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Total No. of Printed Pages: [1]

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B.Sc. (Hons.) Agriculture (Semester – 5th)
CROP IMPROVEMENT-I (KHARIF CROPS)
Subject Code: BAGRS1555
Paper ID: [19130147]

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 and domestication of rice crop.
- b) What are major breeding objectives in rice crop?
- c) Describe the origin and distribution of maize crop.
- d) Give Chromosome number of all species under category of Maize.
- e) Who coined term Ideotype and what is its relevance in plant breeding.
- f) What are the genetic differences between *Desi* and American gram?
- g) What do you mean by Mutation Breeding.
- h) Give wild species of Bajra.
- i) Give distribution of Sorghum.
- j) Write three four lines on rice breeding program in India.

Section – B

(5 marks each)

- Q2. Give botanical classification of rice. Differential between Aus, Aman and Boro rice
- Q3. Give floral biology and wild species of maize.
- Q4. Write short note on mutation breeding with examples.
- Q5. Write short note on Heterosis breeding with examples in *Kharif* crops
- Q6. Describe breeding objectives for Sugarcane.

Section – C

(10 marks each)

- Q7. Describe breeding procedures in rice crop. Mention two breeding centers for rice.
- Q8. Describe breeding procedures in maize crop.
- Q9. Write short note on mutation breeding.