

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(MID SEMESTER EXAMINATION)

CLASS: B. TECH
BRANCH: FOOD ENGINEERING AND TECHNOLOGY

SEMESTER : V
SESSION : MO/2025

SUBJECT: FE301 FOOD MICROBIOLOGY

TIME: 02 HOURS

FULL MARKS: 25

INSTRUCTIONS:

1. The question paper contains 5 questions each of 5 marks and total 25 marks.
 2. Attempt all questions.
 3. The missing data, if any, may be assumed suitably.
 4. Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates
-

		CO	BL
Q.1(a)	Explain the role of intrinsic factors of bacterial growth.	[2] 1	2
Q.1(b)	Explain the role of Extrinsic factors of bacterial growth.	[3] 2	2
Q.2(a)	List different sources wherefrom microbial contaminations can occur	[2] 1	1
Q.2(b)	List Koch's Postulates? What is the Germ Theory?	[3] 2	1
Q.3(a)	Explain about thermophiles, mesophiles, hyperthermophiles	[2] 2	2
Q.3(b)	Explain sigmoid growth curve? Why is it so called?	[3] 3	2
Q.4(a)	Differentiate between HTST and LTLT process and their implications	[2] 2	2
Q.4(b)	Explain the generation time and Synchronous Growth and Chemostat	[3] 1	2
Q.5(a)	Differentiate between Pasteurization, Sterilization and Commercial Sterilization	[2] 2	2
Q.5(b)	Explain the strategies to control microorganisms by physical agent	[3] 1	2

:::::16/09/2025 :::::M