CW -6 PENETRATION CURVE & SURFACE DEVELOPMENT

1. There is vertical square prism of 40mm resting height 60 on H.P. so that all sides of prism are equally inclined to V.P. Above prism is intersected (penetrated) another horizontal square prisms prism of sides 28 mm and length 80mm such that axis is parallel to V.P and H. P.5 mm away from axis of vertical prism and nearer to observer. All sides of small prism are making 45° with H.P and V.P. both.
   Draw: (i) Projections showing line of intersections
   (ii) Surface development of vertical prism.

2. There is a vertical cylinder of 60 mm diameter and 80 mm height. Above cylinder is penetrated (intersected) by another horizontal cylinder of 40 ma diameter such that its axis is parallel to V.P. and H.P 5 mm away from axis of vertical cylinder and nearer to V.P Draw
   (i). Penetration curve
   (ii). Surface development of vertical cylinder

3. A vertical cone, diameter of base 75 mm and axis 100mm long, is completely penetrated by a cylinder of 45 mm diameter. The axis of the cylinder is parallel to the H.P and V.P and intersects the axis of the cone at a point 28 mm above the base. Draw the projections of the solids showing curves of intersections.

HW -6 PENETRATION CURVE & SURFACE DEVELOPMENT

1. A vertical cylinder of 75mm diameter is penetrated by another cylinder of 50 mm diameter the axis of which is parallel to both the H.P. and V.P. the two axes are 9 mm apart. Draw the projection showing curves of intersecting.

2. A square prism, side of base 50 mm and height 70 mm, is resting on H.P. On its base with one of the side of the base inclined at 30 degree to V.P. The above prism is penetrated by horizontal prism, side or base 32 mm and length 96 mm rectangular faces of the horizontal prism are equally to V.P. & H.P. both. The axis of the two prisms are bisect at right angle. Draw the projection and show the line of intersection.