# B.Sc DEGREE EXAMINATION, APRIL 2019 III Year VI Semester Plant Biotechnology

### Time : 3 Hours

Max.marks:75

Section A  $(10 \times 2 = 20)$  Marks

#### Answer any **TEN** questions

- 1. Autoclave
- 2. Callus
- 3. Cytoplasmic hybrid
- 4. Karyoplast
- 5. Micropropagation
- 6. Somatic hybrid
- 7. Microbial Growth
- 8. Fermentation
- 9. Restriction Enzyme
- 10. Plasmid
- 11. Biofertilizer
- 12. Somaclone

Section B  $(5 \times 5 = 25)$  Marks

#### Answer any **FIVE** questions

- 13. Write an account on sterilization.
- 14. Write short notes on Synthetic seeds.
- 15. Describe different methods of Micropropagation.
- 16. List out the requirements of microbial growth.
- 17. Give an account on alkaloid production in plants.
- 18. Describe the mass cultivation of *Rhizobium*.
- 19. Give a brief account on embryo culture.

# Section C $(3 \times 10 = 30)$ Marks

### Answer any **THREE** questions

- 20. Describe the various advancements of biotechnology.
- 21. Describe in detail the isolation and fusion of protoplast and their advantages.
- 22. What is anther culture? Briefly explain the factors influencing anther culture and its applications.
- 23. Write an essay on the various types of bioreactors used in fermentation.
- 24. Write about the aims and techniques of gene manipulation in eukaryotic cells.

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