Reg. No.:						

Question Paper Code: U3909

M.E. DEGREE EXAMINATION, APRIL 2024

Professional Elective

CAD / CAM

21PCD509- ADDITIVE MANUFACTURING

(Regulations 2021)

Duration: Three hours			Maximum: 100 Marks		
		Answer ALL Questions			
		PART - A $(5 \times 20 = 100 \text{ Marks})$			
1.	(a)	Explain the 3D printing technology? Or	CO1- U	(20)	
	(b)	Write a note on the need and development of AM systems	CO1- U	(20)	
2.	(a)	Discuss various aspects of tool path generation? Or	CO1- U	(20)	
	(b)	Explain the need of support generation with flow charts.	CO1- U	(20)	
3.	(a)	Explain the working principle of SGC. Or	CO1- U	(20)	
	(b)	Explain the working principle of LOM.	CO1- U	(20)	
4.	(a)	What are the processing techniques used in LENS? List advantages and limitations of LENS? Explain with examples Or	the CO2- U	(20)	
	(b)	Explain the applications of SLS and its processing techniques	CO2- U	(20)	
5.	(a)	Explain Ballistic Particle Manufacturing (BPM) Or	CO2- U	(20)	
	(b)	Explain Electron Beam Melting	CO2- U	(20)	