

M.Sc. (Ag.) Examination, 2015
Semester – II
Agronomy : Agronomy of Major Cereals
Course : AGR-507

Time: 3 Hours

Full Marks: 50

Questions are of value as indicated in the margin.

Answer **any five** questions.

1. (a) Mention various species of rice. Write down difference characteristics of rice species. State special features of dwarf high yielding rice varieties.
(b) Describe various methods of planting rice. Write down the types of rice culture under different depth of water. Mention the age of seedlings depending on the duration of the rice variety. (1+3+1)+(3+1+1)=10
2. Describe the importance of wheat in India. Write down nutrient and irrigation management in wheat cultivation. State the role of wheat in green revolution. 2+6+2=10
3. What do you mean by malted barley? What measures are taken for cultivation of malted barley? Describe the sowing variables of barley cultivation. Write down the package of practices for barley cultivation under saline-sodic soil. State the quality of malted barley. 1+2+3+3+1=10
4. Write down the method of wet nursery bed for raising rice seedlings. How do seasons of cultivation, tillering ability and duration of the rice variety govern spacing in rice cultivation? Give reasons for higher yield of rice in temperate region. 5+3+2=10
5. Classify maize on the basis of grain type. Describe in brief the soil and climatic requirement for maize cultivation. Mention various growth stages of maize. Briefly write down nutrient management and weed management in maize cultivation. 3+2+2+3=10
6. Write down short notes on the following (**any five**): 2×5=10
 - (a) Baby corn
 - (b) Seed treatment in rice
 - (c) Cereals
 - (d) Semi-dry system of rice cultivation
 - (e) Cold injury in rice seedlings
 - (f) Planting method of maize
 - (g) CRI stage in wheat
7. Differentiate between the following (**any five**): 2×5=10
 - (a) Sweet corn and flint corn
 - (b) Aus rice and Aman rice
 - (c) Dormant and non-dormant rice seeds
 - (d) Bread wheat and durum wheat
 - (e) Cob and tassel
 - (f) Hybrid maize and composite maize
 - (g) Dry ploughing and puddling

P.T.O.

8. Justify the following statements (*any five*):

2×5=10

- (a) Productivity of *boro* rice is more than *aman* rice.
 - (b) Ammonical fertilizers should be applied in reduced zone of rice field.
 - (c) Rice seedlings of dry nursery bed are hardier than seedlings of wet nursery bed.
 - (d) A wheat crop of same variety takes less duration for its maturity in eastern India than north India.
 - (e) Barley is a highly salt tolerant crop.
 - (f) Now-a-days maize is grown for its diversified use.
 - (g) Seedling stage of maize is very sensitive to excess moisture condition.
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