



COLLEGE OF AGRICULTURE, FISHERIES AND FORESTRY (CAFF)
SCHOOL OF AGRICULTURAL SCIENCES
DEPARTMENT OF CROP PRODUCTION
BACHELOR OF EDUCATION IN AGRICULTURE YEAR III
HOR 701 (POST HARVEST MANAGEMENT AND VALUE ADDITION OF FRUITS AND
VEGETABLES)

Date of Examination:

Time:

TRIMESTER-1 FINAL EXAM-2017

DURATION 3 HOURS

INSTRUCTIONS TO STUDENTS

1. This paper consists for 4 pages. Please check to see that your paper is complete.
2. You are allowed 10 minutes extra reading time in which you are NOT permitted to write.
3. Attach all the sheets used as your answer paper in their correct sequence and secure with a string.
4. Use both sides of the answer sheet and write your candidate number on each sheet.
5. Write clearly the number(s) of the question(s) attempted on the top of each sheet.

SECTION	PARTICULARS	TOTAL MARKS	THE ALLOCATIONS
A	Part 1: Fill in the Blanks Part 2: True and False Part 3: Matching	35	30 minutes
B	Short answers	35	60 minutes
C	Long answers	30	90 minutes
	Total	100	

SECTION –A

There are three parts in this section. All the questions are compulsory. In your answer booklet write the question number followed by the answer.

Part 1: Fill in the blanks with appropriate answers.

(10×1=10 Marks)

- (1)causes de greening in oranges and banana.
- (2) The minimum juice content is in lemons.
- (3) Estimated levels of post-harvest losses in Phillipines ispercent.
- (4) Sugar content of fruit is measured by
- (5) Gibberellic acid causes development of parthenocarpic fruit in 1....., 2....., 3....., 4.....
- (6) Tapping is maturity indices for and
- (7) Pencillium is most notorious causing Fruit decay.
- (8) Is a non-climacteric fruit.
- (9) The spray of Bavistin 0.1% at 15 days interval before harvesting can control and in mango.
- (10) N – Benzyl adenine (10-20) ppm prolongs shelf life

Part 2: True or False

(15×1 =15 Marks)

1	Barley water contains 25% fruit juice.	
2	Sweetened juice contains at least 65% juice and 8% Total soluble solids.	
3	Fruit juice containing at least 20% fruit juice or pulp and 15% Total soluble solids are called – Fruit juice concentrate.	
4	Candy is a fruit or vegetable, impregnated with cane sugar or glucose syrup, and subsequently drained free of syrup and dried.	
5	A sparkling, clear, sweetened fruit juice from which pulp- and other insoluble substances have been completely removed is known as cardial.	
6	Refrigeration is the process of removing heat from an enclosed space or room or a substance or commodity.	
7	Minimum damage to commodity is an advantage of the machine harvesting.	
8	Maleic Hydrazide (MH) is a chemical used to prevent, sprout of onion during storage.	
9	Dehydration is a process where water are added to fruit and vegetables.	

10	Quick removal of moisture accelerate the growth of micro-organisms.	
11	Dehydration means the process of removal of moisture by the application of artificial heat.	
12	Drying is the process in which artificial source are used for drying.	
13	Drying of the produce above 70 ^o c does not affect the coloration of the product.	
14	Drying time is directly proportional to relative humidity of the air.	
15	The residual moisture after drying should not be more than 8 -10 percent in vegetables.	

Part 3: Match the following.

(10×1=10 Marks)

1.	A sparkling, clear sweetened fruit juice from which pulp and other insoluble substance have been completely removed.	A	Candied fruit and vegetables
2.	An edible products preserved and flavored in a solution of common salt and vinegar.	B	15%
3.	According to specification, fruits having TSS not less than 70 per cent is known as.	C	Pickle
4.	The fruit jelly in which slices of the fruit or its peel are suspended is known as	D	Glazed fruits
5.	A semi solid product prepared by boiling a clear, strained solution of pectin containing fruit extract, free from pulp, after the addition of sugar and acid.	E	Ready to serve
6.	Fruit beverage which contains at least 10% fruit juice and 10% total soluble solids besides about 0.3% acid are known as	F	Freezing
7.	A low temperature preservation process where the product is frozen at -40 ^o c is known as	G	Cordial
8.	In sauces and ketchups the minimum TSS percent remains	H	750ppm
9.	In sauces / Ketchups the permissible limit of preservative as benzoic acid is	I	Jelly
10.	A fruit or vegetable impregnated with cane sugar or glucose syrup and subsequently drain free of syrup and dried known by the name.	J	Marmalade

SECTION- B (Short Answers)

(7×5= 35 Marks)

Answer all the questions. Each question carries 5 marks.

1. Write short notes on sauces /ketchups.
2. What is Oleocellosis? What are its symptoms and reasons?
3. Write short notes on jam and jelly.
4. Write short notes on marmalade, candy and pickles
5. Write down different way of preserving pickles.
6. What are climacteric fruits? Explain with example.
7. Write short notes on Air-cooling, hydro cooling and vacuum cooling.

SECTION-C (Long answers)

(3×10=30 Marks)

Answer only three from the following questions. Each question carries 10 marks.

1. What are beverages, type of beverages. Describe in detail.
2. Write down major factors responsible for deterioration of harvested fruits and vegetables in detail.
3. What do you understand by pre- cooling, type of precooling, precooling in fruit and vegetable? Write in detail.
4. Describe method of ginger pickle preparation in detail.
5. What is packaging, importance of packaging and methods packaging and packing in detail.
6. Write in detail about importance and scope of fruit and vegetables processing in Fiji.

THE END

