

GUJARAT TECHNOLOGICAL UNIVERSITY**B. E. - SEMESTER – VII • EXAMINATION – WINTER 2012****Subject code: 172304****Date: 27/12/2012****Subject Name: Manufacturing of Thermoplastic Materials****Time: 10.30 am - 01.00 pm****Total Marks: 70****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

Q.1 (a) Explain Manufacturing Process of LDPE & Application of LDPE. **07**

(b) Explain Manufacturing Process of Nylon 6 & Application of Nylon 6. **07**

Q.2 (a) List Properties & Application of PP. **07**

(b) Explain Manufacturing Process of HDPE. **07**

OR

(b) Describe about Polymerization, structure and properties of PVC. **07**

Q.3 (a) List copolymers of Styrene. Give Chemical structure of each. List at least three properties of each. **07**

(b) Explain structure / property relationship for Polyamide. **07**

OR

Q.3 (a) Describe manufacturing process and application of PC. **07**

(b) Short note on (I) Polyacetal (II) PTFE **07**

Q.4 (a) Give Chemical structure of Polysulphone. Also list properties & application of Polysulphone. **07**

(b) List Properties of PPO & PVDF. **07**

OR

Q.4 (a) Short Note on: Liquid Crystal Polymer. **07**

Q.4 (b) List Properties & Application of PEEK. **07**

Q.5 (a) Describe Manufacturing Process & Application of PMMA **07**

(b) Short note: Electro conductive Polymer. **07**

OR

Q.5 (a) Short note: Photo conductive Polymer **07**

(b) Short note: Ion- Exchange Polymer **07**
