PRN:		Course Code :	P26PC302

Second Year BSc.MLT End Semester Examination Summer 2024

Fundamental Biochemistry 000582

Day and Date: Mon 2 DEC 2024 Max Marks: **50**

Time : 10:30AM To 12:30PM Duration: **02** hrs

Instructions: All questions are compulsory.

			Marks	Bloom's Level	CO
Q.1		**Attempt the following**			
	a)	What is indicator? Explain it with one example.	02	L1	1
	b)	Define molality and give its formula.	02	L1	2
	c)	What is the difference between stock standard and working standard?	02	L2	3
	d)	Define non reducing sugar with one example.	02	L1	2
	e)	Define saturated and unsaturated fatty acids.	02	L1	2
Q.2		**Attempt any two from the following**			
	a)	What is indicator? Explain with examples.	05	L1	2
	b)	Give a detailed explanation of any two buffer systems present in human body.	05	L2	3
	c)	Explain Bronsted Lowry acid-base theory with concept of conjugate acid base.	05	L1	3
Q.3		**Attempt any two from the following**			
	a)	Explain concentration of solutions by w/w and v/v.	05	L1	2
	b)	Define molarity .How to calculate it ? Explain preparation of one molar solution of NaCl. (Atomic mass of Na= 23, Cl=35)	05	L1	3
	c)	Define- 1.saturated solution 2.Molality 3.% w/v 4.stock solution 5.Standard solution	05	L1	3
Q.4		**Attempt any two from the following**			
	a)	Explain in detail technique of serial dilution of sample with neat labelled diagram.	05	L2	2
	b)	How to prepare 250 ml of 0.2 M of solution of NH3 using stock solution of 2 M NH3.	05	L1	3
	c)	Explain Fluid Mosaic model structure of plasma membrane with suitable diagram.	05	L3	3
Q.5		**Attempt any two from the following**			
	a)	Describe in detail-Primary and secondary structure of protein.	05	L3	3
	b)	Explain osazone test with its advantages and limitations.	05	L1	2
	c)	What are lipids? Explain simple and compound lipids.	05	L1	2

ESE