B.Sc. (C.B.C.S. Pattern) Sem-V

USMBT-12 : Microbiology DSE Paper-IV - Pharmaceutical Microbiology

P. Pages : 2 **GUG/W/19/13107**

Time : Three Hours * 3 8 9 7 * Max. Marks : 50

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1. What is phytopharmaceutical? Give the various screening tests for phytoconstituents. **10**

OR

a) Give brief account on the classification of pharmacologic agents. **2½**

b) Write a note on alkaloids. **2½**

c) Write a note on Terpenoids. **2½**

d) Give brief information about phytopharmaceutical products. **2½**

2. Discus the process of Drug development in detail. **10**

OR

a) Write a note on in vitro assay system based on enzymes for drug. **2½**

b) Give the information about transgenic animals regarding to anima models. **2½**

c) Discuss in vitro assay system based on growth inhibition. **2½**

d) Describe antiparasitic activity study of drug. **2½**

3. What is Vaccine? Give the information about genetically recombinant vaccines with its advantages and disadvantages. **10**

OR

a) Write a note on gene therapy. **2½**

b) What are the potential targets of gene therapy. **2½**

c) Discuss the mechanism of DNA vaccines. **2½**

d) Give the information about monoclonal antibodies. **2½**

4. What are the various phases of clinical trials used to study the biomolecules? Discuss in detail. **10**

OR

a) Write a note on Probiotic. **2½**

b) Discuss about preclinical trials done on biomolecules. **2½**

c) Give the information about legal considerations in pharmaceutical biotechnology for biomolecules. **2½**

d) Write a note on drug control. **2½**

5. Solve **any ten** of the following.

a) Define Phytopharmaceuticals. **1**

b) Enlist any two examples of alkaloids. **1**

c) Give the examples of commercial natural products from marine organisms. **1**

d) Give the examples of transgenic animal. **1**

e) What is Cell lines? **1**

f) Enlist any two examples of human parasite. **1**

g) What is genetically recombinant vaccine? **1**

h) Give the examples of inherited disorder. **1**

i) What is the use of monoclonal antibody? **1**

j) Define Probiotic. **1**

k) What is FDA? **1**

l) Give the full form of ICMR. **1**

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