QP CODE: 25020365

25020365

Reg No : .....

Name : .....

B.Sc DEGREE (CBCS) REGULAR / REAPPEARANCE / MERCY CHANCE EXAMINATIONS, FEBRUARY 2025

Sixth Semester

B.Sc Biotechnology Model III

CORE COURSE - BT6CRT15 - PLANT BIOTECHNOLOGY

2017 Admission Onwards

B6E7EF7D

Time: 3 Hours Max. Marks : 60

Part A

*Answer any **ten** questions.*

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

1. List out the contributions of Gottlieb Habertlandt.
2. List down the various potting mixtures used for hardening purpose.
3. What are the microelements used in plant tissue culture?
4. Differences between cytoquiscence and cytoscenescence.
5. What is micropropagation?
6. What is somaclones?
7. Who introduced meristem culture?
8. Define cytoplast.
9. Experiment used for inter specific transfer of chloroplast.
10. Define germplasm storage .
11. Discuss about Cry genes.
12. State any direct gene transfer techiques for transgenic plants.

(10×1=10)

Part B

*Answer any **six** questions.*

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

13. Use of autoclave ,working table and distillation plant in plant tissue culture lab.

14. List out the set of instruments for tissue culture work.

15. Explain the importance of growth hormones in cell culture media.

16. Explain the methods for growth measurement of suspension culture.

17. Describe the uses and advantages of artificial seeds.

18. Describe the procedure of anther culture.

19. Differentiate ex situ and in situ germplasm conservation.

20. Differentiate co culture with tissue explant and in planta transformation.

21. Distinguish between co. integrate and binary vector system.

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. Describe prepartion and sterilisation of culture media.

23. Describe somatic embryogenesis with diagram.

24. Explain somatic hybridization.

25. Sketch the role of TDNA of Agrobacterium in genetransfer.

(2×10=20)