



**NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

FACULTY OF HEALTH, APPLIED SCIENCES AND NATURAL RESOURCES

Department of Agriculture and Natural Resources Sciences

QUALIFICATIONS : BACHELOR OF SCIENCE IN AGRICULTURE	
QUALIFICATIONS CODE: 07BAGA	LEVEL: NQF LEVEL 6
COURSE CODE: SLH611S	COURSE NAME: SUSTAINABLE LARGE RUMINANT HUSBANDRY
DATE: JUNE 2022	SESSION: JUNE
DURATION: 3 HOURS	MARKS: 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
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INSTRUCTIONS
<ol style="list-style-type: none">1. Answer all questions2. Type clearly and neatly3. Number the answers clearly4. Report all your answers to the correct significant figures

PERMISSIBLE MATERIALS

1. Calculator
2. Examination paper
3. Examination script

THIS QUESTION PAPER CONSISTS OF 2 PAGES (Excluding this front page)

Question 1

- 1.1 What are the functions of enzymes contained in saliva? (2)
 - 1.2 What is saliva's most important role in the reticulum and rumen? (1)
 - 1.3 What is the estimated amount of saliva a cow produces per day? (1)
 - 1.4 What are the elements contained in the saliva? (5)
- [9]

Question 2

Define the following terms:

- Ketosis (1)
 - Catalysis (1)
 - Acid–base balance (1)
 - Dystrophy (1)
 - Dermatitis (1)
 - Valence (1)
 - Coenzyme (1)
 - Antioxidant (1)
- [8]

Question 3

Why it is important to identify cattle? [8]

Question 4

When the farmer is scoring the body condition for beef cattle, which parts of the body does he need to look at? [6]

Question 5

What is the Bos-indicus cattle breed and give 2 examples? [10]

Question 6

List the different types of abnormal sperm cells and penis impairments. [9]

Question 7

Explain the following terms of dairy management system. [6]

- Calving period
- Gestation period
- Dry period

Question 8

Describe how it feels like when a pregnancy examiner palpates uterus horns at the following stages of pregnancy?

- 8.1 Pregnancy at 2 months (2)
 - 8.2 Pregnancy at 3 months (2)
- [4]

Question 9

9.1 What are the causes of low conception rate, if the cow undergoes artificial insemination? (5)

9.2 Why is it preferable to store the bull semen in liquid nitrogen instead of storing it in dry ice-alcohol? (4)
[9]

Question 10

10.1 What is dystocia? (2)

10.2 What are the factors affecting calving difficulty? (4)
[6]

Question 11

Give 2 deficiencies of the following nutrients? [6]

- Vitamin E Tocopherols
- Vitamin C Ascorbic acid
- Pyridoxine B6

Question 12

Explain the functions of T cells and B cells? [9]

Question 13

List 2 glands and give one (1) function of each. [4]

Question 14

What is the impact on heat stress on reproduction performance of male and female? Give 3 points each. [6]

Total: [100]