



W1-2-60-1-6

JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY
UNIVERSITY EXAMINATIONS 2018/2019
YEAR IV SEMESTER II EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE
IN LAND RESOURCES PLANNING AND MANAGEMENT
ALP 2411: LAND EVALUATION II

DATE: APRIL 2019

TIME: 2 HOURS

INSTRUCTIONS:

Answer question one and any other two (2). Illustrate your answers as necessary.

Question 1

- a. Define the terms:
i. land evaluation ii. Land use planning
(5 marks)
- b. Give a detailed description of the procedure for conducting land evaluation for irrigated agriculture according to the USBR system.
(10 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 diagnostic criteria and explain its role in land 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
- c. In a named 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 a detailed description of three common types of LUTs in an irrigation scheme of your choice
(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)