M.Sc. (Ag.) Examination, 2018
Semester-II
Horticulture
Course No: HOR-514
(Breeding of Fruit Crops)

Time: Three hours **Full Marks: 50**

Questions are of the value as indicated in the margin

*Answer **any five** of the following questions.*

1. How polyploidy and heterozygosity cause problem in fruit breeding. 5+5=10

2. What do you mean by self-incompatibility? Mention different types of self-incompatibility. What are the types of male sterility? 2+5+3=10

3. Discuss the variability of genetic resources of fruit crops in India. Write down the significance of germplasm collection. 7+3=10

4. What are the characteristics of clones? How genetic variations are occurred within clones? Write salient steps of clonal selection. 3+4+3=10

5. What are different types of mutations found in fruit crops? Briefly describe the procedure of mutation breeding followed in fruit crops. 3+7=10

6. Discuss the breeding objectives, breeding methods and breeding achievements in mango. 10

7. Describe the genetic resources of different types of *Musa*. Briefly mention the breeding objectives and international breeding achievements in banana. 5+5=10

8. Write short notes on the following (***any four***): 2x5=10
   a. Bud mutation
   b. Problems of citrus breeding
   c. Breeding objectives and clonal selection in grapes
   d. Floral biology and pollination of papaya
   e. Breeding achievements in pomegranate and sapota
   f. Major groups and varieties of pineapple
   g. Hybridization in apple

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