

**UNIVERSITY OF AGRICULTURE, ABEOKUTA  
DEPARTMENT OF ANIMAL PRODUCTION AND HEALTH  
UNIVERSITY EXAMINATION**

**Full Title of Examination: First Semester, 2005/2006**

**Name of Subject: APH 201**

**Full Title of Paper: Comparative Anatomy and Physiology of Farm Animals**

**Time Allowed: 2 Hours**

**Instruction: Answer all Questions. Start Each Section on a fresh page.**

**SECTION A**

1. Define the following terms:  
(a) Caudal (1 mark)      (b) Frontal (1 mark)
2. Give the vertebral formulae of the following animals:  
(a) Bovine (b) Swine (c) Canine (1 mark each)
3. Name 4 bones in the fore-limb of a goat (2 marks)
4. List the structures that constitute the complex stomach (2 marks)
5. List 4 ligaments that attach the liver to abdominal cavity (2 Marks)
6. Write 3 sentences on the testis of goat (1<sup>1/2</sup> marks)
7. What is an epididymis? (1 mark)
8. Write 3 sentences on the mammary gland of cow (1<sup>1/2</sup> marks)

**SECTION B**

9. State the 4 processes of digestion in animals (2 marks)
10. Name the end products of metabolism of the following in ruminants:  
(a) Carbohydrate      (b) Lipid (3 marks)
11. Give 2 distinguishing features between the heart of Ox and Horse (2 marks)
12. What are the functions of the following in blood circulation?  
(a) Aorta (b) Vena cava (c) Bicuspid valve (d) Left ventricle (e) Right auricle (5mks)
13. Name the 3 cells of tufted glomerular apparatus (3mks)
14. State 5 functions of the distal convoluted tubule (5mks)

**SECTION C**

15. What are the functions of tunica dartos? (1 mk)
16. Differentiate between the penis of horse and bull/ram/boar at erection (2mks)
17. Illustrate the process of spermatogenesis with a sketched diagram (2mks)
18. State 2 functions of the cervix (2mks)
19. State number of ovum (ova) released at ovulation by each of the following:  
(a) Cow    (b) Ewe    (c) Sow    (d) Mare (2mks)
20. Give names and location of 5 endocrine glands found in farm animals (5mks)
21. State 2 examples each of steroid and gonadotropic hormones (2 mks)
22. State 2 differences between respiratory systems of cattle and birds (2mks)
23. With the aid of sketched diagram describe the components of the following:  
(a) Central nervous system (2<sup>1/2</sup> mks)    (b) Peripheral nervous system (2<sup>1/2</sup> mks)
24. State 4 roles of urinary system in the maintenance of homeostasis (2mks)