16 OCT 2008

EASTERN UNIVERSITY, SRI LANKA

THIRD YEAR, FIRST SEMESTER EXAMINATION IN AGRICULTURE - 2007/2008sity, Stillanko ACH 3101- APPLIED SOIL CHEMISTRY (3:30/30)- (Repeat)

Time-02 hours

Answer all questions

- 1) a) What causes clays to have negative charges?
 - b) How does the cation exchange capacity affects the nutrient availability to plants.
- a) Soil acidification is a major degradation problem. Describe the key process involved in soil acidification and the effects of acidification on soil properties.
 - b) Compare and contrast the physical and chemical properties of Smectite and kaolinite clays.
- 3) a) Explain the effect of oxidation-reduction reactions in submerged soils.
 - b) Classify the salt affected soils and list out the management practices for reclamation.

4) Write short notes on the following

- a) Significance of C:N ratio in soil fertility.
- b) Ways to minimize the soil pollution.
- c) Buffering action in soil.