B.Sc. Part-II Paper-III Immunology, Microbiology & Biotechnology

A. Short answer type questions

- 1. What are haptens?
- 2. Define opsonization.
- 3. What is a plasma cell?
- 4. Name the pathogens causing Gonorrhea and Tetanus.
- 5. What are Restriction enzymes?
- 6. What is the role of Fimbriae in Bacteria?
- 7. Define Protoplast. What is the role of plasmids in genetic engineering?
- 8. What are Continuous cell lines?
- 9. Define Plasmids and Interferons.
- 10. Write the three types of cloning.
- 11. Write various methods of food preservation.
- 12. Write any two mode of transmission of Hepatitis-B.
- 13. What are monoclonal antibodies? Draw structure of any one antibody.
- 14. Define culture media.
- 15. Name any four diseases caused by bacteria.
- 16. Define agglutination.

B. Long answer type questions

- 1. What is cell mediated immunity? Describe the functions of various cells involved in it.
- 2. What are primary lymphoid organs? Describe their role in immune response.
- 3. Differentiate between Gram- positive and Gram-negative bacteria on the basis of cell wall structure.
- 4. Write in detail about various protoplast fusion methods.
- 5. Describe the role of microbes in alcoholic beverages.
- 6. Write a detailed account on Hybridoma technology.
- 7. Describe the structure and functions of plasma cells.
- 8. Write an account on origin transmission and treatment of AIDS.
- 9. Describe the importance of Transgenic animals.
- 10. Differentiate between primary and secondary immune responses.