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Registration Number:

Date & Session

**ST JOSEPH’S UNIVERSITY, BENGALURU -27**

**B.Sc (MICROBIOLOGY) – III SEMESTER**

**SEMESTER EXAMINATION: OCTOBER 2023**

**(Examination conducted in November /December 2023)**

**MB 322 – MICROBIAL DIVERSITY, GROWTH AND CONTROL OF MICROORGANISMS**

**(For current batch students only)**

**Time: 2 Hours Max Marks: 60**

**This paper contains 1 printed pages and 4 parts**

**I. Answer any Five of the following 5 x 3 = 15**

1. Write a note on Unculturable bacteria.

2. What is Antagonism? Give an example.

3. List the key features of the 3-domain classification.

4. What are the micronutrients and trace elements required for the growth of microbes?

5. List the types of media with examples.

6. What are the methods of preservation of bacterial cultures?

7. What is Nystatin?

**II. Answer any Five of the following 5 x 6 = 30**

8. Classify antibiotics.

9. How are microbes classified based on their nutritional types? Give examples.

10. Give the Baltimore classification of Viruses.

11. Write notes on Numerical taxonomy and its importance.

12. Diagrammatically explain the growth curve of bacteria.

13. Explain the Chemostat with a neat diagram.

14. Discuss the mode of action of Streptomycin.

**III. Answer any One of the following 1 x 10 = 10**

15. Discuss the influence of environmental factors on the growth of microbes.

16. How is the level of antimicrobial activity determined?

**IV. Answer the following 1 x 5 = 5**

17. The importance of interaction of microbes with all life forms have been very significant. Identify associations where both the micro and macro forms of life live in harmony. Describe one such interaction citing an example.