

**QP Code:102103**

**Reg. No.:.....**

**PG Degree Supplementary Examinations in Biochemistry (MD)  
July 2025**

**Paper II – Molecular Biology, Immunology & Cancer**

**Time: 3 hrs**

**Max marks:100**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

**Essay: (20)**

1. Molecular methods in prenatal screening. Add a note on circulating foetal nucleic acid in prenatal diagnosis

**Short essays: (8x10=80)**

2. Bioinformatics and its applications
3. Eukaryotic replication process
4. Cell cycle and its regulation
5. Gene expression and operon concept of gene regulation
6. Give any four examples for immunodeficiency states. Explain their biological basis
7. Genetic code
8. Principle and applications of CRISPR
9. Translation and post translational processing

\*\*\*\*\*