


Name:			
Enrolment No:			
UNIVERSITY OF PETROLEUM AND ENERGY STUDIES End Semester Examination, May 2023			
Course: Food Processing Technology Program: B.Tech. FT Course Code: HSFT 2007 Instructions:		Semester: IV Duration: 3 Hours Max. Marks: 100	
S. No.	Section A Short answer questions/ MCQ/T&F (20Qx1.5M= 30 Marks)	Marks	COs
Q1	Jam generally contains Total Soluble Solids (TSS) percentage – a) 80.5% b) 90.5% c) 68.5% d) 71.3%	1.5	CO1
Q2	The number of soluble solids that are dissolved within a substance. It is determined using – a) Penetrometer b) Refractometer c) Thermometer d) pH meter	1.5	CO1
Q3	The fruit and sugar ratio for Jam is a) 1:2 b) 1:1 c) 1:4 d) 1:3	1.5	CO1
Q4	How much percent of sugar is necessary for preservation of fruits? a) 45 b) 58 c) 40 d) 66	1.5	CO1
Q5	Ice crystals in frozen meat should be formed by rapid crystallization. a) True b) False	1.5	CO1

Q6	Which of the following dryer is used to produce powder from the solution? a) Spray dryer b) Cabinet tray dryer c) Pneumatic dryer d) Fluidized bed dryer	1.5	CO2
Q7	What is full form of LSU dryer? a) Louisiana State University dryer b) Low simple universal dryer c) Low and slow unit dryer d) Level steady unit dryer	1.5	CO2
Q8	Evaporation, desiccation and dehydration all mean the same thing. a) True b) False	1.5	CO2
Q9	Which of the following is an advantage/use of dried food items? a) Lesser cost and minimum labor required b) Limited processing equipment and minimum food storage requirements c) Reduction in distribution costs d) All of the mentioned	1.5	CO2
Q10	Carbon dioxide is used due to which of its property in food packages? a) Anti-collapse property b) Filling property c) Antimicrobial property d) Ethylene displacing property	1.5	CO2
Q11	Which of the following is true about fruits and vegetable processing? a) They get spoil very fast and hence need to be consumed soon b) They have high moisture content and should be kept in a cold, dark place c) They're tender and hence get spoiled easily d) All of the mentioned	1.5	CO3
Q12	Statement 1: Primary processing such as trimming, sorting, cleaning can be done to add value to products. Statement 2: Secondary processing such as converting raw materials to products such as jellies, marmalade etc. a) True, False b) True, True c) False, False	1.5	CO3

	d) False, True		
Q13	Statement 1: Jam cannot be made using pulp of more than one fruit. Statement 2: Acid and Pectin content is more in over-ripe fruits than in under-ripe fruits. a) True, False b) True, True c) False, False d) False, True	1.5	CO3
Q14	What is marmalade? a) It is a fruit preserve. b) It is a vegetable preserve. c) Both and b. d) None of the above.	1.5	CO3
Q15	Which one is the major component of Mason jar? a) Glass. b) Aluminum. c) Steel. d) Cardboard.	1.5	CO3
Q16	What is canning? a) Application of high temperature to food. b) Application of low temperature to food. c) Both and b. d) None of the above.	1.5	CO4
Q17	Which one is the key requirement of food preservation? a) For future need. b) To preserve food when the availability of food is more than the present use. c) For more marketing. d) All of the above.	1.5	CO4
Q18	_____ is the most widely used inert gases in MAP. a) Xenon b) Krypton c) Argon d) Helium	1.5	CO3
Q19	Which of the following is the most soluble gas used in MAP? a) Carbon Dioxide b) Nitrogen c) Oxygen d) Argon	1.5	CO4

Q20	_____ employs a continuous gas stream that flushes air out from the package prior to sealing. a) Thermal sealing b) Gas flushing c) Thermal flushing d) Pressure sealing.	1.5	CO3
Section B (4Qx5M=20 Marks)			
Q 1	What do you understand by CAP and MAP packaging? Differentiate between them.	5	CO4
Q 2	What are the primary pigments imparting color in fruits and vegetables?	5	CO2
Q 3	Define fruit. What are the different regions of fruits?	5	CO1
Q 4	Write down different operations in fruit and vegetable processing with detailed procedures.	5	CO1
Section C (2Qx15M=30 Marks)			
Q 1	Ravi wants to set up a CAS unit for fruits and vegetables. Write down different components of this unit. (5 marks) Describe the principle and working of all components in detail. (10 marks)	15	CO4
Q 2	Sourabh owns a fruit and vegetable canning unit. Answer the following questions: a) List out the various equipments required in his unit and its importance. (5 marks) b) What are the different types of can spoilage? (10 marks)	15	CO4
Section D (2Qx10M=20 Marks)			
Q 1	What are the different reasons for the under processing of cans? Describe post processing spoilage of cans?	10	CO2
Q 2	Describe the drying and refrigeration processes with its advantages and disadvantages	10	CO3