

R09

Code No: 09A70303

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year I Semester Examinations, May/June - 2013

CAD/CAM

(Common to ME, AE, AME)

Time: 3 Hours

Max. Marks: 75

Answer any Five Questions

All Questions Carry Equal Marks

- 1.a) What is display unit? Explain screen buffer and scanning related to CAD systems.
- b) Explain the concept of various coordinate systems required for geometric display systems. Give an example. [7+8]
- 2.a) Discuss the concept of obtaining a rotation about an arbitrary point in XY plane.
- b) Explain the importance of clipping? Give the details of method used for line clipping. [7+8]
- 3.a) What are the primitive elements in CAD? Give the classification of geometric modeling systems based on their capabilities.
- b) What are the differences and applications of Coons and Bezier surfaces? [7+8]
- 4.a) Explain various facilities that are useful for editing geometric entities in CAD drafting system?
- b) Explain extrude and loft commands in CAD software package. [7+8]
- 5.a) With a block diagram explain main features of CNC machine tools with feedback.
- b) Differentiate between manual part programming and computer aided part programming in CNC machines. [7+8]
- 6.a) Define part family in GT. Explain one method of parts coding system.
- b) Explain the guidelines and benefits of implementing group technology. [7+8]
- 7.a) Define computer aided quality control. Explain how it is implemented.
- b) What are the types of CMM. State the applications. [7+8]
- 8.a) With a CIM circle diagram explain communication network the system.
- b) State the advantages of CIM in manufacturing industry. [7+8]

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