

Roll No.

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Total No. of Pages : 02

Total No. of Questions : 13

B.Pharma (Sem.-3)
PHARMACEUTICAL MICROBIOLOGY

Subject Code : BP-303T

M.Code : 93325

Date of Examination: 17-01-2023

Time : 3 Hrs.

Max. Marks : 75

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **THREE** questions carrying **TEN** marks each and student has to attempt any **TWO** questions.
3. **SECTION-C** contains **NINE** questions carrying **FIVE** marks each and student has to attempt any **SEVEN** questions.

SECTION-A

1. **Answer briefly :**
 - a. Scope of Microbiology
 - b. Phase contrast microscopy
 - c. Growth curve
 - d. Cold sterilization
 - e. Acid-fast staining
 - f. Biological indicator
 - g. Viruses
 - h. Clean area classification
 - i. Microbial spoilage
 - j. Cell culture.

SECTION-B

2. Discuss various applications of microbiology.
3. Define gram staining and its procedure and interpretation.
4. Write various physical and chemical methods of sterilization.

SECTION-C

5. Write a note on the preservation of pharmaceutical formulation.
6. Write applications of cell culture in the pharmaceutical industry.
7. Define microbiological assay and write one method for the assay of antibiotics.
8. How to check the sterility of the ophthalmic formulation?
9. Define disinfectant and various factors affecting it.
10. Difference between dry heat and moist heat sterilization.
11. What is electron microscopy and write its types?
12. Discuss various applications of cell culturing in the pharmaceutical industry.
13. What are the aseptic area and principal of LAF?

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.