

**Date:**

**Reg. No:**

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

M.Sc. Botany: IV Semester

Semester Examination: April 2022

(Examination conducted in July 2022)

BO DE 0418: Microbiology Elective

Time- 2 ½ hrs Max Marks-70

**Part A : Answer any TEN of the following; 10 x 2 = 20 marks**

1. Mycorrhizosphere
2. Humus
3. Example of Type-II hypersensitive reaction
4. Precipitins
5. Drug target of Aminoglycosides
6. Significance of lactic & gluconic acid
7. Cold Sterilization
8. Role of baffle in fermenters
9. Mode of transmission of *Vibrio cholerae*
10. Any two antibiotics used to control *Neisseria gonorrhoea* infections
11. Example of milk borne pathogens
12. Bioleaching

**Part B : Answer any FIVE of the following; 5 x 6 = 30 marks**

1. Molecular mechanism of microbial nitrogen fixation
2. Industrial production of Amylase enzyme
3. Sewage treatment films
4. Etiology, Epidemiology, Disease Cycle & Control Measures of *Mycobacterium tuberculosis*
5. Mechanism of Inflammation & Fever
6. Process & Significance of Pasteurization
7. Etiology, Epidemiology, Disease Cycle & Control Measures of Chicken Pox Virus & Hepatitis Virus

**Part C : Answer any TWO of the following; 10 x 2 = 20 marks**

1. Process and Significance of VDJ Recombination
2. Write the significance and importance of the following microbes;
   1. Actinomycetes
   2. Dengue virus
   3. *Corynebacterium diphtheriae*
3. Discuss the following topics in detail
   1. Preservation of Food from Spoilage
   2. Production of Steroids in Industries