Roll No…….. **Total No. of Printed Pages: 1**

Total No. of Questions: [09]

B.Sc. (Hons.) Agriculture (Semester – 6th)
CROP IMPROVEMENT-II (RABI CROPS)
Subject Code: BAGRS1656
Paper ID: [19130160]

Time: 03 Hours **Maximum Marks: 60**

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A **(2 marks each)**

Q1. Attempt the following:

a. Describe the origin of wheat crop and its wild relatives.
b. What are major breeding objectives in wheat crop?
c. Describe the origin and distribution of barley crop.
d. Give Chromosome number of all species under category of Rapeseed and Mustard.
e. Who coined term Ideotype and what is its relevance in plant breeding.
f. What are the genetic differences between *Desi* and *Kabuli* gram?
g. What do you mean by Somaclonal variation?
h. Give wild species of Safflower
i. Give distribution of Linseed.
j. Write three four lines on Potato breeding program in India.

Section – B **(5 marks each)**

Q2. Give botanical classification of barley. Differential between six and two rowed and irregular barley.

Q3. Give floral biology and wild species of sunflower.

Q4. Write short note on mutation breeding with examples.

Q5. Write short note on Heterosis breeding with examples

Q6. Describe breeding objectives for chickpea

Section – C **(10 marks each)**

Q7. Describe breeding procedures in wheat crop. Mention two breeding centers for wheat.

Q8. Describe breeding procedures in Chickpea crop.

Q9. Write short note on speed breeding.