



RAJARATA UNIVERSITY OF SRI LANKA
FACULTY OF APPLIED SCIENCES
B.Sc. (General) Degree in Applied Sciences
Second Year – Semester I Examination – June/July 2018

BOT 2201- PLANT PHYSIOLOGY

Time: Two (02) hours

Answer ALL questions

1. a) Describe how photosystems facilitate the light reactions of photosynthesis. (50 marks)
b) How does the C4 carbon fixation pathway differ from the C3 pathway? (50 marks)
2. a) Explain the different stages of aerobic cellular respiration. (50 marks)
b) Discuss the mechanisms of phloem solute translocation. (50 marks)
3. a) Explain the movement of water from the soil solution to the root xylem in a land plant. (50 marks)
b) What are the mechanisms involve in stomatal movement? (50 marks)
4. a) Explain the role of phytochrome in plants in relation to day light duration. (50 marks)
b) How do arbuscular mycorrhizae improve the nutrition of forest tree seedlings? (50 marks)

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