CLASS: IMSc   SEMESTER : VII
BRANCH: FOOD TECHNOLOGY   SESSION : MO/18

SUBJECT: SAF1007 ADVANCED FOOD PROCESSING

TIME: 3 HRS.   FULL MARKS: 60

INSTRUCTIONS:
1. The question paper contains 7 questions each of 12 marks and total 84 marks.
2. Candidates may attempt any 5 questions maximum of 60 marks.
3. The missing data, if any, may be assumed suitably.
4. Before attempting the question paper, be sure that you have got the correct question paper.
5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.

Q.1(a)	What do you mean by Adequacy of Blanching?	[2]
Q.1(b)	Write about methods of use of high temperatures in processing of food.	[4]
Q.1(c)	Describe the principles of food preservation with suitable examples.	[6]
Q.2(a)	How loss of texture can be prevented during blanching, give example also?	[2]
Q.2(b)	What are the advantages and limitations of conventional steam and hot-water blanchers?	[4]
Q.2(c)	Describe the Ultra high-temperature (UHT)/aseptic processes and its effects on food.	[6]
Q.3(a)	What are the advantages and disadvantages of IQF?	[2]
Q.3(b)	Describe the limitations and advantages of MAS and CAS.	[4]
Q.3(c)	Make a general flow-chart for production of frozen fruits and describe it with example.	[6]
Q.4(a)	Define the term "Membrane".	[2]
Q.4(b)	Write about the applications of membranes technology in food industry.	[4]
Q.4(c)	What are different types of membrane modules, describe them?	[6]
Q.5(a)	What do you mean by Non-thermal processing methods?	[2]
Q.5(b)	How High Pressure effecting the Microorganisms in food?	[4]
Q.5(c)	Describe the Cold plasma technology for microbial inactivation or destruction.	[6]
Q.6(a)	Define the term "Enzyme" and give Five names of enzymes required in food industry.	[2]
Q.6(b)	What are the positive and negative effects of fermentation on foods?	[4]
Q.6(c)	Give the classification Food Fermentations and role of enzymes in fermentation.	[6]
Q.7(a)	Why food additives are required during processing of food?	[2]
Q.7(b)	Write about food additives classified as Nutrient Supplements and Non-nutritive Sweeteners.	[4]
Q.7(c)	Describe the 5 categories of GRAS additives recommended by American society.	[6]

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