Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE – SEMESTER V • EXAMINATION – WINTER - 2012

Subject code: 152304 Date: 23-01-2013

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)**	Compare: Compression Molding with Transfer Molding	**07**
	(b)	List & Explain Process Steps of Compression Molding with suitable sketch.	**07**
Q.2	**(a)**	Explain about factors to be considered while selecting the plastics processing techniques.	**07**
	(b)	Explain: Semi Positive Compression Mold with neat sketch	**07**
		OR	
	(b)	Explain: Positive Compression Mold with neat sketch	**07**
Q.3	**(a)**	List & Explain Process variables of Transfer Molding.	**07**
	(b)	Explain Plunger type Transfer Molding Process with neat sketch.	**07**
		OR	
Q.3	**(a)**	Explain: HIPS/ Acrylic are the best material for Thermoforming process.	**07**
	(b)	List Process steps of Thermoforming. Explain Heating & Cooling Steps. Also List Advantages & Disadvantages of Thermoforming.	**07**
Q.4	**(a)**	Explain: Plug Assist forming Process With neat sketch.	**07**
	(b)	List the Types of Forming Process. Explain Straight Forming with neat sketch.	**07**
		OR	
Q.4	**(a)**	Explain: (I) Parison Programming (II) Injection Blow Molding	**07**
Q.4	**(b)**	Compare: Stretch Blow Molding with Extrusion Blow Molding	**07**
Q.5	**(a)**	Classify Blow Molding Process. Explain Intermittent Extrusion Blow molding with neat sketch.	**07**
	(b)	Draw Line diagram of Reciprocating Screw type Injection Molding machine & Label its various parts. List & Explain process steps in brief for Injection molding process.	**07**
		OR	
Q.5	**(a)**	Explain Calendaring Process with neat line Diagram.	**07**
	(b)	List advantages & disadvantages of Reactive Injection Molding Process.	**07**

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