

KERALA AGRICULTURAL UNIVERSITY  
B.Sc. (Ag) 2006 Admission VI Semester Final Examination  
July / August 2009

Hort 3207  
Post harvest management and processing of  
Horticultural crops (2+1)

Max. Marks: 60

Time: 2½ hours

**I. Objective type questions (answer all questions).**

(20 X 0.5 = 10)

**Fill up the blanks:**

1. ----- is easily breakable packaging material
2. ----- emulsion is called protective coating
3. ----- is the important storage disease occurring in Onion
4. ----- meter is used for determination of TSS
5. Heat units is used for harvesting of ----- vegetable

**Choose the correct answer:**

6. Technique is used as non-destructive detection method for internal defects  
a) Sorting    b) Grading    c) Pelletization
7. Easily available radiation source is  
a) Cobalt 60    b) Uranium    c) Arsenium
8. The average post harvest losses horticultural produces.  
a) 35-40%    b) 20%    c) 10%
9. HPLC is used for the analysis of  
a) Pesticide    b) Fungicide    c) Acaricide
10. Greening is physiological disorder in  
a) Tomato    b) Brinjal    c) Potato

**Give the name of**

11. Pickles making citrus species
12. Papain yielding varieties
13. Whiptail disorder is due to
14. Chips making banana variety
15. High Vitamin-c content fruits

**True or False:**

16. Hydro-cooling is most commonly followed for vegetables
17. Cashew apple is used for making juice
18. Powder is the commercial value addition in Amla
19. Common salt is one of the preservatives
20. Papain is extracted from fully matured fruits

**II. Short answers for the following questions.**

(14 X 1 = 14)

1. Define Beverages.
2. Distinguish between Jam and Jelly.
3. What is maturity?
4. Define ripening.
5. What is a climacteric fruit?
6. Cryo – Preservation.

7. What is sulphitation?
8. Define marmalades.
9. Expand RTS.
10. Expand MAS and CAS.
11. Ethylene absorbants.
12. Define dehydration.
13. What is blanching?
14. Define pasteurization.

**III. Short notes <sup>on</sup> any eight questions.**

**(8 X 2 = 16)**

1. Role of radiation in shelf life of fruits & vegetables.
2. Preparation of sugar syrup.
3. Different methods of sterilization.
4. Pre - cooling of vegetables.
5. Artificial food colours.
6. Mention the different methods of fermentation.
7. Cider vinegar.
8. List out the value addition in Mango.
9. Write the by - products from the citrus.
10. What is nectars and cordials?

**IV. Short essays on FIVE questions**

**(5 x 4 = 20)**

1. What is packaging? Discuss the different packaging materials with advantages and disadvantages.
2. Define preservatives? Discuss the different preservatives and their merits and demerits.
3. Discuss the role of pre-harvest treatments on storage of fruits.
4. What is ethylene? Discuss briefly on the management of ethylene.
5. Discuss on the nature and causes of losses during storage of Horticultural produces.
6. Discuss on the zero energy cool chamber - its functions and principles with diagram.

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