

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

SECOND EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF
SCIENCE IN ANIMAL HEALTH AND PRODUCTION

ANHE 210: GROSS ANATOMY AND EMBRYOLOGY

STREAMS: BSC AGRI/FOST Y2S2

TIME: 2 HOURS

DAY/DATE: FRIDAY 14/12/2018

11.30 A.M - 1.30 P.M.

INSTRUCTIONS

- Attempt ALL questions in Section A and any TWO in Section B
Do not write anything on the question paper

SECTION A: ATTEMPT ALL QUESTIONS [40 MARKS]

1. Outline three general classifications of body systems. [3 Marks]
2. Describe the divisions of the skeletal system giving examples. [6 Marks]
3. Describe Intrinsic and Extrinsic muscles giving examples. [5 Marks]
4. Outline the muscles of respiration giving their origin and insertion. [5 Marks]
5. Describe the anatomical structures that digest plant materials in herbivores like cattle and donkey. [3 Marks]
6. Describe the structure of the liver in domestic animals. [5 Marks]
7. List the main processes in the developmental anatomy of the fetus. [5 Marks]
8. With the help of a simple well labeled diagram, describe the structure of the lungs and upper respiratory tract of animals. [5 Marks]
9. Describe the structure of the heart and its location in the body. [3 Marks]

SECTION B: ATTEMPT ANY 2 QUESTIONS [30 MARKS]

10. Briefly describe the following:
 - (a) Describe the structure of the pelvic girdle. [5 Marks]

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- (b) Differentiate between epaxial and hypaxial muscles. [2 Marks]
- (c) Describe the masseter muscle giving its function, origin and insertion. [4 Marks]
- (d) Describe the structure of the sternum and the ribs and how the two articulate with each other. [4 Marks]

11. Briefly describe the following:

- (a) The quadriceps femoris muscle giving its function, origin and insertion. [4 Marks]
- (b) The appearance of the ruminant stomach. [4 Marks]
- (c) Outline the functions of the skeletal system of animals. [4 Marks]
- (d) How is entry of multiple sperm in the ovum during fertilization prevented? [3 Marks]

12. Briefly describe eth following;

- (a) Outline the various derivatives of the 3 germ layers of an embryo. [6 Marks]
 - (b) Briefly describe the formation of the neural tube in the embryo. [4 Marks]
 - (c) With the help of a simple well labeled diagram, describe the structure of a typical vertebra bone. [5 Marks]
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