

**FACULTY OF SCIENCE**  
**M.Sc. I-Semester Examination, December 2013**  
**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 (8X4 = 32 Marks)**  
**[Short Answer Type]**

1. Germ theory of disease
2. Flagella and Pili
3. Enrichment techniques
4. Lyophilization
5. Differential staining
6. Chlamydiae
7. Haplointic life cycle
8. Apothecium

**PART – B (4x12 = 48 Marks)**  
**[Essay Answer Type]**

- 9.(a) Explain the principles and working of phase contrast microscope.  
**OR**  
(b) Discuss the structure and functions of ribosomes and ribosomal RNAs in bacterial cell.
- 10.(a) Write an account on the methods of pure culture isolation.  
**OR**  
(b) Describe the advantages and disadvantages of cryo preservation.
- 11.(a) Write a brief note on the molecular identification methods of bacteria.  
**OR**  
(b) Enlist the general properties of bacterial groups.
- 12.(a) Explain the characters of different products of algae and write their importance.  
**OR**  
(b) Write an account on the classification of Fungi.

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