

February 2019
M. Sc. IIIrd Semester Examination

SEED TECHNOLOGY
Plant Breeding
Paper IV

Time 3 Hours]

[Max. Marks : Regular 85 / Private 100
[Min. Marks : Regular 28 / Private 33

Note : This question paper is meant for all Regular and Private students. Answer all five questions. All questions carry equal marks. The blind candidates will be given 60 minutes extra time.

1. What is Cross Pollination ? Describe various factors that promote cross pollination in crop plants.
OR

Write short notes on the following :

- (a) Male Sterility.
(b) Heteroslyly.

2. Describe Pedigree and Bulk Methods applied for Self Pollination Crops.
OR

Write short notes on the following :

- (a) Germplasm Collection.
(b) Seed Banks.

3. Discuss various techniques of Hybridization.
OR

Write short notes on the following :

- (a) Merits and demerits of Bulk Method.
(b) Single Cross Method.

4. What is Mutation Breeding ? Discuss procedure, different types of Mutagens and achievements of Mutation Breeding.
OR

Write short notes on the following :

- (a) Basis of Heterosis.
(b) Difference between Synthetic and Composite Varieties.

5. Give the details of plant breeding work done on wheat in India.
OR

Discuss the major achievements of plant breeding work for disease and insect resistance.