

CHUKA



UNIVERSITY

**UNIVERSITY EXAMINATIONS**

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN FOOD  
SCIENCE AND TECHNOLOGY**

**FOST 464: PRODUCT DEVELOPMENT AND SENSORY EVALUATION**

**STREAMS: BSC (FOST)**

**TIME: 2 HOURS**

**DAY/DATE: THURSDAY 23/09/2021  
P.M.**

**11.30 A.M – 1.30**

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**INSTRUCTIONS:**

- Answer ALL questions in section A and any other TWO questions in section B.

**SECTION A (30 MARKS)**

**QUESTION ONE**

- (a) Briefly explain different types of new products that can possibly be developed. (6 marks)
- (b) Describe the factors that may affect the sensory valuation of your product. (4 marks)

**QUESTION TWO**

- (a) Briefly differentiate a protocept from prototype and final product. (3 marks)
- (b) Suggest strategies you can pursue in order to segment the target market for your new product. (4 marks)
- (c) Explain the meaning of the following expression “the heart of any new product is in its ingredient composition” (3 marks)

**QUESTION THREE**

- (a) Explain the importance of labelling and packaging on the new food product

development.

(4 marks)

(b) Explain factors that influence adoption of a new product by consumers. (3 marks)

(c) In your words, explain the term sensory evaluation and its relevance to a food technologist. (3 marks)

## SECTION B (40 MARKS)

### QUESTION FOUR

(a) Using the food product you have developed as a reference, explain the steps you followed from conception to launching of your new product. (15 marks)

(b) What factors would you consider when selecting a process for a new food product? (5 marks)

### QUESTION FIVE

(a) Discuss the changes in the promotional level and mix in the different stages of the product lifecycle. (10 marks)

(b) Discuss the role of human senses in relation to sensory evaluation of a given product. (10 marks)

### QUESTION SIX

(a) Discuss THREE major sensory evaluation methods that are commonly used in product testing. (9 marks)

(b) Considering the product your group developed, suggest and explain possible market growth opportunities which your group can pursue. (11 marks)

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