



MAASAI MARA UNIVERSITY

**REGULAR UNIVERSITY EXAMINATION
2018/2019 ACADEMIC YEAR
THIRD YEAR FIRST SEMESTER**

**SCHOOL OF SCIENCE AND INFORMATION SCIENCES
FOR THE DEGREE OF BACHELOR OF SCIENCE WILDLIFE**

COURSE CODE: WRM 3203

COURSE TITLE: COMPARATIVE VERBRATE PHYSIOLOGY

DATE: 24TH APRIL, 2019

TIME: 1430 - 1630HRS

INSTRUCTIONS TO CANDIDATES

- a) Answer **ALL** questions in section **A** and **any two** questions in section **B**
- b) Illustrate your answers with suitable diagrams and give examples wherever appropriate.

This paper consists of 2 printed pages. Please turn over.

SECTION A: Answer ALL questions in this section. Each question carries 3marks

1. Define the following :-
 - a. glomerular filtrate. (1mark)
 - b. enzyme. (1mark)
 - c. polysaccharide. (1mark)
2. Give reasons why a zygote is called a fertilized egg? (3 marks)
3. Outline two differences between slow and fast twitch skeletal muscles (3 marks)
4. List three characteristic features of epithelia. (3 marks)
5. Outline three differences between egestion and excretion. (3 marks)
6. Describe three functions of kidneys. (3 marks)
7. Explain why people urinate most in cold than in hot weather.(3 marks)
8. Describe the release and activity of pepsin in the stomach. (3 marks)
9. Distinguish between a human and a fish's heart. (3 marks)
10. Explain three major forms of carbon dioxide transport in the blood. (3 marks)

SECTION B: Answer Any Two Questions Each question carries 20 marks

11. Explain how the digestive system works in vertebrates. (20 marks)
12. Explain how thermoregulation works in vertebrates. (20 marks)
13. Discuss the sequence of events in skeletal muscle contraction. (20 marks)
14. Using any negative feedback loop, describe how the loop works, label the components and explain their role in the loop. (20marks)

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