

- Q.25 What are the various factors considered in selecting tooling for CNC Machines
 Q.26 Explain Preset and qualified tools
 Q.27 Explain Automatic tool changer
 Q.28 Explain in brief types of tool holding devices
 Q.29 Explain basic types of ATC
 Q.30 Write a short note on Work holding and locating devices
 Q.31 Explain components of CNC Systems
 Q.32 Differentiate between conventional and CNC Machines
 Q.33 Explain Swarf removal process
 Q.34 Enlist various safety devices used to safeguard CNC
 Q.35 Compare conventional and CNC Machine Tool

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Explain the working principle and features of ATC
 Q.37 Explain various feedback control systems.
 Q.38 Explain the following:
 a) PLC
 b) Micro-controllers

No. of Printed Pages : 4
Roll No.

124652/84651/84652

5th Sem **Subject:- Basics of CNC Machines**

Time : 3Hrs.

M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 Command Go1 means
 a) Linear Interpolation b) Rapid positioning
 c) Circular Interpolation d) None
 Q.2 CNC stands for:
 a) Computer Network control
 b) Computer Numeric control
 c) Computer Nested control
 d) all of the above
 Q.3 Point to point systems are used for _____
 a) drilling b) parting
 c) grooving d) facing
 Q.4 The CNC Control systems which has no feedback are
 a) uncontrolled system b) controlled system
 c) closed loop d) open loop
 Q.5 The other name for G codes is _____

- a) Speed codes b) Preparatory codes
c) Governing codes d) Miscellaneous codes
- Q.6 Which type of feedback device used in CNC
a) Position feedback b) velocity feedback
c) Both a and b d) none of above
- Q.7 DNC stands for :
a) Direct Network control
b) Direct Numeric control
c) Direct Nested control
d) all of the above
- Q.8 In a DNC System
a) Many machine tool can be controlled simultaneously
b) Only single machine tool can be controlled
c) NC machine cannot be controlled
d) None of the above
- Q.9 Which of the following is not the advantage of CNC machine:
a) Many machine tool can be controlled simultaneously
b) Only single machine tool can be controlled
c) NC machine cannot be controlled
d) None of the above
- Q.10 Which code is used for dwell function
a) G01 b) G03
c) G02 d) G04

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 List any two applications of CNC
Q.12 What is the function of G01 Code in CNC
Q.13 Define DNC
Q.14 Expand MCU
Q.15 What is the function of ATC
Q.16 The function of slideways in CNC is to _____
Q.17 The tool coatings improve the performance of tool
a) True b) False
Q.18 Ceramic tools can be used for _____ cutting speeds
Q.19 What is PLC
Q.20 M01 Code is used for _____

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Explain closed loop control systems.
Q.22 State few advantages and disadvantages of CNC
Q.23 Explain various stages of tool change
Q.24 Write a short note on tool materials used for CNC Machine