

THE OPEN UNIVERSITY OF SRI LANKA
B.SC. DEGREE PROGRAMME – LEVEL 05
FINAL EXAMINATION - 2006/2007
BOTANY
BTU 3105/BTE 5105- SOILS AND PLANT GROWTH



DURATION: TWO AND A HALF HOURS(2 1/2 HRS)

Date : 15th May 2007

Time: 1.30 – 4.00 p.m

Answer any four (04) Questions.

01. Compare the mineralogical organization of clay minerals that you have studied and explain the variation of cation exchange capacity in relation to the structure.
02. Discuss in detail the factors that influence granulation and structure formation in soil.
03.
 - a. What conditions do microorganisms require to survive in soil?
 - b. How do soil microorganisms resist unfavorable environmental conditions?
04. “Fertilizers can be expected to have beneficial as well as harmful effects on the soil and also on the crop”. Discuss this statement.
05.
 - a. What is soil erosion?
 - b. Briefly explain the common erosion control methods indicating the principle and the mechanism underlying each of the methods.
06. Write short note on any two(02) of the following.
 - a. The prominent great soil group of the dry zone
 - b. Management of acidic and saline soils
 - c. Classification of parent material