



115

**1<sup>ST</sup> SEM, 2011/2012**

**PAGE 1 OF 3**

**UNIVERSITY OF SWAZILAND**

**FINAL EXAMINATION PAPER**

**PROGRAMME : BACHELOR OF SCIENCE IN FOOD  
SCIENCE, NUTRITION AND  
TECHNOLOGY YEAR IV**

**COURSE CODE : FSNT 404**

**TITLE OF PAPER : CLINICAL NUTRITION**

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

**INSTRUCTION : 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)**

Case study: Musa's bout with infectious hepatitis.

Musa is a college student who spent part of his summer vacation in Mexico. Shortly after he returned home, he began to feel ill. He had a little energy, no appetite and severe headache. Nothing he ate seemed to agree with him. He felt nauseated, began to have diarrhoea, and soon developed a fever. He began to show evidence of jaundice.

Musa was hospitalized for diagnosis and treatment. His tests indicated impaired liver function. His liver and spleen were enlarged and tender. The physician's diagnosis was infectious hepatitis. Musa's hospital diet was high in protein, carbohydrates and kilojoules and moderately low in fat. However, Musa had difficulty eating. He had no appetite, and food seemed to nauseate him even more.

- (a) (i) What are the normal functions of the liver in relation to the metabolism of carbohydrates, protein and fats?  
(3 x 3 = 9 marks)
- (ii) What other nutrient functions does the liver have?  
(6 marks)
- (b) What is the relationship of the liver functions to the effects or clinical symptoms that Musa experienced during his illness?  
(9 marks)
- (c) Why does vigorous nutritional therapy in the liver disease such as hepatitis present a problem in planning a diet?  
(4 marks)
- (d) Outline a day's food plan for Musa.  
(6 marks)
- (e) What vitamins and minerals would be significant aspect of Musa's therapy? Why?  
(6 marks)

**[Total marks = 40]**

**QUESTION 2**

Describe the dietary management of the following nutritional disorders:

- (a) Celiac disease (10 marks)
- (b) Achalasia (10 marks)
- (c) Dumping syndrome (10 marks)

**[Total marks = 30]**

**QUESTION 3**

- (a) List and explain two (2) formats of medical records that are in common use for documenting nutritional care. (10 marks)
- (b) Describe the effects of drugs on nutrition. (5 x 5 = 20 marks)

**[Total marks = 30]**

**QUESTION 4**

Describe the etiology, lifestyle modification and nutrition management in the treatment of hypertension.

**[Total marks = 30]**