

**Time: Three Hours****Max. Marks: 100 Marks****MICROBIOLOGY -Paper -I
(RS2 & RS3 SCHEME)****QP Code: 1083**

Your answers should be specific to the questions asked

Draw neat labeled diagrams wherever necessary

LONG ESSAYS**2 x 10 = 20 Marks**

1. Enumerate methods of gene transfer in bacteria. Describe conjugation and write the significance of conjugation. [2+6+2]
2. Name the pyogenic cocci. Write the virulence factors, diseases caused and laboratory diagnosis of *Staphylococcus aureus*. [1+3+3+3]

SHORT ESSAYS**10 x 5 = 50 Marks**

3. Mechanism of type I hypersensitivity
4. Disinfectants used in the hospital
5. Classical complement pathway
6. Laboratory diagnosis of brucellosis
7. Bacterial spore
8. Non specific tests for syphilis
9. Structure and function of immunoglobulin A
10. Laboratory diagnosis of Typhoid fever.
11. BCG vaccine
12. Q fever

SHORT ANSWERS**10 x 3 = 30 Marks**

13. Transport media
14. Enumerate modes of transmission of infections with examples
15. Enumerate features of passive immunity
16. Cholera toxin
17. Passive agglutination test
18. Mechanisms of autoimmunity
19. Anti streptolysin 'O' test
20. Malignant pustule
21. Infections caused by *Pseudomonas aeruginosa*
22. Laboratory diagnosis of Shigellosis
