



(Knowledge for Development)

**KIBABII UNIVERSITY
UNIVERSITY EXAMINATIONS
2019/2020 ACADEMIC YEAR**

**FOURTH YEAR SECOND SEMESTER
MAIN EXAMINATIONS**

**FOR THE DEGREE OF BACHELOR OF EDUCATION SCIENCE, BSc-
BIORESOURCE MANAGEMENT AND BSC BIOLOGY.**

COURSE CODE: SZL 412

COURSE TITLE: ETHOLOGY

DATE: Monday ¹⁶ 9th November, 2020.

TIME: 2:00 -4:00 p.m.

INSTRUCTIONS TO CANDIDATES

Answer Question one (1) and any other two (2) Questions. Question one is compulsory and carries 30 marks, the other Questions carry 20 marks each.

TIME: 2 Hours

This paper consists of 2 printed pages. Please Turn Over



KIBU observes ZERO tolerance to examination cheating:

1.

- a) Define Ethology (1 mark).
- b) List four reasons why studying animal behaviour is important. (4marks).
- c) A cock crows at designated times during the day, explain this type of behaviour in relation to behavioral genetics (3marks).
- d) Differentiate between innate and learned behaviour (2marks).
- e) Describe any two forms of innate behaviour (4marks).
- f) With appropriate examples justify the fact that behaviour is inherited from parents (4marks).
- g) Using appropriate examples differentiate between classical conditioning and operant conditioning (4marks).
- h) Describe how a scout honey bee, *Apis mellifera*, communicates to their nest mates about nectar sources. (4marks).
- i) Insects are said to have a long evolutionary history compared to man, explain this phenomenon basing on their reproductive and social behaviour. (4marks).

- 2. Using relevant examples, discuss the significance of communication signals in courtship behaviour in animals (20marks).
- 3. With relevant examples discuss the benefits of mate choice in animals (20marks).
- 4. Describe how kin selection increases an individual's inclusive fitness (20marks).
- 5. Using relevant examples describe how physiology influences behaviour (20marks).