

QP Code:104109

Reg.No.:.....

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

**Paper IV - Applied Microbiology and Recent Advances in Microbiology**

**Time: 3 hrs**

**Max marks:100**

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

**Essays: (20)**

1. Discuss the epidemiology and laboratory diagnosis of most common zoonotic diseases in India. Add a note on the development of vaccines against these diseases.

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

2. What is MALDI-TOF. Mention its principle and uses in clinical microbiology.
3. Discuss newer methods in bacterial examination of water.
4. Sepsis markers.
5. What is quality control. Describe the various methods adopted for internal quality control in microbiology.
6. Discuss quality control in ELISA.
7. Discuss newer vaccine development and delivery techniques
8. Describe newer methods in anti microbial susceptibility testing.
9. Discuss the uses of recombinant antigens in diagnostic microbiology.

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