SPECIFY TYPE OF EXAMINATION

FIRST ATTEMPT ☐
FIRST RESIT ☐
SECOND RESIT ☐
RE-TAKE ☐

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF AGRICULTURAL AND FOOD SCIENCES

SECOND YEAR SECOND SEMESTER UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN AGRICULTURAL & EXTENSION EDUCATION AND BACHELOR OF SCIENCE IN ANIMAL SCIENCE

2022/2023 ACADEMIC YEAR

REGULAR

COURSE CODE: APB 1202

COURSE TITLE: SOIL AND WATER CONSERVATION

DATE: **STREAM:**

TIME: 2 HOURS **EXAM SESSION:**

Instructions:

1. **Answer ALL questions in section A and ANY other 2 Questions in section B.**
2. **Candidates are advised not to write on question paper.**
3. **Candidates must hand in their answer booklets to the invigilator while in the examination room.**

Registration No……

SECTION A: (30 Marks)

Answer ALL questions from this Section.

1. Define the following terms;
    a) Soil erodibility **(2 Marks)**
    b) Erosivity **(2 Marks)**
    c) Carbon sequestration **(2 Marks)**
    d) Crop water use efficiency **(2 Marks)**
2. Why is soil tolerance important? **(3 Marks)**
3. Differentiate between soil conservation and erosion control. **(4 Marks)**
4. Explain how tillage operations affect soil structure. **(5 Marks)**
5. Discuss the role of forests in carbon sequestration. **(5 Marks)**
6. Give FIVE advantages of early planting in crop production. **(5 Marks)**

SECTION B [40 MARKS]

Answer ANY TWO questions from this Section.

7. Discuss various soil conservation practices that can be used in areas with restricted soil infiltration. **(20 Marks)**
8. Discuss the major global effects of deforestation. **(20 Marks)**
9. Discuss various practices that can be used to address climate change under the following approaches;
    a) Mitigation **(10 Marks)**
    b) Adaptation **(10 Marks)**