

GUJARAT TECHNOLOGICAL UNIVERSITY

B.VOC- SEMESTER-I EXAMINATION – WINTER 2024

Subject Code:BV01009031

Date:27-12-2024

Subject Name: Basic Microbiology

Time:10:30 AM TO 12:30 PM

Total Marks:50

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

		Marks
Q.1	(a) Write a short note on External structures of bacteria with a diagram.	05
	(b) Explain: Simple microscope.	05
Q.2	(a) Explain the contribution of any two scientists in the field of microbiology.	05
	(b) Differentiate: Prokaryotes and Eukaryotes.	05
	OR	
	(b) Explain different types of microorganisms like yeast, actinomycetes and protozoa.	05
Q.3	(a) Write a short note on Control of microorganisms by Physical agents.	05
	(b) Explain: Starter organism and Probiotics.	05
	OR	
Q.3	(a) Describe Primary sources of microbes in food.	05
	(b) Write the definition of intrinsic and extrinsic parameters and enlist all the parameters.	05
Q.4	(a) Explain different types of microorganisms like bacteria, viruses and fungi.	05
	(b) Write a short note on Light field microscopy.	05
	OR	
Q.4	(a) Explain: Synbiotics and functional foods.	05
	(b) Write a short note on Dark field microscopy.	05
Q.5	(a) Write about Internal structures of Bacteria.	05
	(b) What are Koch's postulates ?	05
	OR	
Q.5	(a) Explain: Eukaryotic microorganisms.	05
	(b) If we have to make 550ml of NA media, then what will be the amount of NA powder (in grams) and Agar Agar powder (in grams) in this media? (NA= 28 gm in 1000 ml, Agar Agar = 1.5%)	05
