



**NAMIBIA UNIVERSITY  
OF SCIENCE AND TECHNOLOGY**

**FACULTY OF HEALTH, NATURAL RESOURCES AND APPLIED SCIENCES  
SCHOOL OF AGRICULTURE AND NATURAL RESOURCES SCIENCES  
DEPARTMENT OF AGRICULTURAL SCIENCE AND AGRIBUSINESS**

<b>QUALIFICATIONS:</b> BACHELOR OF SCIENCE IN AGRICULTURE	
<b>QUALIFICATIONS CODE:</b> 07BAGA	<b>LEVEL:</b> 7
<b>COURSE CODE:</b> SNH611S	<b>COURSE NAME:</b> SUSTAINABLE NON-RUMINANT HUSBANDRY
<b>DATE:</b> NOVEMBER 2024	<b>PAPER:</b> 1
<b>DURATION:</b> 3 HOURS	<b>MARKS:</b> 100

<b>FIRST OPPORTUNITY EXAMINATION QUESTION PAPER</b>	
<b>EXAMINER:</b>	DR. GABRIEL NGUNGAA HANGARA
<b>MODERATOR:</b>	MRS. LUCIA TUYENI-KELAO KAFIDI

<b>INSTRUCTIONS</b>
<ol style="list-style-type: none"><li>1. Answer all the questions.</li><li>2. Write neatly and clearly.</li><li>3. Mark all answers clearly with their respective question numbers.</li><li>4. All written work MUST be done in blue or black ink.</li><li>5. No books, notes and other additional aids are allowed.</li></ol>

**PERMISSIBLE MATERIALS**

1. Calculator
2. Examination paper
3. Examination script

**THIS QUESTION PAPER CONSISTS OF 1 PAGES  
(Excluding This Front Page)**

### Question 1

- 1.1 Explain the process of egg fertilization. (10)  
1.2 Name the six most common types of chicken combs. (6)

[16]

### Question 2

Give functions of the following systems in chickens.

- 2.1 Skeletal system (2)  
2.2 Excretory system (2)  
2.3 Nervous system (2)  
2.4 Endocrine system (2)  
2.5 Muscle system (2)

[10]

### Question 3

- 3.1 What are the 7 signs of rabbit receptiveness? (7)  
3.2 Why should you move the breeding doe into the buck's compartment? (1)  
3.3 What is the purpose of the nesting box (1)  
3.4 What materials should you put in the nesting box? (2)  
3.5 How do you know if mating has taken place between a rabbit doe and buck? (1)

[12]

### Question 4

- 4.1 Give three different types of spawning and define them. (9)  
4.2 Name and explain five (5) stimuli that stimulate spawning cues in fish. (10)  
4.3 Differentiate between oviparous, ovoviviparous and viviparous. (9)

[28]

### Question 5

- 5.1 Explain how to breed the rabbits. (7)  
5.2 What are the factors that limit conception in female rabbits? (5)  
5.3 Name four types of rabbit fur. (4)

[16]

### Question 6

- 6.1 Name five types of external parasites common in pigs. (5)  
6.2 What causes failure in sow when delivering litters? (8)  
6.3 Give five advantages of pig artificial insemination? (5)

[18]

**Total [100]**