



Department of Genetic Engineering and Biotechnology
Faculty of Health and Life Sciences
B. Sc. (Hons.) in Genetic Engineering and Biotechnology
Midterm Examination Fall 2025

Course Code: 0512-1307
Level and Term: L1, T3
Time: 1 Hour 30 Minutes

Section: 251 (A+B)

Course Title: Enzymology
Course Teacher Initials: DMI & DNH
Total Marks: 25

Splitting any answer is strictly prohibited

			Marks
1	(a) Explain the terms enzyme and enzymology.	[CLO1, PLO1, C1]	2
	(b) State the fundamental properties of enzymes.	[CLO1, PLO2, C1]	3
2	(a) Write the approaches of enzyme nomenclature.	[CLO1, PLO2, C2]	1
	(b) Describe four enzyme classes with suitable examples.	[CLO1, PLO2, C2]	4
3	(a) Define enzyme specificity.	[CLO2, PLO1, C2]	1
	(b) Explain the Lock and Key and Induced Fit Models of enzyme specificity.	[CLO2, PLO2, C2]	4
4	(a) State the Lineweaver-Burk equation.	[CLO2, PLO1, C2]	1
	(b) Discuss the factors affecting the rate of enzymatic reactions.	[CLO2, PLO1, C6]	4
5	(a) Explain the Michaelis-Menten Model in enzyme kinetics.	[CLO2, PLO1, C2]	3
	(b) Write the biological significance of enzyme kinetics.	[CLO3, PLO3, C3]	2