

CE101 Engineering Drawing July- Nov 2019

Indian Institute of Technology Guwahati

Lab Sheet-4 Projections of Points, Lines and Traces
Max Marks: $25 \times 4 = 100$

Thursday Afternoon
Date: 05.09.2019

1. Draw the projections of the following planets on the same solar reference line at a particular time (original distances are scaled to mm). Keep the distance between the projector equal to 25mm
 - a. Mercury, at (-5, -20)
 - b. Earth, at (-10, 0)
 - c. Mars, at (20, -10)
 - d. Jupiter, at (50, 25)
 - e. Uranus , at (-30,-60)
2. The top view of a 75 mm long line AB measures 65 mm, while the length of its front view is 50 mm. Its one end A is in the H.P. and 12 mm in front of the V.P. Draw the projections of AB and determine its inclinations with the H.P. and the V.P.
3. One end of a line AB is 15 mm above H.P. and 20 mm in front of V.P. while it's another end B is 50mm above H.P. and 75mm in front of V.P. The distances between end projectors of the line is 50mm. Draw projections of the line and find its true length and true inclination with the principal planes.
4. Archer targeting to the target on the ground with an arrow. One tip of arrow is 1m above from ground andnock of arrow is at 10m in-front of V.P. Its F.V. is 45^0 inclined to XY while it's H.T. and V.T. are 4.5 m and 3 m below XY respectively. Draw projections of arrow, find its T.L. and find out the inclination of an arrow to be kept with ground and V.P. to hit the target. (Draw the projections with a scale of R.F. = 1:100).