

B.Sc. Semester - 5 (Remedial) (NEP-2020) Examination**March/April-2026****MIC:Microbial Diagnostics and Public Health (Theory) (Skill Enhancement Course)****Time: 1:00 Hours****Marks:25****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

Que.1 (1) Explain the importance of early and accurate diagnosis of bacterial diseases with reference to any one human body system. (05)

(2) Describe the method of collection of clinical samples from the oral cavity and throat, mentioning necessary precautions. (05)

OR

Que.1 (1) Describe the role of laboratory diagnosis in the management and control of viral diseases affecting the human respiratory or nervous system. (05)

(2) Explain the procedure for collection of skin and blood samples for microbiological examination. (05)

Que.2 (1) Describe the steps involved in Gram staining and its diagnostic significance. (05)

(2) Explain the importance of antibiotic sensitivity testing in the treatment and control of bacterial infections. (05)

OR

Que.2 (1) Write a short note on Giemsa-stained thin blood film preparation and its importance in the diagnosis of malaria. (05)

(2) Define Minimal Inhibitory Concentration (MIC) and explain its significance in antibiotic therapy. (05)

Que.3 List and briefly explain any three disease-associated clinical samples used for laboratory diagnosis of infectious diseases, mentioning one example for each. (05)

OR

Que.3 Describe the preparation and use of Chocolate agar, Lowenstein–Jensen medium culture media. (05)
