Code No: 137AZ

R16

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech IV Year I Semester Examinations, December - 2019
CAD/CAM
(Common to ME, AE, MSNT)

Time: 3 Hours

Max. Marks: 75

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b as sub questions.

PART – A
(25 Marks)

1.a)	List out the benefits of the CAD/CAM.	[2]
b)	What is the difference between parametric and non parametric form?	[3]
c)	What is Blending functions?	[2]
d)	Write the parametric equation for Plane surface.	[3]
e)	What is Direct Numerical Control?	[2]
f)	What are the basic elements of NC system?	[3]
g)	State advantages of CAPP.	[2]
h)	What are the two types of parts similarities?	[3]
i)	Define FMS.	[2]
j)	What are the components of an AGV system?	[3]

PART – B
(50 Marks)

2.a)	Explain about different display devices	
b)	What is the most commonly used graphic terminal? Explain its working.	[5+5]
	OR	
3.	Derive the parametric equation for B Spline curve and also list out its characteristics.	[10]
4.	Describe briefly about Bicubic surface and Bezier surface.	[10]
	OR	
5.	Briefly explain the term C rep Modeling with suitable example.	[10]
6.	Differentiate between the ACC and ACO type adaptive controllers.	[10]
	OR	
7.	Discuss the four types of statements used in APT part programming.	[10]
8.	Write a short note on Retrieval type and Generative type.	[10]
	OR	
9.a)	What are the characteristic features of material requirement planning?	
b)	Explain briefly the MICLASS system of codification.	[5+5]
10.a)	What are the different types of CMM?	
b)	Explain in detail the different types of database requirements in CIM.	[4+6]
	OR	
11.	Describe any two methods of non contact type of computer aided testing.	[10]

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