

QP Code: 201383

Reg . No.....

**Second Year M.Sc. MLT Degree Examinations – November 2016  
(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 polymerase chain. Mention the applications of this technique.
2. Explain the post transcriptional modifications.
3. Describe the principle and mention the uses of nephelometric immunoassay and western blot
4. Describe the vectors used in recombinant DNA technology
5. Describe the importance of major histocompatibility complex and compliment system
6. Explain the principle of radioimmunoassay. Describe the types of radioimmunoassay and add a note on its applications.
7. Explain gene switching and somatic recombination
8. Mention the various types of damages caused to DNA and the causative agents. Explain the any two DNA repair mechanisms.
9. Explain autosomal recessive and X linked recessive inheritance of diseases with the help of pedigree charts.
10. Mention the types of T cells and its functions. Add a note on immunodeficiency diseases.

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