

MOI UNIVERSITY
UNIVERSITY EXAMINATIONS
2014/2015 ACADEMIC YEAR
THIRD YEAR, FIRST SEMESTER EXAMINATION FOR THE DEGREE
OF BACHELOR OF EDUCATION (SCIENCE)

COURSE CODE: ZOO300
COURSE TITLE: ANIMAL PHYSIOLOGY (MAIN EXAMINATION)

INSTRUCTIONS TO CANDIDATES

Answer **ALL** questions from Section **A** and any **TWO** questions from Section **B**
All questions in section **B** carry equal marks
Illustrate your answers with diagrams wherever necessary
Duration of the examination: 3 hours

SECTION A: (30 marks)

Answer **ALL** questions

1. Give the meaning of the following secretions
a) Autocrine
b) Pheromones
c) Paracrine (3 marks)
2. What are the action of the following hormones in human body
a) Adrenocorticotrophic hormone
b) Melanocyte stimulating hormone
c) Thyroxine (3 marks)
3. Where do the following fluid compartment exist in the body
a) Intracellular
b) interstitial fluid
c) Plasma (3 marks)
4. What are the glial cells and what are their functions in the body (3 marks)
5. What are the mechanism involved in Blood Brain Barrier (3 marks)

6. What are the three main functions of the cardiovascular system (3 marks)
7. Write about erythroprotein under the following questions
- What is the function?
 - What stimulates its production?
 - and where is it produced?
8. What do you understand about tidal volume, functional residual capacity and vital capacity, with reference to respiratory system. (3 marks)
9. What are the factors that facilitate diffusion of oxygen and carbon dioxide in respiratory sites? (3 marks)
10. Pancreatic juice contains several enzymes, list any four enzymes and the substrate they act on (3 marks)

SECTION B: (40 marks)

Answer ANY TWO questions

11. Write about the hormones involved in regulation of digestion, where they are produced and how they work (20 marks)
12. a) What are the effects of testosterone in males (6 marks)
- b) Describe the phases of menstrual cycle (6 marks)
- c) Write about the steps involved in oogenesis (8 marks)
13. What are the functions of integumentary system (20 marks)
14. Briefly describe the cardiac conduction in mammals (20 marks)

integumentary system
It consists of the skin & its derivatives