Seat No.:	Enrolment No.
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GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI • EXAMINATION - WINTER 2013

Subject Name: Plastic Structure Property and Relationshi Time: 02:30 pm to 05:00 pm Instructions: 1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. Q.1 (a) Explain about Hydrogen Bonding and its effect on the propertic (b) Explain about Tacticity and its effect on the properties of polytomary. Q.2 (a) Explain about effect of Plasticizer and Molecular weight on Tacticity and its effect on the properties of polymer? OR (b) Explain How the structure of polymer affects the chemical properties. Q.3 (a) Explain How the Linearity, branching and cross-link of polymenthe properties of polymer? (b) Discuss effect of Oxygen on polymer properties. OR Q.3 (a) Discuss about Bond strength and its effect on thermal stability (b) (i) Why PVC is self—extinguishing? Explain (ii) Discuss effect of crystallinity on polymer structure.	es of polymer. 07
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(ii) Discuss effect of crystallinity on polymer structure.	07
Q.4 (a) Discuss about C-H bond and its effect on properties of polyme	r. 07
(b) Discuss about structure and properties of Polyamide.	07
OR	
Q.4 (a) What is Tg? List and Explain factors affecting Tg.	07
(b) Discuss effect of Chlorine (Cl) on polymer properties.	07
Q.5 (a) Discuss about structure and properties of PTFE.	07
(b) Compare: Crystalline Polymer with Amorphous Polymer	07
OR	
Q.5 (a) Write chemical structure of Polycarbonate(PC). Why PC is transport	1
(b) Discuss about structure and properties of Polyacetal.	07
