



UNIVERSITY OF EMBU

2021/2022 ACADEMIC YEAR

SECOND SEMESTER EXAMINATIONS

FIRST YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN

AGRICULTURAL EDUCATION AND EXTENSION

AVP 101: ANIMAL PHYSIOLOGY

DATE: APRIL 5, 2022

TIME: 2.00 – 4.00PM

INSTRUCTIONS:

Answer Question ONE and ANY Other TWO Questions.

QUESTION ONE (30 MARKS)

a) Giving examples, explain the following terminologies as used in animal physiological systems.

- | | | |
|------|-------------------|-----------|
| i) | Positive feedback | (2 marks) |
| ii) | Control System | (2 marks) |
| iii) | Homeostasis | (2 marks) |
| iv) | Metabolism | (2marks) |

b) Explain the main difference between a vein and an artery

c) State where the following hormones are produced and their major effect in humans:

- | | | |
|------|--------------|-----------|
| i) | Adrenaline | (2 marks) |
| ii) | Insulin | (2 marks) |
| iii) | Testosterone | (2 marks) |
| iv) | Oestrogen | (2 marks) |



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Knowledge Transforms

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- d) One of your classmate has been experiencing the following symptoms: No sexual urge, digestion problem, breathing problems and difficult in urination. Identify and explain the likely body system associated with this problem. (4 marks)
- e) Outline the main functions of Cardiovascular system (4 marks)
- f) What is your understanding of a master gland? (2 marks)
- g) Why is bleaching of your skin unhealthy? (2 marks)
- h) Name the two hormones that are most important in the development of the secondary characteristics of a female and a male? (2 marks)

QUESTION TWO (20 MARKS)

Discuss how the air we breathe in is transported and exchanged in the body systems. (20 marks)

QUESTION THREE (20 MARKS)

Explain to a dairy farmer the process of embryo formation in a mammalian animal. (20 marks)

QUESTION FOUR (20 MARKS)

A ruminant animal is physiologically designed to survive on grass/ shrubs/herbs and other greens. Discuss how this is accomplished. (20 marks)

QUESTION FIVE (20 MARKS)

- a) An unknown disease has ‘invaded’ your skeletal muscles. What are the possible consequences of this “invasion”? (15 marks)
- b) Describe five (5) areas of the body where smooth muscles are found (5marks)

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