Seat No.: _____ **Enrolment No._____**

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–V- EXAMINATION – SUMMER 2016

Subject Code: 152304 **Date: 17/05/2016**

Subject Name: Plastic Processing & Machinery (Institute Elective-II)

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.**

Q.1	**(a)**	What is Injection Molding? Explain Process steps with line diagram along with advantages & disadvantages	**07**
	(b)	Compare: Compression Molding with Transfer Molding	**07**
Q.2	**(a)**	Explain trouble shooting for Compression Molding	**07**
	(b)	Explain Plunger type Transfer Molding Process with neat sketch	**07**
		OR	
	(b)	List out and explain the types of compression molds in details.	**07**
Q.3	**(a)**	What is calendering? Why it is used? Explain calendering line with neat sketch	**07**
	(b)	Which are the materials use for thermoforming? Explain any two process of thermoforming.	**07**
		OR	
Q.3	**(a)**	Give trouble shooting for Transfer Molding.	**07**
	(b)	Define: (1) Parison (2) Curing (3) Core (4) Cavity (5) Preform (6) Blow-Up-Ratio (7) Pinch-off	**07**
Q.4	**(a)**	What is stretch Blow Molding Process? Why it is used? Explain with advantages & disadvantages	**07**
	(b)	Comparison of Injection blow molding & Extrusion Blow Molding.	**07**
		OR	
Q.4	**(a)**	Explain pressure forming process with neat sketch. List out difference between Pressure & Vacuum Forming	**07**
	(b)	Explain different Roll arrangement for Calendaring Process	**07**
Q.5	**(a)**	Draw general purpose Screw and explain Nomenclature of screw.	**07**
	(b)	Explain the types of calender rolls with neat sketch.	**07**
		OR	
Q.5	**(a)**	Explain: (I) Parison Programming (II) Injection Blow Molding	**07**
	(b)	What is Reacting Injection Molding? Describe the process steps in detail.	**07**

****