

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BVoc DEGREE EXAMINATION DECEMBER 2023
(First Semester)
Branch – **FOOD PROCESSING TECHNOLOGY**

**FRUIT AND VEGETABLE PRESERVATION/ FRUIT & VEGETABLE
PROCESSING TECHNOLOGY**

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	Find the leafy vegetable from the following (i) Cabbage (ii) Beetroot (iii) Onion (iv) Broccoli	K1	CO1
	2	Relate the chemical method to determine the maturity of the fruit (i) Size (ii) Shape (iii) Acidity (iv) Respiration rate	K2	CO1
2	3	Choose the method of removing respiratory gases or air in the canning process (i) Brining (ii) Clinching (iii) Blanching (iv) Exhausting	K1	CO2
	4	Show the clear product free from any cellular matter obtained by unfermented clarified fruit juice (i) Squashes (ii) Cordial (iii) Cruses (iv) Syrups	K2	CO2
3	5	Select the reason for Shriveling of vegetables in pickles (i) High initial salt concentration (ii) Excess addition of spices (iii) High acidic condition (iv) Over cooking	K1	CO3
	6	Infer the product which has citrus peel shreds along with 45%fruit pulp and 65%TSS (i) Jelly (ii) Jam (iii) Preserve (iv) Marmalade	K2	CO3
4	7	Name the enzyme responsible for browning of cut fruits and vegetables (i) Amylase (ii) Protease (iii) Polyphenol oxidase (iv) Lipase	K1	CO4
	8	Show the carotenoid from the following bioactive compounds (i) Flavones (ii) Flavanols (iii) Peptides (iv) Lycopene	K2	CO4
5	9	Which of the following is the FSSAI specification for Fruit squash (i) 70% fruit pulp and 10% TSS (ii) 55% fruit pulp and 75% TSS (iii) 25% fruit pulp and 45% TSS (iv) 10% fruit pulp and 10% TSS	K1	CO5
	10	Infer the percentage of Drained weight for pickle which should not be less than (i) 80% (ii) 60% (iii) 40% (iv) 20%	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.	Outline the composition and nutritive value of fruits.	K2	CO1
	(OR)			
	11.b.	Illustrate on physiological development of vegetables and ripening of fruits.		
2	12.a.	Develop a flow chart for production of canned pineapples and explain the flow chart.	K3	CO2
	(OR)			
	12.b.	Organize the processing steps involved in bottling operations.		
3	13.a.	Construct a flow chart for the production of jelly and marmalade.	K3	CO3
	(OR)			
	13.b.	Apply the principle of osmotic dehydration in preserving fruits and vegetables.		
4	14.a.	Analyze the factor affecting shelf life, merits and demerits of minimal processed fruits and vegetables.	K4	CO4
	(OR)			
	14.b.	Classify nutraceutical and list the bioactive components present in fruits and vegetables.		
5	15.a.	List the FSSAI specifications for Fruit and vegetable powders, sauce, ketchup and soup.	K4	CO5
	(OR)			
	15.b.	Examine on the procedures used for quality checking of pickles.		

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 post harvest techniques and explain each step with example.	K4	CO1
2	17	Classify beverages and examine the production process of squash and RTS.	K4	CO2
3	18	List the value added products of tomato and explain manufacturing steps of any two products.	K4	CO3
4	19	Compare and contrast the processing of any two under-utilized fruits.	K4	CO4
5	20	Examine the procedures used for analyzing the quality of canned foods.	K4	CO5