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THE OPEN UNIVERSITY OF SRI LANKA
B.SC./B.ED DEGREE PROGRAMME
BOTANY – LEVEL 05
FINAL EXAMINATION – 2009/10
BTU3105 – SOILS AND PLANT GROWTH



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DURATION – TWO AND A HALF HOURS

Date – 21st July 2010

Time – 01.00 p.m. – 3.30 p.m.

Answer any four (04) questions.

01.
 - a. What is a “soil profile”?
 - b. Distinguish between eluvial horizon and illuvial horizon in a soil profile.
 - c. Briefly explain how time and topography influence the development of a soil.
02. Discuss the factors influencing on the granulation and structure formation in soil.
03.
 - a. What are “mixed fertilizers”?
 - b. Comment on the advantages and disadvantages of mixed fertilizers in agriculture.
04. Write concisely on the role of microorganisms in the cycling of bioelements.
05.
 - a. What is soil erosion?
 - b. List the factors which affect the rate of soil erosion.
 - c. Explain the measures that can be used to control soil erosion.
06. Write short notes on any **two (02)** of the following.
 - a. Sustainable land use
 - b. Effect of porosity on plant growth
 - c. Classification of parent material