

CHUKA



UNIVERSITY

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**EXAMINATION FOR THE AWARD DEGREE OF
BACHELOR OF WILDLIFE ENTERPRISE AND MANAGEMENT**

WIEM 445: WILDLIFE STOCK ASSESSMENT

STREAMS: BSC WIEM Y4 S2

TIME: 2 HOURS

DAY/DATE: THURSDAY 9/04/2020

8.30 A.M - 10.30 A.M.

INSTRUCTIONS

- Answer Question One and any other Two Questions.
- Do not write on the question paper

SECTION A [30 MARKS]

1. Write short notes on:
 - a. Current yield [2 Marks]
 - b. Recruitment [2 Marks]
 - c. Stock Assessment [2 Marks]
2. Explain the two categories of models used in wildlife stock assessment. [6 Marks]
3. Briefly describe the three main types of data which one ought to collect during fish stock assessments. [6 Marks]
4. You have been consulted to manage Sagana Fish Farm, discuss three main management approaches you can employ. [6 Marks]
5. Briefly explain four aspects of a population used in determining whether population is increasing or declining. [4 Marks]

6. You have been consulted by Soysambu Conservancy to assess tilapia fish stock at Lake Elementaita. Highlight four aspects you will be required to include in the final report. [2 Marks]

SECTION B [40 MARKS]

7. a) Discuss the key approaches you would use when assessing the levels of threat to the Nile
- b) Explain the aspects of fisheries management which one needs to consider in order to achieve high productivity in a fisheries enterprise. [12 Marks]
8. Discuss the factors driving population dynamics of Eland populations at the Olpejeta Conservancy. [20 Marks]
9. Mount Kenya Wildlife Conservancy is seeking a solution to the complex challenges in wildlife resource management. Describe the process you would follow when implementing adaptive management in solving the challenges. [20 Marks]