Q.30 What are the advantages of the Flexible manufacturing system (FMS)? (CO7)

Q.31 Write a short note on Robot Programming languages. (CO8)

Q.32 Explain the principle of flexibility. (CO7)

Q.33 Explain non-parametric surfaces in AutoCAD. (CO3)

Q.34 What do you understand by the terms like contouring, pocketing, facing and overlap. (CO4)

Q.35 Give features of any one design software. (CO2)

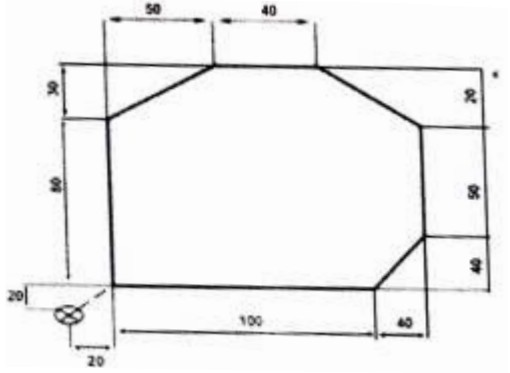
Section-D

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

Q.36 Explain various types of robotics motions with neat sketches. (CO8)

Q.37 Explain the features of the Flexible manufacturing system in detail. (CO7)

Q.38 White a part program for milling for the part shown below, assume suitable dimensions for the missing dimensions if any. (CO4)



(Note Course outcome/CO is for office use only)

No. of Printed Pages : 4
Roll No.....

6th Sem / Mechanica Engg.
Subject : CAD/CAM

Time : 3 Hrs. **M.M. : 100**

SECTION-A

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

Q.1 The basic geometric building blocks provided in a CAD/CAM package are (CO1)

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

Q.2 The axes of miling machines are (CO3)

a) X and Z b) X ,Y and Z
c) X and Y d) None of the above

Q.3 B-rep and C-Rep are the methods of _____ is. (CO2)

a) Solid modelling b) Surface modelling
c) 2-D modelling d) Wireframe modelling

Q.4 CAM uses : (CO1)

a) 2-D drawings to design machining process
b) 3_D drawings to design machining process
c) 3-D models to design machining process
d) None

Q.5 Cad converts 2-D drawing into 3-D models with (CO1)

a) Extrusion b) Revolving
c) Both A & B d) None

Q.6 Several machine tools can be controlled by a central computer by _____ (CO3)

a) DNC b) CNC
c) NC d) CCNC

Q.7 Which of the following codes will give circular interpolation clockwise? (CO4)
a) G00 b) G02
c) G70 d) G71

Q.8 Industrial robots are designed to carry which of the following coordinate systems? (CO8)
a) Polar coordinate system
b) Cartesian coordinate system
c) Cylindrical coordinate system
d) All of the above

Q.9 Which system possesses high flexibility? (CO7)
a) FMS b) Cellular Manufacturing
c) Group Technology d) CNC automation

Q.10 In modern CNC machines the backlash has been eliminated by? (CO5)
a) Rack and Pinion b) Cam
c) Lever b) Preloaded ball screw

Section B

Note: Objective types Questions. All Questions are compulsory. (10x1=10)

Q.11 Write the expanded form of CAM? (CO1)

Q.12 _____ command in AUTOCAD is used as a shortcut for making a circle. (CO2)

Q.13 The robot design with _____ Coordinate system has two rotational and one linear movement. (CO8)

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

Q.15 G Code for dwell command in CNC is _____. (CO)

Q.16 Write the expanded form of FMS? (CO7)

Q.17 What is meant by SE view? (CO3)

Q.18 DNC stands for _____? (CO2)

Q.19 The extension of Autocad drawing file is _____. (CO1)

Q.20 The setting of tools to a specific length, away from the machine is called_____. (CO5)

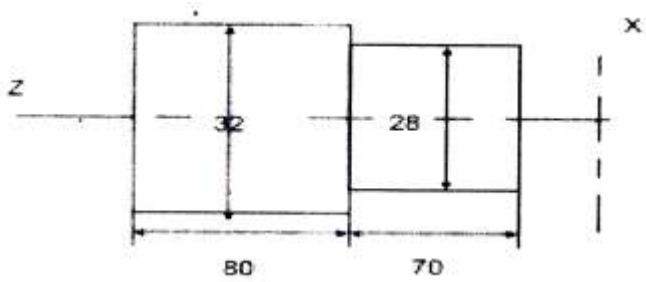
Section-C

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

Q.21 Write any five benefits of using CAD/CAM? (CO1)

Q.22 Compare solid modelling and surface modelling. (CO2)

Q.23 Write a simple finishing cut program in absolute mode for step turning. (CO4)



Q.24 Explain the FILET command with examples.(CO2)

Q.25 Described the construction of solid using Region and Extrude features. (CO3)

Q.26 Explain view ports with an example. (CO3)

Q.27 Explain syntax and function of 'Separate' command. (CO3)

Q.28 Differentiate the term Lead-In and lead out. (CO4)

Q.29 Discuss in brief how the drawing is transferred from any CAD software to CAM & vice versa? (CO6)