

081205T4HPN

HORTICULTURE PRODUCER LEVEL 5

HO/OS/HP/CR/01/5/B

PRODUCE TROPICAL FRUITS

July/August 2024



**TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION
COUNCIL (TVET CDACC)**

WRITTEN ASSESSMENT

3 HOURS

INSTRUCTIONS TO THE CANDIDATE

1. This paper consists of two sections; **A** and **B**
2. Answer **ALL** the question as guided in each section
3. Marks for each question are as indicated in the brackets
4. You are provided with a separate answer booklet to answer the questions
5. Do not write in this question paper

This paper consists of THREE (3) printed pages

**Candidates should check the question paper to ascertain that all pages are printed as
indicated and that no questions are missing**

SECTION A: (40MARKS)*Answer ALL questions in this section*

1. Fruits can be identified both by botanical and common name. Identify the botanical names of the following fruits. [4 marks]

Common name	Botanical name
Mango	
Orange	
Banana	
Avocado	

2. Tropical fruits can be propagated by use of different methods. State FOUR advantages of using suckers as a method of propagation in Banana. [4 marks]
3. In tropical fruits production there are various management operation that can be carried, highlight FOUR management operation carried out in Mango production. [4 marks]
4. Food safety is a major concern in tropical fruit production. List FOUR sources of food safety hazard in Custard production. [4 marks]
5. In marketing of tropical fruits, there are key Phyto-sanitary requirement to be observed. Highlight FOUR phytosanitary requirements in Papaya production. [4 marks]
6. In soil sampling, there are several factors to consider for effective results. State FOUR factors to consider when carrying out soil sampling. [4 marks]
7. Pest and disease control in Avocado production contributes to a greater cost of production. Name FOUR principles that guide decision on when and how to control pest and disease in Avocado production. [4 marks]
8. Nursery bed remains a special propagation structure used in raising seedlings before transplanting to the main field. State FOUR factors to consider when siting the nursery bed. [4 marks]
9. Good agricultural practices (GAP) is a key principle in tropical fruit production. List FOUR agricultural practices carried out in Pineapple orchard. [4 marks]
10. Producers of tropical fruits have to ensure food safety in the production program. Highlight FOUR food safety management plans that producers can employ to food safety. [4 marks]

SECTION B (60MARKS)

*Answer any **THREE** questions in this section.*

11.

- a. An extension officer from the county government has visited Banana farmers in Western Kenya. After scouting their farm he noted that the Bananas are attacked by nematodes.
- i. Highlight FIVE Symptoms he observed [5 marks]
 - ii. Control measures of the pest. [5 marks]
- b. Mango tree undergoes physiological changes that occurs on the fruit as it matures. Explain FIVE physiological changes of a Mango fruit towards maturity. [10 marks]

12.

- a. County government of Kisii County has constructed an industrial park for processing Pineapple. Mr. Mukaka a new farmer wants to venture in Pineapple farming however he is unsure of how to establish the crop, as an expert advise him on the following;
- i. Planting [6 marks]
 - ii. Harvesting [4 marks]
- b. There are several factors that govern the occurrences of different microbes which affect the quality, storage and shelf life of a fruit. Explain FIVE factors that affect the microbes activities on Banana fruits. [10 marks]

13.

- a. Plant propagation is the multiplication of plants and can be done in two ways, sexual and asexual propagation. Describe FIVE advantages of sexual propagation. [10 marks]
- b. A farmer wants to propagate his orange fruits through budding. Explain FIVE reasons why a farmer would choose to carry out budding instead of grafting Oranges. [10 marks]

14.

- a. A farmer in Isiolo County wants to establish a Papaya orchard, as an agronomist explain FIVE field management practices to be carried out on Papaya production. [10 marks]
- b. Physiological disorders are abnormalities that often arise due to imbalances in essential nutrients, moisture stress, temperature fluctuations, and hormonal irregularities. Explain FIVE physiological disorders that can found in Mango fruit. [10 marks]

THIS IS THE LAST PRINTED PAGE