

# NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

SSC4104

FACULTY OF APPLIED SCIENCES

BACHELOR OF SCIENCE HONOURS DEGREE SUPPLEMENTARY EXAMINATIONS

DEPARTMENT OF SPORTS SCIENCE AND COACHING

## **THEORY: SSC4104: NUTRITION AND SPORTS NUTRITION**

AUGUST 2012

3 HOURS (100 MARKS)

### **INSTRUCTIONS**

Answer **four** questions only. Each question carries 25 marks. Where a question contains subdivisions, the mark value for each subdivision is given in brackets. Illustrate your answer where appropriate with large, clearly labeled diagrams.

1. A person's balanced diet should contain relative balance of carbohydrate, fat and protein of total calories consumed.
  - a) What is the recommended balance for most people? [5 marks]
  - b) Discuss how the balance in (a) can change with physical activity [20 marks]
  
2. Discuss sports drinks under the following subheadings:
  - a) Stomach emptying [3 marks]
  - b) Absorption [2 marks]
  - c) Isotonic drinks [6 marks]
  - d) Hypotonic drinks [6 marks]
  - e) Hypertonic drinks [8 marks]
  
3. Write short notes on :
  - a) Making weight for weight class sports. [10 marks]
  - b) Athlete eating disorders. [10 marks]
  - c) Weight loss [5 marks]
  
4. Different sports disciplines have different nutritional requirements based on duration and intensity of activities. Discuss with reference to specific sporting disciplines. [25 marks]
  
5. For the diabetic athlete, the type and duration of exercise recommended depends on the presence of physical complications and the degree of metabolic control. Discuss practical guidelines for insulin dependent and non-insulin dependent diabetic athletes. [25 marks]

6. The athlete may present a variety of symptoms regarding their changes in body composition, motivation and energy level, physical performance in sport and other physiological concerns. In most cases, this is related to poor nutritional practices. Discuss dietary trouble shooting.

[25 marks]

**END OF EXAMINATION**