Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

M. E. - SEMESTER - II • EXAMINATION - SUMMER • 2013

Sul	bject	code: 1722404 Date: 07-06-2013	
Sul	bject	Name: Secondary Plastic Processing Techniques	
		0.30 am – 01.00 pm Total Marks: 70	
Ins	struc	etions:	
		 Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. 	
Q.1	(a) (b)	Explain calendaring process in detail with neat sketch. Explain the types of calenders with neat diagram and list its application.	07 07
Q.2	(a)	Explain pressure forming, simple vacuum forming, plug assisted forming, blow back forming with neat sketch and also list the advantages of vacuum forming.	07
	(b)	Explain drape forming, free forming, snap back forming, pressure snap back forming with neat sketch and also explain the merits and demerits of vacuum forming.	07
		OR	
	(b)	Explain matched die forming, continuous forming methods, and pressure forming-Advantages over vacuum forming and also explain materials for thermoforming	07
Q.3	(a)	List the FRP processing methods and also explain hand layup process, spray up method with neat sketch and list the advantages and disadvantages.	07
	(b)	Explain vacuum bag, pressure bag, matched die molding with neat diagram and list the differentiate vacuum bag and pressure bag molding OR	07
Q.3	(a)	What are laminates? Explain high pressure laminating process and continues high pressure laminating process with diagram. List the applications for the same.	07
	(b)	Explain filament welding, centrifugal casting, and pultrusion and matched die molding with neat sketch and also list the applications of each.	07
Q.4	(a)	Explain low pressure foam molding and high pressure foam molding with neat diagram.	07
	(b)	Explain the process of RIM extrusion foaming in detail with neat sketch. OR	07
Q.4	(a)	List the process to create foam in resin and explain them briefly also explain rigid and semi rigid foam.	07
	(b)	Explain the importance of machining and also explain cutting drilling blending and filling.	07
Q.5	(a)	Explain high frequency welding thermal sealing, hot plate welding, ultrasonic welding, electroplating with neat sketch	07
	(b)	Explain adhesive principle, welding of plastic, printing, hot stamping, in mold decoration in detail	07
0.5	()	OR	0.7
Q.5	(a) (b)	Explain dip casting, continues casting, cell casting process with application Explain rotational molding process and types of coating with neat diagram.	07 07

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