ourdiu.com | Shared by Abdullah Tawsif (CSE-232)

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

Course Code: 0512-1209 **Course Title:** Computer Fundamentals and Computational Biology

Level and Term: L-1, T-2 **Section: 251 A, B** **Course Teacher Initials: MZA**

Time: 1 hour 30 minutes **Total Marks: 25**

Splitting any answer is strictly prohibited

			CLO, PLO, C	Marks
1	(a)	Explain these keywords: Phishing, Malware and Encryption.	CLO1, PLO1, C2	3
	(b)	What can you asses about The Future of Computing?	CLO1, PLO1, C5	2
2	(a)	Write down the key features of control unit in a processor.	CLO1, PLO1, C1	3
	(b)	Describe the GPU system in a computer.	CLO1, PLO1, C2	2
3	(a)	Define three basic logic gates and state their respective Boolean expressions	CLO2, PLO3, C1	3
	(b)	Explain the role of a truth table in analyzing logic gate operations. Provide an example with AND and OR gates.	CLO2, PLO3, C2	2
4	(a)	Design two OR gate using NAND gate and NOR gate.	CLO2, PLO3, C6	3
	(b)	State and prove the 2nd statement of De Morgan using truth table.	CLO2, PLO3, C4	2
5	(a)	Find out the value of Q with respect to A, B and C.	CLO2, PLO3, C3	2
	(b)	Reduce the Q expression as much as possible using Boolean algebra.	CLO2, PLO3, C4	3

