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**University Examinations 2015/2016**

FIRST YEAR FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN HUMAN NUTRITION AND DIETETICS

**AFN 3100: INTRODUCTION TO NUTRITION AND DIETETICS**

 **DATE: DECEMBER 2015 TIME: 2 HOURS**

**INSTRUCTIONS:** *Answer question* ***one*** *and any other* ***two*** *questions*

**QUESTION ONE (30 MARKS)**

1. (i) Explain the role of a nutritionist/dietician in modern public health practice (6 Marks)

(ii) Briefly discuss on the multi-disciplinary of nutrition and dietetics. (2 Marks)

1. (i) State the importance of iodine highlighting deficiencies caused by lack of its consumption. (2 Marks)

(ii) Outline the arguments you can forward to support the statement that, “the best way to control iodine deficiency is by fortification of salt” (5 Marks)

1. In a refugee situation, the prime aim is to provide enough energy. Usually a flour mixture with pulses and oil is provided to the population. An average of 2140 kcal is distributed irrespective of sex and age. State the nutritional problems you can predict if this rations are given over a long period of time. (4 Marks)
2. You are in a rural area where it is said that there is a problem with vitamin A deficiency. You are asked to investigate the matter. Explain how you would proceed to get valid information. (4 Marks)
3. (i) State two reasons why anti-oxidant vitamins are important to health. (2 Marks)

(ii) State two vitamins which are natural anti-oxidants. (2 Marks)

1. State three examples f how living in a multicultural society can affect our choice of food (3 Marks)

**QUESTION TWO (20 MARKS)**

1. Describe the health effects of dietary fiber. (4 Marks)
2. (i) State three functions of protein in the body. (3 Marks)

(ii) Explain why some people need more protein than others. Give examples. (3 Marks)

1. (i) State five pieces of information which must be on a food label. (5 Marks)

(ii) Explain the basis for the shape of the Food Guide Pyramid. (1 Mark)

(iii) Explain how the concepts of nutrient density and calorie control addressed in the Food Guide Pyramid. (2 Marks)

(iv) Briefly explain the difference between ‘best before’ and ‘use by’ dates (2 Marks)

**QUESTION THREE (20 MARKS)**

1. Below is an example of the daily diet of a teenage girl who is a vegetarian

Breakfast Sugar coated cereal bar

 Black coffee

Lunch Pizza slice

 Chips

 Cola

Supper Vegetarian sausages

 Mashed potato

 Carrots

 Doughnut

Snacks Salted crisps

 Cola

1. State two nutrients which may be low in this diet. (2 Marks)
2. Explain four ways in which this diet can be improved to meet current dietary guidelines. (8 marks)
3. State three reasons why some teenage girls decided to follow a vegetarian diet. (3 Marks)
4. Suggest two food products vegetarians could choose as meat alternatives. (2 Marks)
5. Explain dietary advise you would give to prevent obesity. (5 Marks)

**QUESTION FOUR (20 MARKS)**

1. The table below shows the nutritional value of some popular biscuits:

 Nutrients per 100g

Nutrients Biscuit A (g) Biscuits B (g)

Protein 1.1 0.7

Sugar 0.05 2.0

Fat 2.3 1.4

Fibre 0.6 0.8

Salt 0.1 0.04

1. Using information from the table, compare the nutritional value of the two biscuits. (5 Marks)
2. When choosing snack foods for young children, explain points you would consider. (3 Marks)
3. Explain why a starchy food is a better source of energy for children than sugary food. (3 Marks)
4. (i) List three different health problems which may be linked to a high intake of energy foods (3 Marks)

 (ii) Suggest two different ways the diet could be changed to reduce the risk of constipation. (2 Marks)

1. Define the following term:
2. Protein complementation. (2 Marks)
3. Essential nutrients. (2 Marks)