

R16

Code No: 137AZ

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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