EASTERN UNIVERSITY, SRI LANKA SECOND YEAR SECOND SEMESTER EXAMINATION IN AGRICULTURE -2006/2007 (May/June 2012)

(EXTERNAL DEGREE)

AEN 2202 POST HARVEST TECHNOLOGY (2:30/00)

swer all questions

ne: 2 hours

- (a) List out the methods of mechanical drying system.
- (b) Explain the factors affecting storage life of fresh produce.
- (c) Briefly describe the steps involved in modern milling process.
- (a) Briefly discuss the commercial scale parboiling process
- b) Discuss the post harvest losses in grains.
- a) Illustrate the hysteresis effect on cereal grains.
- b) Briefly discuss the moisture migration in cereals during storage.
- 1) Comment on psychrometric chart and its use.
- i) (i) 1 MT of paddy to be dried 25% to 15% moisture content. How much water must be removed and how much heat required for drying process? (note: Latent heat of vaporization is 677 kcal / kg water)
- (ii) Calculate the required air capacity if the initial condition of the air temperature is 38°C and RH 56% and exit condition of air temperature is 30°C and 100% RH. Assume that the drying period is 10 hours. (Psychrometric chart is provided)

23 AUG 2013