

Roll No.....

Total No. of Printed Pages: 1

Total No. of Questions: [09]

**B.Sc. (Hons.) Agriculture (Semester – 6<sup>th</sup>)**  
**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.