

Code No. 2070 / CORE

FACULTY OF SCIENCE**M.Sc. I-Semester Examination, January 2018****Subject : MICROBIOLOGY****Paper : I****General Microbiology and Microbial Physiology****Time : 3 hours****Max. Marks : 80**

Note : Answer all questions from Part-A and Part-B. Each question carries 4 marks in Part-A and 12 marks in Part-B.

PART - A (8 x 4 = 32 Marks)
(Short Answer Type)

- 1 Pioneers of Microbiology
- 2 Structure of bacterial endospores
- 3 Defined synthetic media
- 4 Isolation of pure cultures
- 5 Biochemical methods for identifying microbes ;
- 6 Photoautotrophic bacteria
- 7 Methods of growth measurement
- 8 Cell cycle in microbes

PART - B (4 x 12 = 48 Marks)
(Essay Answer Type)

- 9 a) Write in detail about the organization and function of cell organelles in eukaryotic cells
OR
b) Explain the principle and application of phase contrast microscopy.
- 10 a) Describe the cultivation of bacteria.
OR
b) Explain the techniques employed for preservation of microbial cultures.
- 11 a) Write in detail about Chemoautotrophic bacteria.
OR
b) Explain briefly about the classification of bacteria.
- 12 a) Give a detailed account of bacterial growth curve
OR
b) Explain the methods of synchronous culturing and continuous culturing of bacteria.