



QP CODE: 22100918



22100918

Reg No :

Name :

B.Sc DEGREE (CBCS) REGULAR / REAPPEARANCE EXAMINATIONS, APRIL 2022

Sixth Semester

B.Sc Biotechnology Model III

CORE COURSE - BT6CRT15 - PLANT BIOTECHNOLOGY

2017 Admission Onwards

03667173

Time: 3 Hours

Max. Marks : 60

Part A

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. Write down the purpose of Chromic acid in plant tissue culture.
2. Give a sketch for hardening centre.
3. Which is the common media used in plant tissue culture?
4. What is dedifferentiation?
5. What is micropropagation?
6. What is the importance of shoot apex ?
7. Define Ovule Culture.
8. Define protoplast.
9. List application ofgermplasm storage.
10. Define cryoprotectant.
11. Mention about Golden rice.
12. Mention about TDNA and its importance.

(10×1=10)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Note down the important milestones in plant tissue culture.





14. Design a laboratory for aseptic inoculation.
15. Explain the importance of growth hormones in cell culture media.
16. Explain the procedures for callus culture.
17. Give an account on somatic embryogenesis.
18. Describe the artificial seeds and its types.
19. Describe application of cybridization.
20. Elaborate the commonly used vectors for plant transformation.
21. Illustrate the agrobacterium mediated gene transfer.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. Explain the formulation of plant tissue culture media with example.
23. Explain somaclonal variation and its applications.
24. Differentiate somatic hybridization and cybridization.
25. Explain about binary vector and helper plasmid.

(2×10=20)

