

Time: 2½Hrs.

Marks: 60

NB: 1. All questions are compulsory.

2. Figure to the right indicates full marks.

3. Draw neat labelled diagram wherever necessary.

- Q1. Explain the molecular models of cell membrane. **12**  
**OR**
- Q1. Describe the mechanism of cell division and regulation of cell cycle. **12**
- Q2. Discuss different types of carcinogens. **12**  
**OR**
- Q2. How does protooncogene become oncogene to cancer cell. **12**
- Q3. Discuss the process of production of antibodies by plant cells. **12**  
**OR**
- Q3. Enumerate the different types, symptoms and treatment of immunodeficiency diseases. **12**
- Q4. In detail discuss types, symptoms and treatment of cardiovascular diseases. **12**  
**OR**
- Q4. Explain various types of genetic disorder diseases. **12**
- Q5. Write short notes on **any three** of the following **12**
- a. Apoptosis
  - b. Cell recognition
  - c. Major Histocompatibility complex
  - d. Oncogene virus
  - e. Acquired Immune Deficiency Syndrome
  - f. Genetic counseling

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