

**QP Code:102103**

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

**PG Degree Regular/Supplementary Examinations in Biochemistry  
(MD) November 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. Describe in detail the types and procedures of Gene therapy. Add a note on the advantages of different Vectors used.

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

2. Restriction Fragment Length Polymorphism [RFLP] and its applications.
3. Role of autoimmunity and hypersensitivity in the causation of diseases.
4. Explain cell cycle. Describe briefly about growth factors and cytokines.
5. Immunology of transplantation and malignancy.
6. Markers of chromosomal aneuploidy in maternal serum.
7. Prokaryotic and Eukaryotic Epigenetics.
8. Protein folding and targeting.
9. Discuss different types of mutations and its effects on gene expression.

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