



Daffodil International University

Department of Agricultural Science

Faculty of Health & Life Sciences

Final Examination, Semester: Fall 2025

Course Title: Biochemistry-I (General Biochemistry)

Section: A, B, C

Course Teacher: DFB, DRH

Full Marks: 40

Course Code: 0815-1105

Level & Term: L-1, T-2

Time: 2 Hrs

"Split answering is strictly prohibited"

Q1. Mention the major area of study of biochemistry and importance of biochemistry.	CLO1, C2	3
Q2. a) Define primary metabolites with examples.	CLO2, C1	3
b) Evaluate the difference between primary and secondary metabolites. Discuss the role of secondary metabolites.	CLO2, C2 + C5	2+4
c) Illustrate the functions of alkaloids.	CLO2, C3	2
Q3. a) Mention the four steps of the enzyme mechanism.	CLO3, C1	4
b) Describe the industrial applications of enzymes.	CLO3, C2	4
c) Describe the lock and key mechanism of enzymes with diagram.	CLO1, C3	3
Q4. a) Define saturated fatty acids. Mention the classification of fatty acid.	CLO4, C1 + C2	1+3
b) Describe the biological function of lipid. Classify the lipid.	CLO4, C3 + C2	3+3
c) Discuss the industrial application of lipids in the production of soaps and detergents.	CLO4, C4	5