THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[M.PHARM 1223] DECEMBER 2023 Sub. Code: 2995 (OCTOBER 2023 EXAM SESSION)

M.PHARMACY DEGREE EXAMINATION SEMESTER - II (PCI New Regulations 2016) PHARMACOGNOSY - MPG PAPER I – MEDICINAL PLANT BIOTECHNOLOGY

O.P. Code: 262995

Time: Three hours Answer ALL Questions Maximum: 75 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Describe briefly on development of plant biotechnology as a source of medicinal agents. Mention its applications in pharmacy.

- 2. Write a note on:
 - a. Organogenesis in plant tissue culture.
 - b. Production of Ergot alkaloids by fermentation method.

II. Write notes on: $(7 \times 5 = 35)$

- 1. Applications of PCR in plant genome identification.
- 2. Methods of protoplast fusion techniques.
- 3. Transgenic plants and their applications.
- 4. Different methods of cloning.
- 5. Applications of fermentation technology.
- 6. Protein replication.
- 7. Elicitors on the production of secondary metabolites.
