

2ND SEM. 2018/19

UNIVERSITY OF ESWATINI



FINAL EXAMINATION PAPER

PROGRAMME: BACHELOR OF SCIENCE IN FOOD SCIENCE, NUTRITION AND TECHNOLOGY

COURSE CODE: FSNT404/FNS406

TITLE OF PAPER: CLINICAL NUTRITION

TIME ALLOWED: TWO (2) HOURS

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

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

QUESTION 1 (COMPULSORY)

(a) Define the following abbreviations:

- i. HTN
- ii. PES
- iii. PO
- iv. Hb
- v. NAS
- vi. DASH
- vii. MFP
- viii. FBS
- ix. AFASS
- x. TPN

(10x1=10 Marks)

(b) Differentiate between the following terms:

- i. Nutrition screening vs nutritional assessment
- ii. Somatic and visceral protein
- iii. Serum fluid vs plasma fluid

(3x4=12 Marks)

(c) Mrs Gule, is a 50 year old woman who just started using antihypertensive medication. She comes into your office as a RD, asking for information on possible interactions between the following classes of medications and nutrients. What advice would you give Mrs Gule regarding the effects of these drugs on nutritional status?

- i. Loop Diuretics
- ii. Potassium-sparing diuretics

(2x5=10 Marks)

(d) The DASH has been shown by numerous studies to help treat HTN. In what ways does this particular diet help in lowering blood pressure?

(4x2=8 Marks)

[TOTAL MARKS=40]

QUESTION 2

(a) Discuss **four (4)** possible causes/ risk factors of obesity, and give examples of possible biological mechanisms.

(5x2=10 Marks)

(b) Discuss the goals of MNT for Diabetes.

(5x2=10 Marks)

(c) The angiotensin-aldosterone system plays an important role in blood pressure control. Can you describe the effects of this system in relation to blood pressure?

(5x2=10 Marks)

[TOTAL MARKS=30]

QUESTION 3

(a) Fill in the correct word(s)/phrase (s). Write your answer on the answer sheet. DO NOT write the whole sentence/phrase. e.g. a) i. Excess fat

- i. _____ is a medical condition in which excess body fat has accumulated to the extent that it may have an adverse effect on health.
- ii. _____ compares CHO containing foods according to the rise they produce in blood glucose concentration, relative to the glucose response produced by a standard CHO load.
- iii. The _____ is characterized by early morning hyperglycemia caused by a surge of glucagon and growth hormone release during sleep.
- iv. Atrophic gastritis is the most common cause of vitamin B12 deficiency, so _____ anemia is the most common form of vitamin B12 deficiency anemia.
- v. _____ is a collection of diseases characterized by loss of normal cell regulatory mechanisms, which leads to inappropriate malignant "neoplasms" that form in various body tissue sites.

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(5x2=10 Marks)

- (b) You are a dietician at the Mbabane government hospital, and you have been tasked to provide a diet plan for Mrs Silindza, a 38year old patient with CHF. Discuss the important factors you would consider when developing a nutrition care plan for this patient.

(10x2=20 Marks)

[TOTAL MARKS=30]

QUESTION 4

- (a) Discuss the components of the ADIME format, providing a brief description and examples of what the different parts entail.

(4x5=20 Marks)

- (b) Hunger hormones have been shown to play a significant role in weight regulation. Define the hormones in question and describe their role in controlling energy/food intake i.e. discuss their biological mechanisms.

(2x5=10 Marks)

[TOTAL MARKS=30]
