

Bachelor of Science (B.Sc.) Semester-V (C.B.S.) Examination

MICROBIOLOGY

(Medical Microbiology)

Compulsory Paper—1

Time : Three Hours]

[Maximum Marks : 50]

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

(2) Draw well labelled diagrams wherever necessary.

1. Describe various modes of transmission of communicable diseases. 10

OR

Explain methods of controlling communicable diseases.

10

2. Explain invasiveness and toxigenicity. 10

OR

Describe normal flora of human host.

10

3. (a) Give the morphology and Laboratory diagnosis of *Salmonella* Species. 5

(b) Describe standard tests for Laboratory diagnosis of syphilis. 5

OR

(c) Draw well labelled diagram of HIV and explain its morphology. 5

(d) Draw life cycle of Plasmodium. 5

4. (a) What is basic principle of drug designing ? 2½

(b) Explain mechanism of action of drugs. 2½

(c) Describe Kirby-Bauer method. 2½

(d) Give the reasons for development of drug resistance. 2½

OR

(e) Describe any one method for development of modern drug delivery system. 2½

(f) Write various basic mechanisms of action of drugs. Describe any one method. 2½

(g) Describe automated method for drug susceptibility. 2½

(h) Describe e-strip method in drug susceptibility test. 2½

5. Solve **any Ten** :

(i) Define epidemic.

(ii) What is prodromal phase ?

(iii) What is a carrier ?

(iv) Define MLD.

(v) What is exaltation ?

(vi) What is Germ free and gnotobiotic life ?

(vii) What is Mantoux test ?

(viii) What is titre value ?

(ix) What is window period in HIV infection ?

(x) Define monoclonal antibodies.

(xi) Define MDR.

(xii) What is antimetabolites ? $1 \times 10 = 10$