B PHARM (SEM-III)

THEORY EXAMINATION 2021-22

PHARMACEUTICAL MICROBIOLOGY

Time: 3 Hours Total Marks: 75

Note: Attempt all Sections.

SECTION A

Very Short Answer (Attempt all questions)

 $10 \times 2 = 20$

- a. Define antiseptic and disinfectant.
- b. Differentiate microbial spoilage of pharmaceutical product.
- c. Define microbial assay with two examples.
- d. What is disinfectant with two examples?
- e. Enlist the different staining technique.
- f. Differentiate bactericidal & bacteriostatic.
- g. Define aseptic area.
- h. Define microbial contamination.
- i. Write application of cell culture.
- j. What is difference between yeast & moulds

SECTION B

Short Answer (Attempt any 5 questions)

 $5 \times 7 = 35$

- a. Explain ultra structure and morphological classification of bacteria.
- b. Write principle, application, advantages and disadvantages of phase contract microscopy.
- c. Explain microbial assay of erythromycin.
- d. Differentiate moist heat and dry heat sterilization.
- e. Explain different source of contamination an aseptic area and method of prevention.
- f. Explain cell cultures in pharmaceutical industry and research.
- g. Describe the concept and design of clean and aseptic area.

SECTION C

Long Answer (Attempt any 2 questions)

 $2 \times 10 = 20$

- a. Write in detail about scope and application of pharmaceutical microbiology.
- b. Write classification and mode of action of disinfectant.
- c. Write principle, procedure & application of Ziehl Neelson staining.