M.Sc.(Biotechnology) (C.B.C.S. and Old Pattern) Sem-III

PSBIT110 / BT3-T010 - Paper-II : Plant Biotechnology

P. Pages : 1 **GUG/S/19/11237**

Time : Three Hours * 3 1 7 7 * Max. Marks : 80

Notes :- 1. All questions are compulsory and carry equal marks.

1. Describe the composition and preparation of plant tissue culture media. **16**

OR

Write note on followings.

a) Conventional plant breeding. **8**

b) Callus culture. **8**

2. Describe the followings.

a) Embryogenesis. **8**

b) Hybrid plants. **8**

OR

Write on followings.

a) Production of haploid plants. **8**

b) Protoplast isolation. **8**

3. Discuss the biological and physical methods of nuclear transformation. **16**

OR

Write note on followings.

a) Chloroplast transformation. **8**

b) General features of Ti plasmid. **8**

4. Describe different transgenic plants used as a food. **16**

OR

Write note on followings.

a) Bt genes. **8**

b) Nematode resistance. **8**

5. Write short note on followings.

a) Role of Auxin in plant tissue culture. **4**

b) Cybrid. **4**

c) Hairy roots. **4**

d) Male sterile lines. **4**

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