## EASTERN UNIVERSITY, SRI LANKA THIRD YEAR FIRST SEMESTER EXAMINATION IN AGRICULTURE 2003/2004 ACH 3101 APPLIED SOIL CHEMISTRY

PIRKY

Answer all questions Time: 02 hours

- 1. a. Briefly explain how "Humus" is formed and differentiate the characteristic features of organic soil colloid and inorganic silicate clay mineral
  - b. Explain the impact of isomorphous substitution in silicate clay mineral.
- 2. a. "Cation exchange is an important property in determining soil productivity, however that can vary with different soil types" Explain this statement
  - b. Briefly discuss the factors to be considered when a soil having pH of 4.2 is reclaimed.
- 3. Classify the problematic soils based on their chemical characteristics and give the reclamation practices to those commonly occur in Eastern part of Sri Lanka.
- 4. Explain the followings
  - a. Effect of Acid rain in soils
  - b. Fate of pesticides in soils