



# **EMBU UNIVERSITY COLLEGE**

**(A Constituent College of the University of Nairobi)**

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**2015/2016 ACADEMIC YEAR**

**SECOND SEMESTER EXAMINATION**

**SECOND YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE  
AND BACHELOR OF SCIENCE (BIOLOGY)**

**SZE 203: ANIMAL ECOLOGY AND BEHAVIOUR**

**DATE: APRIL 7, 2016**

**TIME: 08:30-10:30AM**

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**INSTRUCTIONS: Answer any ten (10) questions (7 marks each)**

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1. Explain how animals apply strategies and tactics when competing for mates.
2. Describe the key determinants of social behavior exhibited by animals.
3. Explain the principles of using communication signals in animals.
4. Discuss any SEVEN factors that regulate population growth.
5. Explain the significance of parental care in sustenance of animal survival.
6. Outline various mating systems observed in animals.
7. Describe any SEVEN ways in which animals acquire behavior.
8. Outline the main factors that cause animals to migrate.

9. a) State the advantages of pecking order behavior exhibited in animals. (4 Marks)
- b) Outline the significance of animal territorial behavior. (3 Marks)
10. Describe the defence mechanisms animals use to outwit predators.
11. Discuss briefly the importance of animal adaptations to environmental constraints.
12. a) Outline an aquatic food chain and terrestrial food chain. (1Mark)
- b) Distinguish between the following:
- i) Orientation and Navigation (1Mark)
  - ii) Innate and learned behavior (1Mark)
  - iii) Habituation and imprinting (1Mark)
- c) Explain how aquatic birds and mammals in arctic regions thermo-regulate. (3Marks)

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