

Institute of Health Technology
BSC in Health Technology (Laboratory)
Final Assessment Examination, August 2026
Subject-General and Systemic Microbiology (Part-III, Paper-9)
(All questions carry equal marks) Answer any Three (3) from each Group
Marks: 50 Time: 1hr 30 min

GROUP-A

Q.No.1	(a)	Define bacteria. Classify bacteria on the basis of morphology.
	(b)	List the names of important staining methods. Write down the steps of AFB staining.
	(c)	What is Selective toxicity? Classify Antimicrobial agents on the basis of mechanism of action with examples.
	(d)	Write short note on (any two): (i) Growth curve (ii) Blood agar media (iii) Pasteurization

GROUP-B

Q.No.2	(a)	What do you mean by STD? Define and classify STI with examples.
	(b)	What is Coagulase test? Discuss the cultural and staining characteristics of Staphylococcus.
	(c)	Mention the causative agent, mode of transmission and pathogenesis of Enteric fever.
	(d)	Write short note on (any two) : (i) Widal test (ii) E. coli (iii) MIC and MBC

Institute of Health Technology, Dhaka

BSc in Health Technology (Laboratory)

Final Assessment Examination, August 2026

Subject: Medical Virology and Immunology (Part-III, Paper-VIII)

All Question Carry Equal Marks

Answer Any Three from Each Group

Time: 1.5 Hours

Total Marks: 50

GROUP - A

Q1	a.	Name three DNA and three RNA viruses with their associated disease. Write down the steps of viral replication.
	b.	List four Arboviruses. Describe the clinical types and laboratory diagnosis of Dengue virus infection.
	c.	Define HIV and AIDS. What are the routes of transmission of HIV? List four common opportunistic infection caused by HIV.
	d.	Write short notes on (any two): i) Viral vaccines. ii) Poliomyelitis. iii) Oncogenic viruses.

GROUP - B

Q2	a.	Define and classify immunity. Write down the differences between innate and acquired immunity.
	b.	Classify hypersensitivity. Write down the mechanism of type-1 hypersensitivity.
	c.	Define immune response. Write down the differences between primary and secondary immune response.
	d.	Write short notes on (any two): i) Tuberculin test. ii) ASO titer. iii) ELISA.

Institute of Health Technology
BSC in Health Technology (Laboratory)
Final Assessment Examination, August 2026
Subject-Biochemistry (Part-III, Paper-)

(All questions carry equal marks) Answer any Three (3) from each Group

Marks: 50 Time: 1hr 30 min

GROUP-A

Q.No.1	(a)	Define acid, base, pH and buffer. Write down the clinical importance of pH.	
	(b)	Define protein. Classify protein according to their function.	
	(c)	Define and classify polysaccharides. Write down the importance of GAGs	
	(d)	Write short note on (any two) : (i) Benedicts test (ii) Cardiac marker (iii) Normal saline	

GROUP-B

Q.No.2	(a)	How enzyme helps in diagnosis of diseases? Discuss the laboratory diagnosis of diabetes mellitus .	
	(b)	What are the emergency biochemical tests done in the laboratory? What are the changes that may occur if a blood sample is delayed in processing?	
	(c)	Name the different types of laboratory hazards. How to prevent laboratory hazards ?	
	(d)	Write short note on (any two) : (i) PCR (ii) Thyroid function test (iii) Serum Electrolyte	