

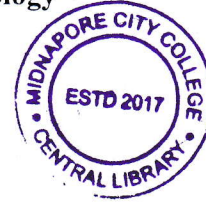
The West Bengal University of Health Sciences
M.Sc. MLT in Microbiology 2nd Year December, 2023 - January,
2024 Examination

Subject: Diagnostic and Applied Microbiology

Time: 3 hrs

Full Marks: 80

Attempt all questions



1. Write in brief on the following questions :

8 x 5

- a) Which type of automation techniques are used in microbiology laboratory?
- b) Describe any one water borne infection.
- c) Write a short note on surgical site infection.
- d) Write the difference between disinfection and sterilization.
- e) Role of bacteria in preparation or milk products.
- f) What is pus? Which type of bacteria are responsible for opportunistic infection?
- g) Write the principle and application of sugar fermentation in bacterial identification.
- h) Discuss about the culture media used for TB culture.

2. Answer **any four** of the following questions :

- a) Discuss about the Multiplex PCR. State the each cycle of PCR with diagram. 5+5
- b) Describe about the principle and techniques of BACTEC. 10
- c) Why Bio-safety cabinet is important in microbiological laboratory? How do you design a microbiological laboratory? 4+6
- d) How is recombinant DNA technology used in medicine? Discuss the steps involved in recombinant DNA technology? 4+6
- e) Discuss about the Human pathogen write in short about Simian virus -40 (sv-40) and it's role in cancer. 5+5