



055

THE OPEN UNIVERSITY OF SRI LANKA  
B.SC. DEGREE PROGRAMME - LEVEL 05  
FINAL EXAMINATION- 2007/2008

BOTANY

BTU 3105/BTE 5105- SOILS AND PLANT GROWTH

DURATION – TWO AND A HALF HOURS (2 ½ HRS)

Date: 9<sup>th</sup> July 2008

Time: 10.00a.m.-12.30 p.m.

Answer any four(04) questions.

1. a. What is weathering?  
b. Describe the factors affecting weathering of minerals.  
c. What are the major changes that occur during the development of a soil?
2. Outline briefly the importance of chemical properties of soil for plant growth.
3. “Soil organic matter performs many functions to keep the soil productive and to act as a best nutritional source for plants” Elaborate on this statement.
4. a. What are cover crops?  
b. How are suitable green manure crops selected?  
c. Briefly discuss the beneficial and harmful effects of green manure on the cultivated crop.
5. a. How do acidic and saline soils develop?  
b. List the effects of these soils on plants.  
b. How do we manage/improve these soils?
6. Write short notes on any two(02) of the following.
  - a. Control of soil erosion by water
  - b. Role of microorganisms in the Nitrogen cycle
  - c. Deficiency symptoms exhibited by plants