



Department of Genetic Engineering and Biotechnology
Faculty of Health and Life Sciences
B. Sc. (Hons.) in Genetic Engineering and Biotechnology
Midterm Examination Spring 2026

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

Section: 252 (A+B)

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

		Marks
1	(a) "Enzyme is a biocatalyst". Explain the statement. [CLO1, PLO1, C2]	2
	(b) Illustrate the structure of enzyme. Write the key properties of enzymes. [CLO1, PLO2, C2]	3
2	(a) Briefly discuss the oxidoreductases and isomerases enzymes with suitable examples. [CLO1, PLO2, C6]	3
	(b) Discuss the Enzyme Commission (EC) number of hexokinase (EC 2.7.1.1). [CLO1, PLO2, C6]	2
3	(a) Define enzyme specificity. Classify the methods of enzyme assay. [CLO2, PLO1, C4]	2
	(b) Explain the Induced Fit Models of enzyme specificity. [CLO2, PLO2, C5]	3
4	(a) How the temperature and pH affect the enzymatic reaction? [CLO2, PLO1, C1]	3
	(b) "At a certain point of enzymatic reaction, increment of substrate concentration do not increase the reaction rate". Explain the statement. [CLO2, PLO1, C2]	2
5	(a) Describe the Lineweaver-Burk Model in enzyme kinetics. [CLO2, PLO1, C5]	3
	(b) Identify the limitations of Michaelis-Menten equation of enzyme kinetics. [CLO3, PLO3, C3]	2