Seat No.:	Enrolment No.
Jeut 140	Linoinent No

GUJARAT TECHNOLOGICAL UNIVERSITY ME- SEMESTER II- EXAMINATION – SUMMER 2015

Subject Name: Polymer Processing			Date: 01/06/2015	
		30 PM – 5:00 PM Total Marks: 7	70	
	1. 2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.		
Q.1	(a)	Explain the working of Ribbon Blender & Continuous Kneader with simple functional sketches.	(07)	
	(b)	How mixing affected in a twinóroll mixer? Explain the working of such a unit with sketch.	(07)	
Q.2	(a) (b)	Discuss the Trouble Shooting in Calendering Process. Answer the following.	(07)	
	(i)	Write the Heating System of Calender Rolls.	(03)	
	(ii)	Discuss the Processing Parameters of Calender rolls. OR	(04)	
	(b)	Describe the Types of Calenders & Type of Rolls and Configuration.	(07)	
Q.3	(a)	Write in brief about thermoforming process to produce thermoplastic sheets.	(07)	
	(b)	Explain how -Mercerization is used to improve properties of fabric. State types and machines used in mercerization process. OR	(07)	
Q.3	(a)	Define Lamination. What are the different types of laminates manufactured? Mention the types of resin used for such manufactures.	(07)	
	(b)	Write a note in brief about various methods of polymer processing.	(07)	
Q.4		Explain in detail the injection molding process, giving schematic diagram of injection moulding machine.	(14)	
		OR		
Q.4	(a)	Differentiate between transfer molding and compression molding.	(07)	
	(b)	Enlist advantages and disadvantages of injection molding process.	(07)	
Q.5		Explain design and application of single screw and twin screw extruder machines in brief.	(14)	
		OR		
Q.5	(a)	Write main steps of rotational molding and give an account of heating systems employed in this process.	(07)	
	(b)	Give an overview of advantages of various molding techniques.	(07)	