

QP Code:104109

Reg.No.:.....

**PG Degree Supplementary Examinations in Microbiology (MD) -  
November 2015**

**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. Describe the composition, role and duties of hospital infection control committee. Describe in detail the role of microbiologist in surveillance and control of hospital associated infections.

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

2. Discuss real time PCR and its applications in clinical microbiology.
3. Discuss the genetically engineered vaccines with respect to newer vaccine strategies.
4. Enumerate molecular typing methods of human pathogens. Describe briefly about ribotyping.
5. Discuss recent automation in microbiology for rapid detection of microbial pathogens.
6. Discuss the role of research methodology and statistical analysis in compilation and meaningful outcomes of microbiological data.
7. Discuss animal and human ethics involved in microbiological research work. What is CPCSEA. What is its composition and who is the controlling authority.
8. Describe various steps involved in investigation of a case of food poisoning
9. Describe the various immune fluorescence methods and its application in microbiological diagnosis

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