

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA ENGINEERING –SEMESTER –VII• EXAMINATION – SUMMER • 2015

Subject Code: 372304**Date: 22-05-2015****Subject Name: Blow and Thermoforming Mold Design****Time: 02.30 PM TO 05.00 PM****Total Marks: 70****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Each question carry equal marks (14 marks)

- Q.1** (a) Define venting. Explain various methods of venting in blow mold. **07**
(b) Write short note on welding edges and flash pockets. **07**
- Q.2** (a) List out various blow mold materials. Explain materials for production tooling. **07**
(b) What is the function of extruder die head? Explain any one type of die head. **07**
- OR
- (b) Sketch parison stick and label its parts. **07**
- Q.3** (a) Draw sectional elevation of blow mould for any product and label different parts. **14**
- OR
- Q.3** (a) Explain design criteria for mould parting line. **07**
(b) Explain importance of cooling in blow mold with neat sketch. **07**
- Q.4** (a) State and explain various properties required for thermoforming mould materials. **07**
(b) Explain design criteria of vacuum holes in thermoforming mold design **07**
- OR
- Q. 4** (a) Explain cooling methods of thermoforming with neat sketch. **07**
(b) Write short note on undercut molds for thermoforming. **07**
- Q.5** (a) What is shrinkage? State its effect on deciding draft angle. **07**
(b) Explain various thermoforming mold clamping mechanisms. **07**
- OR
- Q.5** (a) Design and draw the sectional elevation and plan of female thermoforming mold for square product having 50 mm side and height equal to 30 mm. The size of the sheet is 300 mm X 300 mm. The thickness of the sheet is 0.5 mm. **14**
