



**UNIVERSITY OF SWAZILAND**  
**SUPPLEMENTARY EXAMINATION PAPER**

**PROGRAMME : DIPLOMA IN HOME ECONOMICS  
EDUCATION AND HOME  
ECONOMICS YEAR II**

**COURSE CODE : FN 202**

**TITLE OF PAPER : BIOCHEMISTRY & NUTRITION**

**TIME ALLOWED : TWO (2) HOURS**

**INSTRUCTIONS : ANSWER QUESTION ONE (1)  
AND ANY OTHER (2) QUESTIONS**

**DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN  
GRANTED BY THE CHIEF INVIGILATOR**

**Question 1**

- a) Describe in terms of overall general function the two major pathways of carbohydrate metabolism. [30]
  - b) Outline the concept of energy content in foods. List the energy values for a gram of carbohydrate, fat, protein and alcohol. [10]
- [Total = 40 marks]**

**Question 2**

- a) i) List two types of carbohydrates found in the diet. [2 x 2 = 4]
  - ii) Name three functions of water in the body. [3 x 2 = 6]
  - b) Describe two types of fats and why the differences are important. [10]
  - c) Describe the roles of vitamins and minerals in the body. [10]
- [Total = 40 marks]**

**Question 3**

Describe how your food preferences have been shaped by the following factors:

- a) Exposure to foods at an early age
  - b) Advertising
  - c) Peer pressure
  - d) Economic factors
  - e) Eating out
- [Total = 30 marks]**

**Question 4**

- a) Describe the intent of dietary guidelines. Point out one criticism for its general application to all adults. [11]
  - b) What **three** key points should you make when explaining the significance of the RDAs to a friend? [3 x 3 = 9]
  - c) i) Explain how RDAs and AI differ from daily values in intention and application.
  - ii) How would you explain the concept of nutrient density to a fourth-grade class? [5]
- [Total = 30 marks]**