



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: 0512-1101

Course Title: Introduction to Genetic Engineering and Biotechnology

Level and Term: L-1, T-1

Section-253 (A+B)

Course Teacher Initials: KMH

Time: 1 Hour 30 Minutes

Total Marks: 25

Splitting any answer is strictly prohibited

		Marks
1. (a) Explain the terms Genetic Engineering and Biotechnology and write its applications.	[CLO1, PLO1, C5]	2.5
(b) Discuss on multidisciplinary nature of biotechnology with special references to <u>biology and life sciences; agriculture and food science; and information technology & computational sciences.</u>	[CLO3, PLO2, C6]	2.5
2. (a) Elaborate the potential benefits of biotechnology for developing countries.	[CLO3, PLO2, C6]	2.5
(b) Outline the strategies for successful <u>commercialization of biotechnology in developing countries.</u>	[CLO3, PLO2, C2]	2.5
3. (a) Explain the challenges faced and success stories of biotechnology by developing countries.	[CLO3, PLO2, C5]	3
(b) <u>Demonstrate the strategies for promoting biotechnology in developing countries.</u>	[CLO3, PLO2, C2]	2
4. (a) Define and discuss the key steps in Recombinant DNA (rDNA) technology.	[CLO2, PLO2, C6]	3
(b) Explain the applications of Recombinant DNA technology.	[CLO2, PLO2, C5]	2
5. (a) Enlist the tools, ethical, social, and safety considerations of recombinant DNA technology.	[CLO2, PLO2, C4]	3
(b) Write short notes on (i) Nanotechnology and (ii) Medicine & Healthcare.	[CLO3, PLO2, C6]	2