

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-V (OLD) - EXAMINATION – SUMMER 2018

Subject Code:152301

Date:04/05/2018

Subject Name:Injection Moulding Technologies

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) Explain start up and shut-down process for injection molding process. **07**
(b) What are the advantages & disadvantages of Injection moulding **07**
- Q.2** (a) Differentiate between Hydraulic and Toggle clamping systems. **07**
(b) Compare between Hydraulic & Electrical drives. **07**
- OR**
- (b) Describe Gas assisted Injection Moulding process and its applications **07**
- Q.3** (a) Write down causes & remedies for : **07**
(i) Weld line (ii) Sink marks
(b) Describe Reaction Injection Moulding process and its applications **07**
- OR**
- Q.3** (a) Write down causes & remedies for : **07**
(i) Warpage (ii) Burn marks
(b) Explain Standard nozzle and Needle type shut off nozzle. **07**
- Q.4** (a) What is single stage plunger machine? Explain it. **07**
(b) With the help of graph explain Injection cycle. **07**
- OR**
- Q.4** (a) What is nitriding? Explain nitriding process on injection molding machine part. **07**
(b) Explain about maintenance of Injection molding. **07**
- Q.5** (a) Explain PVT diagram in Injection Moulding **07**
(b) Explain cavity pressure profile in Injection Molding. **07**
- OR**
- Q.5** (a) Explain melting of plastic on screw. **07**
(b) Explain about Injection molding of Thermoset. **07**
