

**KALOJI NARAYANA RAO UNIVERSITY OF HEALTH SCIENCES
WARANGAL, TELANGANA STATE – 506 002**

M.D/ M.S DEGREE SUPPLEMENTARY EXAMINATIONS: MAY,2025

MICROBIOLOGY

PAPER-IV

(Applied Microbiology and Recent Advances)

Time: 3 Hours

Max Marks: 100

Note: Answer all questions

Give Diagrammatic representation wherever necessary

Write a short essay on the following:

10 X 10 = 100

1. List the common types of Health care associated infections. Discuss the causative agents, laboratory diagnosis of central line associated blood stream infection (CLABSI) Write a note on prevention of CLABSI.
2. Define the term Pandemic. List the recent viruses that caused a Pandemic. Discuss the emergency preparedness that you would as a microbiologist do in a hospital setting for a pandemic caused by a viral agent causing severe acute respiratory illness type of infection.
3. Universal Immunisation program.
4. Discuss the root cause analysis, prevention and management of Needle Stick Injuries among health care workers.
5. Biomedical waste management in a health care setting.
6. Biosafety level III laboratory.
7. Rapid diagnostic non culture methods in Microbiology.
8. Quality control in antimicrobial susceptibility tests in a microbiology laboratory.
9. Discuss automated methods employed in diagnosis of tuberculosis.
10. Molecular methods for Epidemiological typing.
