

MICROBIOLOGY
PAPER-IV

Time: 3 hours
Max. Marks:100

MICRO/J/20/18/IV

Important Instructions:

- *Attempt all questions in order.*
- *Each question carries 10 marks.*
- *Read the question carefully and answer to the point neatly and legibly.*
- *Do not leave any blank pages between two answers.*
- *Indicate the question number correctly for the answer in the margin space.*
- *Answer all the parts of a single question together.*
- *Start the answer to a question on a fresh page or leave adequate space between two answers.*
- *Draw table/diagrams/flowcharts wherever appropriate.*

Write short notes on:

- | | |
|---|-----|
| 1. Describe the infection control measures in the prevention of COVID-19. What are the revision in the biomedical waste management related to Covid- care centres? | 6+4 |
| 2. Discuss bundle care approach to prevent device associated infections in healthcare settings. | 10 |
| 3. With suitable examples, discuss the role of point of care (POC) testing. | 10 |
| 4. Define probiotics. Describe their role in the management of bacterial infections. | 2+8 |
| 5. Role of beta D glucan assay in the diagnosis of invasive fungal infections. | 10 |
| 6. Describe the requirements to set up a biosafety level 3 laboratory. Draw the airflow in Class II A2 biosafety cabinet. | 5+5 |
| 7. Future prospective and current application of proteomics in clinical microbiology. | 10 |
| 8. Role of antibody avidity assay in infectious disease diagnosis. Explain with an example. | 6+4 |
| 9. Role of Nanotechnology in diagnosis of infectious disease. | 10 |
| 10. Enumerate Emerging and Re-emerging Viral infections identified as Public Health threats in India. Discuss current scenario of emerging Viral infections and possible reasons for emergence. | 4+6 |
