



**SIR ARTHUR LEWIS COMMUNITY COLLEGE  
ACADEMIC YEAR (2024/2025) – SEMESTER TWO  
END OF SEMESTER ALTERNATE EXAMINATION**

***COURSE CODE*** : **AGR204**  
***COURSE TITLE*** : **Post –Harvest Management**  
***LECTURER(S)*** : **Germain Ambrose**  
***DATE*** :  
***TIME*** :  
***DURATION*** :  
***ROOM*** :  
***STUDENT ID #*** : \_\_\_\_\_

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**GENERAL INFORMATION AND INSTRUCTIONS**

This examination consists of **TWO (2)** sections, **SECTION A** and **SECTION B**.

- **SECTION A** consists of **TEN (10)** multiple choice questions.
- **SECTION B** consists of **TWO (2)** structured questions.
- Students must sign **IN** and **OUT** on the examination class list.
- Write your **Student ID** number on the question paper.

**DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO**

## SECTION A

**INSTRUCTIONS: Please answer all questions.**

1. This plant hormone is associated with rapid cellular elongation and apical dominance during the growth phase of plants
  - A) Auxins
  - B) Gibberellin
  - C) Chloroplasts
  - D) Abscisic acid
2. Identify the Climatic fruit form the given list:
  - A) Eggplant
  - B) Cucumber
  - C) Banana
  - D) Lemons
3. This instrument is used to measure the soluble solid content of a fruit sample:
  - A) Colorimeter
  - B) Refractometer
  - C) Penetrometer
  - D) Thermometer
4. Mycotoxins are food commodity toxins produced by which pest category
  - A) Rodents
  - B) Fungi
  - C) Insects
  - D) Mites
5. One example of food commodity damage causes by elevated temperature extremes is
  - A) Chemical residue
  - B) Sun scald
  - C) Blossom end rot
  - D) Bitterness
6. The most appropriate analytical or objective method listed that can be used to analyse the maturity level of fruit is:
  - A) Colour change
  - B) Total soluble solids
  - C) Aromatics
  - D) Texture
7. This pre - harvest factor has the most significance in terms of commodity disease resistance:
  - A) Light intensity and duration
  - B) Daily mean temperature
  - C) Genetics
  - D) Wind direction and intensity
8. The preferred market preference for okra as a fresh commodity for consumption best correlates to which category of maturation
  - A) Physiological immature
  - B) Firm and mature
  - C) Harvest ripe
  - D) Sprouting stage
9. The main objective of the United States Food and Drug Administration (USDA) Food Safety Assurance guidelines is to:
  - A) Publish guides to minimize food safety hazards for food commodities
  - B) Penalize private-sector industry
  - C) Provide market intelligence to private sector producers
  - D) Regulate market prices for food commodities

10. Primary Packaging is defined as:

- A) Packaging used by marketers to sell product to the end customer
- B) Packaging used for transporting the product from one place to another
- C) The creation of form utility
- D) An element of Porters Five Forces model

## SECTION B

**INSTRUCTIONS:** Answer all questions. Begin each question on a **NEW** sheet of paper please.

### **QUESTION ONE**

- A) Briefly explain how the respiration rate of an agricultural commodity is related to its rate of deterioration. (3 marks)
- B) What does the acronym **GAPs** stand for? (1 mark)
- C) Define the terms: Physiological and commercial maturity. (4 marks)
- D) Briefly explain **TWO (2)** factors which influence the rapid wilting or shrinkage of leafy vegetables. (4 marks)
- E) State the chemical utilized in the ripening process of bananas and why it is important to refrigerate bananas destined for export to the United Kingdom. (3marks)

**Total 15 marks**

### **QUESTION TWO**

- A) Two categories are used to generalize the quality of fresh commodities. One such category is termed Subjective methods.
- i) State **TWO (2) subjective methods** which may be used to assess the quality of fresh commodities
- ii) State the other category and a tool or instrument associated with this category. (4 marks)
- B) State the **TWO (2)** general methods or ways in which commodities may be harvested and name **ONE (1)** commodity harvested using each method. (5 marks)
- C) Briefly explain a simple method for pre- cooling commodities in the field and why precooling is necessary. (3 marks)
- D) A farmer asked you if it is a best practice to store his lettuce and passion fruit which are in separate crates together in the store room for some days before taking them to market. Briefly provide an explanation to the farmer. (3 marks)

**Total 15 marks**

**END OF EXAM**