GURU NANAK INSTITUTE OF TECHNOLOGY
An Autonomous Institute under MAKAUT
2022
BIOCHEMISTRY AND NUTRITION
FT401

TIME ALLOTTED: 3 HOURS **FULL MARKS: 70**

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable

GROUP – A
(Multiple Choice Type Questions)
Answer any *ten* from the following, choosing the correct alternative of each question: **10×1=10**

			Marks	CO No
1	(i)	Enzymes are a. Proteins b. Carbohydrates c. Nucleic acids d. DNA molecules	1	CO5
	(ii)	Which one of the following groups of chemical is not a food nutrient? a. Carbohydrates b. Vitamins c. Proteins d. Enzymes	1	CO5
	(iii)	Which of the following minerals is a constituent of cell membranes and nucleic acids? a. Zinc b. Potassium c. Phosphorous d. Manganese	1	CO4
	(iv)	Net gain of ATP in glycolysis cycle a.5 ATP b.2 ATP c.8 ATP d.10 ATP	1	CO5
	(v)	Pepsin is inhibited by a.Iodoacetate b.DHAP c.Both of these d.None of these	1	CO2
	(vi)	LDH-I_1 found in a.Brain b.Kidney c. RBC d. all of these	1	CO2

GROUP – C
(Long Answer Type Questions)
Answer any ***three*** from the following: **3×15=45**

			Marks	CO No
7.	(a)	What is bioavailability? How can you calculate systemic bioavailability, describe with diagram?	11	CO5
	(b)	Describe Lindeman's 10% law of energy transfer	4	CO5
8.	(a)	Explain the different structures of proteins with a diagram.	7	CO3
	(b)	Explain- Digestion and absorption of protein in human body.	8	CO3
9.	(a)	What is BMR and BMI?	4	CO1
	(b)	Classify enzymes with example.	11	CO1
10.		Write short notes on any three of the followings:	3x5=15	
	(a)	Functions and deficiency of Vitamin C	5	CO2
	(b)	Functions and deficiency manifestations of calcium	5	CO2
	(c)	Ketosis	5	CO5
	(d)	Gluconeogenesis	5	CO3
11.	(a)	What are water-soluble vitamins? Write their sources.	7	CO2
	(b)	What professional advices you will give to a person having severe vitamin deficiency?	8	CO2