Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–IV • EXAMINATION – SUMMER • 2014

Subject Code: 142301 **Date: 16-06-2014**

Subject Name: Basic Plastics Processing and Thermal Engineering

Time: 10:30 am - 01:00 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)**	Explain Intermittent Extrusion blow molding process with neat sketch.	**07**
	(b)	Explain: PMMA and HIPS are the best suitable material for Thermoforming process?	**07**
Q.2	**(a)**	Explain the term Bulk factor & Preform concerned with Compression molding.	**07**
	(b)	Compare: Extrusion Blow molding with Injection Blow molding.	**07**
		OR	
	(b)	Define Transfer molding and Explain Pot type transfer molding process with neat diagram.	**07**
Q.3	**(a)**	Define mold. List type of Compression molds. Explain Semi-positive mold with neat sketch.	**07**
	(b)	Give the classification of Blow molding process. Explain basic blow molding process with neat sketch.	**07**
		OR	
Q.3	**(a)**	Explain the advantages and disadvantages of Transfer molding process over compression molding.	**07**
	(b)	Explain Stretch Blow molding process with neat sketch.	**07**
Q.4	**(a)**	Define: Conduction, Convection & Thermal Radiation. Explain Newton's Law of Heat Transfer.	**07**
	(b)	List the types of Heat Exchanger. Explain any two in detail.	**07**
		OR	
Q.4	**(a)**	Explain Plug assist forming process with neat sketch.	**07**
	(b)	Compare: Skin packaging with Blister packaging.	**07**
Q.5	**(a)**	Define Compression molding. Explain process cycle in detail.	**07**
	(b)	What is parison programming? Explain parison programming in detail.	**07**
		OR	
Q.5	**(a)**	Explain: (1) Straight Forming (2) Match tool Forming	**07**
	(b)	Explain about materials for Compression molding process.	**07**

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