

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER– VIII (New) EXAMINATION – WINTER 2019****Subject Code: 2181913****Date: 21/11/2019****Subject Name: Product Design And Value Engineering****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) List different types of Design and briefly discuss Engineering Design.	03
	(b) Explain different types of organization structure used in product development organizations.	04
	(c) Describe generic product development process in detail.	07
Q.2	(a) What is the importance of product specifications?	03
	(b) What are the challenges of product development?	04
	(c) Explain difference phases of industrial design process.	07
	OR	
	(c) Explain Concept development- The Front end process.	07
Q.3	(a) What AMF development Process?	03
	(b) Define: Product life cycle.	04
	(c) Explain Gozinto chart with the help of example.	07
	OR	
Q.3	(a) Discuss 'Design for Maintainability' with suitable example.	03
	(b) Explain Rigidity and Creativity	04
	(c) Explain steps in the Product planning process.	07
Q.4	(a) Define: (1) Economic Value (2) Social Value (3) Religious Value	03
	(b) Explain how customer need, can be converted into specification of a product with the help of example	04
	(c) Explain the meaning of Design for manufacture. Support your answer with six different examples.	07
	OR	
Q.4	(a) Discuss Articulated-Use Method for conducting interviews with an example	03
	(b) Discuss: (1) Contractual training (2) Informal training	04
	(c) What are the steps involved in Initiating Value Engineering Programme?	07
Q.5	(a) Define value engineering and express the function of any four products in 'Verb' and 'Noun'	03
	(b) Explain the life cycle costs.	04
	(c) Explain how to determine and evaluate value with suitable example.	07
	OR	
Q.5	(a) Explain the process of selection of project for Value Engineering studies	03
	(b) List different evaluation methods for material selection and describe any two.	04
	(c) What is FAST diagram? Explain with suitable example.	07
