Seat No.:	Enrolment No.

## GUJARAT TECHNOLOGICAL UNIVERSITY ME – SEMESTER-1 (NEW) EXAMINATION – WINTER 2016

Subject Code: 2712402 Date:05/01/2017 **Subject Name: Plastics Processing Technology** Time: 2:30 pm to 5:00 pm **Total Marks: 70 Instructions:** 1. Attempt all questions. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. **Q.1** (a) Explain about factors to be considered while selecting the plastics processing 07 techniques Differentiate thermoplastic injection moulding & thermoset injection moulding 07 **(b)** Give comparison between Single screw extruder (SSE) and Twin Screw extruder 07 0.2 (TSE). (b) Describe Compression moulding process. What are process variables influencing **07** compression moulding process? OR **(b)** Explain different types of transfer moulding **07** Explain significance of preheating of material for compression moulding process 0.3 (a) 07 Discuss various types of moulds used for compression moulding 07 0.3 (a) Draw a line diagram of typical Blown film extrusion plant indicating the part details 07 Explain Monofilament extrusion process with neat sketch 07 Write short notes on Parison programming **07** 0.4 (a) **(b)** Explain Extrusion stretch Blow moulding with neat diagram **07 Q.4** Discuss compression molding process cycle 07 (a) **(b)** Explain Toggle system in detail with neat sketch along with its advantage and **07** disadvantages Explain any five defects, causes and remedies of injection molded product 0.5 (a) 07 Draw a pie chart of Cycle time and explain in detail **(b)** 07 OR Write Short notes -(i) Breaker Plate and screen pack (ii) Melt fracture **Q.5 07** (a) **(b)** Short note on: short shot, plasticising capacity, weldline, warpage, flash 07