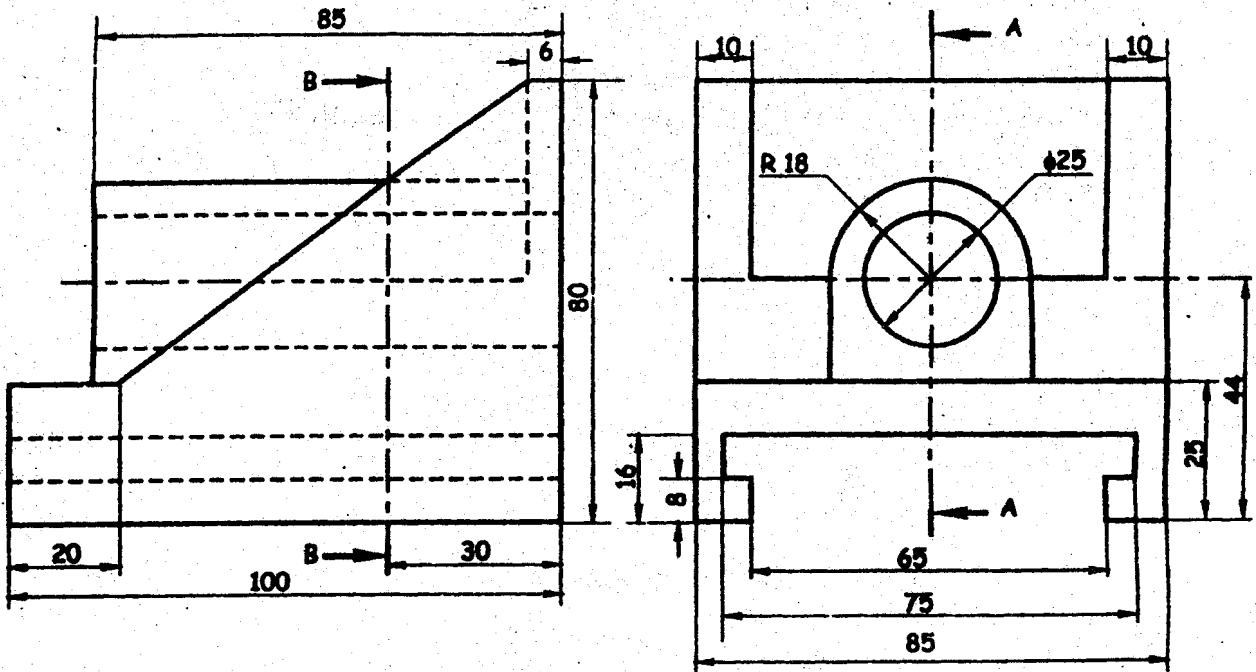


2. Figure shows Front view and Side view of a machine block. Draw the following views :—

- (a) Sec. F. V. along A-A
- (b) Sec. S. V. along B-B
- (c) Top view.

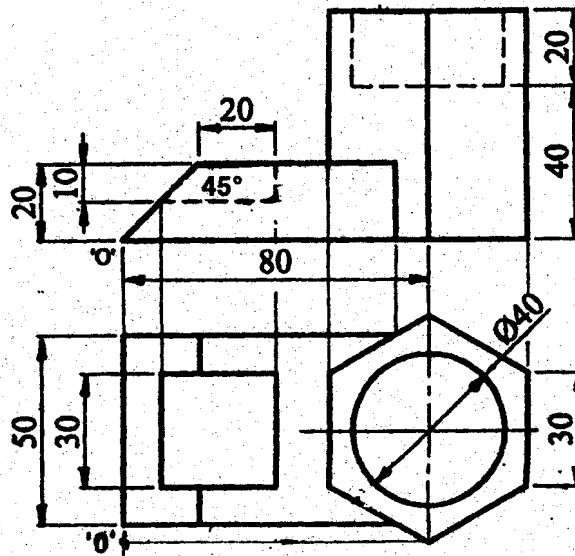
Instert atleast 8 major dimensions.

4
4
5
2



- 3. (a) A line AB, 100 mm long is inclined at an angle of 30° to HP and 45° to VP. Its endpoint 'A' is 10 mm above HP and 20 mm in front of VP. Draw the projections when point B is in the fourth quadrant. Also find HT and VT. 9
- (b) Two lines AB and AC are inclined at 75° to each other. Point P is 40 mm from AB and 30 mm from AC. Draw a hyperbola passing through point 'P'. 6
- 4. A pentagonal pyramid, base edges 40 mm and axis length 75 mm rests on its slant edge on HP, which is inclined at 30° to VP. Draw its projections with apex nearer to the observer. 15
- 5. (a) A cone of base 70 mm diameter and axis 90 mm long is resting on its base on HP. It is cut by an AIP, which is parallel to and 15 mm away from one of its end generators. Draw F. V., Sectional T. V. and true shape of the section. 10
- (b) Draw neat, proportionate free hand sketches of the following (Two views each) :—
 - (i) Countersunk headed screw with flat end 3
 - (ii) Ordinary stud. 2

6. (a) A hexagonal pyramid, side of the base 30 mm and height 70 mm is resting on its base on HP, having a pair of base sides parallel to VP. A square hole of sides 25 mm is cut through it such that its axis is parallel to HP, perpendicular to VP and intersects the axis of pyramid 22 mm from the base. Faces of the hole are equally inclined to HP. Draw DLS of the pyramid with the hole. 11
- (b) Draw neat, proportionate free hand sketch of a castle nut (Two views). 4
7. (a) Draw an Isometric view of the following object using natural scale. 10



- (b) Draw neat, proportionate free hand sketches of the following :—
- (i) Cylindrical headed bolt (Two views) 3
 - (ii) Unified thread profile (One view only). 2