**CHUKA** 



### UNIVERSITY

# UNIVERSITY EXAMINATION RESIT/SUPPLEMENTARY / SPECIAL EXAMINATIONS EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN WILDLIFE ENTERPRISE AND MANAGEMENT

**WIEM 415: ENGINEERING FOR WILDLIFE** 

STREAMS: TIME: 2 HOURS

## DAY/DATE: WEDNESDAY 03/11/2021

8.30 A.M - 10.30 A.M.

## **INSTRUCTIONS**

- Answer ALL questions in **SECTION A** and any **TWO** questions in **SECTION B**.
- Do not write anything on the question paper

# **SECTION A: (30 MARKS)**

1. Write short notes on the following terms

(6 marks)

- a. Soil plasticity
- b. Soil elasticity
- c. Soil structure
- 2. Briefly explain the functions of fences in a protected area

(5 marks)

- 3. Briefly describe three types of signages you can install at Kairini conservancy (6 marks)
- 4. Outline the different parts of a motor vehicle you need to check before starting the engine

(5

marks)

- 5. Briefly explain the effects of tarmacked roads on wildlife in protected areas (4 marks)
- 6. Describe briefly four measures you would take to mitigate the negative impacts of infrastructure development in protected areas (4 marks)

# **SECTION B: (40 MARKS)**

## **WIEM 415**

- 7. Discuss the importance of soil as an engineering Material (20 marks)
- 8. Having been contracted to construct a road from Embu to Karatina across Mount Kenya National Park, explain the factors you would consider when designing the road (20 marks)
- 9. You have been appointed the manager for Kairini captive animals park, discuss the factors you would consider when constructing the cages for the orphaned animals (20 marks)

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