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Total No. of Pages: 02

Total No. of Questions: 09

B.Sc (BT) (Sem. – 4)

**GENETIC ENGINEERING**

Subject Code: BSBT401-18

M Code: 77690

Date of Examination : 22-12-2022

Time: 3 Hrs.

Max. Marks: 60

**INSTRUCTIONS TO CANDIDATES:**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

**SECTION-A**

1. Define:

- a) Episomes
- b) Restriction Endonucleases
- c) Transgenic animals
- d) Vaccines
- e) Chimeric proteins
- f) Genetic engineering
- g) Arhizogenes
- h) Expression vectors
- i) Plasmids
- j) Transduction

### **SECTION-B**

2. Write a note on 'Bacterial conjugation for Gene transfer'.
3. Discuss production of Chimeric Proteins.
4. Write a note on Ti plasmid and its application.
5. List therapeutic products by Genetic engineering. Discuss.
6. Explain the use of Plant viruses as Episomal Expression vectors.

### **SECTION-C**

7. Discuss about physical and other Methods of Gene Transfer to cells.
8. What do you know about Site directed Mutagenesis and Protein engineering? Discuss.
9. Write about Gene targeting in animals and Plants.

**NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.**