



*University of Choice*

**MASINDE MULIRO UNIVERSITY OF  
SCIENCE AND TECHNOLOGY (MMUST)**

**MAIN CAMPUS**

**UNIVERSITY EXAMINATIONS**

**2021/2022 ACADEMIC YEAR**

**MAIN EXAMINATION**

**FIRST YEAR SECOND SEMESTER EXAMINATIONS**

**FOR THE DEGREE OF**

**MSC. PUBLIC HEALTH NUTRITION**

**COURSE CODE: HMD 820**

**COURSE TITLE: THERAPEUTIC DIETETICS AND PRODUCT DEVELOPMENT**

**DATE: 21<sup>ST</sup> APRIL 2022**

**TIME: 9:00AM - 12.00PM**

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***INSTRUCTIONS TO CANDIDATES***

There are three sections in the paper, answer questions in **ALL** the three sections.

1. **QUESTION PAPER** comprises of 5 essay type questions. Answer **ALL**

TIME: 3 Hours

MMUST observes ZERO tolerance to examination cheating.

This Paper Consists of 2 Printed Pages. Please Turn Over

## **ANSWER ALL QUESTIONS.**

### **Question 1**

You want to formulate a therapeutic soup for hepatic conditions. Discuss exhaustively the challenges you are likely to encounter during formulation process (20marks)

### **Question 2**

In many hospitals in Kenya, there is administration of therapeutic diets. Select 5 therapeutic diets that you are likely to get them in our hospitals. Critically analyze their relevancy, efficiency, effectiveness and cost analysis in comparison to conventional diet (20marks)

### **Question 3**

Discuss 5 ways of determining nutrient content of a nutrition product. (20 marks)

### **Question 4**

Discuss legislation issues surrounding nutrition labeling and the use of nutrition and health claims in product development (20mks)

### **Question 5**

Any product that can support the growth of pathogenic microorganisms; it must be assigned a 'use-by' date, after which the product must not be sold, and should not be consumed. The manufacturer is responsible for setting this date - and so must be aware of all the factors that could affect microorganism growth; Describe factors that affect the shelf life of a product (20 marks)