

## **KENYATTA UNIVERSITY** UNIVERSITY EXAMINATIONS 2010/2011

## INSTITUTE OF OPEN LEARNING (IOL) EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION AND BACHELOR OF SCIENCE <u>SBT 407: ARID LAND ECOLOGY</u>

DATE: Friday, 4<sup>th</sup> February, 2011

TIME: 11.00 a.m. – 1.00 p.m.

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**INSTRUCTIONS:** Answer ALL questions in SECTION A and any ONE question in SECTION B. Answers in SECTION A should written in the spaces provided below each question.

- 1. Define or explain:
  - a) Aridity

b) Cutoff drains

c) Agrosylvopastoralism

d) Carrying capacity of land

e) ALDEV

2. Discuss gully reclamation.

3. On what basis is irrigation water classified?

4. Differentiate between saline and sodic soils.

5. Describe natural vegetation in ecoclimatic zone V.

6. Discuss challenges of reafforestation of ASAL with indigenous tree species.

7. Discuss the rationale for economic development of ASAL.

8. Differentiate between Vertisols, Aridsols and Alfisols.

## SECTION B: ESSAY (30 MARKS) WRITE AN ESSAY ON ANY ONE OF THE FOLLOWING.

- 1. Development issues of ASAL of Kenya.
- 2. Methods of water conservation in ASAL.
- 3. Grazing management systems for ASAL.