



## **GE3251 ENGINEERING GRAPHICS**

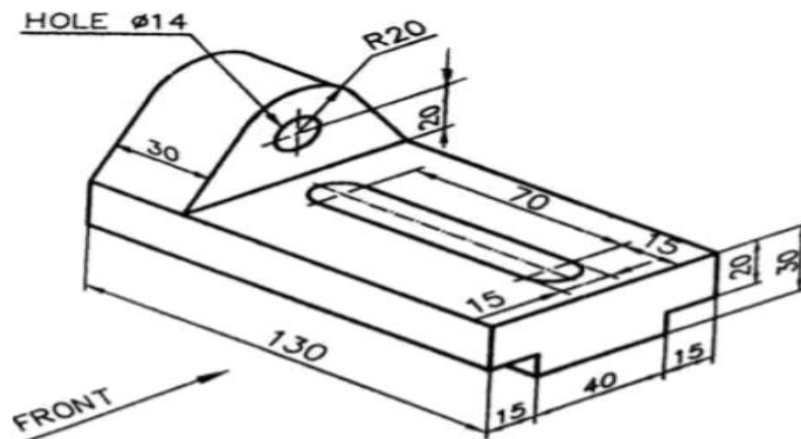
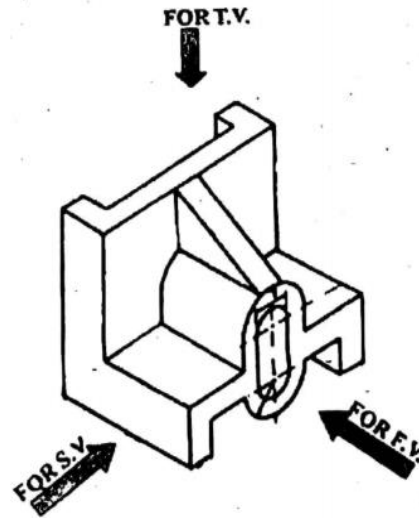
### **Unit III**

#### **PROJECTION OF SOLIDS AND FREE HAND SKETCHING**

1. A hexagonal prism having base of 30mm side and 60 mm long axis, has an edge of its base on the HP. Its axis is inclined at  $60^{\circ}$  to the HP and parallel to VP. Draw projections.
2. A square pyramid of base side 30mm and axis length 60mm is resting on HP on one of its base corners with its base inclined at  $40^{\circ}$  to HP . Draw the projections.
3. A hexagonal pyramid, having base side 30mm and 70mm long axis, has a triangular face on the ground and axis is parallel to VP. Draw projections.
4. A cylinder of base diameter 50mm and axis length 70mm is resting on HP on a point on the circumference of the base with the axis inclined at  $50^{\circ}$  to HP. Draw projection
5. A square prism of base side 35mm and axis length 60mm rests on the HP on one of its longer edges with its face equally inclined to HP. Draw its projections when its axis is inclined  $30^{\circ}$  to VP.
6. A cone of base diameter 40mm and altitude 80mm rests on the HP with its axis inclined at  $30^{\circ}$  to the HP and parallel to the VP. Draw front view and top view.
7. A cone having a 50mm diameter and a 70mm axis length, has a point on its base circle in the VP, such that the axis is inclined at  $45^{\circ}$  to the VP and parallel to HP. Draw the projections
8. A pentagonal pyramid of base side 30mm and axis length 60mm is resting on VP on one of its triangular faces with its axis parallel to HP. Draw its projections
9. A square pyramid of base side 30mm and axis length is suspended by means of a string from one of its base corners with its axis parallel to VP. Draw projections.

**FREE HAND SKETCHING**

10. Sketch by free hand front view ,top view and right side view of the object shown below.





# ROHINI COLLEGE OF ENGINEERING & TECHNOLOGY

Near Anjugramam Junction, Kanyakumari Main Road, Palkulam, Variyoor P.O - 629401  
Kanyakumari Dist, Tamilnadu., E-mail : admin@rcet.org.in, Website : www.rcet.org.in

## DEPARTMENT OF MECHANICAL ENGINEERING

