GUJARAT TECHNOLOGICAL UNIVERSITY ME - SEMESTER- III • EXAMINATION – SUMMER 2015

Su	bject	Code: 730903 Date: 02/05/2015	
Ti		Name: Product Design 2:30 pm to 5:00 pm Total Marks: 70	
		Attempt all questions. Make suitable assumptions wherever necessary.	
Q.1	(a)	Define product development? Explain characteristics of successful product development in details.	07
	(b)	Write a short note on S-curve and new product development.	07
Q.2	(a) (b)	Explain the four types of product development projects in brief. Explain the activities of understanding customer need in brief.	07 07
		OR	
	(b)	Explain the Gantt charts as planning and scheduling tool with a suitable example.	07
Q.3	(a) (b)	What is Force flow diagram? Explain it with binder clip example. Explain the process to develop a product plan and project mission statements.	07 07
		OR	
Q.3	(a) (b)	Explain subtract and operate procedure of function modeling with suitable example. Explain any two methods for identifying customer needs.	07 07
Q.4	(a)	Explain the different categories of Product architecture in detail with suitable examples.	07
	(b)	What is benchmarking? Explain the detailed process of product benchmarking.	07
		OR	
Q.4	(a)	What is Quality function Deployment? Draw, develop and explain a House of Quality for any Automobile Component in detail.	07
	(b)	Explain the DFA and DFM Guidelines for with suitable examples.	07
Q.5	(a) (b)	Explain five step process of concept selection. Explain C-sketch or 6-3-5 method for concept generation with suitable example.	07 07
		OR	
Q.5	(a) (b)	Write a short note on concept generation. Explain the concept of six-step benchmarking process with a suitable example.	07 07
