

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VIII(NEW) EXAMINATION – SUMMER 2019****Subject Code:2183408****Date:17/05/2019****Subject Name:Product Design & Development****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.

Q.1	(a)	Explain the design product process	03
	(b)	Write down the steps for Establishing markets	04
	(c)	Explain the Generic product development process	07
Q.2	(a)	Explain manufacturing cost	03
	(b)	Write down the short note on Identification of customer needs	04
	(c)	Explain the Various phases of product development	07
OR			
Q.3	(c)	Explain activity based costing	07
	(a)	Write the material Selection Process	03
	(b)	Explain the Designing for castings	04
Q.3	(c)	Write a short note on Value Analysis	07
	OR		
	(a)	Define the Residual Stresses, Fatigue, Fracture and Failure	03
Q.4	(b)	Explain the Ergonomics	04
	(c)	Explain the Societal consideration in engineering design	07
	(a)	Explain systematic methods for designing	03
Q.4	(b)	Explain the Generating design concepts	04
	(c)	Write down the steps for Designing to codes of standards in detail	07
OR			
Q.4	(a)	Explain morphological methods	03
	(b)	Explain concept evaluation methods.	04
	(c)	Explain the process of Machining and Welding	07
Q.5	(a)	Explain the classification of the Manufacturing Process	03
	(b)	write short note on Human Factors in Design	04
	(c)	Definition of Creativity and problem solving	07
OR			
Q.5	(a)	Briefly explain the steps of ball pen design	03
	(b)	Explain design for environment	04
	(c)	Explain the process of Designing for forging	07
