1) A Hexagonal Prism, edge of base 20 mm and Axis 50 mm long rest with its base on HP such that one of its rectangular faces is parallel to VP.It is cut by a Plane Inclined at $45^{\circ}$ to HP and passing through the Right top Corner of the prism (i)Draw the Sectional Top view (ii)Develop the lateral Surfaces of the Truncated Prism

2) A Pentagonal Prism side of base 25 mm and Altitude 50 mm rest on its base on HP,Such that edge of the base is parallel to VP and Nearer to the Observer. It cut by a Plane Inclined $45^{\circ}$ to HP and passing through the Center of the Axis (i)Draw the True Shape of the Section (i)Draw the development of the complete surfaces of the Truncated Prism.


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Development of Surfaces
3) A Pentagonal Pyramid side of base 30 mm and height 52 mm stands with its base on HP and edge of the base is Parallel to VP and Nearer to it. It is cut by Plane and Inclined $40^{\circ}$ to HP and Passing through the Point on the axis 32 mm above the base. Draw the Sectional Top view, Develop the Lateral Surfaces of the Truncated Pyramid.


RADIAL LINE DEVELOPMENT OF TRUNCATED PYRAMID
4) A Regular Hexagonal Pyramid of side of base 30 mm and height 60 mm stands with its base on HP such that two of the sides of the base are perpendicular to VP. It is Cut by Plane and Inclined $40^{\circ}$ to HP and bisects the axis of the pyramid. Obtain the development of lateral Surfaces of the Truncated Pyramid.



OA = o'm' = TRUE LENGTH OF SLANT EDGE $O P=o^{\prime} p_{1}^{\prime}, \quad O Q=o^{\prime} q_{1}^{\prime}, \quad O R=o^{\prime} r^{\prime}$,

DEVELOPMENT OF L.S. OF TRUNCATED PYRAMID

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Development of Surfaces
5) A Square Pyramid base 35 mm side axis 70 mm long rest on its base on HP Such that the two adjacent Side of the base are inclined to VP. It is sectioned by a plane inclined at $30^{\circ}$ to HP and Passing through the midpoint of the axis.Draw the Sectional top view and develop the Lateral Surface of the Truncated Pyramid.


(ii)

DEVELOPMENT OF L.S. OF TRUNCATED SQUARE PYRAMID
6) A Cone of base 50 mm diameter and height 60 mm rests with its base on HP.It is cut by a Sectional Plane Perpendicular to VP and Parallel to one of the generator and Passing through the Point on the Axis at a distance of 20 mm from the apex.Draw the Sectional Topview and develop the lateral Surfaces of the remaining Portion of the Cone.

7) Vertical Chimney of 70 cm diameter joins a roof sloping at 35 degree with Horizontal. The Shortest Portion over the roof is 32 cm . Obtain the Shape of Sheet metal from which Chimney can be fabricated.


