KERALA AGRICULTURAL UNIVERSITY B.Sc. (Ag) 2005 Admission VI Semester Final Examination, October 2008

Max. Marks: 60 Hort 3207 Post Harvest Management and Time: 21/2 hours Processing of Horticultural Crops (2+1) $(20 \times .5 = 10)$ Fill in the blanks 1. Jam must contain atleast 30 % of invert sugar to prevent ----2. Enzymes are inactivated by the process of -----3. Synthetic syrup does not contain -----4. Exhausting is a process of -----5. Cider is obtained from ----b) State True or False Acid present in lime is malic acid. 7. Weeping of jelly is gelation. Unripe guavas are rich in pectin. Maturation of wine is ageing. 10. Sodium benzoate is used as a preservative in pineapple squash. c) Give the name of 11. Sparkling clear juice is 12. Example of mesophilie bacteria 13. Using etherel for ripening is 14. Apertizing is 15. The chemical name of vinegar is d) Choose the correct answer Exhausting is a process of removal of d) None of the above (c) Acid (a) O₂ (b) Pathogenic microbes 17. Sterilisation is a process of (b) killing specific microbes (a) Killing of all microbes (d) None of the above (c) Inactivating microbes 18. The chemical responsible for setting jelly is (c) Pectin (d) All the three (a) Sugar (b) Acid 19. The quality of processed fruit products is assessed by (b) MPEDA (a) APEDA (d) None of the above (c) FPO 20. During slow freezing the size of ice crystal formed is (b) Large (a) Small (d) None of the above. (c) Medium

II. Questions for short answers

 $(14 \times 1 = 14)$

- 1. Distinguish between sterilisation and pasteurisation
- 2. Define clarification
- 3. Give the specification of jam
- 4. Define freezing process
- 5. What is canning?
- Define dehydration
- 7. Differentiate jam and jelly.
- 8. Write the principle in packaging of fruits and vegetables
- Explain waxing
- 10. What is enzymatic browning?
- 11. Explain alcoholic fermentation
- 12. List out important plantation crops
- 13. Explain any one export promotion agencies
- 14. Write the name of the enzyme used for clarification of juice

Questions for short notes (any EIGHT) $(8 \times 2 = 16)$ III.

- 1. Discuss on the importance of post harvest management
- 2. What are the changes that occur during ripening?
- 3. Explain controlled atmospheric packaging system
- 4. What are the common packaging materials used for fruits.
- 5. What is pre-packaging?
- 6. How pectin is extracted?
- 7. Write the role of FPO
- 8. How tea is processed?
- 9. What are the different types of coffee available?
- 10. Write the advantages of sun and mechanical drying.

Short essays (any FIVE)

 $(5 \times 4 = 20)$

- 1. Discuss on the post harvest losses of fruits and vegetables. How it can be prevented?
- 2. What are the biochemical changes that take place after harvesting?
- 3. Write the procedure for post harvest handling of cut flowers.
- 4. Discuss on canning of fruits and vegetables.
- 5. How coffee is produced?
- 6. Discuss on the role of export promotion agencies in exporting of fresh and processed products.