



**1<sup>ST</sup> SEM. 2004/2005**

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**UNIVERSITY OF SWAZILAND**

**FINAL EXAMINATION PAPER**

**PROGRAMME: DIPLOMA IN 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**

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**QUESTION 1 (COMPULSORY)**

In the body nutrients do not function in isolation; their activities are integrated and interrelated.

- a) Discuss nutrient interrelationship under the following categories:

- i. Protein-Energy Interrelationships
- ii. Amino Acid Interrelationships
- iii. Amino Acid-Vitamin Interrelationships
- iv. Vitamin Interrelationships
- v. Vitamin-Mineral Interrelationships
- vi. Mineral Interrelationships

6x5= (30)

- b) Discuss how cultural and social/psychological factors influence the acceptability of food (10)

[40]

**QUESTION2**

- a) Explain the fundamental ideas about healthy eating and the goals that have been developed (20)

- b) Differentiate between Recommended Dietary Allowances (RDAs) and Recommended Daily Intakes(RDIs) (10)

[30]

**QUESTION 3**

- a) Discuss biochemical functions and deficiency symptoms of the following:

- i. Niacin
- ii. Vitamin B-6
- iii. Thiamin
- iv. Riboflavin

(20)

- b) Name the end products in the body of the following substances:

- i. Starch
- ii. Fat
- iii. Sucrose

- iv. Lactose
- v. Meat

(10)  
[30]

#### **QUESTION 4**

a) Define the following terms and indicate their significance in nutrition.

- i. Deamination
- ii. Transamination
- iii. Ketosis
- iv. Glycogenesis
- v. Lipogenesis
- vi. Coupled reaction
- vii. Catabolism
- viii. Anabolism
- ix. Fatty acid
- x. N P U or Net Protein Utilization

(20)

b) Discuss how energy obtained from food is expended.

(10)

[30]