

DEPARTMENT OF PHARMACEUTICAL SCIENCES & TECHNOLOGY**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI****(Internal Assessment I)**

CLASS: BPHARM		SEMESTER: III
BRANCH: PHARMACY		SESSION: MO 2025
SUBJECT BP303T PHARMACEUTICAL MICROBIOLOGY		
TIME:2.00 Hour		FULL MARK: 30

PART I

A. Objective type questions (Answer all questions)	(5 x02=10 marks)	CO
1. Differentiate between prokaryotic and eukaryotic cells		3
2. Classify different types of staining with example.		3,4
3. Illustrate different types of bacteria based on its shape and cite examples of each class		1, 2
4. Classify the culture media with examples		1,2
5. At which phase of growth the microorganisms are most susceptible against action of sterilizing agents? Cite reason.		4, 5

PART II

B. Long Answers (Answer any one out of two)	(01x10=10 marks)	CO
1. Discuss the structure and function of the following with appropriate illustrations and examples: a) Flagella; b) Glycocalyx; c) bacterial cell wall d) plasma membrane		3, 4
2. Elaborate the role of electron microscopes used in microscopy.		4, 5

PART III

C. Short Answers (Answer any two out of three)	(02x05=10 marks)	CO
1. Illustrate the characteristic features of bacterial growth curve.		3, 4
2. Differentiate between gram positive and gram negative cell wall		1, 2, 3
3. Classify major nutritional types of microorganisms with examples. Indicate their source of energy.		2, 3

: : : : 19/09/2025 : : : : E