

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***M.E DEGREE END SEMESTER THEORY EXAMINATIONS, NOV/DEC 2025***First Semester**Product Design and Development***PPDT2413 – Creativity and Innovation***Regulations - 2024**Duration : 3 Hrs**Maximum : 100 Marks****PART – A (ANSWER ALL QUESTIONS) (Marks 10*2=20)***

<i>Q. No.</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
1.	Relate directed creativity with quality concept.	L2	1	2
2.	Label the meaning of heuristics.	L1	1	2
3.	Outline about SCAMPER tool.	L2	2	2
4.	Infer about the external motives for creativity.	L2	2	2
5.	Interpret Emotional design.	L2	3	2
6.	Recall one example for incremental improvement in product design.	L1	3	2
7.	Illustrate about Morphological Box.	L2	4	2
8.	List any two Altshuller's Inventive Principle.	L1	4	2
9.	List any two key factors that contribute to the process of de-commoditization.	L1	5	2
10.	Interpret about product architecture.	L2	5	2

PART – B (ANSWER ALL QUESTIONS) (Marks 5*16 = 80)

<i>Q. No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
11.	a i Relate the theory of the mechanics of mind with directed creativity.	L2	1	8
	ii Explain the impact of attitude for creative thinking and problem-solving.	L2	1	8
	Or			
	b i Interpret anyone approach that support creative thinking and explain.	L2	1	8
	ii "Out of box thinking is the real source of creativity" – Explain your answer with a suitable example.	L2	1	8
12.	a i Apply anyone tool that prepare the mind for creative thought using an example.	L3	2	8
	ii Summarize the process of incubation.	L3	2	8
	Or			
	b i Write the importance of prototyping in creativity.	L3	2	8
	ii Construct the ICEDIP model with one example.	L3	2	8

13.	a	i	Relate customer feedback with creative product development.	L2	3	8
		ii	Contrast between innovative design and traditional product design.	L2	3	8
Or						
	b	i	Summarize about three levels of Emotional Design	L2	3	8
		ii	"Creative thinking be leveraged to make reengineering efforts more effective" – Explain.	L2	3	8
14.	a		Apply Altshuller's Inventive Principles in structured problem solving with your example.	L3	4	16
	Or					
	b		"Problem identification is critical in inventive problem solving" – Infer with an example.	L3	4	16
15.	a		Outline about the two types of disruption in detail.	L3	5	16
	Or					
	b		Discover the role of senior executive in leading new growth to drive the Disruptive Growth Engine.	L3	5	16