

EASTERN UNIVERSITY, SRILANKA
EXTERNAL DEGREE
Second Year Second Semester Examination in Agriculture 2005/2006
(Repeat Examination)

AEN - 2202 POSTHARVEST TECHNOLOGY (2:30/00)

Answer all questions

Time: Two hours

01. (i) Briefly explain the mechanism of drying.
- (ii) Write a brief note on the following psychrometric processes:
- (a) Sensible heating and cooling
 - (b) Heating and humidifying
 - (c) Cooling and dehumidifying
 - (d) Drying
02. (i) Why good storage facilities are needed to store grains?
- (ii) Briefly discuss about the moisture migration in storage.
03. (i) Discuss the ways of pre and postharvest losses of grains.
- (ii) Give a brief account on the processes involved in parboiling of paddy.
04. A 4.5 m^3 of paddy grain is being dried at 45°C dry bulb temperature and 27°C wet bulb temperature. The drying rate of the grain is 17.2 kg of water/hour. If the outside air is at 25°C dry bulb temperature and $80\% \text{ RH}$, how much air is needed per minute to carry away the evaporated moisture? (Psychrometric chart is provided)
