

No. of Printed Pages : 4 181761C/171761C/062463
Roll No.

**6th Sem / Branch : Mech., Mecatronics, CNC
Sub. : CAD CAM/CAD CAM & FMS**

Time : 3Hrs. M.M. : 100

SECTION-A

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

- Q.1 The heart of the computer is : (CO1)
a) CPU b) ALU
c) Monitor d) Keyboard

Q.2 _____ Command in AutoCAD is used as shortcut for making polyline. (CO2)
a) PL b) PLY
c) POLY d) None of the above

Q.3 The slanted edges of AutoCAD are known as (CO2)
a) Trim b) Round
c) Chamfer d) Fillet

Q.4 When drawing with 2D, what axis you generally work with? (CO2)
a) X b) Y
c) Z d) None of the above

Q.5 SW isometric view stand for _____. (CO3)
a) Software b) Softwall
c) South West d) Surround west

Q.6 In the following geometric primitives, which is not solid entity of CSG modeling. (CO2)

- a) Box b) Cone
c) Cylinder d) Circle

- Q.7 In the following geometric modeling technique, which is not 3-D modeling. (CO2)

- a) Wireframe modeling
 - b) Drafting
 - c) Surface modeling
 - d) Solid modeling

- Q.8 The basic geometric building blocks provided in a CAD/CAM package are (CO2)

- a) Points
 - b) Lines
 - c) Circles
 - d) All of the above mentioned

- Q.9 A _____ is the path the CNC cutting tool will take the very end of a cut. (CO6)

- a) Lead out
 - b) Leader length
 - c) Lead in
 - d) None of the above

- Q.10 Robot is derived from the Czech name . (CO8)

SECTION-B

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

- Q.11 Expand CAD-CAM. (CO1)
Q.12 NE-Isometric view is known as _____. (CO3)

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- Q.13 Expand AML. (CO8)
- Q.14 The _____ Command in AutoCAD is used to combine the selected 2D regions or 3D solids by method of addition. (CO2)
- Q.15 The rounded corners of an object are made in AutoCAD by _____ command. (CO2)
- Q.16 What is meant by FMS? (CO7)
- Q.17 What is the meaning of surface modeling? (CO2)
- Q.18 Write down the extension of AutoCAD file. (CO2)
- Q.19 CNC drilling machine is considered to be a _____ to _____ machining. (CO4)
- Q.20 Define Dept of Cut. (CO5)

SECTION-C

- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 Explain the terms contouring pocketing, facing and overlap. (CO4)
- Q.22 Give an example of Subtraction' Boolean function. (CO2)
- Q.23 Define viewports with an example. (CO3)
- Q.24 Discuss the requirement of a graphics software. (CO3)
- Q.25 Explain one canned cycled for turning part program. (CO4)
- Q.26 Discuss various applications of CAD/CAM. (CO1)

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- Q.27 Write short note on NC positioning systems. (CO3)
- Q.28 What are the advantages of CNC system? (CO3)
- Q.29 Explain the construction of a solid using REGION and EXTRUDE feature. (CO2)
- Q.30 What is the principle of flexibility? Explain. (CO7)
- Q.31 Discuss changing of model to paper space layout. (Co3)
- Q.32 Write a simple finishing cut program for a rod of 40mm diameter for a 100 mm length. (CO4)
- Q.33 Explain the methods of define solid primitives like Cylinder sphere. (CO2)
- Q.34 Discuss any one 3D command with example in Auto CAD. (CO2)
- Q.35 Write down the procedure of CAM. (CO6)

SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)
- Q.36 Explain briefly with diagrams the different types of tools used in CNC machines. (CO4)
- Q.37 Write short note on following: (CO3)
- Post processing
 - Plotting the drawing
- Q.38 What are the various types of FMS layouts? Discuss them schematically. (CO7)

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