

COMPUTER AIDED MANUFACTURING (3361901)

FREQUENTLY ASKED QUESTIONS (FAQ'S)

Fundamentals of CAM

1. Explain the concept of CAM.
2. Explain Concept of NC machine.
3. Explain Concept of DNC machine.
4. Explain Advantages and disadvantages of CNC.
5. Explain selection criteria for CNC machines.

Constructional features of CNC machines

6. Classify CNC machines.
7. Explain spindle drive and axes drive on CNC machines.
8. Explain re circulating ball screw system.
9. Explain the feedback devices used in CNC machine.
10. Explain automatic tool changer (ATC).
11. Explain automatic pallet changer (APC).
12. Explain the concept of tool presetting.

CNC machines

13. Explain work holding devices used on CNC turning centre.
14. Explain tool holding devices used on CNC turning centre.
15. Explain work holding CNC machining centre.
16. Explain tool holding devices used on CNC machining centre.
17. Explain application of CAD/CAM interfacing standards.

CNC part programming

18. Explain programming format and structure of part program.
19. Write down ISO G and M codes for turning and milling with their meanings and applications.
20. Explain: 1) Canned cycles 2) Macro
3) Do loops 4) Subroutines
21. Explain CNC turning and milling part programming using Canned cycles, Do loops and Subroutines.
22. Explain need and importance of various compensations:
 - 1) Tool length compensation 2) Pitch Error compensation
 - 2) Tool radius compensation 4) Tool offset.

Recent trends in CAM

23. Explain Flexible Manufacturing Systems (FMS).
24. Explain concept of Computer Integrated Manufacturing (CIM).
25. Explain concept of rapid prototyping.
26. Explain the concept of adaptive control.