

A-0040

Total Pages : 3

Roll No.

MBOT-609

M.Sc. BOTANY (MSCBOT)

(Biotechnology)

4th Semester Examination, Session December 2024

Time : 2:00 Hrs.

Max. Marks : 35

Note :- This paper is of Thirty Five (35) marks divided into Two (02) Sections 'A' and 'B'. Attempt the questions contained in these Sections according to the detailed instructions given therein. Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.

Section-A

Long Answer Type Questions 2×9½=19

Note :- Section 'A' contains Five (05) Long-answer type questions of Nine and Half (9½) marks each. Learners are required to answer any *two* (02) questions only.

1. Write a detailed note on plant tissue culture. Also discuss the methods of plant tissue culture.
2. What do you understand by transgenic plants ? Discuss its achievements and advantages.
3. Write about cryopreservation and its methods.
4. Write a detailed note on secondary metabolites of plants.
5. Write a detailed note on organogenesis and its application.

Section–B

Short Answer Type Questions 4×4=16

Note :– Section ‘B’ contains Eight (08) Short-answer type questions of Four (04) marks each. Learners are required to answer any *four* (04) questions only.

1. Write a short note on totipotency.
2. Write briefly about production and application of synthetic seeds.
3. Write a short note on protoplast culture.
4. Give a brief account on somataic hybridization.

5. Write short notes on the following :
 - (i) Somaclonal variants
 - (ii) GM plants
6. Write briefly about proteomics.
7. Write a short note on Intellectual Property Right (IPR).
8. Write a short note on bio safety and its usefulness for the environment.
