

Instructions:

- a) All questions are compulsory
- b) Draw diagrams wherever necessary
- c) Answers of Questions and Sub-questions must be written strictly according to serial order of question paper.
- d) Do not write anything on the blank portion of question paper, if written anything such type of act will be considered as an attempt to resort to unfair means

Q1. Long Answer questions

2 X 10 = 20

- 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.

Q2. Short Answer Questions

4 X 5 = 20

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

Q3. Very Short Answer Questions

1 X 10 = 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.