Reg.No.:				



VIVEKANANDHA COLLEGE OF ENGINEERING FOR WOMEN

[AUTONOMOUS INSTITUTION AFFILIATED TO ANNA UNIVERSITY, CHENNAI] Elayampalayam $-637\ 205$, Tiruchengode, Namakkal Dt., Tamil Nadu.

Question Paper Code: 9014

B.E. / B.Tech. DEGREE END-SEMESTER EXAMINATIONS – MAY / JUNE 2024 Seventh Semester

Computer Science and Engineering U19BTOE7 – FOOD PROCESSING AND PRESERVATION TECHNOLOGY (Regulation 2019)

Time: Three Hours

Maximum: 100 Marks

Answer ALL the questions

Knowledge Levels	K1 – Remembering	K3 – Applying	K5 - Evaluating		
(KL)	K2 – Understanding	K4 – Analyzing	K6 - Creating		

PART - A

		$(10 \times 2 = 20 \text{ Marks})$		(arks
Q.No.	Questions	Marks	KL	CO
1.	List the major constituents of food.	2	K2	CO1
2.	Name any four artificial food colorants used in food processing industries.	2	K1	CO1
3.	What are the processing steps involved in tea preparation?	2	K2	CO2
4.	Abbreviate the term HACCP.	2	K1	CO2
5.	What is blanching? Give example.	2	K1	CO3
6.	Define freezing.	2	K1	CO3
7.	How is pickling important in pickle industry?	2	K2	CO4
8.	List the various chemicals used as food preservatives in food industry.	2	K2	CO4
9.	What are the basic materials used in food packaging?	2	K1	CO5
10.	What type of packaging is used for Ice cream?	2	K2	CO5

PART – B

			$(5 \times 13 = 65 \text{ Marks})$		arks)
Q.	No.	Questions	Marks	KL	CO
11.	a)	i. How will you preserve the nutrients of foods during processing?	10	K2	CO1
		ii. Brief on the energy values of food. (OR)	3		
	b)	Describe the applications of enzymes as food processing aids in food industry.	13	K3	CO1
12.	a)	Explain the process of seafood processing and justify its importance in pasteurization step in this process.	13	K2	CO2
		(OR)			
	b)	Classify the different fermented dairy products and explain each.	13	K2	CO2
13.	a)	What is freezing? Describe the different phenomenon occurring during freezing of foods, with the help of time-temperature curve. (OR)	13	K2	CO3
	b)	Define Pasteurization. Explain the procedures and how they are helpful in processing and preservation of foods.	13	K2	CO3
14.	a)	Exemplify the Super critical technology for food preservation.	13	K2	CO4
		(OR)			
	b)	Justify the significance of hurdle technology in preservation of foods.	13	K2	CO4
15.	a)	Define retort pouch. Illustrate the process of retort pouch packaging and its importance.	13	K2	CO5
		(OR)	1/4		
	b)	Summarize the types of packaging designs used in food processing.	13	K3	CO5
		PART – C			
			$(1 \times 15 =$	= 15M	arks)
Q.N	Vo.	Questions	Marks	KL	CO
16.	a)	You are asked to design the processing of condiments for a condiment industry. Write in detail with process flow sheet for the processing of condiments. (OR)	15	K6	CO2
	b)	A start up food processing industry approaches you for the food preservation to extend the shelf life of food. Elaborate the types of food additives which you suggest to improve its quality.	15	K6	CO1