SCHOOL OF DIPLOMA ENGINEERING, SOLDHA QUESTIONS FOR REVISION DIPLOMA ME 5TH SEM SUBJECT-CNC & AUTOMATION

Very short question (2 marks)

- 1. What is NC machine
- 2. Define CNC Machine
- 3. Define DNC Machine
- 4. Components of CNC machine
- 5. Name various input devices used in CNC machine
- 6. EIA Format / ASCII Code
- 7. Convert 27 of decimal into binary number.
- 8. Stepper motor
- 9. What is preset tool?
- 10. Define ATC
- 11. What are qualified tools?
- 12. Types of control system
- 13. Feedback devices
- 14. Axis control system
- 15. What is PLC?
- 16. What is Resolution?
- 17. What are transducers?
- 18. What are encoders?
- 19.LVDT
- 20. What is repeatability?
- 21. Explain any two G codes.
- 22. Explain any two M codes.
- 23. What is block no. in a part program?
- 24. Cutter radius compensation
- 25. Tool offset
- 26. What is Dwell?
- 27. What is backlash error?
- 28. Define automation.
- 29. Name different types of automation.
- 30. What is NC Post processing?
- 31. What is AGV?
- 32. Group technology.
- 33. What is industrial robot?
- 34. What are end effectors in robots?

SHORT QUESTION FOR (4) MARKS

- (1) Applications of CNC machines.
- (2) Difference between conventional and CNC machines.
- (3) Write short note on punched card.
- (4) Explain types of DNC.
- (5) Difference between DNC and CNC machines.
- (6) Difference between EIA and ISO codes.
- (7) Explain working of any type of punch reader..
- (8) Describe pallet system
- (9) Difference between preset and QUALIFIED TOOLS.
- (10) Chip removal mechanism.
- (11) Requirements of work holding devices.
- (12) Cutting tool materials and their applications.
- (13) Absolute and incremental systems
- (14) Contouring systems
- (15) Types of position control
- (16) Index of performance in ACO
- (17) Explain one canned cycle
- (18) subroutines
- (19) do-loop
- (20) Difference between G codes and M codes.

LONG QUESTION FOR 10 MARKS

- (1) Explain different slide ways
- (2) Explain swarf / chip removal mechanism
- (3) Different types of drives used in CNC machines.
- (4) Explain dif types of control systems.
- (5) Explain procedure for developing part programming.
- (6) Describe all the NC words.
- (7) Problems in mechanical components
- (8) Common faults and remedies found in CNCs.
- (9) Explain various types of automation with advantages.
- (10) Classification of robots in detail.