

**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**

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**COURSE CODE: APB 1202**

**COURSE TITLE: SOIL AND WATER CONSERVATION**

**DATE:**

**STREAM:**

**TIME: 2 HOURS**

**EXAM SESSION:**

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**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)