



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF PURE & APPLIED SCIENCES

UNIVERSITY EXAMINATION FOR:

BACHELOR OF SCIENCE IN COMMUNITY HEALTH

APH 4204: INTRODUCTION TO BIOMOLECULES

SPECIAL/ SUPPLIMENTARY EXAMINATIONS

SERIES: SEPTEMBER 2018

TIME: 2HOURS

DATE: Sep 2018

Instructions to Candidates

You should have the following for this examination

Answer Booklet, examination pass and student ID

This paper consists of **FIVE** questions. Attempt question ONE (Compulsory) and any other TWO questions

Do not write on the question paper.

Question ONE

- Highlight the role of carbohydrate in sparing the usage of proteins in the body (4mks)
- Describe difference between amylose and amylopectin (6mks)
- Outline the difference between essential and non essential amino acids (4mks)
- Describe any 4 differences between a prokaryotic and eukaryotic cell (4mks)
- Name 4 classes of macromolecules within living cells (4mks)
- Differentiate between a nucleoside and a nucleotide (4mks)
- Outline the difference between passive and active transport (4mks)

Question TWO

Describe the classification of amino acids based on the properties of the “R” group

Question THREE

Discuss any 5 functions of carbohydrates (20mks)

Question FOUR

Using examples in each case, describe the following classes of lipids

- Simple lipids (5mks)
- Compound lipids (10mks)
- Derived lipids (5mks)

Question FIVE

Describe the structure and function of any two non membrane bound organelles (20mks)