INTERNATIONAL UNIVERSITY OF EAST AFRICA
'Learning to Succeed'

FACULTY OF SCIENCE AND TECHNOLOGY

END OF SEMESTER EXAMINATIONS - APRIL 2025

PROGRAMME: BSEM

YEAR/SEM: YEAR 3/SEMESTER 2

COURSE CODE: BSE3202

NAME: PLANT AND ANIMAL RESOURCES

DATE: 2025-04-16

TIME: 2:00-5:00PM

INSTRUCTIONS TO CANDIDATES:

1. Read the instructions very carefully
2. The time allowed for this examination is STRICTLY three hours
3. Read each question carefully before you attempt and allocate your time equally between all the Sections
4. Write clearly and legibly. Illegible handwriting cannot be marked
5. Number the questions you have attempted
6. Use of appropriate workplace examples to illustrate your answers will earn you bonus marks
7. Any examination malpractice detected will lead to automatic disqualification.

DO NOT WRITE ANYTHING ON THE QUESTION PAPER

Section A Attempt all questions in this section (40 marks)

Question 1:

a.What do you understand by the term resource? Give 3 examples of plant and animal resources. (7 marks)
b. Mention at least five characteristics of plants (5 marks)

c. Identify the similarities & differences between plants and animals (8 marks)

d. What is photosynthesis and how is it important? (7 marks)

e. Define the following terminologies as applied to living organisms (2 marks each)
i. Heterotrophism

ii. Multicellularity

iii. Parasitism

iv. Autotrophism

f. What is a threat to plants and animals? Mention 4 examples (5 marks)

Section B Attempt any 3 questions (60 marks)

Question 1:

a. a. What are the roles of plants and animals in an ecosystem? (10 marks)
b. Communication in animals refers to the ways animals exchange information with each other to convey messages about danger, mating, food sources, or territory. Discuss the different types of communication in animals (10 marks)

Question 2:

a. What are plant nutrients? (2 marks)
b. Giving at least four examples, differentiate between macronutrients and micronutrients (8 marks)
c. Describe the process of nutrient uptake in plants (10 marks)

Question 3:

Different animals have evolved specialized feeding methods based on their diet and habitat. Discuss the various types of feeding in animals (20 marks)

Question 4:

a. Describe the processes involved in sexual reproduction in animals (10 marks)
b. With examples, discuss asexual reproduction in animals (10 marks)

Question 5:

a. What are tropisms and why are they important? (6 marks)
b. Discuss at least 6 types of tropisms (14 marks)

Question 6:

a. Discuss the steps involved in photosynthesis (10)
b. Which factors determine the rate of photosynthesis? (10 marks)