5th Sem.
Branch : Automation & Robotics
Subject : CAD and CAM

Time : 3 Hrs.   M.M. : 60

SECTION-A

Note: Multiple Choice Questions. All Questions are compulsory.   (6x1=6)

Q.1   Which is not a CAM softwre?   (CO1)

a)   Creo Parametric   b) Unigraphics NX

c)   Auto CAD   d) Power Mill

Q.2   A Automation means_____.   (CO1)

a)   Increased Productivity

b)   Workers controlling machnes

c)   Assisting and replacing humans with machines

d)   All of the above

Q.3   _____ is an application technology that uses computer software and machinery to facilitate and automate manufacturing processes.   (CO1)

a)   CAD   b) CAM

c)   CAQ   d) CAE

Section-D

Note: Long answer questions. Attempt any two question out of three Questions.   (2x8=16)

Q.23   Explain the advantages and disadvantages of analytical and synthetic curve in details.   (CO2)

Q.24   Write the names of different types of curves in geometrical modeling and explain any two.   (CO3)

Q25   Write short Notes on :   (CO5)

a)   Standard Canned Cycles

b)   Linear and Circular Interpolation

Q.4 What is the purpose of CAM? (CO1)

a) To ensure that the error rate is decreased

b) To uniformity of high products

c) To achieve precision in the processes

d) All of the above

Q.5 Art-Programming mistake can be avoided in. (CO4)

a) NC   b) CNC

c) NC & CNC both   d) None of the above

Q.6 CNC machine has the following main advantage over conventional machining practice? (CO5)

a) Ability to employ higher cutting speeds, feeds and depth of cut

b) Feedback control

c) Flexibility

d) None of the above

Section-B

Note: Objective/Completion type questions. All questions are compulsory. (6x1=6)

Q.7 The heat of a computer is _____. (CO1)

Q.8 The term UCS stands for _____. (CO1)

Q.9 The Control loop unit of M.C.U. is always_____(CO2)

Q.10 The magnetic tapes and disks can store more data compared to the punched card. (True/False) (CO2)

Q.11 For CNC machining skilled part programmers is not needed. (True/False) (CO4)

Q.12 DNC stands for _____. (CO4)

Section-C

Note: Short answer type Question. Attempt any eight questions out of Ten Questions. (8x4=32)

Q.13 Explain the 2D and 3D transformation in brief. (CO1)

Q.14 Explain the benefits of Automation Concept. (CO1)

Q.15 Explain the need of CAD/CAM. (CO1)

Q.16 Explain the cubic spline curves. (CO3)

Q.17 Explain the representation of wire frame models.(CO2)

Q.18 What the different M codes used in NC part programming. (CO4)

Q.19 Explain the work holding procedure for milling centres. (CO4)

Q.20 Explain the design characteristics of NC Machine tools. (CO4)

Q.21 Discuss any four functions of direct numerical control (DNC). (CO5)

Q.22 Explain the Pneumatic devices in CNC. (CO5)