NB: All questions carry equal marks.
All questions are compulsory.
Illustrate your answers with neat diagrams wherever necessary.

1. Describe:
   a) Rheumatic heart disease
   b) Diarrhoea and dysentery. Distinguish between amoebic and bacillary dysentery.

OR

1. Write a detailed account on viral hepatitis.

2. Describe:
   a) Urinary tract infections
   b) Cirrhosis of liver

OR

2. Write an account on:
   a) Investigations in female infertility
   b) Inducers and inhibitors of apoptosis

3. Explain:
   a) General principles of Bacterial classification
   b) Procedure and preparation of media for isolation of Pathogens

OR

3. Describe:
   a) Various groups of Bacteria on the basis of their requirements for temperature and substrate
   b) Factors responsible for virulence of Pathogens

4. Give an account of:
   a) Immune response
   b) Role of cytokines during haematopoiesis

OR

4. Give an account of:
   a) Pleuripotent stem cells and their applications
   b) Type I and Type II hypersensitivity reactions

5. Write short notes on Any three of the following:
   a) Lobar pneumonia
   b) Role of Thymus in T-cell maturation
   c) Immunoglobulins
   d) Macrophages
   e) Normal flora of the body
   f) MIC and its importance