



KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2010/2011
FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF
SCIENCE
SZH 102: INTRODUCTION TO BIOCHEMISTRY

DATE: Wednesday, 24th November, 2010

TIME: 11.00 a.m. – 1.00 p.m.

INSTRUCTIONS:

Answer **ALL** questions from Section A and any **ONE** question from Section B within a Section **ALL** questions carry equal marks. Illustrate your answers with diagrams and give examples whenever appropriate.

SECTION A: (40 MARKS)

1. Explain the estimation of plasma blood pH, gases and electrolytes.
2. Outline the differences between starch and glycogen.
3. Give an account of the classification of monosaccharides.
4. Describe the factors affecting the absorption of dietary iron.
5. Explain the mechanism of denaturation and annealing of DNA strands.
6. Describe how temperature affects enzyme activity.
7. Outline the process involved in the conversion of zymogen to active protease.
8. Explain the biological importance of proteins.

SECTION B: (30 MARKS)

Answer any **ONE** question.

9. Discuss the biochemical functions of the liver.
10. Describe the monomeric components of nucleic acids.
11. Discuss the classification of amino acids based on their nutritional requirements.