**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. Autoimmune disorders
2. Bioreactor
3. Gluconic acid
4. Leghaemoglobin
5. Lipases
6. MHC
7. Nod genes
8. Pasturization
9. Rhizosphere
10. Riboflavin
11. Steroid transformation
12. Vaccines

**PART B**

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

1. Antigen-Antibody reactions
2. Bacterial food poisoning
3. *Corynebacterium diphtheria*
4. Human Papiloma Virus
5. Microbial diversity of milk and milk products
6. Production of monoclonal antibodies
7. Production of proteases

**PART C**

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

1. Biodegradation of pestisides. Add a note on Bioleaching
2. Epidemiological importance of tetanus and polio virus
3. Production of Citric Acid and its significance in Industry