Ranbir mukhiya.

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28/3/15

UNIVERSITY INSTITUTE OF ENGINEERING AND TECHNOLOGY

KANPUR
End Semester (30-11-2018)
Department of Mechanical Engineering
Subject Name: Engineering Drawing (CSE 1st year)
Subject code: TCA-S101

Time 3 hrs **Marks 50**

✓ ***Attempt all the questions.***

1. A rhombus ABCD of diagonals 100 mm and 60 mm. It is placed on a corner A on the ground such that the top view appears as a square. Draw its projections when the diagonal BD is parallel to both H.P. and the V.P. (8)

2. The top view of a plane whose surface is inclined at 45° to the H.P. and perpendicular to V.P. appears as a regular hexagon of side 30 mm with a side parallel to the reference line. Draw the projections of the plane and determine its true shape. (8)

3. A straight line AB of true length 100 mm has its end A 20 mm above HP and 30 mm in front of VP. The top view of the line is 80 mm and front view is 70 mm. Draw the projections (TV and FV) of the line AB and obtain the true inclinations of the line AB with HP and VP. (8)

4. Front view of line AB makes 45° angle with XY line and measures 60 mm. Line's top view makes 30° with XY line. End A is 15 mm above HP and its Vertical trace (VT) is 10 mm below HP. Draw projections of line AB, determine inclinations with HP and VP and locates HT, VT. (8)

5. Point F is 50 mm from a vertical straight line AB. Draw locus of point P, moving in a plane such that it always remains equidistant from point F and line AB. (4)

6. Draw the isometric projection of a cone of base 40 mm diameter and height 58 mm when it rest with its base on H.P.