

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

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

Subject Code: 3342301

Date: 28-11-2014

Subject Name: Blow, Rotational 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) Compare Blow moulding, Rotational moulding and Thermoforming process. **07**
(b) Explain process steps for rotational moulding with figure. **07**
- Q.2** (a) Explain basic principle of blow moulding process with neat sketch. **07**
(b) List various polymeric materials used for blow moulding process. Write in brief about any two materials. **07**
- OR
- (b) List various parison blowing system and explain any one. **07**
- Q.3** (a) Write short note on 'parison programming'. **07**
(b) Write short note on 'Die orifice and Mandrel Design' in extrusion blow moulding. **07**
- OR
- Q.3** (a) Write down about advantages and disadvantages of Blow moulding. **07**
(b) Describe various blow moulding processing parameters. **07**
- Q.4** (a) Describe raw material requirements for Rotational moulding. **07**
(b) Explain any one type of rotational moulding machine. **07**
- OR
- Q. 4** (a) Explain trouble shooting of rotational moulding process. **07**
(b) Explain heating and cooling of rotational mould. **07**
- Q.5** (a) Write short note on any one type of Thermoforming process. **07**
(b) Describe applications of Thermoforming process. **07**
- OR
- Q.5** (a) List various thermoforming machines and explain any one. **07**
(b) Write short note on 'Materials for Thermoforming'. **07**
