

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.E. Sem-Vth Examination December 2010

Subject code: 152304

Subject Name: Plastic Processing & Machinery

Date: 21 /12 /2010

Time: 03.00 pm - 05.30 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) Explain Plug assist Thermoforming process in detail with neat sketch. **07**
(b) Describe Reaction Injection molding (RIM) process. **07**

- Q.2** (a) Draw general purpose screw & explain its terminology. **07**
(b) Describe Injection molding process along with advantages. **07**

OR

- (b) Define:- i) Cavity ii) Plastic memory iii) Mold iv) Flash **07**
v) Core vi) Gate vii) Runner

- Q.3** (a) Give principle of Thermoforming process & Explain its material & process variables. **07**
(b) Explain any one Fluid forming process also give advantages & disadvantages of cold forming process. **07**

OR

- Q.3** (a) What are the purpose of preconditioning & explain methods of preheating the thermoset molding. **07**
(b) Give principle of Compression molding process & describe various factors needs to be considered. **07**

- Q.4** (a) Explain advantages & disadvantages of Transfer molding process. **07**
(b) Explain basic extrusion Blow molding process with neat sketch. **07**

OR

- Q.4** (a) Give various Troubleshooting of Thermoforming process. **07**
(b) Give various Troubleshooting of Blow Molding process. **07**

- Q.5** (a) What is bulk factor? Explain preforms with its advantages & disadvantages. **07**
(b) Explain with neat sketch general screw tip & ball type screw tip Assemblies. **07**

OR

- Q.5** (a) Describe Plunger type Transfer Molding with neat sketch & explain important consideration of Transfer mold design for Gate, Runner & Vents. **07**
(b) Explain Injection Blow molding process with advantages & Disadvantages. **07**
