

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-IV • EXAMINATION – SUMMER • 2014

Subject Code: 142301**Date: 16-06-2014****Subject Name: Basic Plastics Processing and Thermal Engineering****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) Explain Intermittent Extrusion blow molding process with neat sketch. **07**
 (b) Explain: PMMA and HIPS are the best suitable material for Thermoforming process? **07**
- Q.2** (a) Explain the term Bulk factor & Preform concerned with Compression molding. **07**
 (b) Compare: Extrusion Blow molding with Injection Blow molding. **07**
- OR**
- (b) Define Transfer molding and Explain Pot type transfer molding process with neat diagram. **07**
- Q.3** (a) Define mold. List type of Compression molds. Explain Semi-positive mold with neat sketch. **07**
 (b) Give the classification of Blow molding process. Explain basic blow molding process with neat sketch. **07**
- OR**
- Q.3** (a) Explain the advantages and disadvantages of Transfer molding process over compression molding. **07**
 (b) Explain Stretch Blow molding process with neat sketch. **07**
- Q.4** (a) Define: Conduction, Convection & Thermal Radiation. Explain Newton's Law of Heat Transfer. **07**
 (b) List the types of Heat Exchanger. Explain any two in detail. **07**
- OR**
- Q.4** (a) Explain Plug assist forming process with neat sketch. **07**
 (b) Compare: Skin packaging with Blister packaging. **07**
- Q.5** (a) Define Compression molding. Explain process cycle in detail. **07**
 (b) What is parison programming? Explain parison programming in detail. **07**
- OR**
- Q.5** (a) Explain: (1) Straight Forming (2) Match tool Forming **07**
 (b) Explain about materials for Compression molding process. **07**
