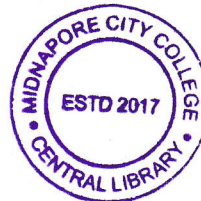


The West Bengal University of Health Sciences
M.Sc. in Medical Microbiology July, 2022 Examination
(Old Regulation)

Paper : IV



Full Marks : 100
Time : 3 hrs.

1. Write briefly about automation in diagnostic microbiology. 10

2. Elaborate on internal and external quality assurance in clinical laboratory. 10

3. Define Nosocomial infection. Discuss the factors responsible for acquiring hospital acquired infections. 2+8

4. Briefly discuss about COVID-19 Vaccines. 10

5. Describe the Biomedical Waste Disposal Rules 2016. 10

6. Briefly state the universal safety precautions. 10

7. Discuss various bio safety levels in microbiology. 10

8. Write the principle of ELISA. Mention the different types of ELISA. 5+5

9. Write an essay on Central Sterile Supply department (CSSD). 10

10. What are the different mechanisms of Drug resistance in bacteria? Discuss CLSI guidelines of detecting drug resistance in bacteria. 6+4