



UNIVERSITY OF EMBU

2016/2017 ACADEMIC YEAR

SECOND SEMESTER EXAMINATION

FIRST YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN

AGRICULTURAL EDUCATION AND EXTENSION

AVP 101: ANIMAL PHYSIOLOGY

DATE: APRIL 5, 2017

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 | (2 Marks) |
- b) Explain the main difference between a vein and an artery (2 Marks)
- 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) |

- d) One of your classmates 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

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

QUESTION THREE

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

QUESTION FOUR

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

QUESTION FIVE

- 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 (5 Marks)

END