GUJARAT TECHNOLOGICAL UNIVERSITY BE – SEMESTER – V (NEW) EXAMINATION – WINTER 2015

Subject Name: Polymer & Rubber Materials - IITime:10:30am to 1:00pmTotal Marks:		15	
)	
1. 2.	Attempt all questions. Make suitable assumptions wherever necessary.		
(a)		07	
(b)		07	
	Write down a brief description on alkyd resin with applications	07 07	
(b)	-	07	
(a)	Why curing is important in case of thermosets? Explain the curing/hardening of	07	
	Epoxy resin with example		
(b)	Comments with examples on thermosets resins are so versatile in coating industry OR	07	
		07 07	
(a)	Give a brief account on the properties of fibre filled thermo sets polyester	07	
	Highlight the impact performance		
(b)		07	
(a)		07	
(b)	Explain in short the vulcanization of rubber and also the cross linking technology	07	
(a)	Write a short note on synthesis and application of novolac resin	07	
(b)	of M-F resin and U-F resin	07	
(a)		07	
(a)		U/	
	materials. Give your reasons.		
	ect : e:10 intion 1. 2. 3. (a) (b) (a) (b) (a) (b) (a) (b) (a) (b) (a) (b) (a) (b) (a) (b) (a) (b) (a) (b) (b) (a) (b) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	 tect Name: Polymer & Rubber Materials - II e:10:30am to 1:00pm Total Marks: 70 (etims: Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. (a) Give chemical equation and conditions for the curing of acrylic resin with butylated melamine and polyisocyanate hardener (b) Select suitable polymer: Printed circuit board, laminates in flooring (a) Write a short note on synthesis and applications of Amino resin (b) Write down a brief description on alkyd resin with applications OR (b) Write in short the curing system and application of unsaturated polyester resin (a) Why curing is important in case of thermosets? Explain the curing/hardening of Epoxy resin with example (b) Comments with examples on thermosets resins are so versatile in coating industry OR (a) Explain the synthesis; curing and applications of polyurethane resins (b) Explain manufacturing of alkyd resin using fatty acid. And give advantages and disadvantages over oil process (a) Give a brief account on the properties of fibre filled thermo sets polyester Highlight the impact performance (b) Write various synthesis methods of silicone resin and its uses OR (a) Write various synthesis methods of silicone resin and its application (b) Explain in short the vulcanization of rubber and also the cross linking technology (a) Write a short note on synthesis and application fonvolac resin (b) Explain M-F powders are superior to U-F plastics. Also give two application of synthesis 	