

EASTERN UNIVERSITY, SRI LANKA
FINAL YEAR FIRST SEMESTER EXAMINATION IN AGRICULTURE –
2004/2005
AEN 4112 SYSTEM CONCEPTS APPLIED TO POST HARVEST
APPLICATIONS (2:15/30)

Answer all questions

Time: 01 hour

1. a. Write short notes on the following,
 - i. Optical properties of fruits and vegetables.
 - ii. Design Philosophy.
 - iii. Planned creativity.

 - b. Briefly discuss the importance of “water activity” and “sorption isotherm” in the storage of agricultural commodities.
-
2. a. Briefly explain the principle behind the Ergonomics.
 - b. i. Brief out the importance of Project Appraisal.
 - ii. In a proposed 5 years research project, cost incurred in first 3 years is 5000, 4000 and 1000 rupees respectively. The benefits will be entertained from 3rd years onwards as 2000, 4000 and 4000 respectively.

Find out the Net Present Value (NPV), benefit-cost ratio and Internal Rate of Return (IRR) by considering the Depreciation Rate (DR) as 10% and 30% and the interest rate as 60%. Comment on the viability of the project.