

**BT-1/D11**

**7507**

**Introduction to Biotechnology**

**Paper : BT-101 E**

Time : Three Hours]

[Maximum Marks : 100

**Note :-** Attempt any **FIVE** questions, selecting at least **ONE** question from each Unit.

### UNIT-I

1. (a) How the prokaryotic cell differs from Eukaryotic Cell ? 10  
(b) What are the differences in living and non-living organisms ? 10
2. Give the classification and functions of carbohydrates. 20

### UNIT-II

3. Describe the process of meiosis and its significance. 20
4. Describe the role of immune system in health and its mechanism. 20

### UNIT-III

5. Give the r-DNA technology in detail and role of vectors. 20
6. What is the significance of Transgenic plants ? Give with examples. 20

### UNIT-IV

7. Describe the applications of Biotechnology in Medicine and Forensic Science. 20
8. Write notes on :
  - (i) Nanotechnology
  - (ii) Biosensors. 10,10