

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY

SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCES

UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION SCIENCE WITH IT

3RD YEAR 2nd SEMESTER 2018/2019 ACADEMIC YEAR

MAIN CAMPUS - REGULAR

COURSE CODE: SZL 304

COURSE TITLE: COMPARATIVE ANIMAL PHYSIOLOGY

EXAM VENUE: LAB 6 STREAM: (BED)

DATE: 26/04/2019 EXAM SESSION: 3.00-5.00PM

TIME: 2 HOURS

Instructions:

- 1. Answer ALL questions in Section A and Any two questions in Section B
- 2. Candidates are advised not to write on question paper
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room

SECTION A: SHORT ANSWER QUESTIONS (30 MARKS)

1.	Explain why homeostasis is considered the central theme in physiology.	(3 marks)
2.	Distinguish between an organ and system.	(3 marks)
3.	Describe the homeostatic concept of negative feedback mechanism. Give example	
4. -	Outline the functions of neutrophils, lymphocytes and platelets.	(3 marks)
5.	Acid-base homeostasis is an important phenomenon in mammals. Explain the rol	
	lungs in this homeostasis.	(3 marks)
6.	Describe the roles of cecum and colon in horses.	(3 marks)
7.	The physiological functions of glucagon oppose those of insulin. Explain.	(3 marks)
8.	Explain the production and functions of cerebrospinal fluid.	(3 marks)
9.	Give any three placental hormones and their functions.	(3 marks)
10.	State importance of taste reception in humans and animals.	(3 marks)
	SECTION B: ESSAY QUESTIONS (40 MARKS)	
11.	Describe fermentative digestion of fibrous carbohydrates in reticulorumen, and di	gestion of
	protein in simple stomach and small intestine:	(20 marks)
12. Analyze the general effects of hormones produced in the medulla and cortex of adrenal glands.		
		(20 marks)
13.	Demonstrate an understanding of the general functions of blood.	(20 marks)
14.		
	a) Examine five types of sensory receptors found in mammals.	(10 marks)
	b) Evaluate synaptic transmission of nervous signals.	(10 marks)
	SUSI OBSIRIIES II.	