

CHUKA



UNIVERSITY

**UNIVERSITY EXAMINATIONS**

**RESIT/SPECIAL EXAMINATION**

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

**FOST 323: FOOD CHEMISTRY II**

**STREAMS: BSC FOST**

**TIME: 2 HOURS**

**DAY/DATE: TUESDAY 02/02/2021**

**2.30 P.M – 4.30 P.M.**

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**INSTRUCTIONS:**

- **Answer all question in section A and any Two in section B**

**SECTION A (30 marks)**

1. Classify vitamins and give examples. (4 marks)
2. Describe the biological function of vitamin B<sub>2</sub> ( Riboflavin). (4 marks)
3. Outline the general functions of minerals and trace elements. (6 marks)
4. Use examples to explain food additives reported to cause adverse reactions. (6 marks)
5. Give the principal biological functions of zinc. (5 marks)
6. Discuss the biological functions of vitamin A (5 marks)

**SECTION B (40 marks)**

7.a) Discuss the macro element calcium under;

- (i) Biological functions. (6 marks)
- (ii) Dietary sources and absorption. (4 marks)

b) By use of examples explain the effect of processing on nutritional value of foods. (10 marks)

8. a) Describe the roles played by Cholecalciferol and its dietary sources. (10 marks)

b) Explain the deficiencies likely due to presence of dietary anti-vitamin factors. (8 marks)

9. (a) By using examples, describe the food additives that are commonly added to foods. (10 marks)

(b) Discuss the functional properties of minerals in foods. (10 marks)

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