

M.Sc. (Ag.)Semester -II Examination 2015

Horticulture

Course : HOR 514

(Breeding of Fruit Crops)

Time : Three Hours

Full Marks : 50

Questions are of value as indicated in the margin.

Answer **any five** questions

1. Write the importance of fruit breeding. Briefly discuss about the history of fruit breeding in India. 5+5=10
 2. Briefly discuss the breeding objectives, breeding methods and achievements in apple or mango. 2+4+4=10
 3. Define clonal selection. Write down the merits and demerits of clonal selection. Discuss procedure of clonal selection. 2+4+4=10
 4. What is unfruitfulness? State different causes of unfruitfulness. How can we overcome the unfruitfulness in fruit crops. 1+3+6=10
 5. What is mutation breeding? Differentiate between spontaneous and induced mutation with suitable examples in fruit crops. Discuss about different physical and chemical mutagens. 1+3+6=10
 6. Discuss the breeding objectives and different approaches for crop improvement of pineapple. 3+7=10
 7. Discuss about the origin, chromosome numbers, ploidy level, and improved varieties of the following crops: 2×5=10
(a) Banana (b) guava (c) grapes (d) papaya (e) aonla
 8. Discuss hybridization and its problems in fruit crops. Enumerate methods of hybridization in fruit crops. 5+5=10
 9. Write short notes on (**any four**) : 2.5×4=10
 - (a) Parthenocarpy
 - (b) Apomixis
 - (c) Polyembryony
 - (d) Root stock breeding in grapes
 - (e) Varieties of ber
 - (f) Polyploidy in fruits crops
 - (g) Man made fruit
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