Subject Code: 153602

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-V • EXAMINATION - WINTER • 2014

Date: 01-12-2014

Ti	-	Name: Technology of Polymeric and Rubber Materials - I 10:30 am - 01:00 pm Total Marks: 70 ons:	
	1. 2.	Attempt all questions.	
Q.1	(a)(b)	Describe in detail the preparation method of Polyethylene (PE) and Low density Polyethylene (LDPE) as well as properties and application. Explain in detail the synthesis of High Density Polyethylene (HDPE) and Linear Low Density Polyethylene (LLDPE) with its properties and applications.	07 07
Q.2	(a) (b)	Write in short the history and preparation of Polyvinyl Chloride (PVC). Explain in detail the preparation method of Polyvinyl Alcohol and Polyvinyl Acetate with common structure.	07 07
	(b)	OR Write the properties and applications of the Polyvinyl Chloride, Polyvinyl Acetate and Polyvinyl Alcohol.	07
Q.3	(a)	Explain the preparation of the Acrylonitrile Butadiene Styrene (ABS) and also	07
	(b)	give information of its properties and uses. Describe the preparation of the polystyrene (PS) and explain its properties and applications.	07
Q.3	(a)	OR Write the properties, applications and also the preparation of High Impact	07
V. 2	(b)	Polystyrene (HIPS). What is Styrene Acrylonitrile (SAN)? Explain the preparation of it with their properties and uses.	07
Q.4	(a) (b)	Explain in detail the raw materials used in the preparation of Nylons. Describe in detail the preparation of Nylon 6, 10 and Nylon 11. OR	07 07
Q.4	(a) (b)	Write in detail in the preparation of Nylon 6. Describe the method of preparation of Nylon 6, 6 with proper reactions.	07 07
Q.5	(a) (b)	Explain in detail the preparation, properties and applications of polyesters. Write in short the properties, applications and method of preparation of Polymethyl Metha Acrylate (PMMA).	07 07
Q.5	(a)	OR Write in detail the history, preparation and properties and applications of Poly Ether Ether Vetore (PEEV)	07
	(b)	Ether Ether Ketone (PEEK). Describe in detail the method of preparation of Poly Ether Sulfone (PES)? Also mention their properties and application.	07
