

GUJARAT TECHNOLOGICAL UNIVERSITY
B. E. - SEMESTER – III • EXAMINATION – WINTER 2012

Subject code: 132302**Date: 05-01-2013****Subject Name: Manufacturing of Plastic Materials-I****Time: 10.30 am – 01.00 pm****Total Marks: 70****Instructions:**

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

- Q.1** (a) Give a brief description about solution polymerization technique. **07**
(b) Discuss the manufacturing process of butadiene monomer. **07**
- Q.2** (a) What are the different types of copolymers? Explain. **07**
(b) Draw the plant layout of any plastic material manufacturing industry. **07**
OR
(b) Explain about stereo regular polymers with example. **07**
- Q.3** (a) Write the manufacturing technique of ethylene monomer. **07**
(b) What are the linear, branched and cross linked polymers. **07**
OR
- Q.3** (a) Discuss the suspension polymerization technique. **07**
(b) Explain in short a) CMC b) Initiator c) Curing **07**
- Q.4** (a) Explain the manufacturing process of Resols and Novalacs. **07**
(b) Explain the properties and applications of thermoset polyester resins. **07**
OR
- Q.4** (a) Explain the properties of UF and MF resins. **07**
Q.4 (b) Explain the manufacturing process of epoxy resins. **07**
- Q.5** (a) Draw the layout of Naphtha Cracking Process. **07**
(b) Discuss about UF moulding powder. **07**
OR
- Q.5** (a) Discuss the manufacturing process of MF resins. **07**
(b) Explain the properties of epoxy resins **07**
