

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-V (OLD) - EXAMINATION – SUMMER 2017****Subject Code: 153405****Date: 15/05/2017****Subject Name: Plastics Manufacturing Technology (Institute Elective - II)****Time: 02:30 PM to 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.

- Q.1** (a) Give in detail about the types of processing techniques and the selection criteria for the processing methods. **07**
- (b) Explain about thermoset injection moulding process , parts and their respective functions with a neat sketch **07**
- Q.2** (a) Write about the merits & demerits of compression moulding process? **07**
- (b) With a neat sketch diagram explain the various types of clamping systems **07**
- OR**
- (b) List and Explain material characteristics required for the thermoforming process **07**
- Q.3** (a) What is drape forming? Give the advantages of pressure forming over vacuum forming? **07**
- (b) Explain the extrusion blow moulding process in detail with neat sketch. **07**
- OR**
- Q.3** (a) Explain the construction and working of injection blow moulding along with its applications in a neat sketch **07**
- (b) Describe twin screw extruder along with its merits and demerits with a neat sketch **07**
- Q.4** (a) Discuss the Trouble shooting and its remedies for the Compression Molding Machine **07**
- (b) Draw generalized Screw used for Injection molding. Explain any three terminologies related to it. **07**
- OR**
- Q.4** (a) Explain the types of molds used in compression molding with diagram **07**
- (b) Compare: Twin screw extruders with Single screw extruder **07**
- Q.5** (a) Explain vented barrel extruder operation with a neat sketch along with its applications **07**
- (b) Explain the matched die moulding and plug assisted forming with neat sketch. **07**
- OR**
- Q.5** (a) What is parison programming? Explain about it in detail. **07**
- (b) Explain the terms: (1)L/D ratio (2) Compression ratio (3)Shot capacity **07**
