



Faculty of Agriculture

End Semester Examination May 2025

AG3CO46 Post-Harvest Management & Values addition of Fruits & Vegetables

Programme	:	B. Sc. (Hons.)	Branch/Specialisation	:	AG
Duration	:	3 hours	Maximum Marks	:	50

Note: All questions are compulsory. Internal choices, if any, are indicated. Assume suitable data if necessary.

Notations and symbols have their usual meaning.

Section 1 (Answer all question(s))

Q1. Pick the odd one out which doesn't have any importance in post-harvest management?

Marks CO BL
1 1 1

Rubric	Marks
Water conservation	1

- Preservation of quality
- Water conservation
- Extension of shelf life
- Reduction of losses

Q2. Which of the following factors contributes to post-harvest losses in fruits and vegetables?

1 1 1

Rubric	Marks
Inappropriate handling and transportation	1

- Adequate storage conditions
- Inappropriate handling and transportation
- Timely harvesting
- Organic farming practices

Q3. Which technique involves the removal of moisture from fruits and vegetables to extend their shelf life?

1 2 1

Rubric	Marks
Dehydration	1

- Fermentation
- Dehydration
- Blanching
- Pickling

Q4. Which hormone enhances ripening process?

1 2 1

Rubric	Marks
Ethylene	1

- Auxin
- Ethylene
- Cytokinin
- Gibberellin

Q5. Peeling comes under which kind of post-harvest losses?

1 3 1

Rubric	Marks
Consumption	1

- Physiological
- Mechanical
- Consumption
- Metabolic

Q6. Change in colour, flavor, texture, taste comes under-

1 3 1

Rubric	Marks
Physical change	1

- Physical change Chemical change
 Microbial change All of these

Q7. Which technique involves the removal of field heat from harvested produce to prolong its shelf life?

1 4 1

Rubric	Marks
Pre-cooling	1

- Solar drying Pre-cooling
 Blanching Refrigeration

Q8. Stages of post-harvest management are-

1 4 1

Rubric	Marks
All of these	1

- Harvesting Packaging
 Transportation/ storage All of these

Q9. Chemical preservative used for preservation is-

1 5 1

Rubric	Marks
All of the above	1

- KMS (Potassium Meta bisulphate) Sodium benzoate
 Benzoic acid and its salts All of the above

Q10. The method of pasteurization is done-

1 5 1

Rubric	Marks
Below 100°C	1

- Above 100°C At about 100 °C
 Below 100°C None of the above

Section 2 (Answer all question(s))

Marks CO BL

Q11. What is post-harvest management?

2 1 1

Rubric	Marks
What is post-harvest management?	2

Q12. How does value addition in fruits and vegetable can be done? Explain with example.

2 1 1

Rubric	Marks
How does value addition in fruits and vegetable can be done?	1
Explain with example.	1

Q13. (a) Explain in brief about importance of post-harvest processing of fruits and vegetable.

4 1 1

Rubric	Marks
Explain in brief about importance of post-harvest processing of fruits and vegetable	4

(OR)

(b) Illustrate the extent and possible causes of post-harvest losses.

Rubric	Marks
Illustrate the extent and possible causes of post-harvest losses.	4

Section 3 (Answer all question(s))

Q14. Define the term quality and maturity.

Marks CO BL
2 2 1

Rubric	Marks
Define the term quality.	1
Define the term maturity.	1

Q15. Define the stages of ripening.

2 2 1

Rubric	Marks
Define the stages of ripening.	2

Q16. (a) Explain the different factors affecting post-harvest quality.

4 2 1

Rubric	Marks
Explain the different factors affecting post-harvest quality.	4

(OR)

(b) What is respiration? Explain factors affecting respiration rate.

Rubric	Marks
What is respiration?	1
Explain factors affecting respiration rate.	3

Section 4 (Answer all question(s))

Q17. What do you understand by harvesting?

Marks CO BL
2 3 1

Rubric	Marks
What do you understand by harvesting?	2

Q18.(a) Write in brief about hand and mechanical harvesting also mention its advantages and disadvantages.

6 3 1

Rubric	Marks
Write in brief about hand harvesting	2
Write in brief about mechanical harvesting	2
mention its advantages and disadvantages.	2

(OR)

(b) Define preservation. What are the different methods of preservation?

Rubric	Marks
Define preservation.	2
What are the different methods of preservation?	4

Section 5 (Answer all question(s))

Marks CO BL

2 4 1

Q19. Illustrate precooling.

Rubric	Marks
Illustrate precooling.	2

Q20. What do you understand by grading and sorting?

2 4 1

Rubric	Marks
What do you understand by grading?	1
What do you understand by sorting?	1

Q21.(a) Write the differences between fermented and non-fermented beverages.

4 4 1

Rubric	Marks
Differentiate between fermented and non-fermented beverages.	4

(OR)

(b) Make a flow chart in descriptive manner for post-harvest handling of fruits and vegetables.

Rubric	Marks
Make a flow chart in descriptive manner for post-harvest handling of fruits.	2
Make a flow chart in descriptive manner for post-harvest handling of vegetables.	2

Section 6 (Answer all question(s))

Marks CO BL

2 5 1

Q22. What do you understand by osmotic drying?

Rubric	Marks
What do you understand by osmotic drying?	2

Q23. Illustrate drying.

2 5 1

Rubric	Marks
Illustrate drying.	2

Q24. (a) Describe the different tomato products and its processing in detail.

4 5 1

Rubric	Marks
Describe the different tomato products and its processing in detail.	4

(OR)

(b) Explain canning and packaging of products.

Rubric	Marks
Explain canning	2
packaging of products.	2
