

EASTERN UNIVERSITY, SRI LANKA

SECOND YEAR SECOND SEMESTER EXAMINATION IN AGRICULTURE – 2008/2009

CSC 2202 CROP PHYSIOLOGY

Answer ALL Questions

Time allowed: 02 Hours



- 1.) a) What are the physiological requirements need to be considered in developing a high yielding rice (*Oryza sativa*) variety?
b) Briefly explain how leaf area and canopy structure determines the Maize (*Zea mays*) yield.
- 2) Discuss the following:
 - a) Dry matter partitioning and source sink relationship in Cassava (*Manihot esculenta*).
 - b) Factors affecting tuber formation in sweet potato (*Ipomea batatas*).
- 3) Photosynthesis is a process that converts carbon dioxide into organic compounds. Discuss the factors limiting the Photosynthetic rate in Potato (*Solanum tuberosum*).
- 4) Write short notes on the following:
 - a) Effects of radiation on boll shedding in Cotton (*Gossypium hirsutum*).
 - b) Effects of calcium on Groundnut (*Arachis hypogea*).
 - c) Effects of nutrition and plant population on leaf quality in Tobacco (*Nicotiana tabacum*).