

Code.No: 37260

R05

SET-1

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**  
**IV.B.TECH - I SEMESTER REGULAR EXAMINATIONS NOV/DEC, 2009**  
**CAD/CAM**

**(Common to ME, MMT, MEP, AE)**

**Time: 3hours**

**Max.Marks:80**

**Answer any FIVE questions**  
**All questions carry equal marks**

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- 1.a] Explain the computer aided Design process with the help of a block Diagram.  
b] Elaborate on the basic requirements that a CAD software has to satisfy. [8+8]
  
- 2.a] What are entities? Explain the methods of defining lines, arcs and circles in wire frame modeling.  
b] From fundamentals; Derive the Hermite cubic Spline equations. [8+8]
  
- 3.a] What do you mean by weighting function. Differentiate from the blending function.  
b] Describe  $C^0, C^1, C^2$  containing in composite B-Spline surface. [8+8]
  
4. What do you mean by primitive instancing? Explain CSG scheme for complex solid modeling objects representation. [16]
  
- 5.a] Draw the block Diagram of Adaptive control with constraints and briefly discuss their features.  
b] Discuss any five motion statements used in APT part programming language. [8+8]
  
- 6.a] Compare a process type layout and group technology layout for batch production.  
b] Explain optiz classification and coading system in GT. [8+8]
  
7. Discuss principles of material handling. Name and Describe the five types of maternal handling devices. [16]
  
8. Explain with the aid of block Diagram the concept of "CIM". [16]