

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL-MAY 2025***Seventh Semester**Information Technology***OME352 – Additive Manufacturing****(Common to Computer Science and Engineering)***Regulations – 2021***Duration : 3 Hrs****Maximum : 100 Marks****PART – A (ANSWER ALL QUESTIONS) (Marks 10*2=20)**

Q.No	Questions	BTL	CO	Marks
1.	Define Rapid Prototyping.	L1	1	2
2.	List the types of Rapid Tooling.	L1	1	2
3.	What are the merits of Digital Light Processing?	L1	2	2
4.	Recall few materials used in FDM process.	L1	2	2
5.	List the basic elements of SLS machine.	L1	3	2
6.	Name the various process parameters in 3D printing process that affect the strength and surface quality.	L1	3	2
7.	Illustrate the basic principle of LENS process.	L2	4	2
8.	List out the various benefits of Multi Jet modeling?	L1	4	2
9.	Name few applications of LOM process.	L1	5	2
10.	List few applications of DW.	L1	5	2

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

Q.No	Questions	BTL	CO	Marks
11.	a Explain the AM process chain.	L2	1	16
	Or			
	b Construct and explain the STL file structure.	L3	1	16
12.	a Explain the process of SLA with applications.	L3	2	16
	Or			
	b Illustrate the working principle of fused deposition modeling with a neat sketch.	L3	2	16

13.	a	Compare between SLS and SLM.	L4	3	16
		Or			
	b	Explain the process of three dimensional printing with neat sketch.	L2	3	16
14.	a	Identify the major process parameters of LENS process.	L3	4	16
		Or			
	b	Select any one process based on material jetting, explain it in detail.	L3	4	16
15.	a	Explain the basic elements of LOM in detail.	L2	5	16
		Or			
	b	Explain the Inkjet printing process.	L2	5	16