

The Open University of Sri Lanka Faculty of Engineering Technology Bachelor of Industrial Studies Honours Degree programme

Final Examination- 2015/2016

## **AEX4231 Food and Nutrition**

Date

: 17.11.2016

Time

: 0930-1230

Duration

: Three (03) hours

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

- 1. (a) "Starch is composed of two forms of homopolysaccharides of amylose and amylopectin". Draw the chemical structure of amylose and amylopectin and compare the differences.
  - (b) Discuss the role of  $\alpha$ -amylase and  $\beta$ -amylase enzymes in starch digestion.
- 2. (a) Draw the structure of cellulose showing  $\beta$  (1-4) linkage.
  - (b) Briefly state why grasses cannot be digested in the human intestine.
- 3. (a) Draw and label the alimentary canal of human.
  - (b) Explain the fate of ingested fried pork meat in a human body.
- 4. Discuss how food policies could directly affect the development of a country.
- 5. Write short notes on two (02) of the following topics.
  - a. Digestion in the stomach.
  - b. Introduction of traffic light colours to show the sugar content of beverages but not milk and milk derived beverages
  - c. Controlling type I and type II diabetics.
- 6. "Urban poor and malnutrition is severe than village poor and malnutrition" Critically evaluate this statement.