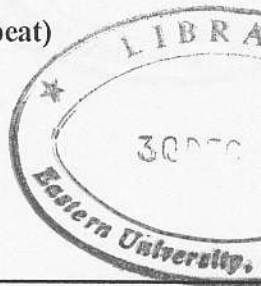


EASTERN UNIVERSITY, SRI LANKA
SECOND EXAMINATION IN SCIENCE 2008/2009 (June/July 2011)
EXTERNAL DEGREE, SECOND SEMESTER (Proper & Repeat)
EXT BT 203 PLANT BIOCHEMISTRY



Time: 02 hours

Answer all Questions

1. a) "Breakdown of glucose aerobically to carbon dioxide and water is much more efficient than its anaerobic conversion to lactate and ethanol"- Justify this statement .
b) Briefly discuss the regulatory mechanism of the following biochemical pathways;
 - i) Fatty acid biosynthesis
 - ii) Entry of glucose to glycolytic sequence

2. a) Outline the pathway of Tri Carboxylic Acid (TCA) cycle.
b) What is transamination reaction? Giving examples, explain its role in the synthesis of amino acids.

3. Distinguish the following pairs:
 - a) Glycolysis and Gluconeogenesis
 - b) Competitive and non-competitive enzyme inhibitors in cells

4. Write a brief account on any **TWO** of the following:
 - a) Lipids in plant cells
 - b) Oxidative Phosphorylation
 - c) Protein digestion and absorption
