GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-VI • EXAMINATION – SUMMER 2013

Subject Code: 162301Date: 24-05-2Subject Name: Plastic Extrusion Technologies			013	
Time	Time: 10.30 am - 01.00 pm Total Marks: '			
 Instructions: Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. 				
Q.1	(a)	What are the types of Screw? With a neat sketch explain different parts of Screw.	07	
	(b)	Define the terms: (i) Helix angle (ii) Compression ratio (iii) L/D ratio (iv) Blow up ratio (v) Lay Flat width (vi) Die swell (vii) Fibrillation	07	
Q.2	(a)	What is tie layer . Explain the manufacturing & applications of Five layer films with suitable examples	07	
	(b)	Describe the manufacturing of HDPE pipes with line diagram OR	07	
	(b)	Describe the manufacturing of Nylon Monofilaments with line diagram	07	
Q.3	(a) (b)	What are types of Reduction gear boxes Compare between Single screw extruder and Twin screw extruder OR	07 07	
Q.3	(a) (b)	Compare between Co rotating and Counter rotating Twin screw extruder What are the different types of Drive systems of extruder	07 07	
Q.4	(a) (b)	Describe the manufacturing process of Raffia (Flat tape) Describe about XLPE cable coating process OR	07 07	
Q.4	(a)		07	
Q.4	(b)	Describe the extrusion of Sheet and trouble shooting	07	
Q.5	(a) (b)	Write short notes on : (i) Hopper Cooling (ii) Manufacturing of BOPP Explain about different Post extrusion equipments OR	07 07	
Q.5	(a) (b)	Describe in detail about Reactive extrusion and its applications Write short notes on : (i) Corona treatment (ii) Output of Single screw extruder	07 07	
