

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

THIRD YEAR EXAMINATION FOR THE AWARD OF DEGREE
OF BACHELOR OF SCIENCE IN FOOD SCIENCE

FOST 323: FOOD CHEMISTRY II

STREAMS: BSC (FOST) Y3S1

TIME: 2 HOURS

DAY/DATE: TUESDAY 05/12/2017

8.30 A.M. – 10.30 A.M.

INSTRUCTIONS: ANSWER ALL QUESTIONS IN SECTION A AND ANY TWO IN SECTION B

SECTION A

1. Classify vitamins with examples. [4 marks]
2. Describe the biological function of vitamin B₂ (Riboflavin). [4 marks]
3. Explain briefly 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. Explain the principle biological functions of zinc as a mineral. [5 marks]
6. Discuss the biological functions of vitamin A. [5 marks]

SECTION B

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 caused by presence of dietary anti-vitamin factors. [8 marks]
 9. By using examples, describe the food additives that are commonly added to foods. [20 marks]
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