

QP Code: 201383

Reg . No.....

**Second Year M.Sc. MLT Degree Examinations November 2017
(Biochemistry)**

PAPER – V MOLECULAR BIOLOGY & IMMUNOLOGY

Time: 3 hrs.

Max. marks: 100

- *Answer all questions*
- *Draw diagrams wherever necessary*

Essays:

(10x10 = 100)

1. Explain the steps of translation. Add a note on inhibitors of translation (8+2)
2. Explain induction and repression with examples of operons
3. Enumerate the vectors used in recombinant DNA technology. Explain their properties and importance
4. Explain the principle of immuno electrophoresis. Mention the various types. Add a note on applications of immune electrophoresis. (5+2+3)
5. Explain gene library and DNA sequencing (3+7)
6. Describe the principle of electro chemiluminescence immunoassay (ECLIA). Add a note on its applications. (7+3)
7. What are interleukins. Explain their physiological role and clinical significance. (1+3+6)
8. Explain the principle of radioimmunoassay. Describe the types of radioimmunoassay and add a note on its applications (3+4+3)
9. Enumerate types of damage caused to DNA and mention the causative agents. Explain any two DNA repair mechanisms (4+2+4)
10. Explain gene switching and somatic recombination. (4+6)
