

Model Question Paper with effect from 2022-23 (CBCS Scheme)

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Seventh Semester B.E. Degree Examination Design Thinking

TIME: 03 Hours

Max. Marks: 100

Note: 01. Answer any **FIVE** full questions, choosing at least **ONE** question from each **MODULE**.

Module -1			BL	CO	Marks
Q.01	a	Explain the Product Life Cycle in detail with an example.	L2	1	12
	b	Explain the 5 step design process.	L2	1	08
OR					
Q.02	a	Explain the 12 step design process.	L2	1	10
	b	Compare Creativity and Innovation in design process.	L2	1	04
	c	Illustrate the important design ethics.	L2	1	06
Module-2					
Q. 03	a	Explain the lateral thinking with an example.	L2	2	05
	b	Illustrate the mind mapping method with an example.	L2	2	05
	c	Explain the Nominal Group Technique (NGT) in detail.	L2	2	10
OR					
Q.04	a	Illustrate the rules for Brainstorming session to make it effective.	L2	2	06
	b	Outline the differences between vertical and lateral thinking.	L2	2	04
	c	Summarize the usage of the following in the idea development: i. Computer Aided Design ii. Visual Design Elements	L2	2	10
Module-3					
Q. 05	a	Explain the reverse engineering process with a neat flowchart.	L2	3	10
	b	Illustrate how reverse engineering leads to a new understanding about products.	L2	3	10
OR					
Q. 06	a	Explain the reasons for using reverse engineering.	L2	3	05
	b	Explain how information is gathered through product assembly.	L2	3	05
	c	Discuss how do patents protect a company's products.	L2	3	10
Module-4					
Q. 07	a	Explain how the drawing and modeling support the design process with a neat diagram.	L2	4	10
	b	Illustrate how communication happens through i. Drawing mirror images ii. Positive & Negative shapes	L2	4	10

OR					
Q. 08	a	Explain the various elements of design in detail.	L2	4	14
	b	Illustrate how communication happens through Blind Contour Drawing.	L2	4	06
Module-5					
Q. 09	a	Illustrate the concept of two point perspective with an example.	L2	5	10
	b	Explain the Orthographic drawing used in technical drawing.	L2	5	10
OR					
Q. 10	a	Discuss the usage of sectional views in technical drawing.	L2	5	08
	b	Explain the Isometric drawing with an illustration of isometric grid paper to sketch.	L2	5	08
	c	Compare the linear and point perspectives.	L2	5	04