Code No: BP303T **PCI** SET - 1

II B. Pharmacy I Semester Supplementary Examinations, Oct/Nov - 2020
PHARMACEUTICAL MICROBIOLOGY

Time: 3 hours Max. Marks: 75

Note: 1. Question Paper consists of three parts (**Part-I**, **Part-II & Part-III**)
2. Answer ALL (Multiple Choice) Questions from **Part-I**
3. Answer any **TWO** Questions from **Part-II**
4. Answer any **SEVEN** Questions from **Part-III**

~~~~~~

PART –I

1. (i) Anticeptics are discovered by …….. (1M)
   a. Alexander Flemming b. Louis Pasteur c. Robert Koch d. Lister

   (ii) A plasmid is a …….. DNA material (1M)
   a. Single stranded, linear c. Single stranded circular
   b. Double stranded, linear d. Double stranded circular

   (iii) Bacterial lysosomes resides in ……. Region (1M)
   a. Nucleoid b. cytoplasm c. ribosome free region d. nucleus

   (iv) ……. is used as solidifying agent in bacterial media (1M)
   a. agar b. cellulose c. dextran d. starch

   (v) Acid fast staining method is used for identification of ….. (1M)
   a. Mycobacterium tuberculosis
   b. Staphyllococcus aureus
   c. Asparagillus niger
   d. Escherisia coli

   (vi) ……. is a basic dye. (1M)
   a. Eosin b. Congo Regd c. Safranin d. Carbol Fuschin

   (vii) …….. alcohol is used for sterilizing forceps etc used in microbiology lab (1M)
   a. 50% b. 60% c. 70% d. 80%

   (viii) Candidiasis infection is is caused by …….. (1M)
   a. Fungus b. Bacteria c. Virua d. Algae

   (xi) …… is an antibiotic. (1M)
   a. Benzalkonium Cl b. thiomersal c. hydrogen peroxide d. cephexin

   (x) MacConkey medium is used for culturing …… (1M)
   a. Enterobacteriaceae b. Diphtheria c. Pheumococcus d. Salmonella

   (xi) The oxidase test is used to differentiate (1M)
   a. Staphylococcus epidermidis from Neisseria meningitidis
   b. Staphylococcus aureus from Staphylococcus epidermidis
   c. Streptococcus pyogens from Staphylococcus aureus
   d. Pseudomonas aeruginosa from Enterococcus faecalis

   (xii) …… is the recommended medium for drug sensitivity assay using disc diffusion (1M)
   a. Blood agar b. Chocolate agar c. Mueller Hinton agar d. LJ medum

   (xiii) …….. is a very good example of an obligatory paracite (1M)
   a. Fungus b. gram +ve bacteria c. gram -ve bacteria d. virus

   (xiv) Lactobacillus plantarum is used for the assay of (1M)
   a. Pantothenic acid b. Vitamin B12 c. Vitamin D d. Vitamin A
~~~~~~

(xv) Key ingredient in Tris Buffer is …….. (1M)
a. tris(hydroxymethyl)aminomethane
b. tris(hydroxymethyl)aminoethane
c. tris(hydroxyethyl)aminomethane
d. tris(hydroxyethyl)aminoethane

(xvi) Lugols solution is ……. (1M)
a. Perchlorate solution b. I_2/KI solution c. HCl solution d. Dilute phenol

(xvii) Highest resolution is possible in …….. microscope (1M)
a. Microscope b. compound c. electron d. Stereom

(xviii) ……. is a very popular nitrogen source used in fermentation media (1M)
a. glucose b. cellulose c. starch d. peptone

(xix) Cary Blair medium is a very good example of ……. Media (1M)
a. minimal b. Differential c. growth d. transfer

(xx) …… gives negative urease test. (1M)
a. Nocardia b. Klebsiell c. Salmonella d. Proteus

PART -II

2. a) Write a note on electron microscopy. (5M)
b) Write the methods used for isolation of pure microbial cultures. (5M)

3. a) Explain the principle and significance of Gram's staining method. (5M)
b) Write a note on sterility indicators. (5M)

4. a) With a neat sketch, explain the functioning of horizontal laminar air flow chamber. (5M)
b) Write general methods used for assessment of a new antibiotic. (5M)

PART -III

5. Write a note on cell walls of bacteria. (5M)

6. Discuss the significance of micronutrients in microbial media. (5M)

7. Write in brief on bacterial growth curve. (5M)

8. Write in brief on sterility testing of ophthalmic solutions. (5M)

9. What are antiseptics? How do you evaluate their efficacy? (5M)

10. Enumerate sources of microbial contamination. (5M)

11. Write in brief on composition and significance of nutrient agar media. (5M)

12. Outline the procedure involved in cell culture. (5M)

13. Explain the method used for microbial assay of any one amino acid. (5M)