



The Open University of Sri Lanka
Faculty of Engineering Technology
Bachelor of Industrial Studies and Technology Programmes
Final Examination- 2014/2015
AEX4231 Food and Nutrition

Date : 04.08.2015
Time : 0930-1230
Duration : Three (03) hours

SECTION 2: Answer any four (04) questions.

1. (a) Classify carbohydrates based on number of monomer units giving two examples for each classification?
(b) Draw the fisher projection formula of D-glucose.
2. (a) Draw the structure of cellulose showing $\beta(1-4)$ linkage.
(b) Briefly state why cellulose cannot be digested in human intestine.
3. (a) Draw and label the alimentary canal of human.
(b) Explain the fate of an Ice-cream in a human body from ingestion to the excretion.
4. (a) What is meant by a sustainable food system?
(b) What are the major areas to be considered by the government to develop food policies in Sri Lanka to overcome malnutrition?
5. Write short notes on two (02) of the following topics.
 - a. The role of Vitamin D and Calcium mineral in bone healthiness.
 - b. Compare the differences of structures of amylase and glycogen
 - c. Role of insulin in controlling blood glucose.
6. "The problem of world hunger should be addressed by increasing small-scale food production". Critically evaluate this statement.