

GWANDA STATE UNIVERSITY



FACULTY OF NATURAL RESOURCES MANAGEMENT AND AGRICULTURE

DEPARTMENT OF ANIMAL PRODUCTION AND HEALTH

BACHELOR OF SCIENCE HONOURS DEGREE IN ANIMAL PRODUCTION AND HEALTH

ANATOMY AND PHYSIOLOGY OF FARM ANIMALS

NAP 1202

Second Semester Final Examination Paper

April 2025

This examination paper consists of 3 pages

Time Allowed: 3 hours
Total Marks: 100
Special Requirements: None
Examiner's Name: Dr B. Moyo

INSTRUCTIONS

1. Answer **all** questions in Section A
2. Answer **two** questions in Section B

MARK ALLOCATION

QUESTION	MARKS
SECTION A	60
SECTION B	40
TOTAL ATTAINABLE MARKS	100

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SECTION A: ANSWER ALL QUESTIONS IN THIS SECTION

QUESTION 1

- a) Define the following terms giving examples:
- i) Proximal. [2]
 - ii) Distal. [2]
 - iii) Superficial. [2]
 - iv) Endocrine gland. [2]
 - v) Hormone. [2]
- b) State the functions of the following:
- i) Connective tissue. [3]
 - ii) Muscle tissue. [3]
- c) Outline the functions of the urinary system. [4]

QUESTION 2

- a) List the functions of the circulatory system. [5]
- b) State the functions of lymph? [5]
- c) i. What purpose does blood clotting play in the animal's body? [2]
ii. Describe the clotting mechanisms in farm animals when they are injured. [10]

QUESTION 3

Complete the table below. [20]

Hormone	Gland (secretion site)	Functions
Thyroxine		
Testosterone		
Estrogen		
Progesterone		
Growth hormone		
Antidiuretic hormone		
Oxytocin		

SECTION B. ANSWER ANY TWO QUESTIONS IN THIS SECTION

QUESTION 4

- a) Describe the structure of the following classes of bones:
- i) Short bones. [2]
 - ii) Irregular bones. [2]
- b) Draw a well labeled diagram of a mammal long bone. [8]
- c) Outline the different bones found in the fore-quarter and the respective joints they form. [10]

QUESTION 5

- a) Highlight the differences between spermatogenesis and oogenesis. [10]
- b) Discuss sperm maturation (transformation) in the female reproduction tract. [6]
- c) Explain the effect of the environment on testicular function. [4]

QUESTION 6

- a) Write notes on the classification of synarthroses joints based on structure, giving examples for each class. [15]
- i) Suture joint.
 - ii) Syndesmosis joints.
 - iii) Synchondrosis joints.
 - iv) Symphysis joint.
 - v) Gomphosis joint.
- b) Explain the role of the respiratory system in the regulation of blood pH. [5]

END OF QUESTION PAPER