

M.Sc.(Ag.) Semester – III Examination, 2014

Horticulture

Course : HOR – 504

(Post Harvest Technology of Fruit, Vegetable and Ornamental Crops)

Time: 3 Hours

Full Marks: 50

Questions are of value as indicated in the margin.

Answer **any five** questions.

1. Write down the importance of postharvest technology. Briefly discuss the present status and future scope of food preservation industry in India. 4+3+3=10
 2. Define precooling. What are the advantages of precooling? Describe different precooling methods. 1+3+6=10
 3. Write down the beneficial and deleterious effects of ethylene in postharvest management of horticultural produce. Briefly discuss about different methods of ethylene management in storage chamber of fruits. 5+5=10
 4. Write down the principles of food preservation. Enlist different food preservation methods. Write in brief about utilization of by-products and waste management of processing industry. 3+2+5=10
 5. Draw a flow diagram depicting different steps of canning operation. Define canning. Write down the principle of canning. Name the horticultural crops suitable for canning. 1+1+6+2=10
 6. Write in brief about the factors responsible for postharvest losses of fresh horticultural produce. Discuss the pre-harvest management practices influencing postharvest quality of crop. 5+5=10
 7. Differentiate among the following (**any four**): 2.5×4=10
 - (a) Climacteric and Non-climacteric fruit
 - (b) Modified atmosphere packaging and controlled atmosphere packaging
 - (c) Chilling injury and Freezing injury
 - (d) Sorting and Grading
 - (e) Sterilization and Pasteurization
 - (f) Squash and RTS
 8. Write short notes on the following (**any four**): 2.5×4=10
 - (a) Vapour heat treatment
 - (b) HACCP
 - (c) Minimal processing
 - (d) Hypobaric storage
 - (e) Bacterial spoilage
 - (f) Maturity indices of mango
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