

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DIPLOMA IN ANIMAL HEALTH

BIOC 0113: BASIC BIOCHEMISTRY

STREAMS:

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 12/04/2023

2.30 P.M – 4. 30 P.M

INSTRUCTIONS:

Answer question one and any other two questions

Do not write on the question paper

QUESTION ONE (30 MARKS)

- (a) State 4 functions of amino acids. [4 marks]
- (b) Explain the role of water in human body. [3 marks]
- (c) Draw the structure of UTP and GMP. [4 marks]
- (d) Give the functions of vitamin E. [6 marks]
- (e) Briefly explain the difference between a prokaryotic cell and eukaryotic cell. [4 marks]
- (f) Five four characteristics of monosaccharides. [4 marks]
- (g) Describe the digestion, absorption and assimilation of lipids. [5 marks]

QUESTION TWO (02 MARKS)

- (a) Briefly describe the classification of compound lipids. [14 marks]
- (b) Explain the assimilation of carbohydrate in the human body. [6 marks]

QUESTION THREE (20 MARKS)

(a) Briefly outline the cause, clinical manifestation, treatment and prevention of the following nutritional disorders.

(i) White muscle disease [10 marks]

(ii) Dysphagia [10 marks]

QUESTION FOUR (20 MARKS)

(a) Describe the structure of the DNA molecule as proposed by Watson and Crick. [10 marks]

(b) Explain the levels of organization of protein structure. [10 marks]
