

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER– VII (New) EXAMINATION – WINTER 2019****Subject Code: 2173409****Date: 30/11/2019****Subject Name: Plastic mold & Die design****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.

		MARKS
Q.1	(a) Write the Principles of mould design.	03
	(b) Write down the selection of materials for moulds and dies.	04
	(c) What is the mean by heat treatment? process explain any one.	07
Q.2	(a) What are the economical point consider for mould design.	03
	(b) Draw any one valve ejection system.	04
	(c) Describe Semi-automatic, Semi positive compression mould with a sketch.	07
OR		
Q.3	(c) Describe the material selection for various parts of dies.	07
	(a) Explain the various types of steels.	03
	(b) Describe the air ejection system.	04
(c) What is the material selection for various parts of mould like cavity.	07	
OR		
Q.3	(a) Explain the working principle of EDM.	03
	(b) Draw the positioning of gates.	04
	(c) Write the grinding process with working principle with neat sketch.	07
Q.4	(a) Explain the design procedure of die.	03
	(b) Describe the bill of material of mould design.	04
	(c) Draw and explain the two plates mould.	07
OR		
Q.4	(a) Describe the shaping machine working principle.	03
	(b) Explain the design of cooling.	04
	(c) Explain the plunger transfer type Mould.	07
Q.5	(a) Write down the requirements of runners and gates.	03
	(b) What is the feed system?	04
	(c) Explain the layout of cooling & heating arrangements.	07
OR		
Q.5	(a) Describe the design of positive compression mould.	03
	(b) Write the Rheological considerations design of extrusion dies.	04
	(c) Explain the requirements of runners and gates.	07
