

M.Sc.(Botany) (CBCS Pattern) Semester - IV  
**Course Code : PSCBOTT13 - Paper-XIII : Plant Biotechnology**

P. Pages : 1

Time : Three Hours



**GUG/S/23/11355**

Max. Marks : 80

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- Notes : 1. All questions are compulsory and carry equal marks.  
2. Draw well labelled diagrams wherever necessary.

1. Discuss aims and strategies for development of transgenic crops citing suitable examples. **16**

**OR**

Write notes on:

- a) Construction of DNA libraries. **8**  
b) Transposon mediated gene transfer. **8**

2. Describe Bacterial transformation and mention strategies used for selection of recombinants from transformants. **16**

**OR**

Write notes on:

- a) Molecular Markers. **8**  
b) Sanger's method of DNA sequencing. **8**

3. Give detail account on Haploid and Triploid plant production and its applications. **16**

**OR**

Write notes on:

- a) Particle gun method of gene transfer in plants. **8**  
b) Salient achievements in Crop Biotechnology. **8**

4. Define Database and describe different types of Bioinformatics databases. **16**

**OR**

Write notes on:

- a) ORF finder. **8**  
b) Nucleotide and Protein BLAST. **8**

5. Write Short notes on.
- a) Agrobacterium. **4**  
b) PCR **4**  
c) Cybrids. **4**  
d) Genscan. **4**

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