G 8233



Reg. No
Name

# M.Sc. (MEDICAL MICROBIOLOGY) DEGREE EXAMINATION, JULY 2025

#### First Year

#### BIOTECHNOLOGY AND MOLECULAR BIOLOGY

(2024 Admissions-Regular, 2021-23 Admissions-Supplementary, 2018-20 Admissions-Mercy Chance)

Time: Three Hours Maximum Marks: 100

## Answer all questions.

Draw diagrams wherever necessary.

### I. Essay:

- 1 Describe methods of gene transfer.
- 2 Explain principle and types of chromatography.

 $(2 \times 20 = 40)$ 

#### II. Short Essays:

- 1 Explain blotting techniques and mention the applications.
- 2 Write about methods for gene therapy.
- 3 Describe hybridoma technology.
- 4 Explain gene regulation in Eukaryotes.

 $(4 \times 10 = 40)$ 

Turn over





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### III. Write short notes on:

- 1 Write an account on pharmaceutical products from DNA technology.
- 2 Write about human genome sequencing.
- 3 Write an account on DNA fingerprinting.
- 4 Explain transcription in prokaryotes.

 $(4 \times 5 = 20)$ 

