

DEPARTMENT OF PHARMACEUTICAL SCIENCES & TECHNOLOGY

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI

(Internal Assessment I)

CLASS: BPHARM		SEMESTER: V	
BRANCH: PHARMACY		SESSION: MO/2025	
SUBJECT: BP502T INDUSTRIAL PHARMACY I			
TIME: 2.00 Hour		FULL MARK: 30	

PART I

A. Objective type questions (Answer all questions)	(5 x 02 = 10 marks)
1. Define Preformulation studies and identify its significance	
2. What is Mottling? Provide a remedy for this processing problem	
3. Calculate the Angle of Repose & % Carrs Consolidation Index of 10 gm of Calcium carbonate granules when the bulk volume is 50ml and tapped volume is 20ml as well as the diameter captured by the granules is 5cm and height is 2cm when flown through a hopper.	
4. List the different types of USP glasses used in parenteral and non-parenteral formulations.	
5. Define isotonic solution and explain the importance of isotonicity in parenteral dosage forms.	

PART II

B. Long Answers (Answer any one out of two)	(01x10=10 marks)
1. Discuss the Processing defects of tablet manufacturing along with their remedies.	
2. Describe the key ingredients of a parenteral formulation.	

PART III

C. Short Answers (Answer any two out of three)	(02x05=10 marks)
1. Define a parenteral dosage form and explain its attributes, advantages and limitations.	
2. Discuss the Stages of Granule formation in details. Discuss the limitations of Dry Granulation method	
3. I. Write the full forms of the following: [2]	
a. FTIR	
b. TGA or DSC	
II. Discuss the process of solubility determination and BCS classification system of drugs [3]	

:::18/09/2025 :::M