



The Open University of Sri Lanka
 Faculty of Engineering Technology
 Diploma/Degree Program: Industrial Studies
 (Agriculture)
 Final Examination- 2008/2009
AEX4231 Food and Nutrition

Date : 29-03-2009
 Time : 0930-1230 hrs

SECTION II Answer four (04) questions only.

- (1) (a) Discuss the differences between **disaccharides** and **polysaccharides**.
 (b) Discuss the importance of gums and related substances in food industries.
 (c) Explain the fermentation of sugars and give examples.
- (2) (a) Draw a sketch diagram for the structure of Amino acid.
 (b) Discuss the importance of proteins based on the followings.
 - 1) Life process
 - 2) Food constituents in food industry
 - 3) Dietary requirement
- (3) (a) Briefly discuss the absorption of lipids inside the body.
 (b) What are the functions of bile secreted from bladder?
 (c) Write the functions of calcium and name six (06) food sources of calcium.
- (4) (a) What do you mean by the "Basal Metabolic Rate"(BMR) ?
 (b) Briefly explain obesity due to over eating.
 (c) Briefly explain the abnormalities of metabolism can be expected due to the deficiencies of calcium, phosphorus and magnesium.
- (5) (a) What are the components of food policies? Briefly explain them.
 (b) Discuss "Why differences may be expected between rural poor in the wet zone and dry zone".
- (6) Write short notes of the followings
 - (a) Malnutrition.
 - (b) Refractive Index (R.I)
 - (c) Biological value of protein.
 - (d) Role of insulin in human body.