

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

Diploma Engineering - SEMESTER-VI • EXAMINATION – WINTER • 2014

Subject Code: 362303

Date: 02-12-2014

Subject Name: Rotational, Blow Moulding and Thermoforming Process

Time: 02:30 pm - 05:00 pm

Total Marks: 70

Instructions:

- 1. Attempt all questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**
- 4. English version is considered to be Authentic.**

- Q.1** (a) Explain the basic principle of extrusion blow molding with neat sketch. **07**
(b) What is stretch blow molding process? State its advantages and disadvantages. **07**
- Q.2** (a) Explain various parison blowing systems. **07**
(b) Explain drape process with neat sketch. **07**
- OR
- (b) Draw a line diagram of blow molding machine and label its different parts. **07**
- Q.3** (a) State types of rotational molding machines and explain any one. **07**
(b) Write short note on materials for rotational molding. **07**
- OR
- Q.3** (a) Explain rotational molding process with neat sketch. **07**
(b) State applications and advantages of rotational molding process. **07**
- Q.4** (a) Explain in brief the basic principle of pressure forming and vacuum forming. **07**
(b) Explain trimming methods in thermoforming. **07**
- OR
- Q. 4** (a) State and explain factors affecting thermoforming process. **07**
(b) What are the material selection criteria for thermoforming? **07**
- Q.5** (a) Write short note on heating and cooling methods in thermoforming process. **07**
(b) Compare rotational molding and blow molding process. **07**
- OR
- Q.5** (a) Explain parison programming in blow molding. **07**
(b) State and explain rotational mold materials. **07**
