

II B. Pharmacy I Semester Supplementary Examinations, May - 2019
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**

PART -A

1. a) Write the principle involved in dry heat sterilization. (4M)
- b) Write short notes on sterilization indicators. (3M)
- c) Differentiate between gram positive and gram negative bacteria. (4M)
- d) Discuss briefly on the growth requirements of bacteria. (4M)
- e) Write short notes on bacterial conjugation. (4M)
- f) Distinguish between autotrophs and heterotrophs. (3M)

PART -B

2. a) Enumerate various methods for the evaluation of bactericidal agents. Explain the procedure for determination of Phenol-Coefficient. (10M)
- b) What are the factors that influence the action of disinfectants? (6M)
3. a) Define pure culture and discuss about various methods of isolation of pure culture. (10M)
- b) Differentiate bacteria from molds with respect to their morphology and laboratory cultivation. (6M)
4. Write a note on etiology, diagnosis, mode of transmission, immunization methods, prevention and control of the following diseases: (16M)
 - (i) Leprosy
 - (ii) Typhoid
 - (iii) Syphilis
 - (iv) Infection Hepatitis.
5. a) Discuss about exponential growth and generation time. Describe the effect of salt concentration on growth of bacteria. (8M)
- b) What are membrane filters and what type of liquids are sterilized by using membrane filters. (8M)
6. a) What is sterility testing and discuss the methods of sterility testing. (8M)
- b) Write a note on principles and methods involved in assay of antibiotics. (8M)
7. a) Write a note on continuous and synchronous growth, Rideal walker coefficient. (8M)
- b) Discuss different techniques applied to measure the bacterial growth. (8M)