



College of Agriculture, Fisheries & Forestry
School of Agricultural Sciences
Department of Agriculture
Trade Diploma in Agriculture – Year II
HOR-503 Post Harvest Management and Food Processing
Trimester II Final Examination – 2017

Total Marks: 100

Time Allowed: Three Hours

[An extra ten minutes is allowed for reading this paper]

Instructions

- This paper consists of 5 pages.
- Answer **ALL** questions in the answer booklet.
- Number your answers correctly.
- Please check to see that your paper is complete
- Write your students number on all the pages that you use including any additional sheet of papers.
- Printed or written material is not allowed into the examination hall.
- Mark values appear at the end of each question or part thereof.
- Non – programmable calculators are permitted

“MOBILE PHONES ARE STRICTLY NOT ALLOWED”

Section	Guidelines	Total Marks	Suggested Time
A	Part 1: Multiple choice questions	10	60 minutes
	Part 2: Fill in the blanks	10	
Part 3: True and False	10		
Part 4: Matching	10		
		40 Marks	
B	Long answers	60 Marks	120 minutes

SECTION –A

Note: Attempt all the questions.

Part 1: Multiple choice questions tick the correct answer from the following multiple choice (10 Marks)

1. The sum of chemical reactions that occurs in living organisms
 - a. Metabolism
 - b. Significant losses
 - c. No profit
 - d. None of the above

2. One of the factors that influences postharvest losses is
 - a. Physiological conditions
 - b. Hygienic conditions
 - c. Physical condition
 - d. All the above

3. The operation done after the harvesting of the crops is termed as
 - a. Pre-harvest management
 - b. Washing
 - c. Post-harvest management
 - d. Harvesting

4. Fruits that are harvested at harvestable maturity are
 - a. Nutritious
 - b. Better
 - c. Have long shelf life
 - d. Not good for producer

5. Computation standard of maturity refers to the
 - a. Persistence of style portion
 - b. Drying of outer leaf
 - c. Drying whole plant body
 - d. Days for harvesting from fruit set till maturity.

6. It is the stage where any organ of the plant attains full growth and development
 - a. The changing of colour of a fruit
 - b. Falling off a matured fruit
 - c. Maturity
 - d. Ripening

7. Water quality and safety fall under
 - a. Ripening
 - b. Deterioration
 - c. Hygiene
 - d. Grading

8. Weeding is referred to as
 - a. Postharvest management
 - b. Pre harvest management
 - c. Cultural control
 - d. None of the above

9. The distribution of goods is determined by
 - a. The quality of fruits
 - b. The perishability of the fruit
 - c. The colour of the fruit
 - d. Type of package

10. Fruits that mature after harvest are termed as
 - a. Non climatic fruit
 - b. Climatic fruit
 - c. Ripen fruit
 - d. Mature fruit

Part 2 Complete the following with appropriate answer.

(10 Marks)

1. Fairness easy separation or abscission falls under _____.
2. Ripening is a _____ process.
3. The higher the temperature the _____ respiration.
4. _____ is a skin injury caused by oil released from the oil glands in the skin after they have ruptured.
5. _____ and _____ activities are the major factors that determine the shelf life of fruits and vegetables.
6. Culling is the same as _____ for post-harvest management.
7. _____ is when a fruit detaches itself from the mother plant.
8. _____ extends the shelf life of the product.
9. The _____ and _____ of the commodity determine the typical post-harvest behavior and quality of the produce
10. _____ is caused by the dropping of the fruits from the trees.

Part 3. Write true or false on the statements that follow.

(10 marks)

1. Post-harvest management is associated with preservation of goods.
2. Irrigation is an example of pre harvest management.
3. Temperature is one of the most effective factors of post-harvest management
4. Harvestable maturity and physiological maturity are the same.
5. Transportation and distribution is not an important component of post-harvest management.
6. Impact bruising is caused by the dropping of the fruits from the trees.
7. Climatric fruits are fruits that ripen after harvest.
8. Grading is the removal of unwanted goods.
9. Temperature also plays an important role in ripening.
10. Compact bruising occurs from simply 'squeezing 'the product into too small a space.

Part 4. Match column A with column B with the appropriate answers.

(10 Marks)

Colum A		Colum B	
1.	Degreening	A	Post-harvest
2.	Physiological maturity	B	Banana
3.	Changes during ripening	C	Visual method
4.	Rodents	D	Have long shelf life
5.	Grading	E	Papaya
6.	Chemical reaction	F	Colour
7.	Clean water	G	Flavor of produce
8.	Change in colour	H	Hygiene
9.	Climatric fruit	I	unwanted goods
10.	Sorting	J	Rats

NOTE: Answer the following to the best of your ability. There are 7 optional questions given from which you are to answer only 6. Each question carries 10 marks.

1. Define post-harvest management. What is the aim and importance of post-harvest management?
2. What is meant by maturity indices and explain each method of maturity indices.
3. List down and explain the factors that are responsible for the deterioration of fruits and vegetable.
4. Differentiate the following with suitable examples
 - a. Non climatric fruits and climatric fruits
 - b. Post-harvest management and pre harvest management
 - c. Metabolic activities and shelf life
 - d. Respiration and transpiration
 - e. Hasten of ripening and delaying of ripening
5. What is hygiene and sanitation? Explain why is there a need for worker hygiene and work place sanitation
6. Define the following concepts with examples
 - A. Pre-harvest
 - B. Shelf life
 - C. Harvesting
 - D. Maturity standards
 - E. Ripening
 - F. Growth regulators
 - G. Non climetric fruits
 - H. Abscission
 - I. Degreening
 - J. Grading
7. Describe the post-harvest management methods in detail from the harvesting of produce to the transport and distribution of produce.

THE END