

QP CODE: 211330

Reg. No:.....

**Second Semester M. Pharm Degree Regular/Supplementary Examinations
November 2024**

M.Pharm (Pharmacognosy)

Paper I: Medicinal Plant Biotechnology (MPG 201T)

(Common for 2017 and 2019 Scheme)

Time: 3 Hours

Total Marks: 75

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary.*

Essays

(3x10=30)

1. Protoplast fusion techniques and its applications.
2. Explain in detail about secondary metabolism in tissue cultures with emphasis on the production of medicinal agents.
3. Production of ergot alkaloids by fermentation technology.

Short Notes

(9x5=45)

4. Protein replication.
5. Hairy root culture.
6. Immobilization techniques of plant cell.
7. Methods used in gene identification and sequencing.
8. Any two enzymes of pharmaceutical interest.
9. Sterilization methods involved in plant tissue culture.
10. Different methods of cloning.
11. Methods used in the gene identification.
12. Recombinant DNA technology.
