

QP CODE: 211330

Reg. No:.....

**Second Semester M. Pharm Degree Regular/Supplementary Examinations
November 2025**

M.Pharm (Pharmacognosy)

**Paper I: Medicinal Plant Biotechnology (MPG 201T)
(Common for 2019 and 2024 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. What are the precursors and elicitors on production of secondary metabolite.
2. Discuss in detail about different methods of cloning and its applications. Add a note on the advantages and disadvantages of plant cell cloning.
3. Explain immobilization techniques of plant cell and its application on secondary metabolite production.

Short Notes

(9x5=45)

4. Recombinant DNA technology.
5. Synthetic seeds and monoclonal variation.
6. Enzyme of pharmaceutical interest.
7. Explain genetic code.
8. Micro-propagation of medicinal and aromatic plants.
9. Hairy root cultures and their applications.
10. Single cell proteins.
11. Applications of PCR in plant genome analysis.
12. RNA and protein replication.

CORRECTION / NO-CORRECTION FILE
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QPCODE: 211330

Dated: 06-11-2025

Question No.5

Corrected as "Synthetic seed and monoclonal variation."

Question No.6

Corrected as "Enzymes of pharmaceutical interest."

Corrections/Modifications/Replacement of Questions if any shall be made available to all students. Take the print out of the Correction File in such cases and distribute to all students.

(Sd/-)

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