



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCES**  
**DEPARTMENT OF BIOLOGICAL SCIENCES**  
**UNIVERSITY SPECIAL EXAMINATION FOR THE DEGREE OF BACHELOR OF**  
**SCIENCE IN BIOLOGICAL SCIENCES AND BACHELOR OF SCIENCE EDUCATION**  
**WITH IT**  
**2019-2020 ACADEMIC YEAR**  
**MAIN CAMPUS**

**COURSE CODE: SBI 3432 AND SZL 402**

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**COURSE TITLE: ANIMAL BEHAVIOUR**

**VENUE**

**STREAM: 0**

**DATE:**

**EXAM SESSION:**

**TIME: 2 HOURS**

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**INSTRUCTIONS:**

- 1. Answer ALL questions in Section A and any TWO questions in Section B**
  - 2. Candidates are advised not to write on the question paper**
  - 3. Candidates MUST hand in their answer booklets to the invigilator while in the examination room.**
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**SECTION A: ANSWER ALL THE QUESTIONS (40 MARKS)**

1. Describe a behaviour motor pattern (3 Marks)
2. Describe the significance of the Hamilton's rule (3 Marks)
3. Briefly describe reciprocal altruism. (3 Marks)
4. Describe any three physiological mechanisms that initiate behaviour in animals.(3 Marks)
5. Describe ways in which biological clocks are important in lives of animals. (3 Marks)
6. Briefly describe any three types of mating systems in animals. (3 Marks)
7. Describe any three characteristics of social animals. (3 Marks)
8. Describe any three reasons for why females mate voluntarily with more than one male. (3 Marks)
9. Describe the relationship between altruism and kinship behaviour. (3 Marks)
10. Describe the significance cooperative breeding behaviour. (3 Marks)

**SECTION B: ANSWER ANY TWO QUESTIONS (2X15 MARKS)**

11. Discuss differences in triggers of proximate and ultimate behaviour in animals.(20 Marks)
12. Discuss imprinting as an adaptive behaviour in animals. (20 Marks)
13. Discuss hypotheses that compel male to monogamy (20 Marks)
14. Discuss functional classes of predators. . (20 Marks)