

**FACULTY OF SCIENCE**  
**M. Sc. I – Semester Examination, December 2014**

**Subject: Microbiology**  
**Paper – I: General Microbiology**

**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 Germ theory of disease
- 2 Resolving power
- 3 Thermal death point and time
- 4 Biological enrichment culturing
- 5 Numerical taxonomy
- 6 Chlamidiae
- 7 Basidiocarp
- 8 Biotrophs and nectrotrophs

**PART – B (4 x 12 = 48 Marks)**  
**[Essay Answer Type]**

- 9 a) Explain the contributions of Louis Pasteur for the development of microbiology  
**OR**  
b) Write on the principle and application of fluorescent microscope
- 10 a) Explain the microbial culture preservation by lyophilization and cryopreservation  
**OR**  
b) Explain the methods of sterilization making use of high temperature and filtration.
- 11 a) Describe the general characters of *Mycoplasma* and their importance in human health  
**OR**  
b) What are the criteria used for identification of microorganisms and how are they important?
- 12 a) How are fungi important for human health and wealth?  
**OR**  
b) Explain the thallus organization in different groups of algal organisms.

\*\*\*\*