Seat No.:	Enrolment No.

## GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-VII EXAMINATION - WINTER 2015

## DE - SEMESTER-VII EXAMINATION - WINTER 2013

Subject Code: 172301 Subject Name: Advance Plastic Processing			Date:12/12/2015	
Tin	ne: 1 ructio	0:30am to 1:00pm Total Marks: 'ons: Attempt all questions. Make suitable assumptions wherever necessary.	70	
Q.1	(a)	What are blowing agents? Explain general production methods for production of plastic foam.	07	
	<b>(b)</b>	Explain Reaction Injection Molding process with neat sketch along with advantages and applications.	07	
Q.2	(a) (b)	Describe Profile extrusion process with neat diagram along with its applications.  Discuss rotational molding process steps for manufacturing of water tank along with its advantages and limitations.	07 07	
	<b>(b</b> .)	OR Write notes on (1) Onen cell Viryl Fooms (2) Closed Cell Viryl Fooms	07	
0.4	<b>(b)</b>	Write notes on (1) Open-cell Vinyl Foams (2) Closed-Cell Vinyl Foams	07	
Q.3	(a)	Explain Vacuum Metallization process steps and also give characteristics and limitations of the process.	07	
	<b>(b)</b>	Write short notes: (1) Fluidized-Bed coating (2) Electrostatic Fluidized bed coating.  OR	07	
Q.3	(a)	What is casting? Which plastics material can be cast? Explain production of acrylic cast sheet.	07	
	<b>(b)</b>	Write short notes: (1) Foil embossing (2) Encapsulation.	07	
Q.4	(a)	Draw calendering line diagram and explain in detail along with its advantages and applications.	07	
	<b>(b)</b>	Explain rotogravure and flexographic printing processes with neat diagram.	07	
Q.4	(a)	OR  Define: Open cell foam, Closed cell foam, Synthetic foam, Compression set, K-factor, Nip gap, Compounding.	07	
	<b>(b)</b>	What is structural foam? Explain low pressure structural foam process.	07	
Q.5	(a) (b)	Explain Two-roll mill for compounding with neat diagram.  Discuss various types of calendaring rolls and also provide heating and cooling arrangements in calendaring.	07 07	
Q.5	(a) (b)	OR  Explain with flow diagram electroless preplating and electroplating sequences for ABS.  Write a note on: PVC compounding.	07 07	

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