

15 JAN 2009

Eastern University, Sri Lanka

Eastern University, Sri Lanka,

Second Year, First Semester Examination In Science - 2006/2007

BT 203 - Plant Bio Chemistry (Repeat)

Answer all Questions

Time allowed: 02 hours

1. a) Outline the biosynthetic pathway of palmitic acid ($C_{15}H_{31}COOH$) from Acetyl CoA.
b) Give a balance sheet equation for energy involved in the synthesis of palmitic acid.
2. Distinguish between the following:
 - a) Glycolysis and Gluconeogenesis
 - b) Oxidation of saturated fatty acids and unsaturated fatty acids.
3. a) Outline how the Pentose Phosphate Pathway can supply ribose-5-phosphate for the synthesis of RNA.
b) Giving examples, describe the synthesis of sugars from fatty acids.
4. Write short notes on the followings:
 - a) Regulatory mechanism fatty acid biosynthesis
 - b) Catabolism of amino acids
 - c) Polysaccharides in plants
