

GWANDA STATE UNIVERSITY



FACULTY OF LIFE SCIENCES

DEPARTMENT OF ANIMAL SCIENCES

BACHELOR OF SCIENCE HONOURS DEGREE IN ANIMAL SCIENCE

ANIMAL ANATOMY AND PHYSIOLOGY 1

LAS 1102

First Semester Final main Examination Paper

June 2019

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 **only 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. Briefly discuss the following:
 - i. Pinocytosis. [5]
 - ii. Phagocytosis. [5]
- b. In brief discuss the following organelles.
 - i. Mitochondria. [3]
 - ii. The Nucleus. [3]
 - iii. Endoplasmic reticulum. [2]
 - iv. Ribosomes. [2]

QUESTION 2

- a. Outline 7 functions of the bones. [7]
- b. With the aid of a diagram describe the long bone. [13]

Question 3

- a. Name any 5 body systems and describe them. [15]
- b. Briefly describe the skin. [5]

SECTION B: ANSWER ONLY TWO QUESTIONS

QUESTION 4

- a. The vertebral column is divided into five regions. State their region and their respective position in the body. [10]
- b. Name the bones in the hind limb. [7]
- c. Where are the following joints located? [3]
 - i) The stifle joint.
 - ii) The elbow joint.
 - iii) The hock joint.

QUESTION 5

- a. State the methods that could be used for pregnancy diagnosis in cattle. [10]
- b. State and briefly describe any 5 different types of epithelium. [10]

QUESTION 6

- a. i. How does the blood help fight invasion by bacteria and viruses? [5]
- ii. With the aid of diagram describe the synovial Joint. [5]
- iii. How does the structure of the alveoli make gas exchange efficient? [3]

- b. State the functions of blood in an animal's body. [7]

QUESTION 7

- a. Liver plays an important role in the animal body. Discuss. [10]
- b. Describe the effects of the action of the sympathetic nervous system in response to a threat. [10]

END OF EXAMINATION