TED (15) -6024
(Revision -2015)

A21-02243

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DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/
COMMERCIAL PRACTICE – APRIL -2021.

CAD/CAM

(Maximum Marks :75) [Time : 2.15 hours]

PART–A

Marks

I. Answer **any three** questions in one or two sentences. Each question carries 2 marks.

1. List any four secondary storage devices.
2. Define CAM.
3. Describe axis designation of ordinary Lathe machine.
4. Differentiate M03 and M04.
5. Describe APT. (3x2=6)

PART - B

II Answer **any four** of the following questions. Each question carries 6 marks.

1. Explain about Graphic workstation.
2. Explain Product development cycle.
3. Compare between NC and CNC.
4. Explain a block of NC program.
5. List any six G code and explain corresponding preparatory function.
6. With the help of a diagram explain horizontal spindle machining centre.
7. Explain input devices in CAD.

[4x6 =24]

PART - C

(Answer **any of the three units** from the following. Each full question carries 15 marks)

UNIT I

III (a) Explain Different types of printers and plotters. (8)

(b) List CAD software packages and explain their application in industry. (7)

OR

IV (a) Explain various LAN topology. (9)

(b) Explain raster scan and stroke writing with example. (6)

UNIT- II

V (a) Explain about Rapid prototyping and its applications. (9)

(b) Explain the advantages of CAM. (6)

OR

VI (a) List the guidelines of design for manufacturing and assembly. (9)

(b) Compare sequential engineering and concurrent engineering. (6)

UNIT- III

VII (a) Explain the principle of operation of NC machine with suitable diagram. (9)

(b) Explain machine axis convention. (6)

OR

VIII (a) List and explain the advantages of higher axes machines. (8)

(b) Explain the features of CNC machine. (7)

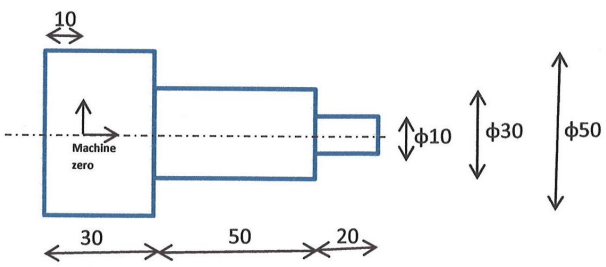
UNIT – IV

IX (a) Explain spindle drive. (9)

(b) Explain recirculating ball screw mechanism for linear motion. (6)

OR

X Write a part program for the following turning operation. All dimensions are in mm. Other data may be suitably assumed. Each block of program should contain the explanation.



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