

Eastern University, Sri Lanka

First Year 1<sup>st</sup> Semester Examination in Science – 2005 / 2006 (Proper) (Aug/Sep.2007)

BT 102 – Plant Physiology

Answer all questions

Time: 2 hrs

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1. a). What are CAM plants?  
b). Briefly describe the reaction of CAM plants?  
c). What is the importance of this pathway in these plants?
2. a). What is photorespiration?  
b). Name the organelles involved in photorespiration?  
c). Give the important biochemical steps in glycolate metabolism in plants?
3. Explain the different between the following;  
a). apoplast and symplast pathway  
b). photosystem-I and photosystem-II  
c). guttation and transpiration
4. a). List out the various theories proposed to explain the mechanism of translocation of Solutes in plants.  
b). Explain the most acceptable theory of translocation of solutes in plants with the help of a physical model relating the parts of the model corresponding parts of a plant.