GEETHANJALI INSTITUTE OF SCIENCE AND TECHNOLOGY NELLORE

ENGINEERING DRAWING – UNIT 2(Projection of Lines)

1B. TECH– CSE–C & CS

1	A line AB of 100 mm length is inclined at an angle of 30^0 to H.P and 45^0 to V.P. The point A is 15 above H.P and 20 mm in front of V.P. and 120 from right profile plane (RPP) Draw (i)front view (ii) top view and(iii) left side view of the line AB
2	An electric switch (A) and Bulb (B), fixed on a wall are 5 m apart. The distance between them, measured parallel to the floor is 4 m. If the switch is 1.5 m above the floor, find the height of the bulb and the inclination of the line joining the switch and bulb with the floor
3	The front view of a 7.5 cm long line measures 5.5 cm. The line is parallel to the H.P and one of its ends is in the V.P and 2.5 cm above the H.P. Draw its projections and determine inclination of the line with H.P.
4	A line measuring 80 mm long has one of its ends 60 mm above H.P and other end is 20 mm in front of V.P. and the other end is 15 mm above H.P. and in front of V.P The front view of the line is 60 mm long. Draw the top view.
5	Two oranges A and B on a tree are respectively at 1 m and 2 m above the ground and 0.3 m and 1.5 m from a 0.35 m thick wall but on opposite sides of the wall. The distance the oranges measured along the ground and parallel to the wall is 3 m. Determine the true distance between the oranges.
6	A line AB of 70 mm long has its end A 20 mm above H.P and 15 in front of V.P. The line is inclined 30^0 to H.P and 60^0 to V.P. Draw its projections.
7	A line AB of 80 mm long has its end A 15 mm from H.P and V.P. The other end B is 40 above H.P and 50 in front of V.P Draw the projections of the line and determine the inclinations of the line with H.P and V.P.

8	A room is 5 x 4.5 x 3.5 m high Determine the distance between the top corner and bottom corner diagonally opposite to it, by drawing the projections of the line joining the two corners.
9	The front view of a 125 mm long line PQ measures 80 mm and its top view measures 100 mm. Its end Q and the midpoint M are in the first quadrant M being 20 from both the planes. Draw the projections of the line.
10	A room is 6 m x 5 m x 3.5 m high. An electric bulb is above the centre of the longer wall And 1m below the ceiling and 0.35 m away from the wall. The switch for the light 1.25 m above the floor on the centre of the adjacent wall. Determine graphically the shortest distance between the bulb and the switch.
11	A line of 100 mm long makes an angle of 35^0 with H.P and 45^0 V.P. Its mid-point is 20 mm above H.P and 15 mm in front of V.P. Draw the projections of the line.
12	A straight-line AB of 75 mm long has the end A on V.P and end B on H.P. The line is inclined at 30^0 to V.P and its front view makes an angle of 45^0 with XY. Draw the projections of the line and add the left side view.

13	A line AB of 75 mm long is inclined at an angle of 30^0 with V.P and lies in a plane perpendicular to both H.P and V.P. Its end A is in V.P and the end B is in H.P. Draw the projections of the line AB.
14	The projections of line AB are on the same projector. A is 10 mm above H.P and 20 mm in front of V.P B is 35 mm below H.P and 25 mm behind V.P. Draw the projections of the line AB and determine its true length and inclinations with H.P and V.P.
15	The front view of a line AB is 50 mm long and it makes an angle of 35^0 with xy. The point A lies 10 mm above H.P and 25 mm behind V.P. The difference between A and B from V.P is 25 mm. The line AB is in second quadrant. Draw the projections of the line, determine its true length and inclinations with H.P and V.P
16	A line AB of 70 mm long has its end A at 10 mm above H.P and 15 mm in front of V.P. Its front view and top view measures 50 mm and 60 mm respectively. Draw the projections of the line and deter mine its inclinations with H.P and V.P.

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