

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

Diploma Engineering - SEMESTER-III • EXAMINATION – WINTER 2013

Subject Code: 332303

Date: 02-12-2013

Subject Name: Design Fundamentals of Moulds

Time: 02:30 pm - 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.
4. English version is considered to be Authentic.

Q.1 (a) Design and draw sectional elevation and plan view of hand injection mold for a hollow cylinder type product. Assume suitable dimensions. **14**

Q.2 (a) Define parting surface. List various types of parting surfaces. Sketch any two types of parting surface. **07**
(b) List any seven elements of machine injection mold. Give function of each element. **07**

OR

Q.3 (b) Differentiate integer method and insert-bolster method. **07**
(a) Give function of guide pillar and guide bush. Sketch guide pillar and guide bush design. **07**
(b) Explain positioning of gate with neat sketches. **07**

OR

Q.3 (a) Sketch sprue gate or fan gate. Also give its applications, advantages and disadvantages.. **07**
(b) Explain balancing of runner with neat sketch. **07**

Q.4 (a) Sketch ejector plate assembly. Label all the parts. **07**
(b) List various ejection elements. Sketch any three of them. **07**

OR

Q. 4 (a) Explain push back pin ejector assembly return system with neat sketch. **07**
(b) Explain stripper plate ejection system with neat sketch.. **07**

Q.5 (a) Define runner efficiency. Sketch various runner profiles. **07**
(b) Sketch any one type of core insert cooling system. **07**

OR

Q.5 (a) Sketch any one type of integer core plate cooling system. **07**
(b) Sketch any one type of integer cavity plate cooling system. **07**
