

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 APRIL - 2022

SEMESTER - III

20PPBCT3008 - PLANT TISSUE CULTURE

Total Duration : 3 Hrs.

Total Marks : 60

Section A

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

1. Give an account of various sterilization methods.
2. Discuss the role of hormones in organogenesis.
3. State the practical applications of synthetic seeds.
4. Describe the steps involved in protoplast isolation.
5. Write a positive approach on production of secondary metabolites by In-vitro method.
6. How will you produce the virus free plants.
7. Write short notes on composition of MS medium.
8. Explain the protocol of callus culture.

Section B

Part A

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

9. Describe the design of tissue culture laboratory.
10. Explain the methods of protoplast fusion.
11. Illustrate any two important alkaloids produced by tissue culture technique.
12. Give an over view of applications of tissue culture.

Part B

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

13. Write an account on micropropagation.
