

QP Code:101109

Reg.No.:.....

**PG Degree Supplementary Examinations in Microbiology (MD) -
November 2014**

Paper I – General Microbiology and Immunology

Time: 3 hrs

Max marks:100

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

Essays: (20)

1. Discuss the bacterial determinants of virulence. Describe superbugs. List the factors responsible for the introduction of superbugs in India.

Short essays: (10x8=80)

2. Explain briefly on the transfer of DNA within bacterial cells.
3. Describe Toll- like receptors.
4. Explain briefly on cytokines and its selected biological effects.
5. Describe the principle, types and utility of electron microscopy.
6. Describe standardisation of toxins.
7. Describe testing of disinfectants.
8. Enumerate different methods of sterilization by heat. Discuss plasma sterilization.
9. Describe intravenous immunoglobulins and its uses.
