

# EDD

## Assignment-2

Ques 1- What is autocad? Write 3 different application of autocad.

Sol<sup>n</sup> → Autocad is a computer aided tool that allows many different types of designers to create diverse kinds of drawing & design. This program helps the quickly that by hand and offers, many quickly, easy and useful features such as copy and paste.

# Aerospace :- satellite space vehicles, missiles and aircrafts are produced in the aerospace industry. Autocad sample drawings play an important role in the first step of design process, because any one of these process cost a million of dollars. The details are thoroughly planned with the autocad software before starting work on final products.

Automotive :- complex designs and software are required in all aspects of automotive designing. CAD is used to build prototype, circuitry boards, engines, tires and so on.

**# Architecture:** Before beginning with the definite construction project, building has to be planned perfectly. 2D and 3D plans are designed using CAD. Schematically of offices, houses and various other commercial buildings are designed as well using CAD.

**# Civil Engineering:** Metropolitan planners use CAD software to plan infrastructure projects such as bridges, office complex, industries units and so on.

**# Site:-** CAD software is used by landscape architects to conceptualize great outdoor settings and find the proper placement of components like fountains, gardens, trees and others.

Ques. 2:- Explain different ways of drawing

- i) circle
- ii) circular arc in AutoCAD

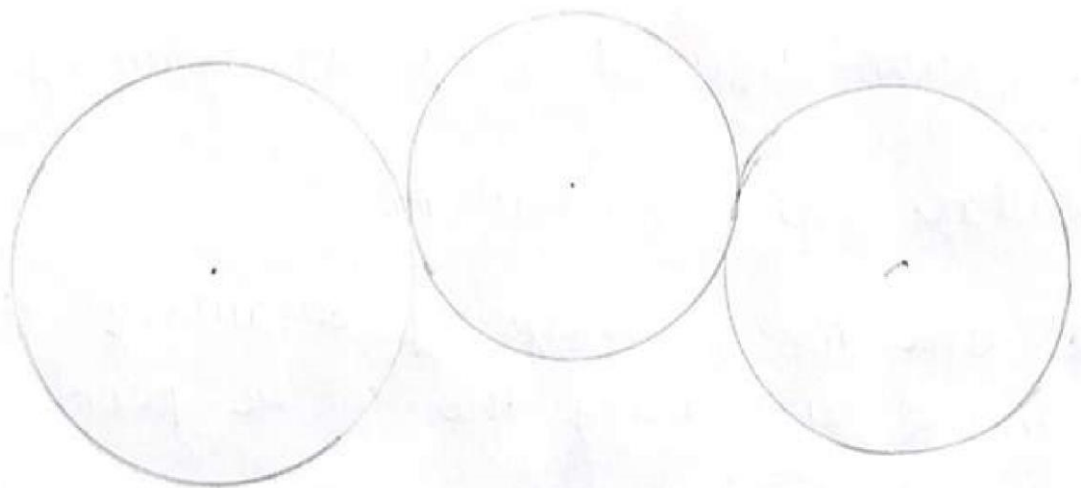
Ans:- There are many ways of drawing a circle, the default being the center point of circle and radius either by typing the command circle or selecting it from a menu bar

- a) Center point and radius
- b) Center point and diameter.



1) 3P:- The specific three points on circumference of a circle. There is a unique circle passing through these given non-collinear points.

2) 2D:- This specifies the end points of diameters,



ii)

circle, tangent, tangent, radius

Circular Arc:- The command is used to draw an arc accurately different ways are:-

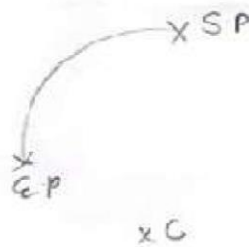
a) 3 point arc:- The arc is drawn by specific 3 points on the chord arc.

b) Start-center:- This option needs to start point and center point of arc.

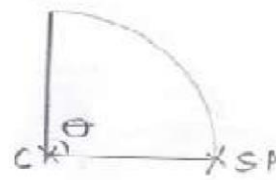
c) Start-end:- This option asks the user to center the start and end points of arc. The arc is by specifying radius of included angle.



3 point arc -  
start, 2nd point  
and point



Center point,  
start point,  
end point



Center point,  
start point,  
included angle.

Quiz:- Write used following modify commands mirror, arrays, fillet, chamfer, offset, trim.

Δ / Δ mirror:- create a mirror image of the selected object about a specified line.

□ □ Array:- This command creates multiple copies of selected object in rectangular or polar form as per copy command.

Δ fillet:- This command is used to create a round corner b/w two lines and shortened or extended to fit a tangent arc.

⌋ offset:- This command creates parallel single copies of lines, arc, circle, rectangle each offset creates a new entity with a same line type, colour and layer settings.


-- / -- Trim:- This command trims the object that extend




find a required point of intersection when you involve this command, you will be prompted to select the cutting edges. The edges can be lines, circles, arcs, rays, text, lines ellipse, splines, blocks & view points.

Question-4 What is the use of objectsnap (OSNAP) in AutoCAD? Name different types of object snaps.


Answer:- The object snaps provide a way to specify precise location an object whenever you are prompted for a point within a command. for eg you can use object to create line from a center of a circle to the midpoint of a line.

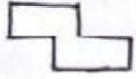
 Endpoint

 Intersection


 Midpoint


 Extension

 Center


 Insertion

 Node


 Perpendicular

 Quadrant

 Tangent

 Nearest

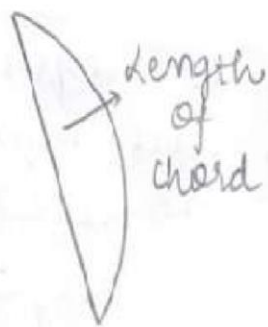
 Apparent Intersection

 Parallel

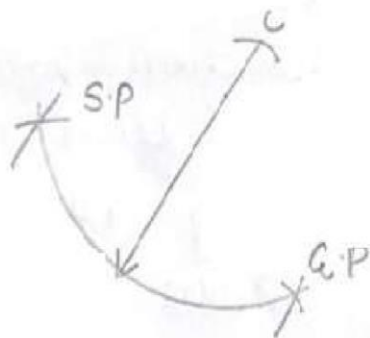
Question-5 What is the use of object snap tracking and/or made in autocad?

Ans:- L object snap tracking is used when we want to align the lines or the part of any object. The object snap tracking in autocad shows the snapping status lines. It displays the snapping lines on position of cursor. It tracks the cursor along vertical and horizontal alignment paths from object snap points.

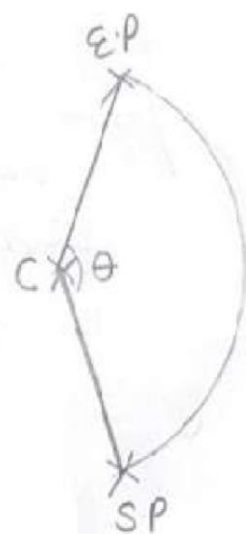
+ Orthomode:- is used to specify a angle or a distance by means of two points using a pointing device. In orthomode, cursor movement is constrained to the horizontal or vertical direction, relative to UCS.



Center point,  
start point,  
end point



Start point. End point,  
Radius



start point  
end point,  
included angle( $\theta$ )