

Q.P Code

Reg. No.

PG Degree Regular/Supplementary Examinations in Microbiology (M.D)

Paper IV – Applied Microbiology and Recent Advances in Microbiology

Time : Three Hours

Maximum : 100 Marks

Essay:

(20)

1. Discuss the core elements of an antimicrobial stewardship program. Discuss the steps to prepare an antibiogram and its role in antimicrobial stewardship. Discuss the opportunities and challenges of rational antibiotic use in a medical college

Short Essays

(8 x10 = 80)

2. Role of CRISPR in infectious diseases
3. Vaccines for adults
4. Discuss the role of rapid diagnostic tests (RDTs) in Microbiology
5. Phenotypic and genotypic methods of drug testing
6. Utility of Next generation sequencing (NGS) and targeted NGS in the diagnosis of infectious disease
7. Define and classify health care associated infections. Discuss briefly the pathogenesis of CAUTI and CRBSI and care bundle approach for prevention of device associated infections
8. Describe the various steps involved in the outbreak investigation of MRSA infection in surgery post operative ward
9. Role of One health in disease control