

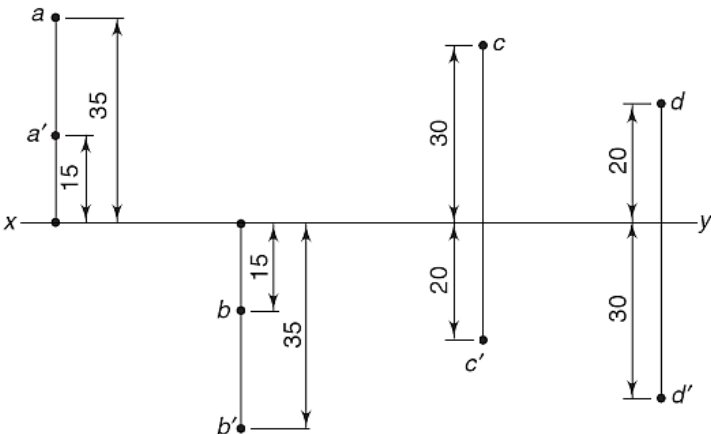
MECHANICAL ENGINEERING DEPARTMENT

Course No.: UTA015

Course Title: ENGG. DRAWING

**Tutorial No. 2 (Manual Drafting and AutoCAD)
(PROJECTION OF POINTS)**

(Time: 2 Hours)

1.	<p>Orthographic projections of points A, B, C, and D are shown in Figure below. Read the views and state their positions with respect to H.P. and V.P. Also state the quadrant in which they lie.</p> 																				
2.	<p>Draw the projections of the following points on common XY line, keeping the distance between the projectors as 40 mm.</p> <p>Point A : 30 mm above HP and 50 mm in front of VP. Point B : 20 mm above HP and 30 mm behind VP. Point C : 35 mm below HP and 20 mm behind VP. Point D : 40 mm below HP and 15 mm in front of VP. Point E : 50 mm in front of VP and on HP Point F : 35 mm above HP and on VP. Point G : 25 mm below HP and on VP. Point H : 35 mm Behind VP and on HP. Point I : On both HP and VP.</p> <table border="1" data-bbox="925 1125 1500 1220"><thead><tr><th>POINT</th><th>A</th><th>B</th><th>C</th><th>D</th><th>E</th><th>F</th><th>G</th><th>H</th><th>I</th></tr></thead><tbody><tr><th>QUADRANT</th><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></tbody></table> <p><i>Also identify the quadrant in which these points lie and represent it in tabular form.</i></p>	POINT	A	B	C	D	E	F	G	H	I	QUADRANT									
POINT	A	B	C	D	E	F	G	H	I												
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3.	<p>Point Q is 30 mm from HP and lies in third quadrant. Distance between its front view and top view is 50 mm. Draw the following views: Front view, top view and left side view.</p>																				
4.	<p>Point P has one of its view 50 mm below XY when it is in first quadrant. When the point is considered in third quadrant, it has one of its view 20 mm below XY. Draw the projections when it is in second quadrant.</p>																				
5.	<p>A point R is 30 mm above H.P. and is in the first quadrant. Its shortest distance from XY line is 50 mm. Draw its plan and elevation.</p>																				
6.	<p>The plan of a point T is 35 mm above XY line and its front view is 40 mm below the XY line. Draw its projections and also mark its shortest distance from the XY line.</p>																				