JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF AGRICULTURAL AND FOOD SCIENCES

THIRD YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN AGRIBUSINESS MANAGEMENT 2024/ 2025 ACADEMIC YEAR

REGULAR

COURSE CODE: APT 3321

COURSE TITLE: Perennial Crops

EXAM VENUE: **STREAM BSC. (AGRIBUS. MGT.)**

DATE: **EXAM SESSION:**

TIME: 2 HOURS

Instructions:

1. **Answer ALL questions in section A and ANY 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.**

SECTION A **[30 MARKS]**

Answer ALL questions in this section

1a. Explain the importance of mulching as a cultural practice in perennial crop production. **[6 marks**]

b. Enumerate five indicators for measuring flowering in perennial crops**. [5 Marks]**

c. Outline the factors to consider before choosing any perennial crop for production.

[5 Marks]

d. Enumerate the causes of flower and fruit abortion in Mango (*Mangosteen mangifera*). **[5 Marks]**

e. Highlight the advantages of training in fruit trees**. [6 marks]**

f. Define phase change. How could it induced in perennial crops? **[3 Marks]**

SECTION B **[40 MARKS]**

Answer ANY TWO (2) questions from this section

2a. Discuss the benefits and opportunities in perennial crop farming systems**. [15 marks]**

b. Highlight the husbandry practices facing industrial crops [**5 marks]**

3. Pruning as a procedure is among the various methods used in growth regulation of vegetative and reproductive phases of fruit trees to promote flowering and productivity. Discuss, giving examples of the basic types of pruning methods. **[20 Marks]**

4a. Discuss the role of hormones in the growth phases of perennial crops. **[14 Marks]**

b. Explain the modulating effects of perennial crops to climate related threats. **[6 marks**]