

**UNIVERSITY OF KABIANGA**

**UNIVERSITY EXAMINATIONS**

**2013/2014 ACADEMIC YEAR**

**SUPPLIMENTAY/SPECIAL EXAMINATION**

**SECOND YEAR SECOND SEMESTER EXAMINATION**

**FOR THE DEGREE OF BACHELOR OF SCENCE IN BIOCHEMISTRY**

**COURSE CODE: BIO 212**

**COURSE TITLE: BASIC METABOLISM**

**DATE: 17TH SEPTEMBER, 2014**

**TIME: 2.00 P.M-5.00 P.M**

**INSTRUCTIONS TO CANDIDATES:**

**ATTEMPT ALL QUESTIONS (TOTAL 70 MARKS)**

1. State two regulatory factors of citric acid cycle. (4 marks)
2. State two importance of triacylglycerol in a cell metabolism. (2 marks)
3. Explain three main importance of amino acids in a cell. (6 marks)
4. State five pathways of a glucose metabolism. (5 marks)
5. Using structures, describe the fructolysis pathway. (5 marks)
6. State the key functions of a catabolic metabolism. (4 marks)
7. State and explain two hormones that regulate the utilization of glucose in a cell. (3 marks)
8. Discuss the degradative pathway of isoleucine. (15 marks)
9. Outline beta-oxidation pathway. (15 marks)
10. Discuss the ubiquinone cycle. (15 marks)