

Eastern University, Sri Lanka,

First Year, Second Semester Examination In Agriculture – 2010 / 2011

ACH 1201: Biochemistry (Repeat)

Answer all Questions

Time allowed: 02 hours



1. a) Outline the catabolic pathway of Palmitic acid ($C_{15}H_{31}COOH$) to acetyl co-enzyme A.
b) What would be the total number of ATP molecules generated from one molecule of Palmitic acid if all the acetyl coenzyme A generated was oxidized via the tri carboxylic acid (TCA) cycle? (Explain all your calculations).

2. Explain the following:
 - a) Fate of Pyruvate in the living cells.
 - b) Formation of urea in human beings

3. a) Outline the Citric acid (TCA) cycle.
b) Explain how the Pentose Phosphate Pathway can supply ribose-5-phosphate for the synthesis of RNA.

4. Write a brief account on the following:
 - a) Polysaccharides in plants
 - b) Glycolysis
 - c) Lipids in cells
