

Enrollment No./Seat No.:

GUJARAT TECHNOLOGICAL UNIVERSITY
Bachelor of Vocation - SEMESTER - I EXAMINATION - SUMMER 2025

Subject Code: BV01009031

Date: 26-05-2025

Subject Name: Basic Microbiology

Time:02:30 PM TO 04:30 PM

Total Marks: 50

Instructions

- 1. Attempt all questions.**
- 2. Make Suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**
- 4. Use of simple calculators and non-programmable scientific calculators are permitted.**

	Marks
Q.1 (a) Explain the contribution of any two scientists in the field of microbiology.	05
(b) Write a short note on External structures of bacteria with a diagram.	05
Q.2 (a) Describe: Light field microscopy.	05
(b) Describe Primary sources of microbes in food.	05
OR	
(b) Describe control of microorganisms by physical agents.	05
Q.3 (a) Write the difference between prokaryotes and eukaryotes.	05
(b) Write a short note on Internal structures of bacteria.	05
OR	
(a) How to control microorganisms using chemical agents?	05
(b) Explain: Starter organism and Prebiotics.	05
Q.4 (a) Write the mechanism of Dark field microscopy.	05
(b) How do you prepare nutrient agar in the lab?	05
OR	
(a) What is the working principle of a simple microscope?	05
(b) What are intrinsic factors that affecting microbial growth in food?	05
Q.5 (a) Why is Antonie van Leeuwenhoek called the father of microbiology?	05
(b) Write short notes on Bacteria, Yeast and Protozoa.	05
OR	
(a) What are Probiotics? Give suitable examples.	05
(b) Differentiate between Gram-positive and Gram-negative bacteria.	05
