1. Draw the projections of the line $A B, 90 \mathrm{~mm}$ long, its mid point m being 50 mm above the HP and 40 mm infront of VP. The end $A$ is 20 mm above the HP and 10 mm infront of VP. Show the traces and inclinations of the line with the HP and the VP.
2. The front vies of a 125 mm long line PQ measures 75 mm and its top view 100 mm . Its end $Q$ and the mid point $M$ are in the first Quadrant, $M$ being 20 mm from both the planes. Draw the projections of the line $P Q$.
3. A line $A B, 75 \mathrm{~mm}$ long is in the secod quadrant with the end $A$ in the H.P. and at $45^{\circ}$ to the VP. Draw the projections of $A B$ and determine its traces.
4. The top view of a 75 mm long line CD measures 50 mm . C is 50 mm infront of the VP and 15 mm below the H.P. D is 15 mm in front of the V.P. and is above the H.P> Draw the front view of CD and find its inclinations with the H.P. and the VP show also its traces.
5. $\alpha=45^{0}$
$F V L=65 \mathrm{~mm}$
$A$ is in HP.
V.T is 15 mm below the HP

$$
\emptyset=30^{\circ}
$$

Find the true length $\mathrm{AB}, \theta, \beta$ and allocate H.T>

