

M.Sc. (Ag.) Examination, 2017
Semester-II
Horticulture
Course – HOR-514
(Breeding of Fruit Crops)

Time: 3 Hours

Full Marks: 50

Questions are of value as indicated in the margin.

Answer **any five** questions

1. What are primary and secondary centre of origin. Mention different centres of origin of crop plants with example of fruit crops. What do you mean by centre of diversity?
3+6+1=10
 2. Briefly discuss the breeding objectives, breeding methods and achievements in apple or peaches.
2+4+4=10
 3. Mention the species, cytogenetics, genetic resources and blossom biology of papaya or citrus.
5+5=10
 4. What is unfruitfulness? Write down the different causes of unfruitfulness. What are the methods to overcome the unfruitfulness in fruit crops?
1+3+6=10
 5. Briefly discuss the breeding objectives, breeding methods and salient achievement in grapes.
10
 6. Discuss about the origin, chromosome number, ploidy level, and improved varieties of the following crops:
2×5=10
 - a) Mangosteen b) Phalsa c) Pineapple d) Pear e) Sapota
 7. Briefly discuss the breeding objectives, breeding methods and achievements in aonla or ber in India.
2+4+4=10
 8. Write short notes on (**any five**):
2×5=10
 - a) Seedlessness
 - b) Apomixis
 - c) Spontaneous mutation
 - d) Variations in clone
 - e) Resistance breeding for abiotic stresses
 - f) Objectives of pear breeding
 - g) Causes of unfruitfulness in fruit crops
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