

Computer Aided Manufacturing (2171903)

Assignment-1

1. What is CIM? Explain Components of CIM.
2. What are the different types of manufacturing? Make an assessment of the extent of computer control in specific cases of each types of manufacturing.
3. Explain clearly the difference between NC, CNC and DNC machine.
4. Which are the basic components of NC system? Briefly discuss function of each component.
5. Discuss the Open loop & Closed loop control system of NC/CNC machines.
6. Explain axis identification for Lathe, Milling & Drilling machines with neat sketches.
7. Discuss the salient features of Absolute & Incremental programming system with suitable example.
8. Explain recirculating ball screw used in CNC machine.
9. Explain Do loop, subroutine and macro with suitable example.
10. What is tool compensation? Explain tool length and cutter radius compensation.
11. Discuss the salient features of point to point, straight line and contouring CNC systems with neat sketches.
12. What are the essential elements of a PLC system?

Note: Assignment-1 should be submitted on or before:05/09/2019

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