### **CHUKA**



## **UNIVERSITY**

#### UNIVERSITY EXAMINATIONS

# EXAMINATION FOR THE AWARD DEGREE OF BACHELOR OF SCIENCE NATURAL RESOURCE MANAGEMENT

NARE 211: PRINCIPLES OF RANGE MANAGEMENT

STREAMS: BSC.NARE YEAR 2 S2

TIME: 2 HOURS

DAY/DATE: MONDAY 20/04/2020 2.30 P.M - 4.30 P.M.

#### **INSTRUCTIONS:**

Answer Questions in Section A and any Two in section B

Do not write on the Question paper.

## SECTION A. 30 MARKS

Q1. Briefly explain the following terms applied in range management [6 Marks]

- (a) Range Management
- (b) Synecology
- (c) Carrying capacity
- (d) Moisture Index
- (e) Stocking rate

Q2. Explain the goals of range management [6 Marks]

Q.3. Using an illustration, explain the gross productivity and net productivity [6 Marks]

Q.4.Briefly explain the implications of defoliation on grazing resources. [6 Marks]

Q.5. Describe the application of range science principles in range resource management.

[6 Marks]

## **NARE 211**

## SECTION B. 40 MARKS

- Q.6. Discuss factors that influence plant palatability and preference in range areas.[20 Marks]
- Q.7. Discuss the grazing management practices for optimal livestock production in rangelands. [20 Marks]
- Q.8. Discuss the interventions that can be adopted in rangelands to enhance rangelands productivity. [20 Marks]