

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2026
(Second Semester)

Branch – **FOOD TECHNOLOGY MANAGEMENT**

POST - HARVEST MANAGEMENT & PROCESSING OF HORTICULTURAL CROPS

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks

(10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	Post-harvest management primarily deals with (i) Handling of produce before harvest (ii) Crop protection in field (iii) Handling of produce after harvest (iv) Irrigation management	K1	CO1
	2	Which of the following is a major cause of post-harvest loss? (i) Proper packaging (ii) Mechanical damage (iii) Cold storage (iv) Grading	K2	CO1
2	3	Grading of fruits and vegetables is mainly based on (i) Only on the basis of Weight (ii) Shape, size, and quality (iii) Storage temperature (iv) Transportation method	K1	CO2
	4	The primary objectives of pre-cooling is to (i) Increase moisture content (ii) Remove field heat (iii) Enhance ripening (iv) Improve color	K2	CO2
3	5	The main objective of dehydration is to: (i) Increase moisture content (ii) Reduce water activity (iii) Enhance enzymatic activity (iv) Increase respiration	K1	CO3
	6	Which of the following is used in osmotic drying process? (i) Sun drying (ii) Immersion in NaOH (iii) Immersion in sugar/salt solution (iv) Freeze drying	K2	CO3
4	7	What is the principle of preservation by sugar in jams and jellies? (i) Increase in pH (ii) Reduction in water activity (iii) Increased water activity (iv) Increase in moisture	K1	CO4
	8	Which of the following is essential ingredient for jelly making? (i) Protein (ii) Fat (iii) Pectin (iv) Fiber	K2	CO4
5	9	Which of the following is a plantation crop? (i) Rice (ii) Wheat (iii) Coffee (iv) Maize	K1	CO5
	10	The curing process in tea primarily involves (i) Drying only (ii) Fermentation only (iii) Both Drying and Fermentation (iv) Boiling	K2	CO5

Cont...

SECTION - B (35 Marks)Answer **ALL** questions**ALL** questions carry **EQUAL** Marks

(5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Explain in detail about the types and causes of post-harvest losses.	K2	CO1
	(OR)			
	11.b.	Elaborate on respiration of fruits and list down the factors influencing it.		
2	12.a.	Describe in detail on the methods of post-harvest handling of Fruits and Vegetables.	K2	CO2
	(OR)			
	12.b.	Explain the need and importance of post-harvest handling operations.		
3	13.a.	Examine common causes of spoilage in canned foods and suggest preventive measures.	K4	CO3
	(OR)			
	13.b.	Write a detailed note on various methods of freezing and its advantages.		
4	14.a.	Define the role of sugar in food preservation and explain processing of sweetened fruit products.	K1	CO4
	(OR)			
	14.b.	Analyze the pros and cons of preservation by sugar.		
5	15.a.	Critically evaluate the post-harvest handling and storage practices of spices.	K5	CO5
	(OR)			
	15.b.	Justify the importance of proper grading, packing, and storage in maintaining quality of plantation crops and spices.		

SECTION - C (30 Marks)Answer **ANY THREE** questions**ALL** questions carry **EQUAL** Marks

(3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Highlight the role of ethylene in fruit ripening and its commercial applications with examples.	K5	CO1
2	17	Differentiate Controlled Atmosphere packaging and Modified Atmosphere Packaging.	K4	CO2
3	18	Elaborate on the different types of drying techniques and its impact on quality and shelf life of foods.	K2	CO3
4	19	Explore suitable processing techniques to develop value-added products from potato, tapioca, and yam.	K3	CO4
5	20	Explain the stages in tea processing and its significance to tea quality.	K1	CO5

Z-Z-Z

END