

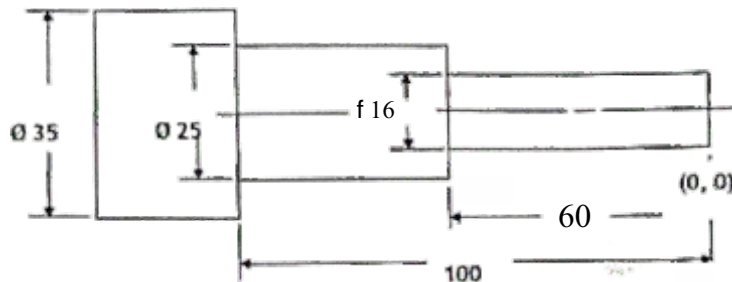
- Q.32 Define the automation and its three types.
 Q.33 What is potentiometer?
 Q.34 Explain any one type of AGV.
 Q.35 Explain hydrostatic slide ways.

SECTION-D

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

- Q.36 Explain DNC machine. Write its advantages, disadvantages & applications
 Q.37 Write short note on:
 a) Encoders b) LVDT.
 Q.38 Write a manual part program for simple turning operation for a given component (using G01 command).

01 (All dimensions are in mm)



No. of Printed Pages : 4
 Roll No.

MSIL121755/031755

4th Sem / Mech. Engg.(MSIL) Subject:- CNC Machines and Automation

Time : 3Hrs.

M.M. : 100

SECTION-A

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

- Q.1 LVDT has got _____ number of windings.
 a) 04 b) 02
 c) 03 d) 08
- Q.2 Full form of MCU is.
 a) Machine computer unit
 b) Machine control unit
 c) Machine control universal
 d) Machine computer universal
- Q.3 Point to point systems are used for.
 a) Drilling b) Parting
 c) Grooving d) Facing
- Q.4 Which of the following code is used in programming in incremental coordinates?
 a) G92 b) G90
 c) G91 d) G94
- Q.5 The punch tape reader in a CNC machine is.
 a) Feedback system b) Input device
 c) Program d) Driving system

- Q.6 Which of the following code will give circular interpolation anti-clockwise?
- a) G00 b) G01
c) G03 d) G903
- Q.7 In how many ways CNC machine tool systems can be classified?
- a) 3 b) 5
c) 4 d) 2
- Q.8 Part programming mistakes can be avoided in.
- a) CNC machine tool b) NC machine tool
c) Both (A) and (B) d) None of these
- Q.9 Closed loop control system is also known as _____ Control system.
- a) Feedback b) Non-Feedback
c) Hydraulic d) Pneumatic
- Q.10 M05 code used for.
- a) Program end b) Program optional stop
c) Spindle stop d) Coolants on

SECTION-B

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

- Q.11 Expand CIM.
- Q.12 Expand ATC.
- Q.13 Write the benefits of group technology.
- Q.14 G codes are also known as _____.

- Q.15 Expand PLC.
- Q.16 Name any two types of NC program readers.
- Q.17 Define Sensor.
- Q.18 Zero point in absolute system can be outside the work piece. (True/False)
- Q.19 Define work zero.
- Q.20 The function of the feedback system is to record the data from the sensor and compare it with output data. (True/False)

SECTION-C

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

- Q.21 Define Laws of Robotics.
- Q.22 Explain the following terms:
a) Subroutines b) Do loops
- Q.23 Differentiate between open-Loop & Closed loop control system.
- Q.24 Write a short note on servomotor.
- Q.25 Write a note on canned cycles.
- Q.26 Write a short note on swarf removal.
- Q.27 Explain term FMS.
- Q.28 Write short note on "ON-Line" fault finding diagnosis.
- Q.29 Name different types of axis drives.
- Q.30 Enlist different types of actuators.
- Q.31 Name any five G codes.