

B PHARM
(SEM III) THEORY EXAMINATION 2018-19
PHARMACEUTICAL MICROBIOLOGY

Time: 3 Hours

Total Marks: 75

Note: Attempt all Sections.

SECTION A

- 1. Attempt all questions in brief. 10 x 2 = 20**
- a. Differentiate between Prokaryotes and Eukaryotes in two main aspects.
 - b. What is contribution of Alexander Flemming in Microbiology?
 - c. How will you define Pasteurization?
 - d. What do you understand by aseptic and clean area?
 - e. Draw a neat labeled diagram of a bacterial cell.
 - f. What is the difference between Yeast and Mould?
 - g. Enlist the vegetative modes of reproduction in Fungi.
 - h. Define Sterilization.
 - i. What do you understand by IMViC?
 - j. Enlist different types of phenol Coefficient tests.

SECTION B

- 2. Attempt any two parts of the following: 2 x 10 = 20**
- a. Enumerate the parameters required for designing of Aseptic area.
 - b. Describe the method for microbial standardization of Vitamin B₁₂ or streptomycin.
 - c. Discuss various types of animal cell cultures and write the procedure for isolation of cells for *in-vitro* culture.

SECTION C

- 3. Attempt any five parts of the following: 7 x 5 = 35**
- a. Describe various factors affecting bacterial growth.
 - b. Explain the reproductive cycles of Virus.
 - c. Differentiate between dry and moist heat sterilization.
 - d. Write principle, procedure and applications of Ziehl-Neelson staining.
 - e. What are the various air flow patterns in laminar flow equipments?
 - f. Write principle, applications, advantages and disadvantages of Phase contrast microscopy.
 - g. Elaborate various factors affecting microbial spoilage.