

Name:	
Enrolment No:	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, May 2020

Programme Name: B Tech ADE

Semester : VIII

Course Name : CAD/CAM

Time : 03 hrs

Course Code : ADEG 424

Max. Marks : 100

Nos. of page(s) : 02

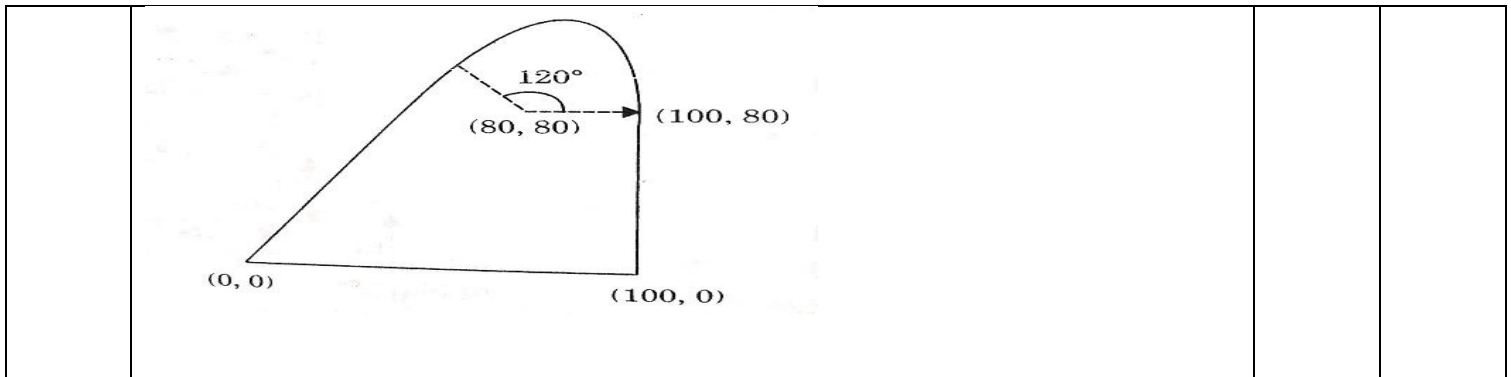
Instructions:

SECTION A

S. No.		Marks	CO
Q 1	What is the criteria for evaluation of CAD system?	5	CO1
Q 2	What are the activities of CAE? Discuss	5	CO1
Q 3	What is automation and what are its types?	5	CO1
Q 4	Discuss Macro statements used in APT with suitable examples.	5	CO1
Q 5	What do you understand by the Non-parametric and Parametric representation of curves?	5	CO2
Q 6	Explain different types of production system. Write down advantages to be gained by adoption of CAD/CAM.	5	CO2

SECTION B

Q 7	Write a program in C/C++/MAT Lab to generate a line on screen using Bresenham's line algorithm. OR Write a program in C/C++/MAT Lab to generate a circle on screen using Mid-Point circle algorithm.	10	CO3
Q 8	Briefly explain the various graphic transformations required for manipulating the geometric information.	10	CO3
Q 9	Distinguish between ACC and ACO types of adaptive control.	10	CO4
Q 10	Write APT program for end milling of plate shown in figure below	10	CO4



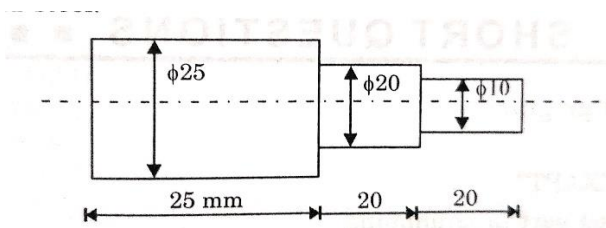
Q 11 Why do you prefer Bezier form of cubic curves over the Hermite form for interactive computer graphics?

10

CO4

SECTION-C

Q 10 Write CNC program for the part shown in the figure below.



OR

Write word address format part program for drilling 2 similar holes in a rectangle plate of thickness 5 mm at points with coordinates (10, 25) and (55, 60). Origin and start point is (0, 0). Take spindle speed 1675 rpm and feed 200 mm/min.

20

CO5