

Bachelor of Science (B.Sc.) Semester—V (C.B.S.) Examination**MEDICAL MICROBIOLOGY****(Microbiology)****Compulsory Paper—1**

Time : Three Hours]

[Maximum Marks : 50

Note :— (1) All questions are compulsory and carry equal marks.

(2) Draw suitable diagrams wherever required.

1. (a) What are carriers ? Explain various types of carrier. 5
 (b) Describe various stages of infectious disease. 5

OR

- (c) What are the different vectors borne diseases ? Explain various types of vectors involved with suitable examples. 5
 (d) Explain various means to protect susceptible population. 5
 2. Describe aggressive mechanisms of pathogenic organisms. 10

OR

Describe normal flora of various parts of human body. 10

3. (a) Draw well labelled diagram of HIV. 2½
 (b) Write a note on qualitative Widal test. 2½
 (c) Compare between infectious and serum hepatitis. 2½
 (d) Describe Ziehl-Neelsen staining method for Mycobacterium tuberculosis. 2½

OR

- (e) Explain Mantoux test. 2½
 (f) Describe indirect ELISA test for the detection of HIV infection. 2½
 (g) Draw the well labelled diagram of hepatitis B virus. 2½
 (h) Draw life cycle of plasmodium. 2½
 4. (a) Write a note on drugs inhibiting protein synthesis. 5
 (b) Describe Kirby-Bauer disc diffusion method. 5

OR

- (c) Write any two mechanisms leading to development of drug resistance in the organisms. 5
 (d) Write a note on drug delivery vehicles. 5
 5. Solve any **TEN** questions :
 (i) What is meant by vertical transmission ? 1
 (ii) What is quarantine ? 1
 (iii) Define the term pandemic. 1
 (iv) Name any two diseases of reproductive system. 1
 (v) What is meant by meningitis ? 1
 (vi) What is a zoonotic life ? 1
 (vii) Name any two media used for cultivation of Mycobacterium tuberculosis. 1
 (viii) What is VDRL test ? 1
 (ix) What is exoerythrocytic schizogony ? 1
 (x) Why polymyxins are not effective against fungi ? 1
 (xi) What are antimetabolites ? 1
 (xii) How penicillin attacks bacteria ? 1