

GUJARAT TECHNOLOGICAL UNIVERSITY**Diploma Engineering - SEMESTER-III • EXAMINATION – WINTER • 2014****Subject Code: 332303****Date: 01-12-2014****Subject Name: Design Fundamentals of Moulds****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.
4. English version is considered to be Authentic.

- Q.1** Draw sectional elevation and plan of hand injection mould for any product of your choice. Draw product drawing also. **14**
- Q.2** (a) List various components of injection machine mould and write functions of any seven components in brief. **07**
- (b) Compare integer and insert-bolster types of core and cavity. **07**
- OR
- (b) Explain use of local inserts in integer mould plate with example. **07**
- Q.3** (a) List various types of parting surface and explain any one with neat sketch. **07**
- (b) List various types of guide pillars used in injection mould design and explain any one with neat sketch. **07**
- OR
- Q.3** (a) Draw sketch of one product for each type of parting surface. **07**
- (b) Explain about Locating Ring and its function. Sketch any one type of it. **07**
- Q.4** (a) Draw neat sketches of various types of ejector elements. **07**
- (b) Write short note on 'Sprue Bush'. **07**
- OR
- Q. 4** (a) List various types of gates and explain any one with neat sketch. **07**
- (b) Draw sketches of different runner layouts used in multi impression injection mould. **07**
- Q.5** (a) Explain any one type of ejector plate assembly return system. **07**
- (b) Explain any one type of integer core plate cooling with neat sketch. **07**
- OR
- Q.5** (a) Explain any one type of cavity insert cooling with neat sketch. **07**
- (b) Explain cooling of bolster plate with neat sketch. **07**
