

**FACULTY OF SCIENCE**  
**B.Sc. I-Semester (CBCS) Examination, December 2016**

**Subject : Microbiology**

**Paper – I**

**General Microbiology – I**

**Time : 3 Hours**

**Max. Marks: 80**

**PART – A (5 x 4 = 20 Marks)**

**(Short Answer Type)**

**Note : Answer any FIVE of the following questions.**

- 1 Antony Van Leeuwenhock
- 2 Beijerink
- 3 Negative staining
- 4 TEM
- 5 Hot air oven
- 6 Aldehydes
- 7 Micromanipulator
- 8 Enrichment culturing

**PART – B (4 x 15 = 60 Marks)**

**(Essay Answer Type)**

**Note: Answer ALL the questions.**

- 9 (a) Briefly explain the contribution of Edward Jenner, Louis Pasteur and Robert Koch in microbiology.
- OR**
- (b) Explain the importance and applications of Microbiology in agriculture and food industry.
- 10 (a) Write an account on the principle and applications of Electron Microscopy.
- OR**
- (b) Write the structure of stain and describe the differential staining and capsular staining methods.
- 11 (a) Define sterilization and explain about physical sterilization methods.
- OR**
- (b) What is chemical sterilization? Explain with any three examples.
- 12 (a) Write in detail about the pure culture isolation techniques.
- OR**
- (b) Explain different microbial preservation methods.

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