

Sixth Semester B.Sc. Degree Examination, April/May 2019

(CBCS Scheme)

Biotechnology

Paper VII — PLANT AND ANIMAL CELL TECHNOLOGY

Time : 3 Hours]

[Max. Marks : 90

Instructions to Candidates : Draw labelled diagrams wherever necessary.

PART – A

- I. Answer any **TEN** of the following : **(10 × 2 = 20)**
1. Meristem culture
 2. Micronutrients
 3. Differentiation
 4. Hybrid
 5. PEG
 6. Primary culture
 7. Interleukin – 2
 8. Serum free media
 9. Vector
 10. Copyright
 11. GATT
 12. Patent

PART – B

- II. Answer any **SIX** of the following : **(6 × 5 = 30)**
13. Auxins and Cytokinins
 14. In vitro fertilization

Q.P. Code – 42645

15. Somatic hybridization
16. Somaclonal Variation
17. Applications of plant tissue culture in Horticulture.
18. EPO
19. Mechanical disaggregation
20. Selectable Marker

PART – C

- III. Answer any **FOUR** of the following : **(4 × 10 = 40)**
21. What are haploids? Explain the protocol involved and add a note on its applications.
 22. Explain the techniques involved in production of secondary metabolites. And add a note on its applications.
 23. What are edible vaccines? Explain the production of vaccines in watermelon.
 24. What is Transfection? Explain the types.
 25. What is Transformation? Explain the physical and chemical methods of gene transfer.
 26. What is Somatic embryogenesis? Add a note on its applications.
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