

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE SEM-V Examination-Nov/Dec.-2011****Subject code: 152304****Date: 03/12/2011****Subject Name: Plastic Processing & Machinery****Time: 2.30 pm -5.00 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) Define Blow Molding. Explain Material characteristic required for Blow Molding Process. List the basic Process steps for Blow Molding. **07**
- (b) Give the classification of Blow Molding Process. Explain Intermittent Extrusion Blow Molding Process with neat sketch. **07**

- Q.2** (a) Define Thermoforming. List Advantages & Disadvantages of Thermoforming. List the basic Process steps of it. **07**
- (b) List & Explain the Material characteristic required for Thermoforming. **07**

**OR**

- (b) List the types of the Forming process. Explain Drape forming process with neat sketch. **07**

- Q.3** (a) Explain about application of Thermoformed materials in the field of Packaging. **07**
- (b) Differentiate: Injection Blow Molding & Extrusion Blow Molding **07**

**OR**

- Q.3** (a) Define: (1) Compression Molding (2) Curing (3) Core (4) Cavity (5) Preforms (6) Blow-Up- Ratio (7) Pinch-off **07**
- (b) Explain in brief: (1) Bulk Factor (2) Heaters for Compression Mold **07**

- Q.4** (a) List the types of Mold used for Compression Molding. Explain Semi-Positive Mold with Neat sketch. **07**
- (b) Differentiate: Compression Molding & Transfer Molding **07**

**OR**

- Q.4** (a) Define Transfer Molding. List types of Process of Transfer Molding. Explain any one with neat sketch. **07**
- Q.4** (b) Define Term Plastic Processing. List the various methods used for Processing of Thermoplastic & Thermoset materials **07**

- Q.5** (a) Explain Calendaring Process with neat sketch. **07**
- (b) Explain different Roll arrangement for Calendaring Process. **07**

**OR**

- Q.5** (a) Define Injection Molding. Explain reciprocating screw type Injection Molding Process with neat sketch. **07**
- (b) Define Reactive Injection Molding (RIM). Explain process of RIM with Flow diagram. **07**

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