

**MICROBIOLOGY**

**Time: 3 Hours**

**Total Marks: 75**

- **Answer all questions**
- **Draw diagram wherever necessary**

**Essay:**

**(2x10=20)**

1. Define and classify hypersensitivity. Discussion in detail type I hypersensitivity with special emphasis on the mediators released. Give common examples of this in your daily practice. (1.5+2+5.5+2)
2. Classify mycobacteria. Mention the route of transmission and laboratory diagnosis of pulmonary tuberculosis. Add a note on revised national tuberculosis control programme (RNTCP). (2+1+5+2)

**Short notes:**

**(8x5=40)**

3. Dermatophytes.
4. Structure of immunoglobulin M
5. Methicillin -resistant staphylococcus aureus (MRSA).
6. Differentiate between streptococcus viridians and streptococcus pneumoniae.
7. Free living Amoeba
8. Candida albicans
9. Laboratory diagnosis of fungal infection
10. Cultivation of viruses.

**Answer briefly:**

**(5x3=15)**

11. Define definitive host with two examples
12. Definition of vector with two examples
13. Define an antibiotic and give two examples of antibiotics acting on the cell wall.
14. Define cytopathic effect (CPE).
15. Define enrichment media with two examples.