Reg.No:

SNS College of Technology, Coimbatore-35.
(Autonomous)

B

B.E/B.Tech- Internal Assessment -I
Academic Year 2023-2024(ODD)
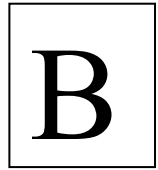**Fifth Semester**
Mechanical Engineering
19MEE307 – Additive Manufacturing

Time: 1¹ᐟ² Hours   Maximum Marks: 50
Answer All Questions
PART - A (5 x 2 = 10 Marks)

1.	What are the surface fitting techniques?	CO1	Und
2.	What are the post processing methods in Rapid prototyping?	CO1	Rem
3.	Mention the Geometry Modeling techniques	CO2	Und
4.	What are data exchange formats? Why are they required?	CO2	Rem
5.	Mention any two materials used in Rapid tooling	CO2	Und

PART – C (13+13+7 = 35 Marks)

6.	(a)	Explain the classification of AM process. What are the challenges in AM? discuss	13	CO1	App
		(or)			
	(b)	What is the requirement of support generation in FDM process? How does orientation of the part affect the quality of the prototype? Discuss	13	CO1	App
7.	(a)	What are the scanning techniques used in RE? Explain the steps involved in reverse engineering	13	CO2	Und
		(or)			
	(b)	Explain the advantages of solid modeling over wireframe modeling and surface modeling. How is the weight of the part or assembly determined?	13	CO2	Rem
8.	(a)	Explain direct method of Rapid tooling.	14	CO1	Und
		(or)			
	(b)	How does rapid tooling help in product development?	14	CO2	Und

Blooms Taxonomy Legend: Rem: Remembering Und: Understanding Ana: Analyse App: Application