

**B.Tech. AEROSPACE ENGINEERING  
(BTAE)**

**Term-End Examination**

00339

**June, 2016**

**BAS-005 : ENGINEERING DRAWING**

*Time : 3 hours*

*Maximum Marks : 70*

---

**Note :** Attempt any *five* questions. All questions carry equal marks.

---

1. A square prism, edge of base 25 mm and axis 45 mm long has its axis inclined at  $45^\circ$  to the H.P. and an edge of its base on which the prism rests is inclined at  $30^\circ$  to the V.P. Draw its projections.

14

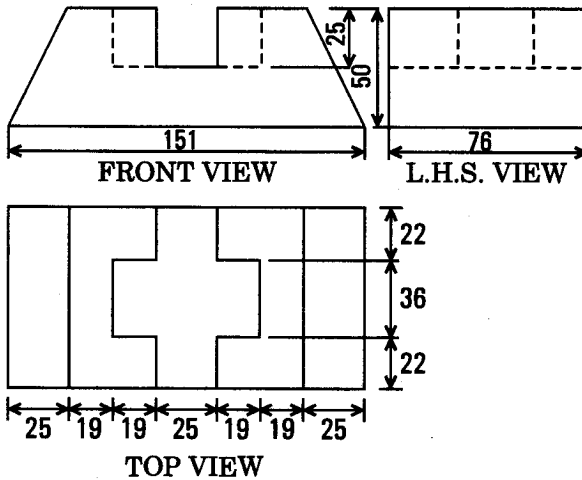
2. A line AB, inclined at  $30^\circ$  to V.P., has its end A 15 mm and end B 50 mm below H.P. The length of its elevation is 60 mm and its VT is 7 mm below the H.P. Draw its projections and determine the TL of AB, its inclination ( $\theta$ ), with the H.P. and H.T.

14

3. A pentagonal pyramid, side of base 25 mm and length of axis 50 mm, lies on one of its slant edges with its axis parallel to V.P. Draw the projections of the pyramid. 14

4. Construct a branch of hyperbola, when the diameter of its focus from the directrix is 50 mm and its eccentricity is  $\frac{3}{2}$ . Also draw a tangent and a normal to the curve at point P on it. 14

5. Figure 1 shows elevation, side view and plan of an object. Draw its isometric view using 1<sup>st</sup> angle projection. 14



(All dimension are in mm)

Figure 1

6. A cone, diameter of base 54 mm and height 66 mm, rests on its base in H.P. An auxiliary vertical section plane (AVP) inclined to V.P. at  $45^\circ$  cuts the cone and is 8 mm in front of axis. Draw its top view, sectional front view and sectional side view.

14

