R09

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech IV Year I Semester Examinations, May/June - 2015
CAD/CAM
(Common to ME, AE, AME)

Time: 3 Hours   Max. Marks: 75

Answer any Five Questions
All Questions Carry Equal Marks
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1.a) Explain the basic structure and basic configuration of CAD/CAM software.
 b) With neat sketch, explain the working principle of Refresh display and DVST.
[7+8]

2.a) What is data base? Explain the popular database models with an example.
 b) What is windowing? Explain with suitable example.
 c) Describe the DDA algorithm.   [5+5+5]

3.a) What are the various types of curve fitting manipulation techniques ? Explain them.
 b) Explain the De Boor's algorithm for B spline surfaces with an example.   [8+7]

4. Write short notes on the following:
   a) Display control commands
   b) Methods of Dimensioning and tolerance
   c) Solid modeling.   [5+5+5]

5.a) Differentiate between
    i) Absolute and incremental position system
    ii) Fixed and Floating zero method.
 b) Discuss the different NC words used in part programming techniques.
 c) Discuss the basic feedback control system used in CNC machine tools.
[5+5+5]

6.a) Explain the benefits of a well designed classification and coding system for GT.
 b) What is production flow analysis? Discuss various steps involved in it.   [7+8]

7.a) With the help of schematic diagram explain the measurement system based on CMM system.
 b) Differentiate between computer aided inspection and computer aided testing.
[7+8]

8.a) Explain the computerized business functions of CIM.
 b) What are the three major elements of an ASRS? Explain.   [7+8]

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