

**GWANDA STATE UNIVERSITY**



**FACULTY OF LIFE SCIENCES**

**DEPARTMENT OF ANIMAL SCIENCE**

**BACHELOR OF SCIENCE HONOURS DEGREE IN CROP SCIENCE**

**Principles of Animal Production**

**LAS 2106**

**First Semester Final Main Examination Paper**

**February 2022**

This examination paper consists of 3 pages

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

**INSTRUCTIONS**

1. Answer **all** questions in Section A
2. Answer **only Two** questions in Section B

**MARK ALLOCATION**

<b>QUESTION</b>	<b>MARKS</b>
SECTION A	60
SECTION B	40
<b>TOTAL ATTAINABLE MARKS</b>	<b>100</b>

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**SECTION A: ANSWER ALL QUESTIONS IN THIS SECTION**

**QUESTION 1**

- a. State 4 ways in which domesticated animals greatly contribute to human needs. [4]
- b. Outline four criteria in which an animal must meet in order to be considered domesticated. [4]
- c. Give the scientific name of a pig. [1]
- d. Explain the following terms as used in Animal Science
  - i. Heterosis. [2]
  - ii. Wether. [2]
  - iii. Pullet. [2]
- e. State any five challenges faced by poultry production industry in Zimbabwe. [5]

**QUESTION 2**

Write briefly on each of the following:

- a. Oestrus detection aids that can be used to improve heat or oestrus detection
  - i. Use of a teaser bull [5]
  - ii. Heat mount detectors [5]

**QUESTION 3**

Explain crossbreeding as a tool for animal improvement and highlight its advantages. [6]

**QUESTION 4**

The actual calving process can be divided into 3 stages. Discuss each of the following:

- i. Preparatory stage; [5]
- ii. Fetal expulsion; [5]
- iii. Expulsion of the placenta. [5]

**QUESTION 5**

- a. Food restriction is commonly practiced in layers production. List any four advantages attached to this practice. [4]
- b. Describe the production management principles of broilers from day old to slaughter. [5]

**SECTION B: ANSWER ANY TWO QUESTIONS FROM THIS SECTION**

**QUESTION 6**

Discuss artificial insemination under the following headings:

- i. Advantages; [10]
- ii. Semen collection; [5]
- iii. Insemination process. [5]

**QUESTION 7**

- a. Outline 7 ways through which parasites cause harmful effects to animals. [14]
- b. How can these parasites (in question 7a) be controlled. [6]

**QUESTION 8**

Discuss the World Organisation for Animal Health (OIE) general principles for the welfare of animals in livestock production systems. [20]

**END OF EXAMINATION**