

**II B. Pharmacy I Semester Regular Examinations, Oct/Nov - 2017**  
**PHARMACEUTICAL MICROBIOLOGY**

Time: 3 hours

Max. Marks: 70

- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)  
2. Answering the question in **Part-A** is Compulsory  
3. Answer any **THREE** Questions from **Part-B**
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**PART -A**

1. a) Louis Pasteur is regarded as “Father of Microbiology” Justify this. (2M)
- b) Classify bacteria based on their Oxygen requirements with examples. (2M)
- c) Write any four differences between Active and Passive Immunity. (2M)
- d) How can a gene be amplified invitro? (2M)
- e) Write causative Organism, route of infection, main symptoms of tuberculosis. (2M)
- f) Write the difference between disinfectant and antiseptic with examples. (2M)
- g) Define and Classify Sterilization Methods. (2M)

**PART -B**

2. a) Describe the Structure of a bacterial Cell. (8M)
- b) Define Staining and write about differential Staining. (6M)
3. a) Explain the methods of isolating pure culture. (8M)
- b) Discuss the methods of maintenance and preservation of pure culture. (6M)
4. a) Describe the design and operation of a “Hot air Oven”. (8M)
- b) Write the uses and mechanism of action of (6M)
  - a) Phenol
  - b) Chlorine
5. a) Enlist the factors affecting disinfectant activity and explain any two. (8M)
- b) What is Sterility Testing? Describe the Sterility testing of one Pharmaceutical Preparation. (6M)
6. a) Write the source of infection, causative organism, Mode of transmission and preventive measures of Hepatitis. (8M)
- b) Write the Principles and methods involved in assay of Antibiotics. (6M)
7. a) Discuss Sterilization by gamma radiation and gases. (8M)
- b) What are the measures to be taken to maintain a septic environment in Microbiology Laboratory? (6M)