

No. of Printed Pages : 1

Sl. No.



21BTH1C1L

M.Sc. I Semester Degree Examination, April/May - 2023

BIOTECHNOLOGY

Cell and Molecular Biotechnology

Time : 3 Hours

Maximum Marks : 70

Note : (i) Answer **any five** of the following questions with **Question No. 1 (Q1) compulsory**, each question carries **equal** marks.
(ii) Draw neat diagrams wherever necessary.

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| 1. | Explain in detail membrane vesicular traffic. | 14 |
| 2. | Write an account on cytoskeletal proteins. | 14 |
| 3. | Explain the role of secondary messengers in cell signaling. | 14 |
| 4. | Describe post transcriptional modifications of m-RNA. | 14 |
| 5. | Explain the mechanism of translation in eukaryotes. | 14 |
| 6. | (a) Write a note on extracellular matrix. | 5 |
| | (b) Explain cell-cell adhesion. | 5 |
| | (c) Explain apoptosis. | 4 |
| 7. | (a) Explain the Lac operon concept. | 5 |
| | (b) Write a note on enzymes involved in DNA replication. | 5 |
| | (c) Write an account on Wobble hypothesis. | 4 |
| 8. | (a) Write an account of G-protein receptors. | 5 |
| | (b) Write a note on transcription factors. | 5 |
| | (c) Explain salient features of genetic code. | 4 |

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