

EASTERN UNIVERSITY, SRI LANKA
FINAL YEAR FIRST SEMESTER EXAMINATION IN AGRICULTURE –
2004/2005
AEN 4109 ADVANCED POST HARVEST TECHNOLOGY FOR
AGRICULTURAL COMMODITIES (2:15/30)

Answer all questions

Time: 01 hour

1. a. Briefly describe the suitability of mechanical harvesting of fruits for fresh consumption.
 - b. Briefly discuss the impact of harvest maturity and harvesting techniques on post harvest life of fresh agricultural produce.
 - c. Briefly explain the role of respiration in extending the shelf life of agricultural commodities.
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2. a. i. Briefly describe the methods of refrigerator cooling for agricultural commodities.
 - ii. Briefly explain the principles of the applicability of controlled atmosphere storage under local conditions.
 - b. i. List out the heat loads absorbed by a refrigeration plant.
 - ii. 5 tonnes of Brussels sprouts are kept into a cold store and cooled from 15.5 °C to 0 °C in 1 hour. Calculate the rate of heat extraction (Field heat load). Specific gravity of Brussels sprouts is 3.68 kJ/ kg °C.