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Reg. No. : .....

Name : .....

Third Semester M.Sc. Degree Examination, February 2024

Biotechnology

BT 301 : PLANT BIOTECHNOLOGY

(2020 Admission Onwards)

Time : 3 Hours Max. Marks : 75

I. Answer any **two** of the following :

1. With neat diagram, distinguish between Ti-Plasmid and Ri-Plasmid and its role in transformation of plants.

2. Discuss and debate on transgenic plants and its significance.

3. Describe the various methods and procedures for the germplasm conservation.

(2 × 15 = 30 Marks)

II. Answer any **nine** questions

4. Explain the technique to produce haploid plants.

5. What is the significance of single cell clones?

6. Discuss organogenesis.

7. Write a note on the abiotic factors influencing Plant tissue culture.

8. How to address the constraints to transform monocot plants than dicot plants?

9. Write examples for fusogens.

P.T.O.

10. Discuss the alternative techniques to produce secondary metabolites.

11. What is the chemical method for plant transformation?

12. Exchange your observation on the development of molecular pharming for the production of many biopharmaceuticals.

13. Discuss somaclonal variations.

14. What are reporter genes and its role?

15. Write notes on the natural cytokinins and auxins.

(9 × 5 = 45 Marks)

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