

## **2019/2020 ACADEMIC YEAR**

## SECOND SEMESTER EXAMINATIONS

# FIRST YEAR EXAMINATION FOR THE DEGREE OF MASTER OF SCIENCE IN AGRICULTURAL RESOURCE MANAGEMENT

## **ALM 608: LAND DEGRADATION AND REHABILITATION**

DATE: OCTOBER 22, 2020

TIME: 2.00 -5.00PM

**INSTRUCTIONS:** 

Answer ANY FOUR Questions.

#### **QUESTION ONE (25 MARKS)**

Explain the major causes of land degradation in Sub-Saharan Africa.

(25 marks)

#### **QUESTION TWO (25 MARKS)**

A degraded watershed in Mbeere Sub-country shows evidence of extensive soil erosion and sedimentation. Explain how the Revised Universal Soil Loss Equation (RUSLE) can be used to model soil erosion and sediment yield from the watershed.

(25 marks)

# **QUESTION THREE (25 MARKS)**

Discuss how the concept of land degradation neutrality (LDN) can be achieved under smallholder farming systems in Kenya. (25 marks)

## **QUESTION FOUR (25 MARKS)**

ISO 27001:2013 Certified

Discuss the major forms of physical and chemical degradation that are prevalent in the tropical highlands of East Africa. (25 marks)



# **QUESTION FIVE (25 MARKS)**

Discuss the role of remote sensing and GIS in modelling land degradation

(25 marks)

-END-

