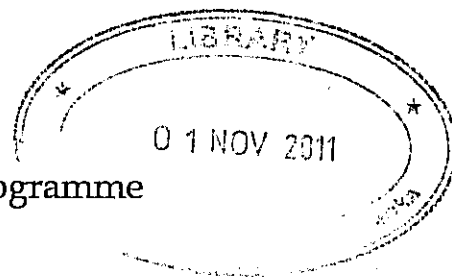




The Open University of Sri Lanka
Faculty of Engineering Technology
Industrial Studies (Agriculture) Programme



Final Examination- 2011
AEX5232 Soil plant water relationship

Date : 09-03-2011
Time : 0930-1230
Duration : Three (03) hours

SECTION 2: Answer any four (4) questions. All questions carry equal marks.

1. Briefly explain effect of soil physical properties on agricultural water management.
2. Write a brief account on how soil salinity can be controlled to maintain good quality soil.
3. (a) What are the main processes involved in absorption of solutes by plants.
(b) Explain how an ion in soil is transported to the shoot of the same plant.
4. (a) Describe how water deficit is developed in plants.
(b) Briefly discuss the effect of water deficit on physiological processes of plants
5. (a) What is "thermal conductivity" in soil?
(b) Discuss the importance and factors affecting on the thermal conductivity in soil.
6. Write short notes on any three (03) of the following
 - (i) Soil water potential
 - (ii) Modes of energy transfer in soil
 - (iii) Environmental effects on stomata opening
 - (iv) Soil erosion by water