

EASTERN UNIVERSITY, SRI LANKA
FACULTY OF SCIENCE

EXTERNAL DEGREE EXAMINATION IN SCIENCE- 2004/2005
FIRST EXAMINATION IN SCIENCE (Re-Repeat) – June/July -2008

EXTBT- 101 PLANT PHYSIOLOGY

Answer 4 Questions

Draw diagrams wherever necessary

Time: 02 hours

1. a) Name the processes by which water may be lost from plants. Explain each process?
b) What are the factors which influence the above processes?

2. Write short notes on the followings
 - a) Photorespiration
 - b) Root pressure
 - c) Water potential

3. Distinguish between
 - a) Photo system I and Photo system II
 - b) Apoplast and Symplast pathway
 - c) CAM plants C₃ plants

4. a) Outline diagrammatically the path of CO₂ fixation in C₄ plants?
b) What is the importance of this pathway in these plants?

5. Write short notes on the following

- a) Phloem loading and unloading
- b) Mechanism of stomatal movement.

6. a) List the components of xylem tissue.

b) Explain the structural features of the xylem elements that facilitates in conduction of water.