**CHUKA** 



#### **UNIVERSITY**

### UNIVERSITY EXAMINATIONS

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

**ANHE 215: ANIMAL PHYSIOLOGY** 

STREAMS: ANHE TIME: 2 HOURS

DAY/DATE: MONDAY 03/12/2018 2.30 PM – 4.30 PM

# **INSTRUCTIONS:**

#### Answer ALL Questions in Section A and any Two in Section B

#### Section A (40 Marks)

- 1. Briefly explain the function of the following organelles in a eukaryotic cell
  - (a) Endoplasmic [1 mark]
  - (b) cytoskeleton [1 mark]
  - (c) Nucleus [1 mark]
  - (d) Ribosomes [1 mark](e) Golgi apparatus [1 mark]
- 2. Describe how macromolecules are transported across the plasma membrane.

[5 marks]

- 3. With aid of a diagram, describe how impulses are transmitted across neuromuscular junctions. [5 marks]
- 4. Describe the process of gaseous exchange between lungs and blood and between tissues and blood. [5 marks]
- 5. Outline five functions of accessory sex glands in male reproductive system.

[5 marks]

6. List the primary hormones that are secreted by the pituitary gland and state their function.

[5

marks]

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- 7. With aid of a well labeled diagram, describe the term 'Negative Feedback' [5 marks]
- 8. Describe the composition and functions of blood.

[5 marks]

# Section B: (40 Marks) Answer any Two Questions

- 9. With aid of a well labelled diagram, describe the different components of the nephron explain the major functions of each component. [15 marks]
- 10. The body temperature is maintained at a constant level in mammals by the hypothalamus. Explain how this occurs and outline the common disorders that can affect this mechanism in an animal. [15 marks]
- 11. Discuss the metabolic functions of bones in animals.

[15 marks]