

DEPARTMENT OF MECHANICAL ENGINEERING
UNIVERSITY INSTITUTE OF ENGINEERING AND TECHNOLOGY, CSJM UNIVERSITY, KANPUR
Engineering Drawing (TCA-S101)

Semester: 2023-24 (Even Semester)

Year: 1st Year (2K24)

Mid Semester Examination (A-1)

1. The front view of a line makes an angle of 30° with xy . The H.T. of the line is 45 mm in front of the V.P., while its V.T. is 30 mm below the H.P. One end of the line is 10 mm above the H.P. and the other end is 100 mm in front of the V.P. Draw the projections of the line and determine (i) its true length, and (ii) its inclinations with the H.P. and the V.P.
2. The top view of line AB measures 60 mm and inclined to reference line at 60° . The end point A is 15 mm above the H.P. and 30 mm in front of the V.P. Draw the projections of the line when it is inclined at 45° to the H.P. and is situated in the first quadrant. Find true length and inclination of the line with the V.P. and traces.
3. A line AB is in the first quadrant. Its end A and B are 20 mm and 60 mm in front of the V.P. respectively. The distance between the end projectors is 75 mm. The line is inclined at 30° to the H.P. and its H.T. is 10 mm above xy . Draw the projections of AB and determine its true length and the V.T.
4. The top view of a 75 mm long line CD measures 50 mm. C is 50 mm in front of the V.P. and 15 mm below the H.P. D is 15 mm in front of the V.P. and is above the H.P. Draw the front view of CO and find its inclinations with the H.P. and the V.P. Show also its traces.
5. The front view of a line AB measures 70 mm and makes an angle of 45° with xy . A is in the H.P. and the V.T. of the line is 15 mm below the H.P. The line is inclined at 30° to the V.P. Draw the projections of AB, and find its true length, inclination with the H.P. and its H.T.

[6 x 5]

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