SUBJECT: TECHNICAL DRAWING.

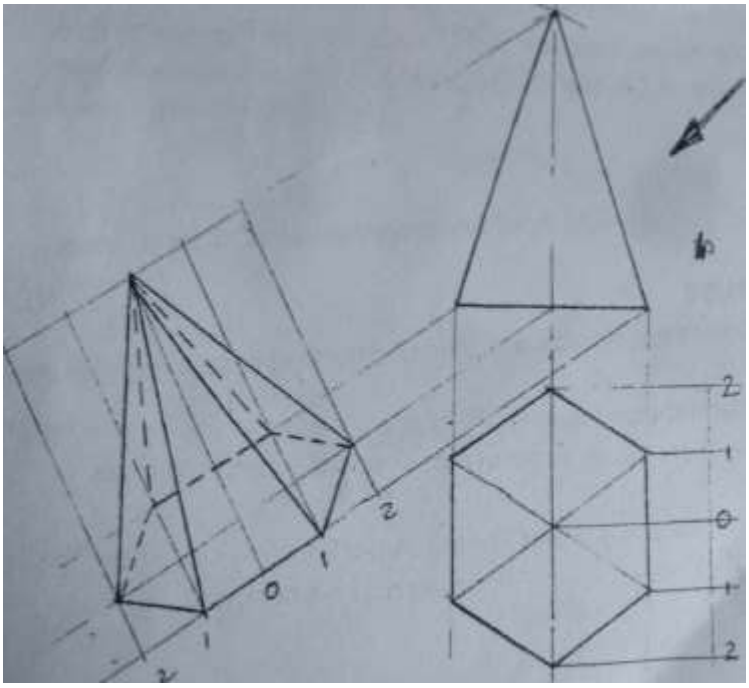
CLASS: SS2.

TOPIC: AUXILIARY VIEWS OF GEOMETRICAL SOLIDS

TRUE SHAPE

True shapes or lengths in technical drawing entails using technicalities to find the actual shape(s) or length (s) of solids or lines with relation to either of horizontal plane, vertical plane or auxiliary plane.

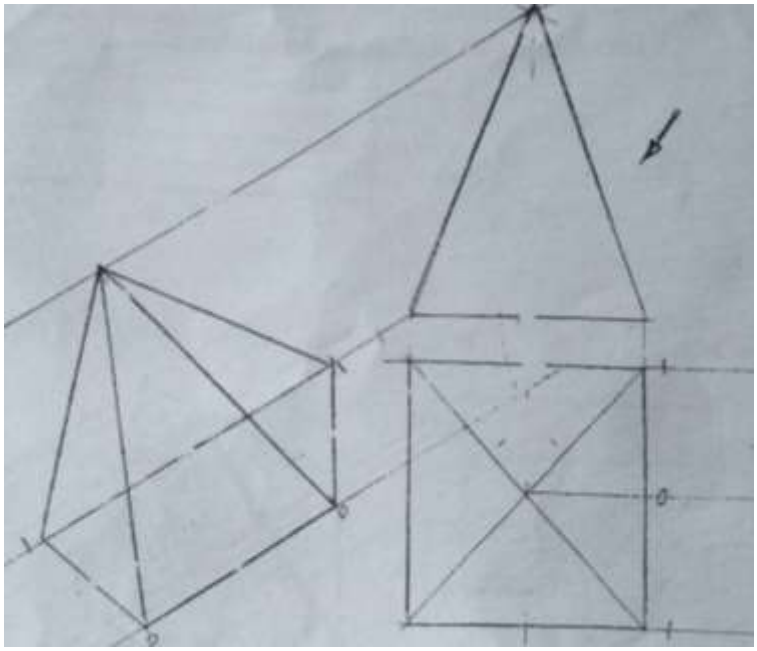
The true shape of a hexagonal base pyramid



PROCEDURE

1. Draw the given elevation as shown and number accordingly.
2. Project with 30^0 angle from all the points on the front elevation down to the left through the direction of the arrow as shown.
3. At a convenient distance on the base line, draw a center line O which is at 60^0 angle, the vertical height is taken from the 30^0 line drawn from the apex on the front elevation.
4. Transfer all the points from the plan i.e. 0,1,2,0,1,2 to the baseline starting from the center line which is 0, project all the points transferred as shown. You can see the beauty and the true shape of the hexagonal based pyramid.

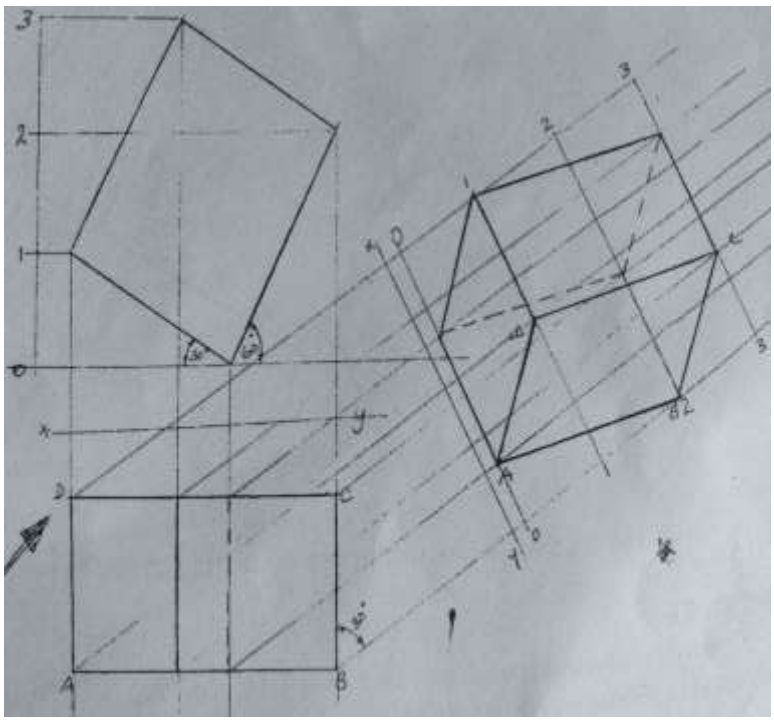
The true shape of a square based pyramid



PROCEDURE

1. Draw the elevation as shown,
2. Project all the points from the elevation with 30^0 line down to the left,
3. At a convenient distance, draw a 60^h line on the 30^0 lines,
4. Transfer all the points from the elevation to the auxiliary,
5. Outline the auxiliary.

True shape of a rectangular box.



PRODURE

1. Draw and number the plan and elevation of the rectangular box,
2. Project all the points on the elevation to the right with 30^0 angle,
3. At a convenient distance, draw a vertical with 60^0 angle. This line is called the XY plane.
4. Transfer all the points i.e. 0,1,2, and 3 from the plan to the auxiliary as shown.

ASSIGNMENT

1. C**onstruct the true shape of a truncated cone, using your preferred dimensions.**