Seat No.:	Enrolment No.

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

ME-SEMESTER II – EXAMINATION – SUMMER - 2017

Subject Name: Thermoplastics Elastomers		Code:2722414 Date:30	Date:30/05/2017	
		Aarks: 70		
	tructio 1. 2.			
Q.1	(a)	Write a short note on Block copolymer, Random copolymer & Graft c	o- <b>07</b>	
	<b>(b)</b>	polymer.  Discuss in detail any one Polyolefin blend TPE with preparation, Properti & application.	es <b>07</b>	
Q.2	(a)	Write the advantage & disadvantage of thermoplastics elastomers ov conventional rubbers.	er <b>07</b>	
	<b>(b)</b>	Explain in detail about the manufacturing, compounding, properties application of PVC/ Co-polyester elastomer blend.  OR	& 07	
	<b>(b)</b>	Discuss in detail about the structure – property relationship of styreni thermoplastic elastomer.	cs <b>07</b>	
Q.3	(a)	Explain in detail about the manufacturing, properties and application Thermoplastics Polyurethane Elastomers.	of <b>07</b>	
	<b>(b)</b>	Give brief note on characteristics of TPU mentioning the role of so segments and hard segments in TPU elastomer.  OR	oft <b>07</b>	
Q.3	(a)	Explain in brief about the different blends of TPU Elastomer & application.	its <b>07</b>	
	<b>(b)</b>	Discuss about degradation & stabilization of polyesters elastomers.	07	
Q.4	(a)	Explain in detail about the manufacturing, structure-property relationshi and application of Polyamide Thermoplastic Elastomers with an example.	-	
	<b>(b)</b>	Define Blending and write the criteria required for blending the polymers' OR		
Q.4	(a)	Give a brief note on thermoplastic Polyether ester elastomer with a	an <b>07</b>	
	<b>(b)</b>	example.  Distinguish between the structure- property relationship of Polyamide TPE & Polyether ester TPE	07	
Q.5	(a) (b)	Define Compounding and Give a brief note on compounding of TPE. Give brief note on Ionomeric thermoplastic elastomers.	07 07	
Q.5	(a) (b)	OR Write in detail about the different methods of blending of TPE. Define Vulcanization and write in detail about Dynamic vulcanized TPE with an example.	07 07	

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