

DD-773

M. Sc. (Fourth Semester) EXAMINATION, 2020

BOTANY

Paper First

(Plant Reproduction and Utilization of Resources)

Time : Three Hours

Maximum Marks : 80

Note : Question No. 1 is compulsory. Attempt all the *five* questions. All questions carry equal marks. Draw well labelled diagrams wherever necessary.

1. Write notes on the following :
 - (a) Double Fertilization
 - (b) Pollen development
 - (c) Endospermic and Non-endospermic seed
 - (d) Origin of Agriculture

Unit—I

2. What do you understand by self-incompatibility in plants ? Describe its various methods, types and significance.

Or

Write about the following :

- (a) Pollination and their mechanism
- (b) Pollen-Stigma interaction

Unit—II

3. Describe the structure of anther and microsporogenesis in Angiospermic plants.

Or

Write notes on the following :

- (a) Sperm dimorphism and hybrid seed production
- (b) Pollen embryo sac

Unit—III

4. Describe the structure dynamics of fruit growth, biochemistry and biology of fruit maturation in Angiospermic plants.

Or

Write notes on the following :

- (a) Endosperm development
- (b) Embryoculture

Unit—IV

5. Describe the ethnobotanical important plants of Chhattisgarh with their botanical names, family and utilizations.

Or

Write notes on the following :

- (a) World centers of primary diversity
- (b) Plants used as a pollution control and aesthetics