

**PRAGATI ENGINEERING COLLEGE: SURAMPALEM
(AUTONOMOUS)**

M. Tech – II Semester Regular/Supplementary Examinations, July-2024

**RAPID PROTOTYPING
(CAD/CAM)**

Time: 3 Hours

Max Marks: 60

**Answer any FIVE questions
All questions carry EQUAL marks**

5X12=60M

Q.NO.		Question	BTL	CO	Marks
1.	a.	Discuss about Rapid Prototyping Process Chain.	K2	CO1	6M
	b.	Explain different applications of Rapid Prototyping in Design, Planning and Manufacturing.	K2	CO1	6M
2.	a.	Explain the following 3D Modeling Software's features i) CATIA ii) PROE	K2	CO2	6M
	b.	Discuss Slicing and Scan Path Generation Algorithms briefly.	K3	CO2	6M
3		Discuss Stereolithography in detail with advantages, disadvantages and applications.	K2	CO3	12M
4	a.	Explain Shape Deposition Manufacturing Process.	K2	CO4	6M
	b.	Discuss Multi-Jet Modeling (MJM) System.	K3	CO4	6M
5.	a.	Explain the case study of Wind-Tunnel Testing with RP Models.	K2	CO5	6M
	b.	Demonstrate Two Photon Process for Micro/Nano Fabrication.	K3	CO5	6M
6.	a	Write the advantages, disadvantages and applications of Solid Ground Curing process.	K1	CO3	6M
	b	Discuss File Formats IGES and STL.	K2	CO2	6M
7	a	Demonstrate Fuse Deposition Modeling system briefly.	K3	CO4	6M
	b	Explain Reverse Engineering Process and Applications.	K2	CO5	6M
8	a	Discuss about the historical development of Rapid Prototyping.	K2	CO1	6M
	b	Explain Mechanical Scanning System.	K2	CO2	6M