Branch: Mech. Mecatronics, CNC
Subject : CAD/CAM/CAD CAM & FMS

Time : 3 Hrs.   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   _____ key can be used for entering the command in memory at COMMAND prompt in Auto CAD. (CO2)

a)   Spacebar   b)   Enter key

c)   Both A & B   d)   None of the above

Q.3   The final stage in the implementation of a CAD system is :   (CO3)

a)   Geometric modeling   b)   Drafting & detailing

c)   Documentation   d)   Design changes

Q.4   Point-Point systems are used for _____.   (CO4)

a)   Reaming   b)   Parting

c)   Grooving   d)   Facing

Q.24   Name different types of tools used in CNC, Explain any one with neat sketch.   (CO5)

Q25   What are the advantages of CNC system?   (CO6)

Q.26   Discuss the techniques of tool path generation?   (CO6)

Q.27   What are the advantages Flexible manufacturing system (FMS)?   (CO7)

Q.28   Discus teach pendant programming in robots.   (CO7)

Q.29   Defined the robot motion in detail.   (CO8)

Q.30   Write a short note on Robotic sensor.   (CO8)

Q.31   Discuss NC positioning system.   (CO5)

Q.32   Write a simple finishing cut program in absolute mode for step turning.   (CO4)

Q.33   Explain the pocketing operation in milling.   (CO4)

Q.34   Explain job flexibility in detail.   (CO7)

Q.35   Explain material handling system in FMS.   (CO7)

Section-D

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

Q.36   Write short note on following :   (CO3)

a)   Post processing   b)   Plotting the drawing

Q.37   What are various production equipment, support systems which become part of an FMS.   (CO6)

Q.38   Explain different types of Cutting tools with diagrams.   (CO6)

Q.5 Which of the following code will give rapid linear movement? (CO6)

a) G00　　　　b) G01

c) G70　　　　d) G71

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 The extension of auto CAD drawing file is _____.(CO2)

a) DRG　　　　b) DXF

c) DWT　　　　d) DWG

Q.8 Robot is derived from Czech name (CO8)

a) Robota　　　b) Rabota

c) Rebota　　　d) Ribota

Q.9 Flexible manufacturing system (FMS) is generally limited to firms involved in _____. (CO7)

a) Mass production　　b) Batch production

c) Both A & B　　　　d) None of above

Q.10 In modern CNC machines the backlash has been eliminated by? (CO5)

a) Rack and Pinion　　b) Cam

c) Lever　　　　　　　d) Preloaded ball screw

Section-B

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

Q.11 Expand CAD-CAM. (CO1)

Q.12 NE-Isometric view is knows as _____. (CO3)

Q.13 The rounded corners of an object are made in Auto CAD by _____command. (CO2)

Q.14 The machine zero on the lathe is generally set at _____. (CO4)

Q.15 Lead out is a straight or curved cut made at the very end of the part of hole which completes the cutting process? (True/False) (CO5)

Q.16 Many machine tools can be controlled simultaneously in _____. (CO6)

Q.17 What is a the meant by FMS? (CO7)

Q.18 Expand AML. (CO8)

Q.19 What means by the surface modelling in CAD? (CO2)

Q.20 CNC drilling machine is considered to be a _____. (CO6)

Section-C

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

Q.21 Discuss various applications of CAD/CAM. (CO1)

Q.22 Explain MIRROR command with an example. (CO2)

Q.23 Explain the operations involved in milling. (CO4)