



UNIVERSITY OF SWAZILAND
Faculty of Health Science

Department of Environmental Health
Sciences

Final Examination 2007

- TITLE OF PAPER : FOOD CHEMISTRY AND ANALYSIS
- COURSE CODE : EHS 511
- DURATION : 3 HOURS
- MARKS : 100
- INSTRUCTIONS : READ THE QUESTIONS & INSTRUCTIONS
CAREFULLY
- : ANSWER FIVE QUESTIONS
- : EACH QUESTION CARRIES 20 MARKS
- : NO PAPER SHOULD BE BROUGHT INTO NOR OUT
OF THE EXAMINATION ROOM
- : BEGIN EACH QUESTION ON A SEPARATE SHEET
OF PAPER

DO NOT OPEN THE QUESTION PAPER UNTIL PERMISSION HAS BEEN
GRANTED BY THE INVIGILATOR.

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QUESTION 1

What does the statement 'carbohydrates are watered carbons means'? Explain four reasons why this statement may not be correct (20 Marks)

QUESTION 2

Briefly discuss:

- a) Glucosinolates (12 Marks)
- b) Saturated fatty acids in foods (8 Marks)

QUESTION 3

Using structures to support your answer, compare and contrast lactose and sucrose found in foods (20 Marks)

QUESTION 4

Using structures to illustrate your answer, briefly describe:

- a) Amylose (10 Marks)
- b) Triacyl glycerides (10 Marks)

QUESTION 5

Write short notes about:

- a) essential amino acids (12 Marks)
- b) Essential fatty acids (8 Marks)

QUESTION 6

- a) Discuss effect of temperature and pH on enzymic reaction rate? (12 Marks)
- b) Write short notes about fat soluble vitamins (8 Marks)