MURANG'A UNIVERSITY OF TECHNOLOGY

SCHOOL OF AGRICULTURE AND ENVIRONMENTAL SCIENCES

DEPARTMENT OF AGRICULTURE

TVET EXAMINATION

2023/2024 ACADEMIC YEAR

FIRST YEAR **SECOND** SEMESTER EXAMINATION FOR DIPLOMA IN AGRICULTURAL EXTENSION

AG/CU/EXT/CR/02/B: SOIL AND WATER MANAGEMENT

DURATION: 2 HOURS

INSTRUCTIONS TO CANDIDATES:

1. Answer Question one and any other three questions.
2. Mobile phones are not allowed in the examination room.
3. You are not allowed to write on this examination question paper.

SECTION A: ANSWER ALL QUESTIONS IN THIS SECTION

QUESTION ONE (40 MARKS)

1.
   a. Explain the cultural methods of soil and water conservations. (5marks)
   b. Explain four types of water erosion (4marks)
   c. State three ways in which organic mulch help to conserve water in the soil. (3marks)
2.
   a. Discuss four agents of weathering (3marks)
   b. Explain the factors which influence mass wasting or solifluction. (2marks)
3. Name four micro – catchment aimed at conserving soil water around crops. (4marks)
4.
   a. State four Agricultural practices that pollute surface water sources (4marks)
   b. List three benefits of irrigation. (3marks)
   c. Highlight three advantages of drainage. (3marks)
5.
   a. Describe the various components of drip irrigation. (5marks)
   b. State four ways in which soil fertility is lost. (4marks)

SECTION B (60 MARKS): ANSWER ANY THREE QUESTIONS IN THIS SECTION

QUESTION TWO (20 MARKS)

a. State the factors that indicate that a soil is fertile. (5marks)
b. Outline the procedures of making compost manure (5marks)
c. State five characteristics of Nitrogen fertilizers (5marks)
d. Highlight ten descriptive terms commonly associated with certain range of soil PH. (5marks)

QUESTION THREE (20 MARKS)

Describe five methods of farm water harvesting. (20marks)

QUESTION FOUR (20 MARKS)

Discuss five irrigation methods giving at least two advantages of each. (20marks)

QUESTION FIVE (20 MARKS)

Discuss how Kenya land mass is classified topographically. (20marks)