

M.SC.(Botany) (CBCS Pattern) Fourth Semester CBCS  
**PSCBOTT15.2-Course Code PSCBOTT15-Paper-XV –**  
**Molecular Biology And Plant Biotechnology-II**

P. Pages : 1

Time : Three Hours



**GUG/W/18/11359**

Max. Marks : 80

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1. Give detail account on Agrobacterium mediated gene transfer in the production of transgenic plants. 16
- OR**
- Write note on:
- a) Chloroplast transformation. 8
- b) Transgene stability and gene silencing. 8
2. Describe Herbicide and Disease resistant transgenic crops citing suitable examples. 16
- OR**
- Write note on.
- a) Hazards and safety regulation of transgenic plants. 8
- b) Biodegradable plastic. 8
3. What is plant tissue culture? Describe different types of plant cell cultures along with their applications. 16
- OR**
- Write note on
- a) Gene Expression in Chloroplasts. 8
- b) Post translational gene expression. 8
4. Describe organization, functions and regulation of Nitrogen fixing genes in Klebsiella pneumoniae. 16
- OR**
- Write note on.
- a) Molecular Marker Assisted selection. 8
- b) Pollution control through, genetically modified organisms. 8
5. Write short note on:
- a) Particle Bombardment. 4
- b) Edible vaccines. 4
- c) Somaclonal variations. 4
- d) RAPD Markers. 4

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