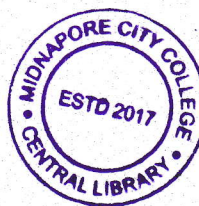


The West Bengal University of Health Sciences
M.Sc. in Medical Microbiology Part-II November-December, 2023
Examination

Subject : General Microbiology and Immunology
Paper : I



Full Marks : 100
Time : 3 hrs.

Attempt all questions

1. Describe the mechanism of Gram staining and its importance in clinical microbiology laboratory. 5+5
2. Give a brief account about electron microscopy, stating the principle and usage with diagram. 10
3. Enumerate different methods of sterilization by moist heat. Describe the principle and functioning of an autoclave. 5+5
4. Enumerate the methods of gene transfer in bacteria and its mechanism, with diagram. 10
5. Write short notes on : 5+5
 - a) PCR.
 - b) Enrichment media.
6. Define and classify immunity. Mechanism of various innate immunity. 10
7. Describe the cells of immune system along with their function in immune response. 10
8. Enumerate the hypersensitivity reactions. Write the principles of Type I & type II reactions. 10
9. Describe the various classes of immunoglobulin, their properties and functions. 10
10. Write in brief about the methods of HLA typing. 10