### **CHUKA**



### **UNIVERSITY**

## **UNIVERSITY EXAMINATIONS**

# EXAMINATION FOR THE AWARD OF MASTER OF SCIENCE DEGREE IN WILDLIFE MANAGEMENT

WIEM 832: ADVANCED POPULATION DYNAMICS

STREAMS: MSc. WIEM (Y1B2)

**TIME: 2 HOURS** 

DAY/DATE: TUESDAY 6/07/2021 2.30 PM – 4.30 PM

#### **INSTRUCTIONS:**

- Answer ALL Questions in Section A and any other TWO Questions in Section B.
- Do not write anything on the question paper

### **SECTION A: (20 MARKS)**

- Discuss various limitations to achievement of Maximum Sustainable Yield (MSY) in wildlife utilization. [6 Marks]
- 2. Describe the logistic growth model in population dynamics. [4 Marks]
- 3. Describe the consequences of overharvesting on population dynamics. [4 Marks]
- 4. Describe four idealized patterns of populations to a given carrying capacity (K) of their environment. [6 Marks]

### **SECTION B: 40 MARKS**

- 1. Discuss the effect of climate change on wildlife population dynamics and management.

  [20 Marks]
- Discuss four factors responsible for population dynamics and their implications in wildlife management for sustained conservation. [20 Marks]
- 3. Discuss 'hunting' as a concept for population dynamics and management. [20 Marks]

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