



UNIVERSITY EXAMINATIONS

**FIRST YEAR EXAMINATION FOR THE AWARD OF DIPLOMA IN
ANIMAL HEALTH AND PRODUCTION**

ANHE 0101: GROSS ANATOMYH AND EMBRYOLOGY

STREAM: DIP. ANHE Y1S1

TIME: 2 HOURS

DAY/DATE: MONDAY 26/7/2010

8.30 A.M. - 10.30 A.M.

INSTRUCTIONS:

- Answer all questions.
- Start answering each question on a new page.

Q.1 (a) Briefly define the following:

- (i) Germ layers
- (ii) Secondary oocyte
- (iii) Semineferous tubules
- (iv) Morular
- (v) Primordial germ cells

[10 marks]

(b) Describe the formation of the following:

- (i) Embryonic mesoderm
- (ii) Yolk sac
- (iii) Notochord
- (iv) Post puberty follicle

[10 marks]

Q.2 (a) List the functions of skeletal system.

(b) Describe the thoracic inlet, and name all structures that pass through it.

- (c) Name the bones that comprise the skeleton of the following:
- (i) Fore limb
 - (ii) Pelvic skeleton
- [18 marks]

Q.3 (a) Give two examples of the following types of joints:

- (i) Hidge joints
- (ii) Ball and socket joints
- (iii) Serrated sutures
- (iv) Symphysis joints
- (v) Composite joints

(b) List five joints of hind limb from proximal to distal aspect.

(c) Name the components of respiratory system and give the lung lobes that make up bovine lungs. [20 marks]

Q.4 Write short notes on the following:

- (i) Ligamentum nuchae
- (ii) Para lumba fossa
- (iii) Diaphragm
- (iv) Prescapular lymph node
- (v) Longismus dorsi muscle

On average limit your notes to a maximum of six lines on each of the above. [20 marks]

Q.5 (a) Draw and label a female ruminants reproductive organs. [10 marks]

(b) Name the blood vessels that play the following role in the body:

- (i) Carry oxygenated blood from the lungs
- (ii) Supply arterial blood to the head
- (iii) Carry venous blood from the head
- (iv) Supply arterial blood to small intestines
- (v) Supply arterial blood to uterus
- (vi) Supply of arterial blood to kidneys
- (vii) Carry deoxygenated blood to placenta
- (viii) Supply of arterial blood to the liver
- (ix) Carry mesenteric blood to the liver

[4 marks]

(c) Give the embryological germ layers from which the following originated:

- (i) Teeth
- (ii) Mammary glands
- (iii) Testis
- (iv) Peritoneum
- (v) Liver
- (vi) Brain
- (vii) Femur
- (viii) Abdominal muscles
- (ix) Blood
- (x) Pancreas

[5 marks]

(d) What are endocrine glands? Give two examples.

[3 marks]
