



**NAMIBIA UNIVERSITY**  
OF SCIENCE AND TECHNOLOGY

**FACULTY OF COMMERCE, HUMAN SCIENCES AND EDUCATION**

**DEPARTMENT OF TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET)**

<b>QUALIFICATION : MUST BRIDGING PROGRAMME - TVET AGRICULTURE STREAM</b>	
<b>QUALIFICATION CODE: 04NBTA</b>	<b>LEVEL: 4</b>
<b>COURSE CODE: FOA412S</b>	<b>COURSE NAME: FUNDAMENTALS OF ANIMAL PRODUCTION</b>
<b>SESSION: JANUARY 2025</b>	<b>PAPER: 2</b>
<b>DURATION: 3 HOURS</b>	<b>MARKS: 100</b>

<b>SECOND OPPORTUNITY EXAMINATION QUESTION PAPER</b>	
<b>EXAMINER(S)</b>	<b>Ms. E MATALI</b>
<b>MODERATOR:</b>	<b>Dr. G HANGARA</b>

<b>INSTRUCTIONS</b>
1. The paper has <b>3 SECTIONS</b> (A, B and C).
2. Write clearly and neatly using a black or blue ink pen.
3. Each section must start on a new page.

**THIS QUESTION PAPER CONSISTS OF 4 PAGES (Including this front page)**

## SECTION A

### QUESTION 1

[20 marks]

Write down **True or False** corresponding to your choice next to the question number.

- 1.1. Goats are classified as ruminants.  
a) True  
b) False (2 Marks)
- 1.2. Crossbreeding refers to the practice of mating animals from the same breed.  
a) True  
b) False (2 Marks)
- 1.3. Sheep and goats have a similar gestation period of about 150 days.  
a) True  
b) False (2 Marks)
- 1.4. The major source of protein in poultry diets is cereal grains.  
a) True  
b) False (2 Marks)
- 1.5. Anthrax is a bacterial disease that can be spread from animals to humans.  
a) True  
b) False (2 Marks)
- 1.6. Dehorning is a procedure carried out to remove the tails of animals.  
a) True  
b) False (2 Marks)
- 1.7. Broiler chickens are bred primarily for egg production.  
a) True  
b) False (2 Marks)
- 1.8. Vitamin E deficiency in livestock can lead to muscle degeneration  
a) True  
b) False (2 Marks)
- 1.9. Lactation is the period during which a female animal produces milk.  
a) True  
b) False (2 Marks)

1.10. Calves should be fed colostrum within the first 24 hours after birth.

a) True

b) False

(2 Marks)

## SECTION B

### QUESTION 2

[40 marks]

2.1. Match the following terms to their correct definitions. Write only the correct definition to each numbered term. (2 Mark each)

Term	Definitions
1. Farrowing	a) The feeding process of young chicks.
2. Mastitis	b) Difficulty in giving birth.
3. Fodder	c) Milk production period in animals.
4. Estrus	d) Removal of the ability to reproduce in males.
5. Vaccination	e) The process of pig birthing.
6. Weaning	f) Inflammation of the udder.
7. Brooding	g) Feed for livestock.
8. Dystocia	h) The process of introducing a vaccine.
9. Castration	i) The cycle of fertility in female animals.
10. Lactation	j) The process of separating young animals from their mothers.

(20 Marks)

2.2. Define animal production and explain its importance to the agricultural sector.

(5 Marks)

2.3. Describe the process of artificial insemination in cattle and state two advantages of using this method in animal production. (6 Marks)

2.4. What are the key components of a balanced diet for ruminant animals, and why is each important? (6 Marks)

2.5. Differentiate between intensive and extensive livestock production systems. (3 Marks)

## **SECTION C**

### **QUESTION 3**

**[40 marks]**

3.1. A farmer in a temperate region raises 100 dairy cows and 50 beef cattle. Due to climate change, the region is experiencing hotter summers and colder winters. The farmer is concerned about the impact of these temperature changes on the health and productivity of the livestock.

Develop a comprehensive livestock management plan for the farmer that addresses the following aspects:

- Housing and shelter
- Feeding strategies for extreme weather conditions
- Disease management and prevention
- Breeding strategies to improve productivity

**TOTAL MARKS: 100**

**END OF PAPER [100]**