

JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY
EXAMINATIONS ACADEMIC YEAR 2016/2017
YEAR FOUR SEMESTER TWO EXAMINATIONS FOR THE DEGREE OF BACHELOR OF SCIENCE
IN LAND RESOURCES PLANNING AND MANAGEMENT

ALP 2411: LAND EVALUATION II

DATE: JUNE 2017

TIME: 2 HOURS

INSTRUCTIONS: ANSWER QUESTION ONE AND ANY OTHER TWO. ILLUSTRATE YOUR ANSWERS AS NECESSARY

QUESTION 1

a. Define the terms:

- i) Land evaluation ii) Land use planning (2 marks)

b. Give a detailed description of the procedure for conducting land evaluation for rainfed agriculture. (13 marks)

c. Name and describe five major key attributes employed to describe land utilization types (10 marks)

d. Give a detailed description of the classification categories employed in the FAO-Framework for land evaluation (5 marks)

Question 2

a. Define and explain the role of diagnostic criteria in suitability evaluation (3 marks)

b. Discuss the nature and effect and assessment of the land qualities:

- i) Availability of moisture ✓ ii) Availability of oxygen ✓
 iii) Availability of nutrients ✓ iv) Excess salts ✓ (12 marks)

c. In a survey area of your choice, name and describe two land qualities which you consider as background information. (5 marks)

Question 3

a. Define a Land Utilization Type (LUT) (2 marks)

b. Define and give three examples of the three common types of LUT's (10 marks)

c. Describe the four irrigable classes of the USBR System. (8 marks)

Question 4

a) Describe the five basic principles of the USBR System (6 marks)

b) Describe the procedure for conducting suitability classification according to the USBR System (8 marks)

c. Define the suitability classes used by the FAO-Framework for land evaluation. (6 marks)

Handwritten notes:
 Study ALP
 Land use planning
 Agriculture
 Nitrogen

Handwritten notes:
 Cap
 Co

Handwritten notes:
 available
 arable