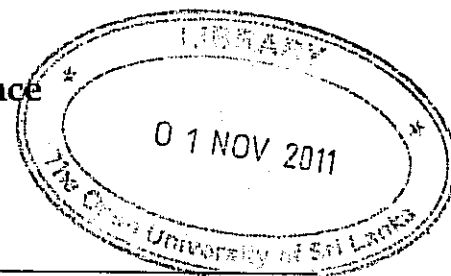




The Open University of Sri Lanka
Faculty of Engineering Technology
Bachelor of Science in Industrial Studies Program

Final Examination- 2010/2011

AEX3232 Plant and Soil Science



Date : 09-03-2010
Time : 0930-1230
Duration : Three (03) hours

SECTION 2: Answer any four (04) questions.

1. Discuss the effectiveness of soil conservation in an agricultural land while maintaining its long-term sustainability.
2. (a) What is C/N ratio?
(b) If you are given straw, saw dust and green manure as organic manure to you field, which will you select as the best? Reason out your choice.
(c) Explain why the reddish brown earth soils are more fertile than regosols?
3. (a) What do you mean by soil texture?
(b) Briefly explain the importance of the knowledge of soil texture in Agriculture.
4. (a) How can you improve the soil aeration in field?
(b) Briefly explain the importance of soil temperature in plant growth.
(c) What are the physical and chemical environmental factors that affect on growth of rice?
5. (a) With the help of a labelled diagram, sketch the structure of a montmorillonite clay mineral.
(b) Explain why, illite and vermiculite differs in their colloidal properties, even though they both are in the same mineral group.
6. Write short notes on the following topics.
 - a) Compost production
 - b) N cycle