

M-6642

M.Sc. (IVth Semester) Examination, 2020

BOTANY

(Reproductive Biology of Flowering Plants)

Time Allowed : Three Hours

Maximum Marks : 70

Note : Attempt any five questions of all the units. One question from each unit is compulsory. Each question have equal marks.

Unit-I

Q. 1. Describe the process of pattern formation and growth during floral organogenesis. **14**

OR

Write a detail note on pollination regulator of flower development. **14**

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P.T.O.

(2)

Unit-II

Q. 2. Describe the process of embryogenic development of pollen grains. **14**

OR

Write notes on any two of the following : **7+7=14**

- (a) Sperm dimorphism
- (b) Transformation of pollen
- (c) Megasporogenesis

Unit-III

Q. 3. Describe the mechanism of double fertilization in the flowering plant. **14**

OR

Write notes on any two of the followings : **7+7=14**

- (a) Structure of ovule

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(3)

- (b) Pollen tube guidance
- (c) Pistil activation

Unit-IV

Q. 4. Write an overview note on plant-pollinator interaction in detail. **14**

OR

Write notes on any two of the followings : **7+7=14**

- (a) Floral display
- (b) Mating system
- (c) Ovule abortion

Unit-V

Q. 5. Describe the developmental biology and diversity of fruit types. **14**

(4)

OR

Write notes on any two of the followings : **7+7=14**

- (a) Pattern of seed development
- (b) Embryo culture
- (c) Diversity of fruit types

