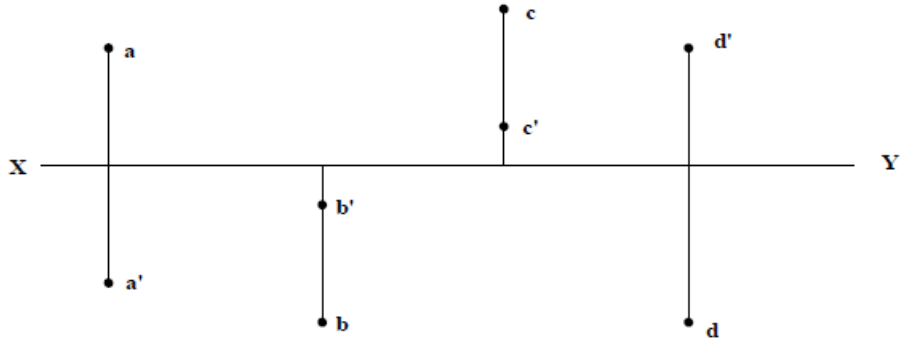
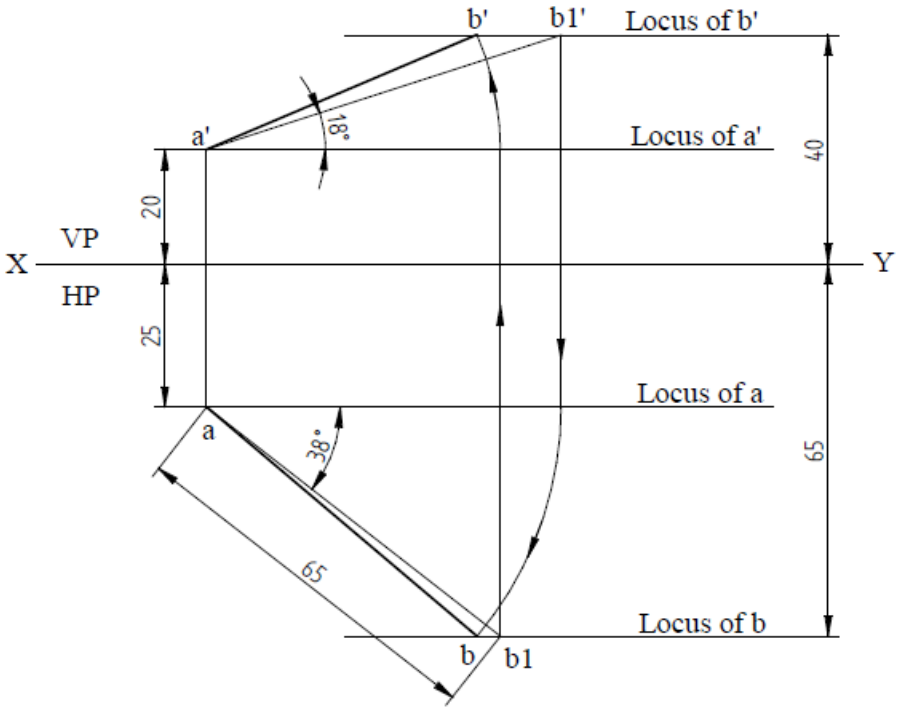
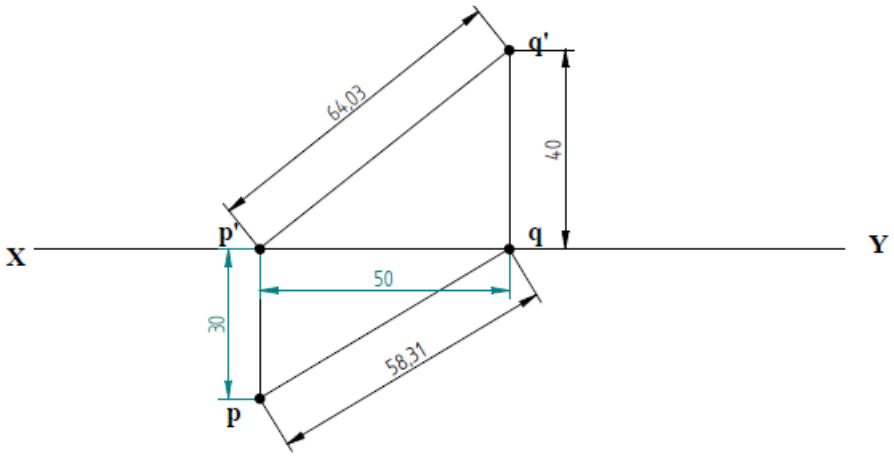
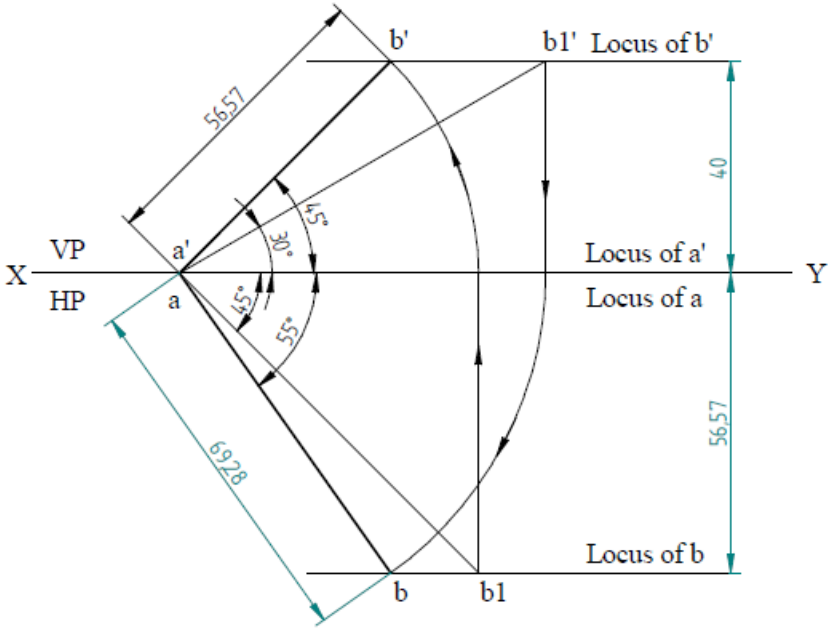
ROLL NO. | | - | | |

