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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 :75107

Date of Examination : 16-12-22

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. Viable count
- b. Disinfectants
- c. Grams Staining
- d. Sterilization
- e. Sterility testing

Differentiate between

- f. Prokaryotes and Eukaryotes
- g. Toxin and Toxoid
- h. Phase contrast and dark field microscopy. Give method used for sterility testing of:
- i. Catguts and Eye ointments.
- j. Why it is necessary to wrapped brown paper before autoclaving?

SECTION-B

2. Explain sterilization methods with examples of each.
3. Give different methods for the evaluation of disinfectants.
4. What is microbial assay? Give method for the assay of vitamins.

SECTION-C

5. Give morphological classification of bacteria? Explain nutritional requirements for the exponential growth of bacteria.
6. Explain the principle and procedure of staining techniques.
7. Enumerate efficiency of sterilization methods.
8. **Write short note on**
 - a. Laminar air flow
 - b. Standardization of antibiotics?
9. Explain sterility testing of insoluble solids and soluble solids.
10. Highlight factors effecting microbial spoilage.
11. Enumerate preservation of pharmaceutical products.
12. Give applications of cell cultures in pharmaceutical industry.
13. **Write short note on:**
 - a. Sterility indicators
 - b. Cultivation of fungi.

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.