

M.Sc. (Micro) Semester - 3 (CBCS) Examination
Oct/Nov. -2019 – [NEW COURSE]
Pharmaceutical and Medical Microbiology (Core)

Time: 2:30 Hours

Marks: 70

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate marks.

SECTION I

1. Answer the following
 - a. Write a note on properties of molecules considered as drug targets 07
 - b. Explain preclinical studies and clinical trials of a drug candidate 07
- OR
1. Describe the stepwise process of discovering a novel drug molecule in a company. 14
2. Answer the following
 - a. Write a note on normal flora of skin and genitourinary tract 07
 - b. Explain diseases caused by *Neisseria* and *Treponema* in brief 07
- OR
2. Describe infectious disease cycle in detail. 14
3. Do as directed (Any seven) 07
 - 1) Give examples of physiological barriers.
 - 2) What are siderophores ?
 - 3) Mention types of hemolysis zones on a blood agar
 - 4) What is QSAR ?
 - 5) Discuss the symptoms of Ebola virus infection.
 - 6) What do you mean by lead decoration ?
 - 7) Enlist the drugs used in treatment of tuberculosis.
 - 8) What are H_xN_y Viruses ?

SECTION II

1. Give an elaborate account on Congenital and Acquired Immunodeficiency 14
- OR
1. Answer the following
 - a. Write a note on Tumor antigens and immune response to them 07
 - b. Explain Allograft rejection and its prevention by immunosuppression 07
2. Describe avenues of vaccine biology in detail 14
- OR
2. Answer the following
 - c. Explain principle of Immunochromatography based rapid test 07
 - d. Describe Monoclonal antibodies and their applications 07
3. Do as directed 07
 - 1) What are APCs and CD4 cells?
 - 2) Give examples of TAA.
 - 3) When does GVH condition arise?
 - 4) What is DiGeorge syndrome?
 - 5) What is the use of colloidal Gold signal reagent in immunodiagnostics?
 - 6) What is ART?
 - 7) Define : Recombinant vaccine
 - 8) Write examples of prominent immunosuppressive drugs.
