

M.Sc.(Biotechnology) (CBCS Pattern) Semester - III  
**PSBIT110 - Paper-II : Plant Biotechnology**

P. Pages : 1

Time : Three Hours



**GUG/S/23/11237**

Max. Marks : 80

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1. Give details about composition and preparation of plant tissue culture media. **16**

**OR**

Describe in detail about callus and suspension culture with various techniques. **16**

2. Explain in detail Embryo culture and embryo rescue. **16**

**OR**

a) Describe shoot tip culture in detail. **8**

b) Explain anther culture in detail. **8**

3. Explain in detail methods of nuclear transformation. **16**

**OR**

a) Describe chloroplast transformation. **8**

b) Explain feature of Ti and Ri plasmid. **8**

4. Describe virus resistance in plant. **16**

**OR**

a) Explain golden rice and pomato as transgenic plant food products. **8**

b) Describe fungal resistance in plants in detail. **8**

5. a) What are plant growth hormones? Explain. **4**

b) Comment on production of virus free plant. **4**

c) Explain mechanism of DNA transfer in brief. **4**

d) Comment on Bt genes. **4**

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