



The Open University of Sri Lanka  
 Faculty of Engineering Technology  
 Bachelor of Industrial Studies Program

Final Examination- 2011/2012

**AEI 3236 Postharvest Biology and Technology I**

Date : 09.03.2012  
 Time : 0930-1230  
 Duration : Three (03) hours

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**SECTION 2: Answer any four (04) questions.**

1. a) Briefly explain the plant cell using a labelled diagram. Your answer should include the different organelle involved in the main functions of plants.  
 b) Why fruits and vegetables are categorized under group of perishables. Critically evaluate your answer.
2. Write an essay on "effect of pre-harvest management practices on postharvest shelf life of perishables".
3. Write short notes on any three (03) of following.
  - i) Glycolysis and Krebs cycle
  - ii) Maturity indices of mango fruit
  - iii) Importance of ethylene in postharvest technology
  - iv) Importance of packaging
  - v) Psychometric chart and it applications
4. a) It is more difficult to control postharvest diseases than postharvest disorders. Critically discuss the above statement using suitable examples.  
 b) Briefly discuss why rate of respiration consider as an excellent indicator of predicting storage life of fresh produces.
5. Write an essay on importance of analysing postharvest losses of paddy industry in Sri Lanka.
6. a) What is meant by paddy parboiling?  
 b) Write five (05) advantages of parboiled paddy.  
 c) Discuss the importance of implementing standards and grades for paddy in Sri Lanka.