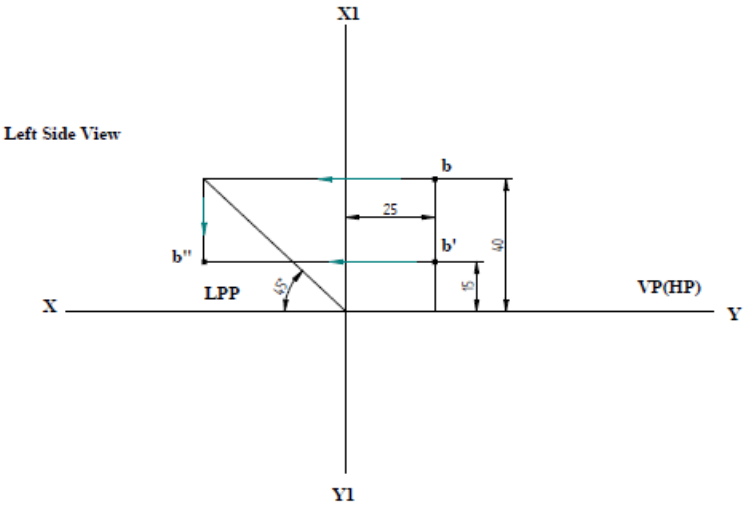
Internal Assessment Test I

Sub:	Engineering Graphics					Sub Code:	18EGDL15	Branch:	Physics Cycle
Date:	25/01/2021	Duration:	90 min's	Max Marks:	50	Sem / Sec:	1st / A TO G		OBE

