BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF AGRICULTURE AND ENVIRONMENTAL SCIENCE

AGA 230

Department of Animal Science
BSc. Agricultural Science (Honours) Part II Examination

Applied Animal Physiology I

3 HOURS (100 Marks) **EPi**

INSTRUCTIONS

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

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1. State the source, target organs and effects of the following hormones of the adenohypophysis:
   a) Follicle stimulating hormone (FSH) **[6 marks]**
   b) Growth stimulating hormone (GSH) **[6 marks]**
   c) Luteinising hormone (LH) **[6 marks]**
   d) Prolactin **[7 marks]**
2. Discuss lactate dehydrogenase (LDH) under the following headings:
   (i) State and explain what lactate dehydrogenase (LDH) is. **[2 Marks]**
   (ii) Types of LDH iso- enzymes and areas of high concentration. **[5 Marks]**
   (iii) Causes of high LDH **[5 Marks]**
   (iv) Fluids collected for LDH tests and substances that may interfere with LDH tests **[5 Marks]**
   (v) Implications of low and high LDH **[8 Marks]**
3. Discuss the endocrine role of the pancreas highlighting physiological challenges that maybe caused by a faulty pancreas. **[25 marks]**
4. Describe the source, target organs and effects of the following hormones:
   a) Oestrogen **[4 marks]**
   b) Gastrin **[4 marks]**
   c) Relaxin **[4 marks]**

d) Testosterone [4 marks]

e) Anti diuretic hormone [4 marks]

f) Oxytocin [5 marks]

5. a) State and explain processes involved in:

i) Maternal recognition of pregnancy, [8 marks]

ii) Implantation [8 marks]

b) State the signs of approaching parturition in cows. [9 marks]

c) Discuss thermoregulation in the testis of a bull [25 marks]

6. Discuss the use of Cortisol and Creatine Kinase as indicators of stress in slaughter animals. [25 Marks]

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