



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:
 GEB 0512-1101

Course Title: **Introduction to Genetic
 Engineering and Biotechnology**

Level and Term: L-1, T-1
 Time: 01 Hour 30 Minutes

Section: 252 (A+B)

Course Teacher Initial: KMH

Total Marks: 25

Splitting any answer is strictly prohibited

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|---|--|------------------|-------|
| 1 | (a) Discuss the prospects of genetic engineering and biotechnology. | [CLO1, PLO1, C6] | 3 |
| | (b) Outline the applications of genetic engineering and biotechnology. | [CLO1, PLO2, C2] | 2 |
| 2 | (a) Discuss on four suitable parameters regarding multidisciplinary nature of biotechnology. | [CLO3, PLO1, C6] | 3 |
| | (b) Explain the potential benefits of biotechnology for developing countries. | [CLO3, PLO2, C5] | 2 |
| 3 | (a) Demonstrate the strategies for successful commercialization of biotechnology in developing countries. | [CLO3, PLO1, C2] | 2 |
| | (b) Elaborate the key steps in recombinant DNA technology. | [CLO2, PLO2, C6] | 3 |
| 4 | (a) Organize three suitable biological tools being used for rDNA technology. | [CLO2, PLO2, C3] | 2 |
| | (b) Illustrate four suitable methods of gene transfer. | [CLO2, PLO2, C2] | 3 |
| 5 | (a) What are the challenges of biotechnology and genetic engineering in developing countries? | [CLO1, PLO2, C1] | 3 |
| | (b) Critically summarize the public perception and ethical concerns regarding genetic engineering and biotechnology. | [CLO3, PLO2, C2] | 2 |