



Instructions:

- 1) All questions are compulsory
- 2) Draw diagrams wherever necessary for Question no. 2, 3 and 4.
- 3) Answers of Questions and Sub questions must be written strictly according to the serial order of question paper, otherwise the question shall not be valued
- 4) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.

Time : 2.30 Hours

Maximum Marks : 32

Q. 2. Long Answer Question

2 X 5 = 10

- a. Enumerate the methods of gene transfer and discuss the mechanisms of drug resistance in bacteria.
- b. Classify Rickettsiaceae. Write in detail about pathogenesis and lab diagnosis of typhus fever.

Q3 Short Answer Question

4 X 3 = 12

- a. Type IV hypersensitivity.
- b. Hot air oven.
- c. Lepromin test.
- d. Monoclonal antibodies.

Q4 Very Short Answer Question

10X 1 = 10

- a. Satellitism.
- b. Name four bacterial zoonotic infections.
- c. Oxidase test.
- d. Koch's postulates.
- e. Name Three live bacterial vaccines.
- f. Diagram of Immunoglobulin.
- g. Name Three Heterophile Antigen – Antibody reaction.
- h. Name the HACEK group of bacteria.
- i. What is Bile solubility test? Describe its principle.
- j. Name four bacteria causing food poisoning.

