

**BINDURA UNIVERSITY OF SCIENCE EDUCATION**  
**FACULTY OF AGRICULTURE AND ENVIRONMENTAL SCIENCE**

AG 120

**Department of Animal Science**  
**BSc (Honours) Animal Science and Technology**  
**Part I Examination**  
**Anatomy and Physiology of Farm Animals**

JUN 2024

**3 HOURS (100 Marks)**

**INSTRUCTIONS**

Answer any **FOUR** questions. Each question carries **25 marks**.

1. a) Draw and label a synovial joint. [5 marks]  
b) Discuss the organelles found in a typical animal cell. [8 marks]  
c) Discuss the functions of the skeletal system in a named farm animal. [12 marks]
2. Describe in brief the functions of the following:
  - (a) The pancreas [5 marks]
  - (b) The ovary [5 marks]
  - (c) The tongue [8 marks]
  - (d) The trachea [7 marks]
3.
  - (a) Discuss gaseous exchange in the lungs of a named farm animal. [7 marks]
  - (b) Compare the structure of arteries and veins in the mammal. [5 marks]
  - (c) Outline the main characteristics of cardiac muscles [8 marks]
  - (d) Describe structure and function of the bronchi [5 marks]
- 4 Describe the gross structure and function of the digestive system of a pig [25marks]
5. Describe the respiratory system of a goat. [25 marks]
6. Describe the oestrus cycle in cows, highlight how the cycle is exploited to improve reproduction in livestock. [25 marks]

**End of Exam Paper**