



THE UNIVERSITY OF ZAMBIA
SCHOOL OF AGRICULTURAL SCIENCES
DEPARTMENT OF ANIMAL SCIENCE

AGA 2110– ANATOMY & PHYSIOLOGY OF FARM ANIMAL - TEST 1
DATE: 8 OCTOBER 2020
TIME ALLOWED: 2 HOURS

INSTRUCTIONS:

ANSWER ALL QUESTIONS

CLEARLY WRITE THE NUMBER OF EACH ATTEMPTED QUESTION

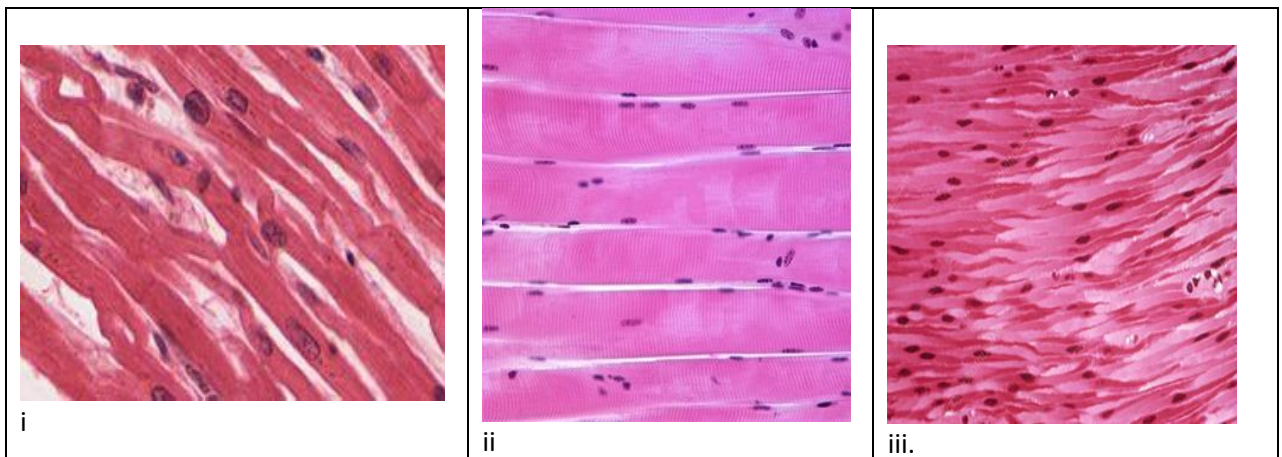
ALL QUESTIONS CARRY EQUAL MARKS (10 MARKS)

YOUR WORK SHOULD BE CONCISE, YOU WILL PENALISED FOR UNNECESSARY INFORMATION

ONLY THE ANSWER SHEET SHOULD BE SUBMITTED ON MOODLE

QUESTION 1

The following are the microscopic appearance of three (03) categories of muscles found in farm animals.



A. Identify the 3 muscle types (**3 Marks**)

- i.
- ii.
- iii.

B. For each of the muscles mentioned in 'A', list two microscopic features that have helped you identify the muscles (**3 marks**)

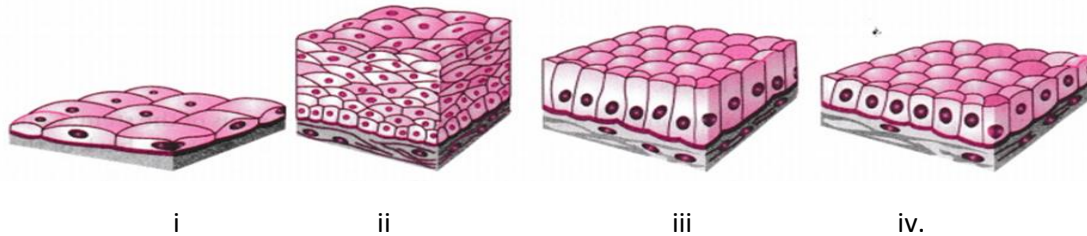
- i.
- ii.
- iii.

C. Mention the three (03) anatomical structures that make up the blood brain barrier (**3 marks, Max 3-4 sentences**)

- D. List one difference in anatomical structure between blood brain barrier and an ordinary blood vessel (1 mark)

QUESTION 2

Identify the following epithelium & give one example of their location in the body of an animal (4 marks)



TYPE OF EPITHELIAL TISSUE	LOCATION IN THE BODY
i.	
ii.	
iii.	
iv.	

- A. List three (03) general functions performed by epithelial tissue (3 marks)

- i. .
- ii. .
- iii.

- B. From your knowledge of anatomy, why do bone fractures generally heal faster than injuries of the joint (3 Marks, Max 3 sentences).

QUESTION 3

Farm animals are categorised into four (04) groups based on the anatomy of the digestive system.

- A. Mention the four (04) groups or categories (2 Marks)
- B. Briefly explain the anatomical differences in the gastrointestinal track of the mentioned categories (6 Marks, Max 6 -7 sentences)
- C. For each category give an example of the species that belongs to that category (2 Marks)

QUESTION 4

Differentiate the following (2 marks each, Max 3 sentences for each answer)

- A. Cilia and flagella
- B. Viscera and parietal pleura
- C. Tendon and ligament
- D. Aponeurosis and linea alba
- E. Tissue and organ

QUESTION 5 (10 MARKS)

Insert the missing directional term (only type the missing term on your answer sheet)

- i. The head is _____ to the tail
- ii. The humerus isto the ulna
- iii. The lungs areto the heart.
- iv. The heart isto the lungs
- v. The stomach is.....to the heart.
- vi. The nose isto the eyes
- vii. The lumbar vertebrae areto the thoracic vertebrae
- viii. The bladder is.....to the small intestine
- ix. The oesophagus isto the trachea
- x. The skin is.....to the muscles

THE END