

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 EXAMINATION APRIL/NOV - 2021

SEMESTER - III

20PPBCT3008 - Plant Tissue Culture

Total Duration : 3 Hrs	Total Marks : 75
MCQ : 30 Mins	MCQ : 15
Descriptive : 2 Hrs.30 Mins	Descriptive : 60

Section B

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

1. Explain the steps involved in Surface sterilization.
2. Classify the different types of Media.
3. Predict the mechanism of Callus culture initiation and its maintenance.
4. List the applications of Somatic hybridization.
5. Describe the steps involved in Secondary metabolite production.
6. Explain Synthetic seed production.
7. Show how Protoplast can be used as a tool in Biotechnology.
8. Explain Fumigation.

Section C

Part A

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

9. Relate the use of Immobilization and Bioreactor.
10. Explain the various steps involved in Micropropagation.
11. Breaking Self incompatibility by Embryo culture -Justify.
12. Show the progress in the development of the technologies of plant tissue culture

Part B

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

13. Classify the methods involved in Isolation and Culture of Protoplast.