



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2016/2017

**THIRD YEAR SECOND SEMESTER EXAMINATION FOR
THE DEGREE OF BACHELOR OF SCIENCE AND
PLANT NUTRITION, AGRONOMY AND HORTICULTURE
WITH INFORMATION TECHNOLOGY**

MAIN CAMPUS

**ASS 304 AND AAG 308: SOIL SURVEY, CLASSIFICATION AND LAND
EVALUATION**

Date: 9th June, 2017

Time: 12.00 - 3.00pm

INSTRUCTIONS:

- Answer ALL Questions in section A and any TWO in section B.



SECTION A: Answer ALL questions in this section

QUESTION 1: Explain the following:

[5 marks]

- a) Soil profile
 - b) Soil survey
 - c) Soil classification
 - d) Land evaluation
 - e) Soil mapping unit
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QUESTION 2: Distinguish between the following:

[10 marks]

- a) Master horizon and Diagnostic horizon
 - b) Land capability and land suitability classifications
 - c) Epipedon and endopedon
 - d) AE and 2C horizon designations
 - e) Bs and B/E horizon designations
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QUESTION 3: Outline the entries in FAO-UNESCO soil map of the world legend.
[15 marks]

SECTION B: Answer ANY TWO questions in this section

QUESTION 4: [20 marks]

- (a) Outline five (5) objectives of the FAO – UNESCO soil legend.
- (b) Discuss the fundamental principles of the FAO – UNESCO soil classification system

QUESTION 5: [20 marks]

Discuss the procedure of soil profile description and the parameters involved.

QUESTION 6: [20 marks]

- (a) Discuss the sources of information required in land evaluation.
- (b) Discuss the main objectives of land evaluation that must be addressed in any land evaluation plan