DEPARTMENT OF BIOCHEMISTRY OLABISI ONABANJO UNIVERSITY REMO CAMPUS, IKENNE 2009/2010 HARMATTAN SEMESTER EXAMINATION

COURSE CODE: BCH 405 COURSE TITLE: METABOLIC REGULATION DATE: 19TH March. 2010 TIME: 2HR

INSTRUCTION: ANSWER ANY FIVE (5) QUESTIONS

| la. b. | Describe the sources and fate of Acetyl CoA Indicate the entries and exits of metabolites in the TCA cycle and explain how there events and regulation of the cycle. |
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| 2a. b. | How are the genes of the lac-operon regulated? Describe feedback inhibition using a named pathway |

"Proteins is essential for life survival". Justify the statement starting from liver proteins with the aid of appropriate pathway.

Discus how the liver regulates the bio availability of plasma lipid with the aid of relevant pathway.

Classify using two (2) relevant examples, each of metabolic regulation.

Describe briefly how insulin and glucagons signals blood glucose level.

Describe with the aid of appropriate pathways how the plasma glucose level is bio maintained and bio-regulated.