



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY**  
**SCHOOL OF BIOLOGICAL, PHYSICAL, MATHEMATICS AND ACTUARIAL**  
**SCIENCES**

**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION**  
**SCIENCE AND BACHELOR SCIENCE IN BIOLOGICAL SCIENCES**

**4<sup>th</sup> YEAR 1<sup>st</sup> SEMESTER 2022/2023 ACADEMIC YEAR**

**MAIN CAMPUS - REGULAR**

---

**COURSE CODE: SBB 1403/SPB 9401**  
**COURSE TITLE: ANIMAL BEHAVIOUR**  
**EXAM VENUE: STREAM: (B.ED &B.SC)**  
**DATE: 14/12/2022 EXAM SESSION: 15.00-17.00PM**  
**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. Define:
  - a. Kinesis
  - b. Taxis
  - c. Fixed action pattern (3 marks)
2. State any three approaches to behavioural studies (3 marks)
3. Describe any three forms of aggressive behaviour (3 marks)
4. Describe any two physiological mechanisms of behaviour (3 marks)
5. Describe any three causes of migratory behaviour (3 marks)
6. State any three functions of communication in animals (3 marks)
7. Outline any three stages animals use in search for food (3 marks)
8. Using a diagram, relate costs and benefits of territorial defense (3 marks)
9. Describe the preconditions for the evolution of polygamy (3 marks)
10. Describe ecological traps (3 marks)

## **SECTION B: ESSAY QUESTIONS (40 MARKS)**

11. Discuss orientation mechanisms. (20marks)
12. Discuss types of foraging in animals. (20marks)
13. Discuss communication in honey bees (20marks)
14. Discuss female infidelity in animals (20marks)