

**Seat Number**

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BP 303 T

## **Pharmaceutical Microbiology (731103)**

W-18

P. Pages : 3

**Time : Three Hours**

Max. Marks by 75

### **Instructions to Candidates :**

1. Do not write anything on question paper except Seat No.
  2. Graph or diagram should be drawn with the black ink pen being used for writing paper or black HB pencil.
  3. Students should note, no supplement will be provided.
  4. All questions are compulsory.
  5. Draw neat labelled diagram wherever necessary.

**1.** One Mark each.

20

- i) In acid fast staining the counter stain is -----  
a) Methylene blue                          b) Alcohol  
c) Crystal Violet                            d) Carbobifuchsin

ii) Example of Acid Fast Bacteria -----  
a) Straphyllococcus Aureus                b) E Coli  
c) Mycobacterium tuberculosis              d) Salmonella typhi

iii) Which test organism is used in Ideal Walker Test.  
a) S. Typhi                                    b) Staphyllococcus Aureus  
c) Pseudomons Aeruginosa                    d) E Coli

iv) Which species is used as Biological Indicator for sterilization of Autoclave.  
a) B. Pumulis                                b) B Subillis  
c) Stearothermophilus                        d) S typhi

v) Oily solutions are sterilized by -  
a) Auto clave                                b) Hot Air oven  
c) Radiation                                 d) Filtration

vi) Which of the following used as chemical Indicator for Ethylene gas sterilization.  
a) Royce Sachet                                b) Chemical Dosimeter  
Witness Tube                                    d) None of these

vii) The cell wall of fungi is composed of -  
a) Cellulose                                    b) Chitin  
c) Peptidoglycan                                d) Starch

- viii) Which of the following staining reagent used in Gram Negative Staining.  
 a) Crystal Violet                            b) Gram Iodine  
 c) Safranin                                d) Nigrosin
- ix) Cultivation of virus is carried out by -  
 a) Chick embryo Tech                    b) Cell Culture Technique  
 c) Animal Inoculation                  d) All of these
- x) CFU stand for -----  
 a) Colony Forming Unit                b) Cell Forming Unit  
 c) Colony Per Sq. Feet Unit        d) Cell Per Sq. Feet unit
- xi) Ditch Test is used for -----  
 a) Bacteriostatic                        b) Bactericidal  
 c) Both of these                         d) None of these
- xii) Crown Test is used for -----  
 a) Bacteriostatic                        b) Bactericidal  
 c) Both of these                         d) None of these
- xiii) Medium Volume of AOAC test is -----  
 a) 10 ml                                 b) 5 ml  
 c) 15 ml                                d) 20 ml
- xiv) Organism Used in R-W test  
 a) S. aureus                            b) S. typhi  
 c) E. Coli                              d) Proteus Vulgaris
- xv) Diluent for disinfectant use in Crown Test -----  
 a) Yeast Suspension                    b) Water  
 c) Oil                                    d) Artificial Sea Water
- xvi) IMVIC Test is carried out for -----  
 a) Cocc                                 b) Algae  
 c) Enterobacteria                     d) Protozoa
- xvii) Methyl Red test is for production of -----  
 a) Indole                                b) Acid  
 c) Citrate                              d) Acetone
- xviii) Reagent used for Indole test -----  
 a) Alpha naphthol                    b) Methyl Red  
 c) Kovac Reagent                     d) KOH
- xix) Sampling time for chick Marten test is -  
 a) 10 min                              b) 20 min  
 c) 30 min                             d) 5 min

**2.** Solve any seven.

35

- a) Discuss the Growth Curve of Bacteria.
  - b) Define Sterilisation. Comment on Moist Heat Sterilisation.
  - c) Differentiate between Gram positive & Gram negative bacteria.
  - d) Which factors influence the activity of disinfectants & antiseptics.
  - e) Comment on Evaluation of Bactericidal
  - f) Comment on Viruses.
  - g) Write short note on sterility testing of solid & liquid sterile products.
  - h) Explain General procedure of cell culture.
  - i) Explain spoilage, types of spoilage with example.

**3.** Solve any two.

20

- a) Explain ultrastructure & morphological classification of Bacteria. Comment on staining.
  - b) Explain the designing of Aseptic Areas. Comment on sources of contamination & its prevention.
  - c) Comment on Morphology, classification, reproduction & cultivation of viruses.

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