

Code No: B132104

**R13**

**SET - 1**

**II B. Pharmacy I Semester Supplementary 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) Write a note on contributions of Robert Koch. (4M)
- b) Describe the preparation of nutrient agar bacterial cultivation (3M)
- c) Describe the method of autoclaving and various types of substances that can be Sterilized. (3M)
- d) Describe the principle and significance of 'Sterility Test'. (4M)
- e) Write about the etiology, sources, diagnosis of typhoid disease. (4M)
- f) What is mutation? Write about different mutagens. (4M)

**PART -B**

2. a) Enumerate various methods for evaluation of bactericidal agents. Explain the procedure for determination of Phenol-coefficient. (10M)
- b) Write a note on Sterilization Indicators. (6M)
3. a) With the help of a neat labeled diagram, describe the design and operation of a 'Hot air Oven'. (8M)
- b) Differentiate bacteria from molds with respect to their morphology and Laboratory cultivation. (8M)
4. a) Explain the term immunity; classify types of immunity with examples. (8M)
- b) Discuss about the factors that affect the growth of bacteria. (8M)
5. a) Write a note on official methods of Sterility testing of pharmaceuticals. (10M)
- b) What are the measures to be taken to maintain a septic environment in the microbiology Lab? (6M)
6. a) Write the principles and methods involved in microbiological assay of Antibiotics. (8M)
- b) Write the principles and methods involved in assay of amino acids. (8M)
7. a) Describe the structures of following organnels and discuss their functions. (9M)
  - (a) Gram-ve cell wall.
  - (b) Bacterial endospore.
  - (c) Flagella.
- b) With the help of a neat diagram, describe the structure of a typical bacterial cell. (7M)