



ESTERN UNIVERSITY, SRI LANKA

FIRST YEAR, SECOND SEMESTER EXAMINATION IN AGRICULTURE 2008/2009

ACH 1201-BIOCHEMISTRY

Time: 2 Hours

Answer all Questions

1.
 - a) Discuss the functions of carbohydrate in human body.
 - b) How does the change of an amino acid molecule vary with the change in pH of the medium?
 - c) Describe the primary, secondary and tertiary structures of protein, what are the forces which stabilize them?

2.
 - a) Define the term "vitamins"
 - b) Describe the sources, biochemical functions and deficiency symptoms of water soluble vitamins.
 - c) Name any five macro minerals and give their sources, functions and signs of deficiency.

3.
 - a) Describe the process of glycolysis. Explain how many molecules of ATP are formed in aerobic condition
 - b) Enumerate the major steps of synthesis of cholesterol. Name the rate limiting steps of cholesterol.

4.
 - a) Write brief account on "Urea cycle".
 - b) Explain the steps involved in the oxidation of palmitic acid and give the total ATP yield of the process.