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UNIVERSITY OF SWAZILAND

1ST SEM. 2016/2017

FINAL EXAMINATION PAPER

PROGRAMME: BSc. AGRICULTURAL EDUCATION YEAR 2, BSc. ANIMAL SCIENCE YEAR 2 AND BSc. ANIMAL SCIENCE (DAIRY OPTION) YEAR 2

COURSE CODE: ASC 207

TITLE OF PAPER: ANATOMY AND PHYSIOLOGY OF FARM ANIMALS.

TIME ALLOWED: TWO (2) HOURS.

INSTRUCTIONS: ANSWER FOUR (4) QUESTIONS

DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN GRANTED BY THE CHIEF INVIGILATOR.

QUESTION ONE

- (a) List the three (3) types of ventral cavities. (6 Marks)
- (b) Write short notes on the following;
- i. Pelvic cavity. (10 Marks)
 - ii. Anatomy and Physiology. (4 Marks)
 - iii. Bone fracture and exercise. (5 Marks)

QUESTION TWO.

- (a) Compare and contrast between the following:
- i. Muscle contraction and Rigor mortis. (6 Marks)
 - ii. Compact bone and Spongy bone. (6 Marks)
- (b) Describe the anatomy and physiology the Pumping Apparatus. (8 Marks)
- (c) Draw and label a diagram of the regions of a stomach of the pig. (5 Marks)

QUESTION THREE.

a) Match the terms on the left column (represented by a letter) with the correct definition/description of the term on the right column(represented by a number). For example, in your answer book Y=15.

(20 Marks)

A).Gross Anatomy	1. refers to the endomysiums, perimysiums and epimysiums organized into definite structures that attach muscles to bones.
B).Rostral	8. it has mucous membranes raised into folds that are four sided honey comb like papillae.
C).A Tendon	3. is the study of form and structure of the body and its parts as seen by unaided eyes.
D).The Reticulum	4. this is a term used within the head region. It is a direction from any part of the head towards the and up to the nose.
E).Thoracic cavity	5. refers to the space between the parietal pleura and the visceral pleura, it contains pleural fluid secreted by pleural membranes.
F).Pelvic cavity	6. is the cranial most, bounded by an inlet, dorsal wall, two lateral walls, a ventral wall and caudal wall.
G).Pleural cavity	7. is the caudal most of the ventral cavities, it contains dorsoventrally the rectum, vagina, urinary bladder in females and the rectum and urinary bladder in males.
H).The peritoneum	2. it has a centralized cavity, mucosa, lamina propria, the muscularis mucosae, glands, capillaries, lymphatic ducts and nerve fibers.
I).A tubular organ	9. refers to four separate glands physically divided into right and left halves. Each quarter is distinct and functionally separate.
J).Mammary glands of cattle	10. it lines the abdominal cavity forming the peritoneal cavity. It secretes the peritoneal fluid that functions as a lubricant for the visceral and parietal peritoneal membranes.

b) Write short notes on bone growth.

(5 Marks)

QUESTION FOUR.

- a) Describe the functions of cartilage and bone. (10 Marks)
- b) List all the five(5) regions of the vertebral column. (5 Marks)
- c) Explain how the vertebrae of each region of the vertebral column are differentiated. (5 Marks)
- d) Describe the role of the Esophageal groove in young ruminants. (5 Marks)

QUESTION FIVE

- i. Copy this table onto your answer book and complete it by filling your answers in the empty boxes. (20 Marks)

Hormone	Source	Function
Adrenaline		
Estrogen		
Prolactin		
Testosterone		
Calcitonin		
Parathyroid hormone		
Oxytocin		
Antidiuretic hormone		
Thyroxine		
Progesterone		

- ii. Write short notes on the term "Alveolus/Alveoli". (5 Marks)

END OF QUESTION PAPER.