

**I CONSTRUCTION OF HYPERBOLA BY ECCENTRICITY METHOD**

**EXAMPLE 1**

**To draw a hyperbola with the distance of the focus from the directrix at 50mm and  $e=3/2$**

**(Eccentricity method)Construction:**

1. Draw the directrix CD and the axis AB.
2. Mark the focus F on AB and 65mm from A.
3. Divide AF into 5 equal divisions and mark V the vertex, on the second division from A.
4. Draw a line VE perpendicular to AB such that  $VE=VF$ . Join A and E.
5. Mark any point 1 on the axis and through it, draw a perpendicular to meet AE produced at 1'.
6. With centre F and radius equal to 1-1', draw arcs intersecting the perpendicular through 1 at P1 and P'1.
7. Similarly mark a number of points 2, 3 etc and obtain points P2 and P'2, etc.



