

EASTERN UNIVERSITY, SRILANKA

THIRD YEAR FIRST SEMESTER EXAMINATION IN AGRICULTURE - 2004/2005

ACH 3101 – APPLIED SOIL CHEMISTRY (3:30/30)

Answer all questions

Time allocated: 2 hours

1. a. "Colloidal particles are the seat for most of the cation and anion exchange".
Explain the statement.
- b. Briefly explain the importance of cation exchange capacity on the nutrient availability of soils.

2. a. "The amount and time of fertilizer application varies with soil types"
-comment on this statement.
- b. Briefly discuss the formation of humus from organic matter.

3. a. Explain how soil pH is influenced by temperature and rainfall.
- b. If a farmer having a soil with pH 4.8, explain him about the following:
 - i) Formation of the soil and suitability of the crops.
 - ii) Factors to be considered in selecting an appropriate reclamation practice.

4. Write short notes on the followings
 - i) Soils containing pyrites are potential source of acid sulphate soils.
 - ii) Flooding of soil for rice production is beneficial.
 - iii) Classification of saline and alkaline soils.
