

PARUL UNIVERSITY
PARUL INSTITUTE OF APPLIED SCIENCES
MID SEMESTER INTERNAL EXAMINATION, summer - 2020
B. Sc. Semester IV
Subject: Food Processing Equipment-II
Title of the paper: Food Processing Equipment-II

Paper Code: 11113251

Date: 02/03/20, Monday

Time:90 min

Maximum Marks: 40

Instructions:

1. All questions are compulsory and options are given in first and second question only.
2. Numbers to the right of question indicate the marks of respective question.

Q. 1	Attempt any one question of the following. (i) Draw the structure of vapor compressor refrigeration system & explain their components. In details. (ii) What is Food Irradiation? describe in detail	(08)
Q. 2	Attempt any three questions of the following. (i) What happen, suppose condenser is not working during running the vcr cycle? (ii) What is baking? write down the applications (iii) What is roasting? write down the application (iv) Write a Importance & application of VCR System (v) Write a nutrition effects of Irradiation	(12)
Q. 3	Do as directed. Attempt all five questions. (i) Gamma rays. (ii) E-Beam. (iii) X- rays. (iv) condenser (v) kGy	(05)
Q. 4	Write correct option in your answer sheet for following 15 multiple choice questions.	(15)

MCQ 1	Food irradiation has proven to be a safe & effective as a			
	(A)	Non thermal process	(B)	Thermal process
	(C)	Hurdle technology	(D)	Freezing process
MCQ 2	FDA has approved irradiation of food for limited purposes since			
	(A)	1963	(B)	1965
	(C)	1987	(D)	2005
MCQ 3	Gamma ray photons have a than either ultraviolet or x- ray photons			
	(A)	Higher frequency	(B)	Lower frequency
	(C)	Both A & B	(D)	None of the above
MCQ 4	The disadvantage of E- beam is its			
	(A)	Short penetration depth	(B)	Long penetration depth
	(C)	Both A & B	(D)	None of the above

MCQ 5	1 kGy indicates that the target sample receives..... joules			
	(A)	1000	(B)	100
	(C)	125	(D)	900
MCQ 6	The D value is the dosage of radiation required to reduce the microbe population of a sample by %			
	(A)	50	(B)	90
	(C)	80	(D)	70
MCQ 7	The energy of electron guns used for E- beams & x-rays is typically measured in.....			
	(A)	Electron volts (eV)	(B)	Power volts (pw)
	(C)	Volts (v)	(D)	Dielectrics
MCQ 8	More radiations is required to kill microbes in..... Food			
	(A)	Frozen foods	(B)	Canned foods
	(C)	Perishable foods	(D)	Non – perishable foods.
MCQ 9	The most common baked items Range of Baking is ⁰ C			
	(A)	180-220	(B)	178-232
	(C)	150-170	(D)	Less than 180
MCQ 10	Roasting is a cooking methods that used form			
	(A)	Burn to fire	(B)	Dry heat
	(C)	Frying to hot oil	(D)	All of above
MCQ 11	VCR cycle starts to			
	(A)	Condenser – compressor – expansion valve – evaporators	(B)	Compressor - Condenser – expansion valve – evaporators
	(C)	Compressor – Condenser – evaporators – expansion valve	(D)	Evaporators -Condenser – compressor – expansion valve
MCQ 12	VCR' system based on four components			
	(A)	Compressor - Condenser – expansion valve – evaporators	(B)	Compressor – Condensation – heat control – evaporators
	(C)	Magnetron – fans – magnetic device – switch	(D)	None of this
MCQ 13	To complete the refrigeration cycle, refrigeration vapors from the evaporators is again a saturated vapors and is routed back in to the			
	(A)	Expansion valve	(B)	Compressor
	(C)	None of this	(D)	Evaporators
MCQ 14	The flow of the refrigerants in refrigeration cycle is controlled by			
	(A)	Expansion valve	(B)	Compressor
	(C)	Compressor	(D)	Evaporators
MCQ 15	In a VCR' cycle the vapors as it leave the compressor is ..			
	(A)	In liquid Form	(B)	Wet Vapors
	(C)	Dry & Saturated vapors	(D)	None of the above.