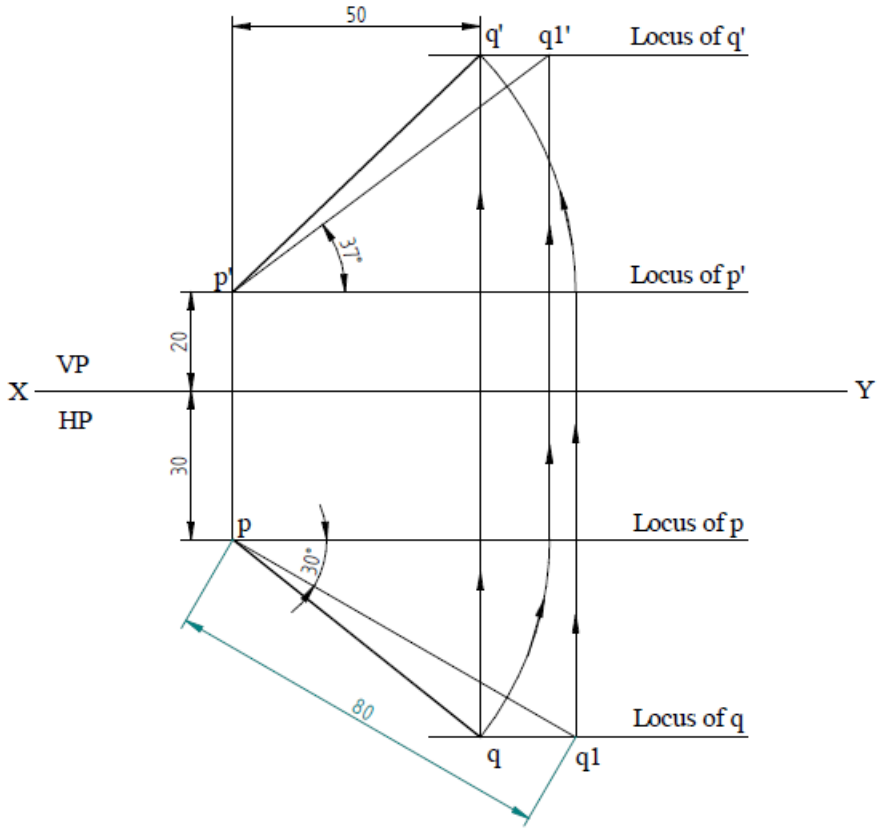
Answer any Two Questions

		MARKS	CO	RBT
1	a. Draw and state the quadrants in which the following points are located. Assume any distances A. Front view below XY line & top view above XY line. B. Front and Top views are below XY line C. Front & top views are above XY line. D. Front view above XY line & top view below XY line.  Solution: A III Quadrant C II Quadrant B IV Quadrant D I Quadrant			
	b. A line AB, 65mm long, has its end A 20mm above the HP and 25mm in front of VP. The end B is 40mm above the HP and 65mm in front of the VP. Draw the projections of AB and show its inclinations with the HP and the VP.  $\theta = 18^0$ $\phi = 38^0$	10 15	CO1, CO3	L3

2	a. A point P is on HP and 30mm in front of VP. Another point Q is on VP and 40mm above HP. The distance between their projectors parallel to XY line is 50mm. Find the distance between their front and top views of the points P and Q.  The distance between top views of P & Q is **58.31mm** The distance between front views of P & Q is **64.03mm** b. A line AB 80mm long is inclined to HP at 30° and inclined to VP at 45°. The end A touches both HP & VP. Draw front and top views of line and determine their lengths. Also measure the perpendicular distance of end B from both HP and VP.  a'b' = 56.57 ab = 69.28 Distance of B from HP = 40 Distance of B from VP = 56.57 c.	10 15	CO1, CO3	L3
3	a. A point is 40mm behind VP, 15mm above HP and 25mm in front /behind/from LPP. Draw its projections and name the side view.	10 15	CO1, CO3	L3



b. A line PQ measures 80mm in length. The point P is above HP and in front of VP by 20mm and 30mm respectively. The distance between the end projectors is 50mm. The line is inclined to VP by 30°. Draw the projections of the line and find its true inclination with HP.



$\theta = 37^{0}$