

**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. - END SEMESTER EXAMINATIONS NOVEMBER - 2022**

**SEMESTER - III**

**20PPBCT3008 - Plant Tissue Culture**

**Total Duration : 2 Hrs 30 Mins.**

**Total Marks : 60**

**Section A**

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

1. Explain the milestones achieved in tissue culture of plants.
2. Describe the preparation and types of growth medium.
3. Write the steps involved in micropropagation.
4. Explain the isolation and culture of protoplasts.
5. Justify protoplasts as a tool in biotechnology.
6. Give an account on fumigation and wet and dry sterilization.
7. Discuss about somatic embryogenesis.
8. Write a note on production of clones and secondary metabolites.

**Section B**

**Part A**

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

9. What is surface sterilization? Give the procedures involved in it.
10. Describe the composition of medium.
11. Write an essay about suspension culture.
12. Justify on breaking self incompatibility using embryo culture.

**Part B**

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

13. Explain callus culture and synthetic seed production.

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