Roll No. | | | | | | | | | | | | | Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(Bio Technology) (Sem.–6)

PLANT BIOTECHNOLOGY

Subject Code : BTBT-602

M.Code : 71073

Time : 3 Hrs. Max. Marks : 60

INSTRUCTION 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. Answer briefly :

a. Explain Micropropagation.

b. Define Callus.

c. What do you mean by organogenesis?

d. What is meant by bioresource conservation?

e. Define Transposons.

f. Explain Ri plasmid.

g. Molecular farming.

h. Explain edible vaccine.

i. Write applications of genetic engineering.

j. Define Cytoplasmic Male Sterility.

SECTION-B

2. Give a brief account on technique of plant tissue culture.

3. Write a detailed note on somatic embryogenesis.

4. Discuss in detail the mitochondrial genomes.

5. Explain in brief the role of genetic engineering in abiotic resistance in crop plants.

6. Describe in detail the methods of protoplast isolation and fusion.

SECTION-C

7 Give a detailed account on mechanism of gene expression in crop plants.

8. Describe in detail the role of plant tissue culture in production of secondary metabolites.

9. Discuss in detail :

   a) Bioplastics.

   b) Genetic engineering of chloroplast.

NOTE : Disclosure of identity by writing mobile number or making passing request on any page of Answer sheet will lead to UMC against the Student.