

EASTERN UNIVERSITY, SRI LANKA

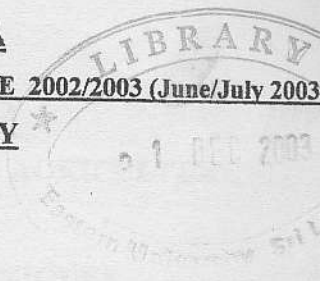
THIRD YEAR FIRST SEMESTER EXAMINATION IN AGRICULTURE 2002/2003 (June/July 2003)

ACH 3101 APPLIED SOIL CHEMISTRY

Answer all questions

Time: 02 hours

This paper should be answered in English



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1. a. Briefly explain how 1:1 and 2:1 clays are formed and indicate their characteristic features
 - b. Explain the reason why calcium and sodium ions are used as flocculating and dispersing agents respectively in soil analysis.

 2. a. "Cation exchange capacity is an important property in determining soil productivity, however that can vary with different soil types". - Explain the statement.
 - b. Briefly discuss the factors to be considered when a soil having pH 4.6 is reclaimed.

 3. a. Classify the salt affected soils based on their chemical characteristics
 - b. "Nitrate fertilizers are not recommended for rice soils"- Justify this statement.

 4. Explain the followings
 - a. Formation of acid sulphate soil and their reclamation methods.
 - b. The detrimental effects of fertilizer application on water bodies.
