

Reg.No.:

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VIVEKANANDHA COLLEGE OF ENGINEERING FOR WOMEN
[AUTONOMOUS INSTITUTION AFFILIATED TO ANNA UNIVERSITY, CHENNAI]
Elayampalayam – 637 205, Tiruchengode, Namakkal Dt., Tamil Nadu.

Question Paper Code: 90007

B.E. / B.Tech. DEGREE END-SEMESTER EXAMINATIONS – NOV. / DEC. 2025

Third Semester

Biotechnology

U23BT302 – MICROBIOLOGY

(Regulation 2023)

Time: Three Hours

Maximum: 100 Marks

Answer ALL the questions

Knowledge Levels (KL)	K1 – Remembering	K3 – Applying	K5 - Evaluating
	K2 – Understanding	K4 – Analyzing	K6 - Creating

PART – A

(10 x 2 = 20 Marks)

Q.No.	Questions	Marks	KL	CO
1.	What is the significance of Whittaker's five-kingdom classification?	2	K1	CO1
2.	Mention the basic idea behind the capsule staining technique.	2	K1	CO1
3.	Point out the structural feature that are unique to bacteriophages.	2	K2	CO2
4.	Classify microbes on the basis of nutrition.	2	K2	CO2
5.	List two factors that influence bacterial growth curve.	2	K1	CO3
6.	Write short notes on any one microbial process involved in nitrogen fixation.	2	K2	CO3
7.	Identify one physical method of sterilization and state its application.	2	K1	CO4
8.	Compare dry heat and moist heat sterilization.	2	K2	CO4
9.	Mention any one microbe and its role in biogas production.	2	K1	CO5
10.	State the mode of action of at least one antimicrobial drug.	2	K1	CO5

PART – B

(5 x 13 = 65 Marks)

Q.No.	Questions	Marks	KL	CO
11. a)	Explain the scope of microbiology with examples from medical, environmental, and industrial applications.	13	K2	CO1

