Seat No.: _____ Enrolment No.: _____

GUJARAT TECHNOLOGICAL UNIVERSITY

DIPLOMA ENGINEERING – SEMESTER – III • EXAMINATION – WINTER 2015

Subject Code: 332303 **Date: 07 -12 -2015**

Subject Name: Design Fundamentals of Mould

Time: 10:30 AM TO 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. **Each question carry equal marks (14 marks)**

Q.1		Design hand injection mould for any suitable product and draw the following: (i) Part drawing (ii) Sectional elevation (iii) Plan. Assume suitable dimensions.	**14**
Q.2	(a)	Define Parting Surface. Sketch any three types of parting surfaces.	**07**
	(b)	Differentiate Integer Method and Insert-Bolster Method.	**07**
		OR	
	(b)	Give function of any seven elements of two plate machine injection mold.	**07**
Q.3	(a)	Sketch guide pillar and guide bush design.	**07**
	(b)	Explain balancing of runner with neat sketch.	**07**
		OR	
Q.3	(a)	Sketch sprue gate. List advantages and disadvantages of sprue gate.	**07**
	(b)	Explain positioning of gate with suitable examples.	**07**
Q.4	(a)	List various ejector elements. Sketch any three of them.	**07**
	(b)	Explain stripper plate ejection with neat sketch.	**07**
		OR	
Q.4	(a)	Draw a neat sketch of ejector plate assembly.	**07**
	(b)	What is the function of push back pin? Draw a neat sketch of push back pin ejector assembly return system.	**07**
Q.5	(a)	Sketch any two types of integer cavity plate cooling.	**07**
	(b)	Give significance of cooling and sketch baffle cooling technique.	**07**
		OR	
Q.5	(a)	Draw a neat sketch of helical core cooling technique.	**07**
	(b)	Give material of any seven elements of machine injection mold.	**07**

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