

# OF SCIENCE AND TECHNOLOGY

## **FACULTY OF NATURAL RESOURCES AND SPATIAL SCIENCES**

## **DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES SCIENCES**

QUALIFICATION: BACHELOR OF NATURAL RESOURCES MANAGEMENT HONOURS (NATURE CONSERVATION)		
QUALIFICATION CODE: 08BHNC	LEVEL: 8	
COURSE CODE: RWM820S	COURSE NAME: RANGELAND ANDWILDLIFE MANAGEMENT B	
SESSION: JANUARY 2020	PAPER: THEORY	
DURATION: 3 HOURS	MARKS: 100	

SUPPLEMENTARY / SECOND OPPORTUNITY EXAMINATION QUESTION PAPER				
EXAMINER(S)	DR MORGAN HAUPTFLEISCH			
MODERATOR:	DR MARK BILTON			

INSTRUCTIONS		
1.	Answer ALL the questions.	
2.	Write clearly and neatly.	
3.	Number the answers clearly.	

## **PERMISSIBLE MATERIALS**

- 1. All written work MUST be done in blue or black ink
- 2. No books, notes and other additional aids are allowed

#### Question 1:

With reference to the camera trap count, road strip count and aerial survey of Onguma Private Reserve:

1.1 What wildlife management benefit did the game count have?

(10)

1.2 What did the game count <u>not</u> achieve? Why not? How could it have been improved to achieve this?

(10)

1.3 From the results of the game count, what recommendations would you make for improved wildlife counting on the game farm?

(10)

1.4 Looking at the wildlife census at Etosha Heights and Onguma critically, which method was the best to determine actual numbers of wildlife on the farm?

(10)

[40]

### Question 2:

Human-wildlife conflict increased significantly in the drought of 2015-2017 in Namibia's north-west conservancies. Using your knowledge of systems thinking and systems dynamics, analyse the reasons for this increase (use a graph of predator-prey interactions as part of your analysis).

[15]

#### Question 3:

Discuss the breeding and use as economic commodity (current and potential) of the following wildlife species / variants in Namibia.

3.1 Disease free buffalo

(10)

3.2 Golden gemsbok

3.3	White	spring	bok

3.4 Llama

(5)

3.5 Game birds

(5) [30]

# Question 4:

Systems thinking and systems dynamics is an important discipline for explaining interconnectedness between ecological and social systems.

Discuss the above statement, and describe two examples where systems dynamics will be particularly useful.

[15]

[100]