



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF AGRICULTURAL AND FOOD SCIENCES

**FIRST YEAR SECOND SEMESTER UNIVERSITY EXAMINATION FOR THE
DEGREE OF BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION
EXTENSION**

2019/2020 ACADEMIC YEAR

COURSE CODE: APT 3125

COURSE TITLE: PRINCIPLES OF CROP PRODUCTION

EXAM VENUE: STREAM: BSc. Agric. Ext. Educ.,

DATE: EXAM SESSION:

TIME: 2 HOURS

Instructions:

- 1. Answer ALL the questions in section A and any TWO 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.**
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SECTION A [30 MARKS]

Answer ALL questions in Section A.

- Q 1. a) Explain the qualities of a good seedbed giving reasons why this is necessary. **(3 marks)**
- b) Using the modern techniques of farming, discuss the meaning of seed rates and explain who determines it. **(4 marks)**
2. a) Explain the major concern to be considered before the plan of seedbed preparation is done. **(5marks)**
3. a) Give reasons why increasing the amount of seed per acre does not compensate for the poor tillage **(4marks)**
- b) Explain why crop rotation is necessary. **(4marks)**
4. a) What are the advantages and disadvantages of vermin compost? **(5marks)**
- b) Explain the environmental factors determining when to protect a given crop against pests. **(5marks)**

SECTION 'B' [40 MARKS]

Answer any two of the questions below. [Each question has 20 marks]

5. With the help of a diagram, describe the concept of food chain. **(20marks)**
6. Discuss the relationship between plant population and seed rates. **(20marks)**
7. Discuss the method of zero tillage and give reasons to be considered before practicing it near the water bodies. **(20marks)**
8. Explain how to conserve soil and water in a sloppy environment citing at least two methods. **(20marks)**