Seat No.: Enrolment	No
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GUJARAT TECHNOLOGICAL UNIVERSITY BE- IVth SEMESTER-EXAMINATION - MAY/JUNE- 2012

BE- IV SEMESTER-EXAMINATION – MAY/JUNE- 2012 Subject code: 142301 Date: 23/05/2012

Subject Name: Basic Plastic Processing & Thermal Engineering				
Time	: 10	0:30 am – 01:00 pm Total Mar	ks: 70	
Instr	ucti	ons:		
	1.	Attempt all questions.		
		Make suitable assumptions wherever necessary.		
	3.	Figures to the right indicate full marks.		
Q.1	(a)	Define Term Plastic Processing. List the various methods used for Processing of Thermoplastic &Thermoset materials	07	
	(b)	List & Explain the Material characteristic required for Thermoforming.	07	
Q.2	(a)	Define Thermoforming. List Advantages & Disadvantages of Thermoforming. List the basic Process steps of it.	07	
	(b)	Give the classification of Blow Molding Process. Explain Intermittent Extrusion Blow Molding Process with neat sketch. OR	07	
	(b)	List the types of the Forming process. Explain Drape forming process with neat sketch.	07	
Q.3	(a)	Explain about application of Thermoformed materials in the field of Packaging.	07	
	(b)	6 6	07	
Q.3	(a)	(4) Cavity (5) Preforms (6) Blow-Up-Ratio (7) Pinch-off	07	
	(b)	List the types of Mold used for Compression Molding. Explain Semi-Positive Mold with Neat sketch.	07	
Q.4	(a)	Explain in brief: (1) Bulk Factor (2) Heaters for Compression Mold	07	
	(b)		07	
Q.4	(a)	Explain any one with neat sketch.	07	
	(b)	Define Blow Molding. Explain Material characteristic required for Blow Molding Process. List the basic Process steps for Blow Molding.	07	
Q.5	(a) (b)	List General laws of Heat Transfer. Explain any one.	07 07	
o -	, .	OR		
Q.5	(a) (b)		07 07	
