

# Engineering Graphics

## Assignment-1

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- 1) A line AB 80mm long makes an angle of  $40^\circ$  with the HP and its TV makes an angle of  $45^\circ$  with the XY line. Its end A is on HP and 10mm away from VP. Draw the projections of AB and determine its true inclination with VP.
- 2) The end projectors of line AB are 50mm apart. Point A is 10mm in front of VP and 50mm above HP while point B is 15mm above HP and 25mm in front of VP find the true length and inclinations of the line with HP and VP.
- 3) A line AB 70mm long is inclined at  $40^\circ$  to the HP and its front view makes an angle of  $60^\circ$ . The end A is in both HP and VP draw its FV and TV. Find its true inclination with VP. Point B is above HP and in front of VP.
- 4) Point A of line AB having 90mm length is 20mm above HP and point B is 10mm in front of VP if distance between end projectors is 50mm and its plan makes an angle of  $45^\circ$  with XY line. Draw its projections.
- 5) Point P of line PQ having 80mm length is 10mm in front of VP & 20mm above HP and its end Q is 50mm above HP and 60mm in front of VP. Draw its Projections.
- 6) The point P of line PQ is 25mm above HP and 20mm in front of VP, its FV makes 500 and TV makes 300. Draw its projection find the true inclinations if its true length is 90mm.
- 7) The top view of line a 75 mm long line AB measure 65mm, while its front view measures 50mm. Its one end A is in HP and 12mm in front of VP. Draw the projection of AB and determine its inclination with HP and VP.
- 8) A line AB 70mm long has its end A 15mm above the HP and 25mm in front of VP. Its top view has a length of 40mm. Draw the projection and find the inclination of the line with HP.
- 9) A line AB 80 mm long has its end A 20MM above HP and 30mm in front of VP. It is inclined at 30 degrees to HP and 45 degrees to VP. Draw the projection of the line and find apparent lengths and apparent inclination.
- 10) A line AB has its end point A 16mm above the HP and 25mm in front of the VP. The length of the line in the plan is 60mm and length of the line in elevation is 65mm. Distance between the projectors of end points A and B is 45mm. Draw the projection of the line. Find the true length of line and its inclination with HP and VP.