

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**FOURTH YEAR EXAMINATIONS FOR THE AWARD OF DEGREE OF SCIENCE IN
WILDLIFE ENTERPRISE AND MANAGEMENT**

NARE 200: NATURAL RESOURCES ECOLOGY

STREAMS: BSC (WIEM) (Y4S2)

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 03/02/2021

2.30 P.M. – 4.30 P.M.

INSTRUCTIONS:

- Answer all in section A and any other two in section B.
- Do not write anything on the question paper

SECTION A: [30 MARKS]

- Q1. Describe the two main components of an ecosystem (4 Marks)
- Q2. List and briefly describe three major ecosystems of the world (6 Marks)
- Q3. What is meant by energy flow in an ecosystem? (4 Marks)
- Q4. Write short notes on the following as used in ecology:
- (a) Ecological niches (2 Marks)
 - (b) Producers (2 Marks)
 - (c) Food web (2 Marks)
 - (d) Ecological pyramids (2 Marks)
 - (e) Food chain (2 Marks)
- Q5. Briefly describe three differences between ‘population’ and ‘community’ as used in ecology (6 Marks)

SECTION B [40 MARKS]

- Q6. Describe the ‘Nitrogen biogeochemical cycle’ occurring in nature (20 Marks)
- Q7. Using Illustrations, discuss the relationships between natural resources, ecosystem functions and ecosystem services (20 Marks)
- Q8. (a) Discuss five ecosystem services provided by wetlands (10 Marks)
- (b) Discuss human activities that may impair proper functioning of ecosystems (10 Marks)