Seat No.:	Enrolment No

GUJARAT TECHNOLOGICAL UNIVERSITY M. E. - SEMESTER – I • EXAMINATION – WINTER • 2013

Subject code: 712402N Date: 26-12-2013 **Subject Name: Plastics Processing Technology** 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** Draw Injection moulding machine screw and explain compression ratio and helix angle. 07 **(b)** What do you mean by Cycle time? Explain Cavity Pressure Profile in Injection Moulding process. **07 Q.2** Explain Toggle system in detail with neat sketch along with its advantage and disadvantages. **07** (b) Differentiate between Toggle clamping system and Hydraulic clamping system. 07 OR **(b)** What do mean by Shrinkage and Warpage? Discuss. 07 **Q.3** (a) Write a note on Cup flow test and its significance for compression moulding 07 (b) Define Bulk factor. Explain importance of Preforms in compression moulding 07 process. OR Q.3 (a) Which are process variables influencing compression moulding process? Discuss. 07 **(b)** Discuss compression molding process cycle. **07 Q.4** Give difference between Compression and transfer moulding. 07 (a) Gibe difference between Thermosetting Injection moulding and Thermoplastics Injection moulding. 07 **Q.4** Explain Monofilament extrusion process with neat sketch. 07 **(b)** Which are the types of screws used in Extrusion and explain each with neat 0.4 Sketch. 07 0.5 (a) What is the function of screen pack and breaker plate? Discuss. 07 Draw line diagram for manufacturing of Pipes and explain function of its various parts. 07 OR **Q.5** (a) Explain Extrusion stretch Blow moulding with neat diagram. 07 **(b)** Describe Trouble shooting in Blow moulding process 07
