

FIJI NATIONAL UNIVERSITY
College of Agriculture, Fisheries & Forestry
School of Agriculture and Forestry
Department of Crop Science
Bachelor of Science in Agriculture
Semester 2 Supplementary Examination Paper – 2020
HOR701- Preservation of Fruits and Vegetables
Writing Time: 3 hours
Reading Time: extra 10 minutes allowed at the beginning of the exam
Total Marks: 100

INSTRUCTIONS:

1. This paper consists of four pages.
2. Please check to see that all your paper is complete.
3. Answer all questions in the Answer Booklet only.
4. No written or printed material and mobile phones are allowed in the examination hall.
5. Marks allocated for each section appears at the side of each question so allocate your time accordingly.
6. This paper is divided into Three Section

Section A: Multiple Choice

(10 Marks)

Section B: Short answer

(30 Marks)

Section C: Essay

(60 Marks)

Section A**Multiple Choices. Select the correct answer. (10marks)****In your answer sheet write the question number followed by the answer**

1. The attainment of a particular size or stage after which ripening takes place is called _____.
 - A. maturity
 - B. post-harvest
 - C. ripening
 - D. senescence

2. _____ is a skin injury caused by oil released from the oil glands in the skin after they have ruptured.
 - A. Ripening
 - B. Senescence
 - C. Oleocellosis
 - D. Chlorosis

3. Which of the following is not the main objective of storage _____?
 - A. Slow biological activity
 - B. Increase biological activity
 - C. Slow growth of micro-organisms
 - D. Reduce transpiration loss

4. _____ is done immediately after harvesting to strengthen the skin.
 - A. Curing
 - B. Cooling
 - C. Sorting
 - D. Grading

5. _____ is the process of decomposing green pigments in fruits by applying ethylene to give a fruit its characteristic color as preferred by the consumer.
 - A. Greening
 - B. De-greening
 - C. Curing
 - D. Ripening

6. Treatment of fruits and vegetables with boiling water or steam for short period followed by cooling is called _____.
 - A. blanching
 - B. curing
 - C. hardening
 - D. greening

7. Organic acids _____ during ripening as they respired or converted to sugars.
 - A. decline
 - B. increase
 - C. does not change
 - D. increase rapidly

8. _____ is a means of removing field heat.
- A. Pre-cooling
 - B. Curing
 - C. Sorting
 - D. Blanching
9. Application of _____ suppresses sprouting and improve shelf life by delaying the rate of ripening and senescence.
- A. Irradiation
 - B. Hydro-cooling
 - C. Controlled modified atmosphere
 - D. Barns
10. Anthocyanin is main colouring compound in _____.
- A. Tomato
 - B. Cucumber
 - C. Brinjal
 - D. Watermelon

SECTION B – Short Answers (30 marks)

Answer all the questions. Each question is worth of 5 marks.

1. Evaluate the importance of post-harvest technology.
2. Analyze the causes of post-harvest losses.
3. Evaluate the importance of fruit and vegetable preservation.
4. Analyze the advantages and disadvantages of blanching.
5. Provide valid reasons on the importance of packaging.
6. Analyse and describe zero energy cool chambers with illustrations.

SECTION C – Long Answers (60 marks)

There are eight questions in this section. Answer ONLY SIX questions.

Each question is worth of 10 marks.

1. Evaluate factors which influences ripening.
2. Evaluate the importance of fruit and vegetable preservation and discuss its advantages and disadvantages.
3. Analyze the methods of packaging or packing fruits and vegetables.
4. List and evaluate the different methods for storing fruits and vegetables.
5. Post-harvest handling is all the process through which fruits and vegetables pass from the time of harvest till they delivered to the consumer. Evaluate the process involved in post-harvest of fruits and vegetables.
6. Evaluate the major factors responsible for the deterioration of fruits and vegetables during post-harvest life.
7. Evaluate the parameters used in determining maturity indices.
8. Provide your understanding on chemical preservatives and apply your knowledge to describe chemical preservatives and food additives.

THE END!!!