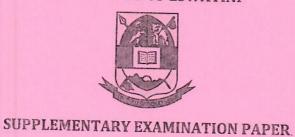
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2<sup>ND</sup> SEM. 2018/19

## UNIVERSITY OF ESWATINI



PROGRAMME:

BACHELOR OF SCIENCE IN FOOD SCIENCE, NUTRITION AND

TECHNOLOGY

COURSE CODE:

FSNT404/FNS406

TITLE OF PAPER: CLINICAL NUTRITION

TIME ALLOWED: TWO (2) HOURS

INTRUCTIONS:

ANSWER QUESTION ONE (1) AND ANY OTHER TWO (2)

QUESTIONS.

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

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## QUESTION 1 (COMPULSORY)

(a) What is insulin? Describe the effects of insulin on glucose metabolism.
(7x2=14 Marks)
(b) How have environmental changes affected obesity trends? Describe five (5) positive changes and five (5) negative changes.
(10x1=10 Marks)
(c) There is a growing recognition that HIV and malnutrition interact in complex ways that heighten vulnerability to and worsen severity of each condition. While many national governments are scaling up HIV programmes, health ministries are seeking guidance on how to deal with a range of policy and programme challenges related to food, nutrition and HIV/AIDS. Discuss the vicious cycle of malnutrition and HIV.
(4x4=16 Marks)
[TOTAL MARKS=40]
QUESTION 2
(a) Define anemia and discuss five types/classifications of anaemia.
(b) Discuss the causes of IDA. (6x2=12 Marks)
(7x2=14 Marks)
(c) What are the causes of and characteristics of megaloblastic anaemia?
(2x2=4 Marks)
[TOTAL MARKS=30]

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## **QUESTION 3**

(a) Describe the different processes that happen during fluid shifts.

(2x3=6 Marks)

(b) Calculate fluid requirements for an adult of 55 kg using the 4/2/1 ratio (Holliday Segar).

(3x2=6 Marks)

(c) Discuss the four different levels of Na restriction.

(4x2=8 Marks)

(d) Discuss five (5) risk factors for T2DM.

(5x2=10 Marks)

[TOTAL MARKS=30]

## **QUESTION 4**

(a) You have been tasked to provide nutrition care during pregnancy and early infancy for those infected/affected by HIV. Based on the WHO guidelines, what advice would you give to a new HIV+ mother in order to prevent mother-to-child transmission of HIV?

(5x2=10 Marks)

(b) You have been tasked to monitor the nutritional status of a patient on dialysis. Calculate and discuss the nutritional requirements for this patient as appropriate.

(10x2=20 Marks)

[TOTAL MARKS=30]