

QP Code:102103

Reg. No.:.....

**PG Degree Supplementary Examinations in Biochemistry (MD)
April 2026**

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 the process of DNA transcription and its regulation. Enumerate post transcriptional modifications of various RNAs.

Short essays: (8x10=80)

2. Classify tumor markers. Discuss the role of molecular markers for cancer diagnosis.
3. Describe the structure of Immunoglobulins. Enumerate briefly on class specific effector functions and antibody diversity.
4. DNA damaging agents and biochemical changes in cancer cells.
5. Genetic mutation and gene therapy.
6. Write briefly on molecular methods used in prenatal and new born screening.
7. In cancer therapy- role of monoclonal antibodies and telomerase.
8. Stem cells and its application in clinical medicine.
9. DNA fingerprinting and growth factors.
