647510 **MSC3MicC315x** **Seat No :_____**

M.Sc. (Micro) Semester - 3 (*CBCS*) Examination
Nov/Dec-2023 (NEW COURSE)
Pharmaceutical and Medical Microbiology (Core (New))

Time: 2:30 Hours **Marks: 70**

Instructions:

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

SECTION-I

Que-1 **Answer the following**

(A) Explain the pharmacokinetics and pharmacodynamics approach. **(07)**

(B) Write a note on large molecule drugs. **(07)**

OR

Que-1 Describe the drug development and explain its trial in Preclinical and clinical level. **(14)**

Que-2 **Answer the following**

(A) Write note on bird flu and explain possible treatments of flu. **(07)**

(B) Explain epidemiology, prevention and possible diagnosis of Neisseria. **(07)**

Que-2 Explain the mode of transmission, diagnosis, prevention and possible treatment of mycobacteria and salmonella diseases. **(14)**

Que-3 **Do as direct (any seven)** **(07)**

(1) Explain the serological test used for gram positive bacterial infection.
(2) Define the role of receptor in drug discovery.
(3) Explain the role of microbiologist in drug discovery.
(4) Explain the zoonotic disease in brief.
(5) What is causative agent of swine flu.
(6) Define SARS and MERS.
(7) Define normal flora and explain its importance.
(8) Define the term Gnotobiology.

SECTION-II

Que-1 Discuss the primary and secondary immunodeficiencies in details. **(14)**

OR

Que-1 **Answer the following**

(A) Explain the immune response towards the viral and parasite infection. **(07)**

(B) Explain the possible therapy for the cancer treatment. **(07)**

Que-2 Explain immunodiagnostics in detail and enlist its advantages. **(14)**

Que-2 **Answer the following**

(A) Write principle and application of immunochromatography based rapid test. **(07)**

(B) Describe Anti-malarial and Anti-tuberculosis drugs. **(07)**

Que-3 **Do as direct (any seven out of eight questions each of one marks)** **(07)**

(1) Describe role of adjuvant in vaccine design.
(2) Application of FISH, RIA in medical science.
(3) Give its example of recombinant vaccine.
(4) What do you mean by first and second line of drug?
(5) Define xenograft.
(6) Write the major type of cytokines.
(7) Define TSTA in brief.
(8) What is adoptive cell therapy?

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