UNIVERSITY OF RUHUNA

BACHELOR OF SCIENCE (GENERAL) DEGREE LEVEL III SEMESTER I EXAMINATION –2020 (NOVEMBER 2021)

Subject	: Botany					
Course	Unit: BOT3172 (Food Technology)					
Time: 1	.5 hours	Index NO:	Index NO:			
Answer	ONLY THREE questions including qu	nestion No. 1				
1) Pa	urt A		(24 marks			
Sele	ct the most appropriate answer from a,b	,c and d	(2 / 11/1/12)			
i)	The reason for a food crisis is					
	a. high consumer demand	b. low production	vity			
	c. increased population	d. above all				
ii)	solution	is more suitable for avoidin	g cut apple browning			
	a. sodium sulfite solution	b. pure water				
	c. ascorbic acid solution	d. salt solution				
iii)	Which of the following accelerates fruit ripening?					
	a. ethylene b. ammonia	c. methane	I. none of the above			
iv)	is not used as a foo	od rapping material				
	a. plastic b. polythene		I. leather			
v)	What is the purpose of blanching of v	regetables during the canning	ng process?			
	 a. to soften the product to fill l b. to denature enzymes that ch c. to reduce microbial population d. all of the above 	ange colour and texture				
vi)	What is the test used to identify the pa. Biuret test b. Iodine test	rotein in a food sample? c. Benedict's test	d. non of the above			

- The process of preserving food by rapid freezing followed by dehydration under vacuum is vii) called
 - a. lyophilisation
- b. sterilization
- c. cold dehydration d. cryopreservation

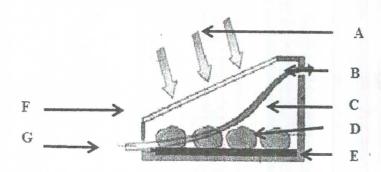
- Which of the following is a result of freezer burn? viii)
 - a. irreversibly changes colour, texture, flavour and nutritive values of frozen foods
 - b. roast beef turns light brown
 - c. dehydration of food items takes place
 - d. all of the above

Part B

Write down the most suitable answer in given space for all parts

i) Label from A to G in the following Figure

(14 Marks)



Α	 	;	
В	 		
C	 		
D	 		
E	 		
F	 		
G	 		

i)	Name the process demonstrated by above figure	(02 Marks)
ii)	Briefly explain the principle behind the above process.	(08 Marks)
iii)	List the three advantages and disadvantages of this process.	
,	Advantages	(0636.1)
		(06 Marks)
		• • • • • • • • • • • • • • • • • • • •
	Disadvantages	(06 Marks)
		• • • • • • • • • • • • • • • • • • • •
(v)	What are the factors that determine the drying time of a food?	(10 marks)

V)	Why some cut fruits become brown at room temperature?	(06 marks)

		••••••
		• • • • • • • • • • • • • • • • • • • •
vi)	Assume that you are given an apple and three type of solutions concentrations. Write down the major steps you should follow to find solution which can be used to control browning of cut apple	with similar
		(10marks)
vii)	List 4 information contained in a proper food label	(08 marks)
	······································	
viii)	Give 1 example for each food type of the following.	
a. Per		(06 marks)
L C	ishable food	
o. sen	ni perishable food	
c. Nor	p-perishable food	

.

F

- 2) i) What is the definition of food preservation?
 - ii) Briefly explain the advantages of food preservations.
 - iii) List the five pre-treatment methods which are applied for fruits preservation.
 - iv) What are the major steps in "Boiling Water Canning".
- 3) i) Explain the followings
 - a. food spoilage and food poisoning
 - b. food toxification and food intoxication
 - ii) Briefly describe the reasons for food spoilage
 - iii) What are the measures that can be used to control food poisoning?
 - iv) Discuss the importance of plastic boxes for transporting vegetables and fruits
- 4) Write short notes on any three of the following
 - i) Sharp freezing of food
 - ii) Microwave radiation in food preservation
 - iii) Food packaging
 - iv) Enumeration of bacteria in a spoiled rice pack