

UNIVERSITY OF KABIANGA  
SCHOOL OF NATURAL RESOURCE AND ENVIRONMENTAL MANAGEMENT SEMESTER  
TWO 2015/2016

FOR 227: SOIL SURVEY AND LAND USE PLANNING(MAIN EXAM)

Marks = 70                      Time allowed 3 Hour

**INSTRUCTIONS:** There are two sections, section A (30 Marks) and B (40 marks). Answer all questions in section A and any two in section in B

**Section A (30 Marks)**

1. Explain the meaning of the following terms used in soil mapping  
(i) Map unit [3 marks]  
(ii) Map legend [3marks]
2. Describe the types of soil maps applied in land use planning [5marks]
3. (i) Describe the factors that influence consistence of soil horizons [3 marks]  
(ii) Describe the horizon boundary descriptors in soil morphology characterization [4 marks]
4. Outline the information and data on a soil map [4 marks]
5. Describe the hierarchy of categories in soil taxonomy classification [4 marks]
6. Explain the importance of photogrammetry in soil survey [4 marks]

**Section B (40 Marks)**

7. (i) Explain the Structure of land capability classification [10 marks]  
(ii) Discuss the land suitability classes used in land use planning [10 marks]
8. (i) Discuss the format and interpretation of soil survey report [10 marks]  
(ii) Discuss the new approaches in soil mapping [10marks]
9. (i) Discuss the objectives of soil survey [4 marks]  
(ii) Discuss the types and categories of soil survey [6 marks]  
(iii) Discuss the principles of air-photo interpretation [10 marks]