1. Answer any *five* questions from the following:



UNIVERSITY OF NORTH BENGAL

B.Sc. Honours 3rd Semester Examination, 2021

GE2-P1-FOOD TECHNOLOGY

CHEMISTRY, FUNDAMENTALS OF NUTRITION AND MICROBIOLOGY IN FOOD TECHNOLOGY

Time Allotted: 2 Hours Full Marks: 40

The figures in the margin indicate full marks.

 $1 \times 5 = 5$

	(a)	Name the monomer of starch.	
	(b)	Give an example of neutral amino acid.	
	(c)	Give an example of saturated fatty acid.	
	(d)	Which vitamin helps in blood clotting?	
	(e)	Define starter culture.	
	(f)	Name a pathogenic bacteria that occurs in foods.	
	(g)	What is CFU/ml?	
	(h)	Define pasteurization.	
2.		Answer any <i>three</i> questions from the following:	5×3 = 15
	(a)	Draw all the structures of glucose.	5
	(b)	Write a note on the classification of proteins.	5
	(c)	What do you mean by denaturation of proteins? What is saponification? What is saponification number?	2+2+1
	(d)	Write a short note on the microbiological techniques used in the food industry.	5
	(e)	Explain food preservation by the use of chemicals.	5
3.		Answer any <i>two</i> questions from the following:	$10 \times 2 = 20$
	(a)	What are disaccharides? Give examples. What do you mean by storage carbohydrate? Give examples. Write a note on rancidity.	(2+1) +(2+1)+4
	(b)	Write a note on the structure of protein. What are vitamins and what role do they play? What do you mean by macro minerals? Give examples.	4+(2+1) +(2+1)
	(c)	Define food spoilage. How does the spoilage of milk take place?	2+8
	(d)	Explain briefly the historical developments in Food microbiology?	10
		V	

3240