

Register No : _____

THE KAVERY ENGINEERING COLLEGE

(An Autonomous Institution)

B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, NOV/DEC 2025

Seventh Semester

Biomedical Engineering

OBT352 – Basics of Microbial Technology

(Common to Agricultural Engineering)

Regulations - 2021

Duration : 3 Hrs

Maximum : 100 Marks

*PART – A (ANSWER ALL QUESTIONS) (Marks 10*2=20)*

Q.No	Questions	BTL	CO	Marks
1.	Define microbes and mention their major characteristics.	L1	1	2
2.	Explain the existence of microbes in diverse environments with one example.	L2	1	2
3.	Differentiate between physical and chemical methods of sterilization.	L2	2	2
4.	What is fermentation?	L1	2	2
5.	Name the causative agents of tuberculosis.	L1	3	2
6.	What are the preventive measures for dengue?	L2	3	2
7.	List any four clinical microbes.	L2	4	2
8.	Mention any two roles of microbes in marine microbiology.	L1	4	2
9.	Define fermented beverages with two examples.	L1	5	2
10.	What are vaccines? Give any two microbial vaccines.	L2	5	2

*PART – B (ANSWER ALL QUESTIONS) (Marks 5*16 = 80)*

Q.No	Questions	BLT	CO	Marks
11.	a Describe the historical discoveries that led to the development of microbiology as a science	L3	1	16
	Or			
	b Highlight the significance of microorganisms in the environment.	L3	1	16
12.	a Categorize the various methods of physical sterilization with examples.	L3	2	16
	Or			
	b Illustrate the process of cultivation of microbes and explain in detail of microbial growth curve and its significance.	L3	2	16
13.	a Summarize the modes of transmission and preventive strategies for COVID-19 infection.	L3	3	16
	Or			
	b Describe the life cycle of Plasmodium species causing malaria with a neat sketch.	L3	3	16

14.	a	Analyze the importance of microbes in clinical and agricultural microbiology.	L4	4	16
		Or			
	b	Describe the applications of microbes in food microbiology with suitable examples.	L4	4	16
15.	a	Discuss the role of microbes in the preparation of biopesticides and biofertilizers.	L3	5	16
		Or			
	b	Explain the process involved in vermicomposting and discuss its benefits in sustainable agriculture.	L3	5	16