

B. PHARM
(SEM-III) THEORY EXAMINATION 2019-20
PHARMACEUTICAL MICROBIOLOGY

*Time: 3 Hours**Total Marks: 75***Note: 1.** Attempt all Sections. If require any missing data; then choose suitably.**SECTION A****1. Attempt all questions in brief. 10 x 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**2. Attempt any two parts of the following: 2 x 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. |

SECTION C**3. Attempt any five parts of the following: 5 x 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. |