

End Semester/Reappear (Semester III) Examination December 2022

Programme: B. Sc. (Hons.) Agriculture
Course: Fundamentals of Plant Breeding
Course Code: 13A.209
Enrolment no. _____

Full Marks: 50
Time: 2 Hrs.

Section I

1. Short Answer type questions. Answer any four.

4 x 5 = 20

- a. Distinguish between male sterility and self-incompatibility.
- b. Define the germplasm conservation. Discuss briefly the importance of germplasm conservation.
- c. Discuss heterosis and inbreeding depression in brief.
- d. Explain briefly the importance of Intellectual Property Rights.
- e. Distinguish between pedigree and bulk method of breeding.
- f. Explain multiline variety in brief.

Section II

Long answer type questions. Answer any two.

2 x 15 = 30

2. Explain the various mechanisms which promote self and cross pollination in crop plants.
3. Define mass selection. Mention its types, important features, merits, demerits and achievements with examples.
4. Give a brief account of various breeding methods used for developing drought and salt tolerant varieties in crop plants.
5. Define marker assisted selection. Explain its role in crop improvement with suitable examples.
