



MJ-523

M.Sc. (Botany)

4th Semester Examination, Jan.-June, 2022

Paper - I

Plant Reproduction and Plant Resources Utilization

Time : Three Hours] [*Maximum Marks* : 80

Note : Answer from **all** the Units and Question Number 1 is compulsory. All questions carry equal marks.

1. Write short notes on the following :

- (a) In-vitro fertilization in plant
- (b) Vegetative propagation
- (c) Male sterility
- (d) Pollen stigma interaction

(2)

Unit-I

2. Write an account on plant vegetative propagation methods and explain the role in plant reproduction.

OR

Write short notes on the following :

- (a) Sporophytic and gametophytic self incompatibility
(b) Structure of Pistil

Unit-II

3. Describe the development of embryo sac in detail.

OR

Write short notes on the following :

- (a) Role of Tapetum
(b) Pollen embryo

Unit-III

4. What is polyembryony? Describe its development and significance.

OR

Write short notes on the following :

- (a) Storage proteins of endosperm
(b) Apomixis

(3)

Unit-IV

5. Write an essay on ethnobotanically important plants of Chhattisgarh.

OR

Write short notes on the following :

- (a) Plant used in aesthetics
(b) Green revolution
-