**St.Joseph’s College** (Autonomous)

**Bangalore-27**

**M.SC Botany –IV Semester**

**End Semester Examination - April 2020**

**Code : BO-0418 –Microbiology (elective paper)**

**Time: 2 1/2 Hours Max. Marks :70**

This question paper has one printed page and three parts

Draw diagrams wherever necessary

**PART A**

**Define/Explain any TEN of the following 10x2=20**

1. Acetic Acid
2. APCs
3. Bioleaching
4. Bioreactor
5. Cold sterilization
6. Dengue virus
7. Hypersensitive Reaction
8. Infection Thread
9. Proteases
10. Rhizobium
11. Rhizoplane
12. Steroids

**PART B**

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

1. Antibody types and properties
2. Bacteriological examination for milk
3. *Neisseria gonorrhoea*
4. Preservation of food additives
5. Production of Amylases
6. Production of monoclonal antibodies
7. *Streptococcus pyogenes*

**PART C**

**Give a comprehensive account of any TWO of the following 3x10=30**

1. Biodegradation of Cellulose and Pectin
2. Epidemiological importance of *Vibrio cholerae*
3. Production of proteolytic enzymes and its role in leather industry