

End Semester/Reappear (Semester V) Examination December 2022

Programme: B. Sc. (Hons.) Agriculture
Course: Crop Improvement-I (Kharif Crops)
Course Code: 13A.315
Enrollment No: _____

Full Marks: 50
Time: 2 Hrs.

Section I

- 1. Short Answer type questions. Answer any four. 4 x 5 = 20**
- Briefly discuss various classes of seed that we use in a seed production programme.
 - Analyze briefly the conventional and non-conventional approach of plant breeding.
 - Different between vertical and horizontal disease resistance.
 - Discuss briefly the main reasons for low yield of pulses compared to cereals.
 - Write the process pedigree method with merit and demerit.
 - Explain the hybridization and write their types.

Section II

- Long answer type questions. Answer any two. 2 x 15 = 30**
- Illustrate the role of National and International Research Institutes involved in the breeding of rice, maize and pigeonpea.
 - Compare:
 - pure line and mass selection
 - Drought escape and drought avoidance
 - Genetic resistance and gene pyramiding
 - Analyse the terms single cross, test cross, out cross, top cross and double cross.
 - Discuss the role of IPGRI and NBPGR in collection and conservation of plant genetic resources.
