Reg. No.												

Question Paper Code	12328

M.E. / M.Tech. - DEGREE EXAMINATIONS, NOV / DEC 2023

First Semester

M.E. - CAD/CAM

20PCDPC102 - COMPUTER AIDED TOOLS FOR MANUFACTURING

(Regulations 2020)

Duration: 3 Hours Max. Marks: 100

PART - A (10 × 2 = 20 Marks)

Answer ALL Questions

		Marks, K-Level, CO
1.	Differentiate point to point and continuous path manufacturing?	*2,K2,CO1*
2.	What is G00 and G01 stands for?	*2,K1,CO1*
3.	List the needs for CAPP.	*2,K1,CO2*
4.	What is D – Class?	*2,K1,CO2*
5.	What is GD&T?	*2,K1,CO3*
6.	What is Tolerance Synthesis?	*2,K1,CO3*
7.	Write down the need for reverse engineering.	*2,K1,CO4*
8.	Define Solid Modelling.	*2,K1,CO4*
9.	List the Objectives of Database.	*2,K1,CO5*
10.	What is recycle time in reverse engineering?	*2,K1,CO5*

PART - B (5 × 13 = 65 Marks)

Answer ALL Questions

11.	a)	Discuss various tool path generations and contour profiles with examples.	*13,K2,CO1*
		OR	
	b)	Briefly explain the Canned cycle in manual part programming.	*13,K2,CO1*
12.	a)	Explain in detail about cellular manufacturing.	*13,K2,CO2*
		OR	
	b)	Examine the information on CAM-I, D-CLASS, and CMPP in the brief.	*13,K2,CO2*
13.	a)	Explain about various tolerances, fits and limits with their sketches.	*13,K2,CO3*
		OR	
	b)	Explain Tolerance Analysis &Tolerance Synthesis.	*13,K2,CO3*

14. a) Compare Surface Modelling and Solid Modelling. *13,K2,CO4*

OR

b) Explain in detail about various tools used for Reverse Engineering. *13,K2,CO4*

15. a) How embedded software helps in developing solid model in reverse engineering process? Discuss in detail. *13,K2,CO5*

OR

b) Explain
(i) Rule based detection for RE user interface. *6,K2,CO5*
(ii) RE of Assembly programs. *7,K2,CO5*

PART - C (1 × 15 = 15 Marks)

16. a) Write a case study on Rule based detection for Reverse Engineering user interface and Reverse Engineering of assembly programs. *15,K3,CO5*

OR

b) Elaborate in detail about the Contact Inspection Methods and Non Contact Inspection Methods. *15,K3,CO3*