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Register Number :

Date :

**ST. JOSEPH’S COLLEGE (AUTONOMOUS), BANGALORE-27**

**M.Sc. – IV SEMESTER**

**SEMESTER EXAMINATION: APRIL 2019**

**BO 0415 : Microbiology (Elective)**

Time- 2 ½ hrs Max Marks-70

**This paper contains ONE printed page and THREE parts**

**Draw diagrams and write examples wherever necessary**

1. **Define/ explain any TEN of the following 10 × 2 = 20**
2. Nitrogenase enzyme
3. Humic acid
4. Biodegradation of lignin
5. Bioreactor
6. *Pseudomonas putida*
7. Super bugs
8. Viremia
9. *Neisseria gonorrhoeae*
10. Opsonisation
11. Primary lymphatic organs
12. Pasteurisation
13. Microorganisms in milk
14. **Write critical notes on any FIVE of the following 5 × 6 = 30**
15. Diagnosis of plant diseases using antibodies
16. Production of amylases
17. Epidemiology of *Clostridium botulinum*
18. Causes and control measures of Tuberculosis
19. Monoclonal antibodies
20. Inflammatory cascade
21. Methods of food preservation (Any 6)
22. **Give a comprehensive account of any TWO of the following 2 × 10 = 20**
23. Fermentation of ethyl alcohol
24. Etiology, epidemiology and control measures of polio virus
25. MHC complex

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