

2025

M.Sc. 3rd Semester Examination

MICROBIOLOGY

Paper : MCB - 305

(Medical and Diagnostic Microbiology)

Full Marks : 25

Time : One Hour

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Group - A

Answer any *two* questions. $2 \times 2 = 4$

1. Why secondary immune response is sustained?
2. What are the advantages of killed vaccine?
3. Which specific antigens of HIV are targeted for diagnosis and why?
4. What is the difference among epidemic, endemic and pandemic?

Group - B

Answer any *two* questions. $4 \times 2 = 8$

5. State the principle of anti-idiotypic vaccine.

P.T.O.

(2)

6. Disease A has a critical hard immunity threshold (P_c) of 80%, and disease B has P_c of 90%. Which disease has the higher Basic reproduction number (R_0), and what is the relationship between their 'R0' values?
7. Describe the antigens onto the RBC.
8. Write the diagnosis process of *Mycobacterium tuberculosis*.

Group - C

Answer any *one* question.

8×1=8

9. How do you conclude the finding CSF of pyogenic meningitis on the basis of bacterial staining? How does mosquitoes sense the host for blood sucking? 6+2
10. Describe briefly about national immunization schedule. Why DNA vaccine is superior over other? 5+3

Internal Assessment : 5 marks
