

Eastern University, Sri Lanka

First year, First Semester Examination in Science –2015/2016

(July/August-2017)

BT-152 Plant Physiology (Practical)

(Proper & Repeat)

Answer all question

Time duration: 2 hours

- 1) You have been provided five graded series of sucrose solutions (0.2M, 0.4M, 0.6M, 0.8M, and 1M), *Rhoeo* leaves, light microscope and other facilities. ( $R = 8.314 \text{ J/mol K}$ ,  $T = 303 \text{ K}$ ).
- a) Carry out suitable procedure to determine the osmotic potential of *Rhoeo* leaf cells.
- b) List out the limitations of the above experiment. (50 min)
- 2) Identify the spot A and B.
- a) Draw fully labeled diagram of A & B.
- b) Explain the reasons for your drawings. (20 min)
- 3) Take cross section of the leaf Specimen R.
- a) Draw the detailed diagram.
- b) Find out the  $\text{CO}_2$  fixation mechanism of the above plant.
- c) Leave your slide for evaluation. (20 min)
- 4) Identify and comment on C, D, E, F, G and H. (30 min)

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