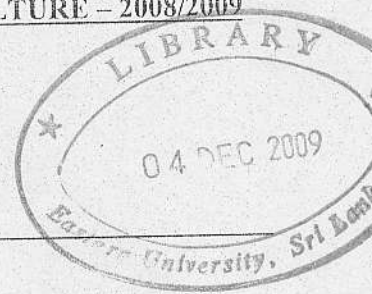


EASTERN UNIVERSITY, SRI LANKA

FINAL YEAR, FIRST SEMESTER EXAMINATION IN AGRICULTURE – 2008/2009

SOIL CHEMISTRY (ACH – 4109)



Answer all questions

Time: One Hour

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1. a. Briefly explain how the diffuse double layer formed in a colloidal system. And discuss the effect of thickness of double layer on charge development of colloids. (40 marks)
  
  - b. Discuss how electrical potential changes between the surface of colloids and mass of the suspending liquids. (30 marks)
  
  - c. Explain the tendency of colloids to agglomerate or remain discrete using DLVO (Derjaguin, Landau, Verwey and Overbeek) theory. (30 marks)
  
  2. a. Briefly explain changes in soil property after the submergence. (40 marks)
  
  - b. List the three (3) layer silicate clays present in soils and discuss soil properties pertaining to each separately. (30 marks)
  
  - c. Briefly explain how acidity developed in soils and propose amelioration measures for an acidic soils. (30 marks)

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