Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–V EXAMINATION – WINTER 2015

Subject Code: 153405 **Date:14/12/2015**

Subject Name: Plastics Manufacturing Technology

Time: 10:30am to 1:00pm **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 Extrusion Blow Molding Process with neat sketch.	**07**
	(b)	Define: Plastics Processing Techniques. Which are the selection criteria for choosing a particular processing method?	**07**
Q.2	**(a)**	Compare :Thermoplastics Injection Molding with Thermoset Injection Molding	**07**
	(b)	List the general processing methods use for Thermosets. Explain Transfer molding Process with neat sketch.	**07**
		OR	
	(b)	List and Explain material characteristics required for the thermoforming process.	**07**
Q.3	**(a)**	Explain : (1) L/D ratio (2) Compression ratio (3) Blow up ratio	**07**
	(b)	Explain the principle of Extrusion. Write about the classification of extruders.	**07**
		OR	
Q.3	**(a)**	Compare: Twin screw extruders with Single screw extruder.	**07**
	(b)	Explain Stretch Blow Molding process in detail.	**07**
Q.4	**(a)**	Explain : (1) Straight forming (2) Drape forming	**07**
	(b)	Write down merits and demerits of Compression Molding Process.	**07**
		OR	
Q.4	**(a)**	What is parison programming? Explain about it in detail.	**07**
	(b)	Explain multi-layer film plant with neat sketch.	**07**
Q.5	**(a)**	Write down the startup and shutdown procedure of Extrusion molding.	**07**
	(b)	Draw generalized Screw used for Injection molding. Explain any three terminologies related to it.	**07**
		OR	
Q.5	**(a)**	Explain the types of mold used in compression molding with diagram	**07**
	(b)	Explain the process of injection molding with neat and detailed diagram	**07**

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