

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

SECOND YEAR EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR
OF SCIENCE IN HUMAN NUTRITION AND DIETETICS

HNDS 233: PRINCIPLES OF FOOD AND NUTRITION I: MACRONUTRIENTS

STREAMS: BSC (HNDS) Y2S1

TIME: 2 HOURS

DAY/DATE: FRIDAY 26/03/2021

11.30 A.M. – 1.30 P.M.

INSTRUCTIONS: Answer ALL questions

SECTION A (40 MARKS)

1. Describe two molecules that form structures of plant starches [4 marks]
2. Name three examples of soluble fibers [3 marks]
3. Explain the role of cholesterol in the human body system [4 marks]
4. Outline two essential fatty acids and describe the role they play in the body [5 marks]
5. A vital role of fatty acids to 'contribute to satiety'. Explain how this mechanism works [2 marks]
6. Explain the importance of fats to the bioavailability of other nutrients [4 marks]
7. Explain four common forms of vegetarianism [4 marks]
8. Explain four common lipoproteins and their functions [4 marks]
9. Describe the basic structure of amino acids [4 marks]
10. Explain the complex series of chemical reactions involved in protein synthesis [6 marks]

SECTION B (30 MARKS)

1. Describe the primary function of carbohydrates in the human system [8 marks]
2. Describe the chemical classification of proteins [8 marks]
3. Discuss how proteins are digested and absorbed by our bodies [14 marks]

