

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BVoc DEGREE EXAMINATION MAY 2025
(First Semester)

Branch – FOOD PROCESSING TECHNOLOGY

FRUIT & VEGETABLE PROCESSING

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	Which gas is commonly associated with the ripening of fruits? a) Oxygen b) Ethylene c) Carbon dioxide d) Nitrogen	K1	CO1
	2	Show the climacteric fruit among the following a) Grape b) Banana c) Strawberry d) Cherry	K2	CO1
2	3	Which of the following microorganisms is primarily targeted by canning to prevent food spoilage? a) Fungi b) Viruses c) Bacteria d) Yeast	K1	CO2
	4	Explain the primary purpose of adding sugar to squash beverages a) To enhance preservation b) To change the color c) To create carbonation d) To dilute the flavor	K2	CO2
3	5	What is the typical range of water activity (aw) for intermediate moisture foods? a) 0.00 to 0.20 b) 0.30 to 0.50 c) 0.60 to 0.85 d) 0.90 to 1.00	K1	CO3
	6	Outline the typical pH range of ketchup a) 3.0 to 4.0 b) 5.0 to 6.0 c) 7.0 to 8.0 d) 8.0 to 9.0	K2	CO3
4	7	Which of the following treatments is commonly used to prevent enzymatic browning in minimally processed fruits like apples? a) Sodium benzoate b) Ascorbic acid c) Citric acid d) Vinegar	K1	CO4
	8	Illustrate the compound that is often added to functional foods for its antioxidant properties a) Sodium b) Vitamin E c) Sugar d) Monosodium glutamate (MSG)	K2	CO4
5	9	Which of the following is a primary objective of FSSAI? a) To promote international trade of food products b) To ensure the safety and quality of food products in India c) To regulate food prices d) To enhance the flavor of food products	K1	CO5
	10	Show the quality parameter that is assessed using a Brix refractometer in canned fruit products a) pH level b) Sugar content c) Color intensity d) Texture	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 the Physico-chemical changes during ripening.	K2	CO1
	(OR)			
	11.b.	Enumerate methods of precooling and its importance.		
2	12.a.	Identify defects and spoilage in canned foods.	K3	CO2
	(OR)			
	12.b.	Organize the steps involved in bottling of juices.		
3	13.a.	Discuss on the types and characteristics of Intermediate Moisture Foods.	K3	CO3
	(OR)			
	13.b.	Explain the principle and steps involved in preparation of mango pickle.		
4	14.a.	Categorize nutraceutical food and explain any one	K4	CO4
	(OR)			
	14.b.	Describe the processing methods for underutilized fruit specially focusing on passion fruit.		
5	15.a.	Examine how rehydration ratio is determined for dehydrated fruit and vegetable powders.	K4	CO5
	(OR)			
	15.b.	Analyze quality specifications and standards for jam and jelly.		

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	Categorize and explain in detail the types of maturity indices for fruits and vegetables.	K4	CO1
2	17	List the common tests used for quality control in canned foods and identify the typical defects and spoilage signs that occur.	K4	CO2
3	18	Analyze in detail the process steps in preparation of fruit bar and leather	K4	CO3
4	19	Examine the physiology and biochemistry of fresh cut fruits and vegetables.	K4	CO4
5	20	Discover the quality parameters for canned products and its influence on product stability and safety.	K4	CO5

Z-Z-Z

END