

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI (NEW) EXAMINATION – WINTER 2018****Subject Code:2162308****Date:27/11/2018****Subject Name:Advance Plastics Processing****Time: 02:30 PM TO 05:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

		MARKS
Q.1	(a) Draw and explain various types of Calendar roll arrangements.	03
	(b) List the general production methods of foam.	04
	(c) Explain the Rotational Molding process with a neat diagram.	07
Q.2	(a) Explain the encapsulation process briefly.	03
	(b) List the advantages and disadvantages of Rotational Molding.	04
	(c) With a neat diagram explain the Low pressure structural foam molding process.	07
	OR	
	(c) Write a short note on Finishing & Machining of Plastics.	07
Q.3	(a) Define i) Foamed plastics ii) Open celled foam iii) Blowing agents.	03
	(b) Compare Rotational Molding with Blow Molding.	04
	(c) With a neat diagram explain the Injection Stretch Blow Molding process.	07
	OR	
Q.3	(a) Mention any two problems, its causes and remedies, found in blow molding process.	03
	(b) Explain the Vacuum Metalizing process with a neat sketch.	04
	(c) Explain the process of Calendaring with a neat line Diagram.	07
Q.4	(a) Explain briefly what is parison programming.	03
	(b) With a neat diagram explain the Screen printing process.	04
	(c) Explain the Electrostatic Fluidized Bed Powder Coating Process with a neat sketch.	07
	OR	
Q.4	(a) Explain the heating system for calendar roll arrangement.	03
	(b) Explain any two Problems its causes and its remedies found in Calendaring process.	04
	(c) List various methods of surface treatment for plastics and explain the Corona discharge process with a neat sketch.	07
Q.5	(a) List the welding techniques for plastics and briefly explain any one.	03
	(b) Discuss briefly about expandable PS foams with a neat sketch.	04
	(c) Compare Extrusion Blow Molding with Injection Blow Molding.	07
	OR	
Q.5	(a) Explain briefly about gravure printing process.	03
	(b) What is Structural foam? List its advantages and disadvantages.	04
	(c) Explain the steps in Reaction Injection Molding process with a neat flow diagram.	07
