



RAJARATA UNIVERSITY OF SRI LANKA  
FACULTY OF APPLIED SCIENCES

B.Sc. (General) Degree in Applied Sciences  
Second year – Semester I Examination – June /July 2018

BIO 2209 – ANIMAL PHYSIOLOGY

Time: Two (2) hours

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Answer **four (04)** questions only.

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1. (a) Discuss the physiology of “Steroid *Hormones*”, commenting specifically on the following features.  
(i) Main characteristics      (iii) Synthesis and secretion  
(iv) Regulation of secretion      (v) Transport in blood      (vi) Metabolism  
(b) Explain the mechanism of action of steroid hormones. **(100 marks)**
  
2. a) Define the two terms ‘Acquired/Active immunity’ and ‘Passive immunity’.  
b) Briefly outline the process of vaccine production.  
c) Explain why it has been difficult to develop a vaccine for Human Immunodeficiency virus (HIV). **(100 marks)**
  
3. a) Compare the structural and functional differences of non-ruminant and ruminant stomachs.  
b) Describe the modifications shown by non ruminant herbivores for the digestion of cellulose in their digestive systems. **(100 marks)**
  
4. Define “folliculogenesis”. Explain the stages and the process of folliculogenesis in man with special reference to “follicle recruitment” and “gonadotrophin dependent follicular growth”. Illustrate your answer with labelled diagrams. **(100 marks)**
  
5. Write short notes on any three of the following.  
a) Transport of CO<sub>2</sub> in blood  
e) Functions of the epididymis  
f) Regulation of blood glucose  
g) Complement system **(100 marks)**

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