Code No:**R1641032**　　　**R16**　　　

IV B.Tech I Semester Advanced Supplementary Examinations, May - 2022
CAD/CAM
(Common to Mechanical Engineering and Automobile Engineering)
Time: 3 hours　　　　　　　　　　　　　　　　　　　　　　Max. Marks: 70
Question paper consists of Part-A and Part-B
Answer ALL sub questions from Part-A
Answer any FOUR questions from Part-B
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PART–A(14 Marks)

1.	a)	Describe the Raster scan graphics?	[2]
	b)	List out the surface representation methods in geometric modelling?	[2]
	c)	Define the MCU, DPU, CLU in NC system?	[3]
	d)	What are the types of GT machine cells?	[2]
	e)	Differentiate between contact and noncontact inspection methods?	[2]
	f)	Define total quality management and explain its relevance to CIM	[3]

PART–B(4x14 = 56 Marks)

2.	a)	Describe the advantages of local area network in a design environment?	[7]
	b)	Explain the function of graphics package?	[7]
3.	a)	Explain how surfaces can aid in creating solid models, that is when must you use surface in solid modelling?	[7]
	b)	Find the equation of a Bezier curve which is defined by four control points as (80,30,0),(100,100,0),(200,100,0) and (250,30,0).	[7]
4.	a)	Explain the components of direct numerical control system witha block diagram What are its advantages?	[7]
	b)	Discuss the relationship of adaptive control software to APT program?	[7]
5.	a)	What factors are to be considered in selecting a classification and coding system?	[7]
	b)	Explain the enterprise resource planning and capacity requirements planning?	[7]
6.	a)	Discuss the important benefits of computer-aided quality control?	[7]
	b)	What is the working principle of computer vision systems?	[7]
7.	a)	Explain the importance of the human labour in manufacturing systems?	[7]
	b)	How does Lean production differ from Flexible production system? Explain.	[7]

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