

**FEDERAL UNIVERSITY OF TECHNOLOGY, OWERRI**  
**SCHOOL OF PHYSICAL SCIENCES**  
**DEPARTMENT OF SCIENCE LABORATORY TECHNOLOGY**  
**RAIN SEMESTER EXAMINATION 2013/2014 SESSION**  
**STC509: BIOCHEMISTRY OF FOODS AND NUTRITION**  
**TIME ALLOWED: 2 HOURS**  
**INSTRUCTIONS: ANSWER FOUR (4) QUESTIONS**

1. Discuss exhaustively the nutritional virtues of milk.
2. (a) Define the term "Nutritional disease".  
(b) Discuss six diseases caused by nutritional deficiency; stating their deficient nutrient, disease symptoms and the foods rich in key nutrients.  
(c) How can nutritional diseases be prevented and treated?
3. (a) Obesity is a medical condition or nutritional disorder. Discuss.  
(b) Describe in details how obesity can be managed or treated.
4. (a) With the aid of diagrams, list the different types of retinoids you studied.  
(b) What are the functions of vitamin A and its precursors in health and disease?
5. (a) What are RDAs and how are they set?  
(b) Describe the Food Guide Pyramid and use it to plan a menu for one day with a caloric content of about 2,200 kcal.
6. (a) Food processing adds variety to food preparations. Discuss any two varieties of food processed from cassava.  
(b) What are the various processes used in detoxification of hydrogen cyanide?