

COMPUTER AIDED DRAWING

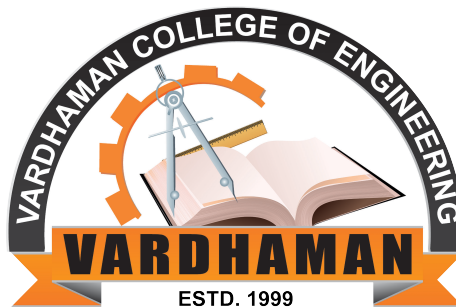
A-8302

Experiment No. 4

Projection of Points - I

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Group Name

I B.Tech I Semester

Computer Science Engineering

VARDHAMAN COLLEGE OF ENGINEERING

(AUTONOMOUS)

Affiliated to **JNTUH**, Approved by **AICTE**, Accredited by **NAAC** with **A++** Grade, **ISO 9001:2015** Certified
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Projection of Points II

1 Objectives

- Understand the concept of orthogonal projections of points
- Apply projection concepts for two points in different quadrants
- employ the modify tools and dimension tools.

2 Aim

Perform the following in AUTOCAD

- A point P is 15 mm above the H.P. and 20 mm in front of the V.P. Another point Q is 25 mm behind the V.P. and 40 mm below the H.P. Draw projections of P and Q keeping the distance between their projectors equal to 90 mm. Draw straight lines joining
 - their top views
 - their front views
- Two points A and B are in the H.P. The point A is 30 mm in front of the V.P., while B is behind the V.P. The distance between their projectors is 75 mm and the line joining their top views makes an angle of 45° with xy . Find the distance of the point B from the V.P.

3 Software Used

- AUTOCAD

4 System Requirements

1. **System Type:** Windows 10 64 Bit Operating System
2. **Processor:** i3
3. **RAM:** 4 GB

5 Commands Used

- (a) Units
- (b) Ucsicon

- (c) Limits
- (d) Line
- (e) Donut
- (f) Text
- (g) Arc
- (h) Trim
- (i) Erase
- (j) Move
- (k) Dimension Linear

6 Experimental procedure

- (a) Open the file with name *Template.dwg* from the local disk E and edit the title block.
- (b) Perform the units and ucsicon commands.
- (c) In the limits set the A4 sheet dimensions 297x210.
- (d) For the reference line XY use Line command and take some convent distance of the line (50mm).
- (e)
- (f)
- (g)
- (h)
- (i)
- (j)
- (k)
- (l)
- (m)
- (n)
- (o)
- (p)
- (q)
- (r)

7 Outcomes

- apply the dimension tools for the measure of unknown length
- Application of various projection techniques within the CAD environment
- Integration of projection techniques into the overall CAD modeling workflow, understanding how projections contribute to the design process.

8 Result

The solutions of the projection of points are analyzed and drawn in the AUTOCAD.