

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER- VIII (New) EXAMINATION – WINTER 2019

Subject Code: 2183408**Date: 29/11/2019****Subject Name: Product Design & Development****Time: 02:30 PM TO 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.

		MARKS
Q.1	(a) Explain the design product process	03
	(b) Discuss the types of design	04
	(c) Definition of Market segmentation and Planning for products	07
Q.2	(a) What is the Ergonomics?	03
	(b) Explain the Various phases of product development	04
	(c) Write short note on Human Factors consideration in design	07
OR		
Q.3	(c) Explain the activity based costing	07
	(a) Discuss the Designing for castings	03
	(b) Write the material Selection Process	04
	(c) Write a short note on Value Analysis	07
OR		
Q.3	(a) Define the Residual Stresses, Fatigue, Fracture and Failure	03
	(b) Explain the Design for Manufacture	04
	(c) Discuss the Societal consideration in engineering design	07
Q.4	(a) Discuss the Design for Assembly	03
	(b) What is the systematic methods for designing	04
	(c) Explain Creative thinking techniques	07
OR		
Q.4	(a) Definition of Creativity and problem solving	03
	(b) Discuss the Generating design concepts	04
	(c) Explain manufacturing cost	07
Q.5	(a) Discuss the morphological methods	03
	(b) Which are the systematic methods for designing?	04
	(c) Explain activity based costing	07
OR		
Q.5	(a) Explain the classification of the Manufacturing Process	03
	(b) Discuss the design for environment	04
	(c) Explain the process of Designing for forging	07
