

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN  
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)

Chromepet, Chennai - 600 044.

M.Sc.PBPBT - END SEMESTER EXAMINATIONS - APRIL 2025

SEMESTER - III

**20PPBCT3008 - Plant Tissue Culture**

Total Duration : 2 Hrs. 30 Mins.

Total Marks : 60

### **Section B**

Answer any **SIX** questions ( $6 \times 5 = 30$  Marks)

1. Illustrate the concept of totipotency have been studied.
2. Describe the plant growth regulators.
3. Justify the production of synthetic seed.
4. Describe the immobilization of cell.
5. Explain the production of clones
6. Explain Micronutrients and plant growth regulators.
7. Apply the production of secondary metabolites by cell culture.
8. Illustrate the embryogenic culture have been studied.

### **Section C**

I - Answer any **TWO** questions ( $2 \times 10 = 20$  Marks)

9. Explain briefly about the sterilization techniques have been studied.
10. Justify the different types of media have been studied.
11. Describe the techniques involved in micropropagation by direct and indirect method.
12. Justify the tissue culture techniques use for crop improvement have been studied.

II - Compulsory question ( $1 \times 10 = 10$  Marks)

13. Evaluate the isolation, culture and regeneration of protoplast culture.

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