

3BT0064



VIT

Vellore Institute of Technology
(Deemed to be University under section 3 of DUC Act, 1956)

**SCHOOL OF BIO SCIENCES AND TECHNOLOGY
CONTINUOUS ASSESSMENT TEST -I
FALL SEMESTER 2025-2026**

Programme Name & Branch	:B.Tech Biotechnology	
Course Code	:BIT203L	
Course Name	: Microbiology	
Slot	:D1+TD1	
Faculty Name(s)	:Dr.C.Subathra Devi & Dr.E.Nalini	
Class Number(s)	: VL2025260100973;VL2025260100975	
Date of Examination	:20.08.25	
Exam Duration	: 90 minutes	Maximum Marks: 50

General instruction(s):

- Draw neat diagrams wherever necessary

Q. No	Question	Marks
1.	What events, discoveries, or inventions of Louis Pasteur were probably the most significant in the development of microbiology and why?	10
2.	Compare & contrast light microscopy & transmission electron microscopy.	10
3.	a)Relate autoclave and steam sterilization. (6 marks) b)Why is the standard autoclave temperature set to 121°C? (2 marks) c) Autoclaving kills viruses-This statement is true or false. Justify your answer. (2 marks)	10
4.	a) How Blood agar medium acts as an enriched and differential medium. Explain with suitable examples.(5 marks) b) Nutrient agar is a basal and complex medium-True or false. Justify the reason with proper explanation (5 marks)	10
5.	Shreya is a microbiologist; she is working on thermostable lipase producing bacteria. She became sick, but recovered after about two weeks. Two weeks later Shreya was back at work and she continued her work on the same bacteria. Explain, how she preserved the cultures for two weeks? Again, due to some unavoidable circumstances, she was not able to continue her work for one year. What will be your suggestion for her to preserve the cultures for one year? Explain.	10