

CBCS SCHEME

USN

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

BCG602

Sixth Semester B.E./B.Tech. Degree Examination, Dec.2025/Jan.2026

Design Processes and Perspectives

Time: 3 hrs.

Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.

2. M : Marks , L: Bloom's level , C: Course outcomes.

Module – 1				M	L	C
Q.1	a.	Explain the importance of Engineering Design Process. Also discuss the 5 steps in engineering design process.		10	L2	CO1
	b.	List and explain types of Designs.		5	L2	CO1
	c.	With a neat diagram, describe simple iteration model.		5	L2	CO1
OR						
Q.2	a.	Explain in the detail considerations of a Good Design.		10	L2	CO1
	b.	Briefly, explain societal consideration in Engineering Design.		5	L2	CO1
	c.	Summarize problem definition and describe the parameter involved in creating a design.		5	L2	CO1
Module – 2						
Q.3	a.	Compare and contrast data, information and knowledge.		5	L2	CO2
	b.	Describe Product Architecture in detail.		10	L2	CO2
	c.	Summarize the concept of embodiment design.		5	L2	CO2
OR						
Q.4	a.	Describe in detail the steps in developing Product Architecture.		10	L2	CO2
	b.	List and explain the library source of information pertinent to design.		10	L2	CO2
Module – 3						
Q.5	a.	Describe the steps to enhance creative thinking. Also explain 4 steps model for continue thinking and problem solving process.		10	L2	CO3
	b.	With a neat diagram, explain evaluation process.		5	L2	CO3
	c.	List and explain 5 base patterns by which people cope with the challenges of decision making.		5	L2	CO3
OR						
Q.6	a.	Describe in detail Barriers of creative thinking.		10	L2	CO3
	b.	With a neat diagram, explain concept selection process.		5	L2	CO3
	c.	List out and explain sequence of steps that are taken in making a good decision.		5	L2	CO3

Module – 4					
Q.7	a.	Describe in detail, Golden Rule of Design.	10	L2	CO4
	b.	What are Design Patterns? Explain the three types of patterns that are relevant to object oriented design.	10	L2	CO4
OR					
Q.8	a.	Describe in detail web interface design steps and design principle.	10	L2	CO4
	b.	Explain web design pattern with respect to drag forces and granularity.	10	L2	CO4
Module – 5					
Q.9	a.	Outline WCED report on sustainability.	5	L2	CO5
	b.	Illustrate the challenges of sustainability for Business.	5	L2	CO5
	c.	Describe Recycling in detail.	10	L2	CO5
OR					
Q.10	a.	Summarize the concept of Ecosystem and Balance.	5	L2	CO5
	b.	Explain your views on dependence of Fossil fuels, behavior change started and sustainability.	5	L2	CO5
	c.	Explain in detail Reuse and remanufacturing.	5	L2	CO5
	d.	Describe in detail combustion and landfills.	5	L2	CO5
