

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted from the academic year 2023 – 2024)

B.Sc. DEGREE EXAMINATION, APRIL 2026
BRANCH V(a) – PLANT BIOLOGY AND PLANT BIOTECHNOLOGY
SIXTH SEMESTER

COURSE : MAJOR – ELECTIVE
PAPER : FRUIT PRESERVATION AND NUTRITION
SUBJECT CODE : 23BT/ME/FN45
TIME : 3 HOURS

MAX. MARKS: 100

Q. No.	SECTION A CHOOSE THE CORRECT ANSWER (5 X 1 =5)	CO	KL
1.	Which preservative is most suitable for acidic fruit products? (a) Citric Acid (b) Sodium benzoate (c) Calcium propionate (d) Nitrates	1	1
2.	The sour taste of vinegar is due to (a) Citric acid (b) Lactic acid (c) Acetic acid (d) Tartaric acid	1	1
3.	Jelly sets mainly due to the presence of (a) Preservatives (b) KMS (c) Pectin (d) Salt	1	1
4.	Peeling of fruits by dipping them in caustic soda refers to (a) Flame peeling (b) Abrasive peeling (c) Lye peeling (d) Mechanical peeling	1	1
5.	Which container is commonly used in canning? (a) Plastic bottles (b) Copper cans (c) Tin cans (d) Paper boxes	1	1
FILL IN THE BLANKS. (5 X 1 =5)		CO	KL
6.	The water soluble vitamins are _____ & _____.	1	1
7.	In malolactic fermentation malic acid is converted into _____.	1	1
8.	Brine is used in canning of _____.	1	1
9.	Carotenoids are responsible for _____ pigments.	1	1
10.	The International symbol for Irradiated food is _____.	1	1
STATE WHETHER TRUE OR FALSE. (5 X 1 = 5)		CO	KL
11.	Vitamins are required in large quantities.	1	1
12.	Freeze drying involves sublimation.	1	1
13.	Refrigeration increases enzyme activity.	1	1
14.	Pectin is soluble in water.	1	1
15.	Squash is a concentrated beverage.	1	1
MATCH THE FOLLOWING. (5 X 1 =5)		CO	KL
16.	Lycopene - CO-60	1	1
17.	Vitamin A - Class I preservative	1	1
18.	Vinegar - Fat soluble	1	1
19.	Radiation - Orleans process	1	1
20.	Sugar - Carotenoid	1	1

SECTION B		(8 X 2 =16)	
Q. No.	ANSWER ANY EIGHT OF THE FOLLOWING IN 50 WORDS.	CO	KL
21.	Compare primary fermentation and secondary fermentation.	2	2
22.	Tabulate the classification of fruits.	2	2
23.	Comment on Corrugated fiberboard.	2	2
24.	Differentiate fruit squash and syrup.	2	2
25.	Trace any three health benefits of Cider.	2	2
26.	Define Blanching.	2	2
27.	What are the sources of Vitamin B complexes?	2	2
28.	List the limitations of Canning.	2	2
29.	What is Thermal Death Time?	2	2
30.	Define ageing in wine.	2	2
SECTION C		(4 X 6 =24)	
Q. No	ANSWER THE FOLLOWING IN 200 WORDS.	CO	KL
31.	List the different types of antioxidants present in fruits and vegetables. (OR)	3	3
32.	Illustrate the endpoint test for jams and jelly.	3	3
33.	Explain the microbial process in wine making. (OR)	3	3
34.	Summarise the techniques in the process of home canning.	3	3
35.	Describe the different methods of radiation in food preservation. (OR)	4	4
36.	Outline the steps involved in the preparation of lime syrup.	4	4
37.	Explain the role of low temperature in preservation of food. (OR)	4	4
38.	Interpret the methods involved in the production of vinegar.	4	4
SECTION D		(2 x 20 = 40)	
Q. No.	ANSWER THE FOLLOWING IN 1000 WORDS. DRAW DIAGRAMS WHEREVER NECESSARY.	CO	KL
39.	Elucidate the steps involved in the process of canning. (OR)	5	5
40.	Analyse the physical and chemical properties of pigments in fruits and vegetables.	5	5
41.	Elaborate the steps in the preparation of Mixed fruit jam and Grape crush. (OR)	5	5
42.	Evaluate drying and chemical preservation as methods of preserving fruits and vegetables.	5	5
