



Department of Genetic Engineering and Biotechnology
Faculty of Health and Life Sciences
B. Sc. in Genetic Engineering and Biotechnology
Midterm Examination Spring 2025

Course Code:
GEB 0512-1101

Course Title: Introduction to Genetic
Engineering and Biotechnology

Level and Term: L-1, T-1
Time: 1 hour 30 minutes

Section: 251 A, B

Course Teacher Initials: KMH, DFB
Total Marks: 25

Splitting any answer is strictly prohibited

		Marks
1	(a) Explain the terms genetic engineering and biotechnology [CLO1, PLO1, C2] and briefly outline the history.	2
	(b) Demonstrate the applications of genetic engineering and biotechnology. [CLO1, PLO2, C2]	3
2	(a) Write down three commercial products produced by biotechnological process. [CLO3, PLO2, C6]	2
	(b) Explain recombinant DNA technology and summarize the key steps in recombinant DNA technology. [CLO2, PLO2, C2]	3
3	(a) Illustrate the biological tools being used in recombinant DNA technology. [CLO3, PLO2, C6]	2
	(b) Define plasmid with appropriate diagram. [CLO3, PLO2, C2]	3
4	(a) Discuss on importance and challenges of commercialization of biotechnology in developing countries. [CLO2, PLO2, C4]	2
	(b) Write down a short note on DNA, RNA, Animal cell. [CLO3, PLO2, C2]	3
5	(a) Choose the key areas of biotechnology in medicine. [CLO3, PLO2, C3]	2
	(b) Briefly discuss on somatotropin and insulin hormones. [CLO3, PLO2, C6]	3