

EASTERN UNIVERSITY, SRI LANKA
SECOND YEAR, FIRST SEMESTER EXAMINATION IN AGRICULTURE- 2008/2009
(March/April/May-2010)
ACH 2101 – SOIL PROPERTIES (3:30/30)

Time Allowed: Two hours

Answer all questions.

- 1) a. Briefly explain how would soil texture affect on Agricultural practices. (40 Marks)
- b. Define and explain “Soil Aggregate Stability”. (35 Marks)
- c. Explain the reasons for “Soils getting different colours”. (25 Marks)
- 2) a. Briefly explain the factors affecting soil porosity. (35 Marks)
- b. What is “Permanent charge”? Explain the mechanism of creating Permanent charge in clay minerals. (35 Marks)
- c. Write an account on “Atterburg’s limit”. (30 Marks)
- 3) Write short notes on
- a. “Redox Potential in Submerged soils”. (50 Marks)
- b. “Cation Exchange Capacity of a soil and its importance in Agriculture” (50 Marks)
- 4) a. Classify soil water based on the force with which the water is held to the soil particles and indicate the boundaries between different types of water. (40 Marks)
- b. Differentiate organic colloids from inorganic colloids. (30 Marks)
- c. Explain the soil properties and/or constituents determine its buffering capacity? (30 Marks)


