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Register Number:

DATE:

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

**M.Sc. BOTANY- IV Semester**

**Semester Examination - April 2017**

**BO - 0415: Microbiology (Elective Paper)**

**Time: 2½ Hours Maximum Marks: 70**

This question paper has **one** printed page and **three** parts.

Draw diagrams wherever necessary

**Part A**

**Explain or define any TEN of the following 10x2=20**

1. Sacred mushroom
2. Anaphylaxis
3. Hypersensitivity
4. HTST
5. Epitope
6. Wood smoke
7. Autoimmunity
8. Fermentor
9. Natural media
10. Steroids
11. Parasporal crystals
12. Biopesticides

**Part B**

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

1. Mycotoxins and their effects in food and food grains
2. Single cell protein
3. Biochemistry of nitrogen fixation
4. Etiology of Polio virus, add a note on Pulse Polio Vaccination Programme
5. Bacterial food poisoning
6. Microbial diversity of milk and milk products
7. Adoptive versus innate immune reaction

**Part C**

**Give a comprehensive account of any TWO of the following 2x10=20**

1. Industrial production of penicillin. Add note on its significance in medicine
2. Discuss the commercial production of biofertilizers
3. Industrial production of proteases.

BO-0415-B-17