

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.E. Sem-III (Plastics Technology) Examination December 2009

Subject code: 132302

Subject Name: Manufacturing of Plastics Materials

Date: 23 / 12 / 2009

Time: 11.00 am – 1.30 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 Polymerisation Technique **07**
(b) Discuss the manufacturing process of Butadiene and Cellulose monomer **07**
- Q.2** (a) Define the followings **07**
a. Monomer, b. Initiator, c. Inhibitor
(b) Draw the plant lay out of any Plastics machine manufacturing industry **07**
- OR**
- (b) Draw the plant lay out of any Plastics material manufacturing industry **07**
- Q.3** (a) Write the manufacturing technique of Styrene Monomer. **07**
(b) Differentiate between the Monomer and Polymer with suitable examples **07**
- OR**
- Q.3** (a) Discuss the Suspension Polymerization Technique **07**
(b) Explain the term Confirmation and Configuration with suitable examples **07**
- Q.4** (a) Discuss about the Linear Branch and Cross Link Polymer with the help of neat sketch. **07**
(b) Define and explain in short: a. Thermoset, b. Curing and c. CMC(Critical Miscible Concentration) **07**
- OR**
- Q.4** (a) Draw the lay out of Naphtha Cracking Process **07**
(b) Differentiate between Linier and Cross linked Polymer **07**
- Q.5** (a) Give properties applications and examples of Unsaturated Polymers **07**
(b) Give the manufacturing process of Vinyl Chloride Monomer **07**
- OR**
- Q.5** (a) Draw a plant lay out of PVC as Plastics raw material industry **07**
(b) Explain the manufacturing process of Epoxy resin **07**
