Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VIII EXAMINATION – WINTER 2015

Subject Code:183602 **Date:12/12/2015**

Subject Name: Design & Fabrication of Molds

Time: 2:30pm to 5:00pm **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)**	List out the different types of compression molding? Explain Semi automatic flash mold with a sketch.	**07**
	(b)	Explain bulk factor in compression mold. How to calculate loading chamber depth?	**07**
Q.2	**(a)**	Write about transfer molding process with the help of a sketch.	**07**
	(b)	How to calculate number of cavities in transfer molding?	**07**
		OR	
	(b)	Write down the advantages and disadvantages of transfer molding.	**07**
Q.3	**(a)**	Explain about three plate injection mold with the help of sketch.	**07**
	(b)	What is venting in injection molds? What is its importance in moulds? Where the venting to be provided in moulds?	**07**
		OR	
Q.3	**(a)**	Explain about Hot runner moulds. How they differ from cold runner moulds?	**07**
	(b)	Describe the tubing die with a neat sketch.	**07**
Q.4	**(a)**	What are the selection criteria of a mould material? List out the mould materials and their applications for a standard mold.	**07**
	(b)	Write the advantages and applications of pre hardened steel material.	**07**
		OR	
Q.4	**(a)**	Define runner. What are the types of runners? Explain about them.	**07**
	(b)	Write a short note on fan gate and rectangular edge gate.	**07**
Q.5	**(a)**	How to calculate number of cavities in injection moulds? Explain.	**07**
	(b)	How to control the temperature of moulds? Explain.	**07**
		OR	
Q.5	**(a)**	Explain the blow molding process with the help of a sketch. What are the applications of blow molding?	**07**
	(b)	Define CAD. Explain the steps involved in CAD process. What are the benefits of implementing CAD?	**07**

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