

**First B.Sc MLT Degree Examinations, September 2014**

**BASIC MICROBIOLOGY & IMMUNOLOGY**

**Time: 3 Hours**

**Total Marks: 100**

- Answer all Questions.
- Draw Diagrams wherever necessary.

**Essay**

**(2x10=20)**

1. Classify antigen antibody reactions. Describe in detail agglutination reaction with examples. (4+ 6 = 10)
2. Define vaccines. Describe the various vaccines used in India (4+ 6 = 10)

**Short notes**

**(10x5=50)**

3. Enumerate different types of hypersensitivity reactions with examples
4. Decontamination of wastes
5. Cell mediated immunity
6. Name various methods of moist heat sterilization and its uses
7. Bacterial spores
8. Gaseous disinfectants
9. Predisposing factors responsible for bacterial infection
10. Enumerate the cells involved in immune response and describe the lymphocytes.
11. Classification of bacteria based on morphology.
12. Major histocompatibility complex

**Answer briefly**

**(10x3=30)**

13. Plasmids and describe its properties
14. Biological effects of complement
15. Radiation used for sterilization
16. Characters of ideal antiseptic
17. Immunoglobulin E
18. Passive immunity
19. Flagella
20. Classification of microorganisms based on bio hazards
21. Antibody
22. Carriers