



KISII UNIVERSITY
UNIVERSITY EXAMINATIONS

**FIRST YEAR EXAMINATION FOR THE AWARD OF THE
DIPLOMA IN AGRICULTURAL AND APPLIED ECONOMICS
SECOND SEMESTER, 2023/2024
(JANUARY-APRIL, 2024)**

AGEC 0140: INTRODUCTION TO ECOLOGY

STREAM: Y1 S2

TIME: 2 HOURS

DAY: TUESDAY, 12:00 – 2:00 P.M.

DATE: 23/04/2024

INSTRUCTIONS

- 1. Do not write anything on this question paper.***
- 2. Questions in Section A are compulsory; choose the other TWO from section B.***

SECTION A: ATTEMPT ALL QUESTIONS IN THIS SECTION (40MKS)

- Describe the following:
 - Eukaryotic. (2marks)
 - Prokaryotic. (2marks)
 - Ecological succession. (2marks)
 - Predator satiation. (2marks)
 - Niche. (2marks)
- Differentiate between food chains and food webs. (4marks)
- Describe the three facts on which life on earth depends. (6marks)
- Discuss the following:
 - Net primary productivity. (5marks)
 - Gross primary productivity. (5marks)

5. Briefly explain biodiversity and its importance. (10marks)

SECTION B: ATTEMPT ANY TWO QUESTIONS IN THIS SECTION (30MKS)

6. Discuss the following types of succession:

(i) Secondary succession. (5marks)

(ii) Primary succession. (5marks)

(iii) Cyclic succession. (5marks)

7. Explain global warming. (15marks)

8. Discuss the following species interactions:

(i) Commensalism. (5marks)

(ii) Mutualism. (5marks)

(iii) Predation. (5marks)