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SCHOOL : STA.

SUBJ ECT: TECHNICAL DRAWING.

CLASS: SS3.

NOTES.

TOPIC :REVISION ( INTERSECTION OF SOLIDS.)

DEFINITION OF SOLID INTERSECTION : Intersection is when two solids interpenetrate and thereby produce a line of intersection . The line of intersection will show the exact shape of the meeting surfaces.

APPLICATIONS OF SOLID INTERSECTION.

Skill of true shape is highly necessary and useful in metal fabrication industry where endless combinations of pipework, chutes, ducts, hoppers for industries such as mining, wine, oil and gas , ship building , food and beverage and the petro- chemical industry are produced. Varieties of shapes that can intersect each other. The shapes are categorised in groups:

1. Prisms

2. Cylindrical pipe

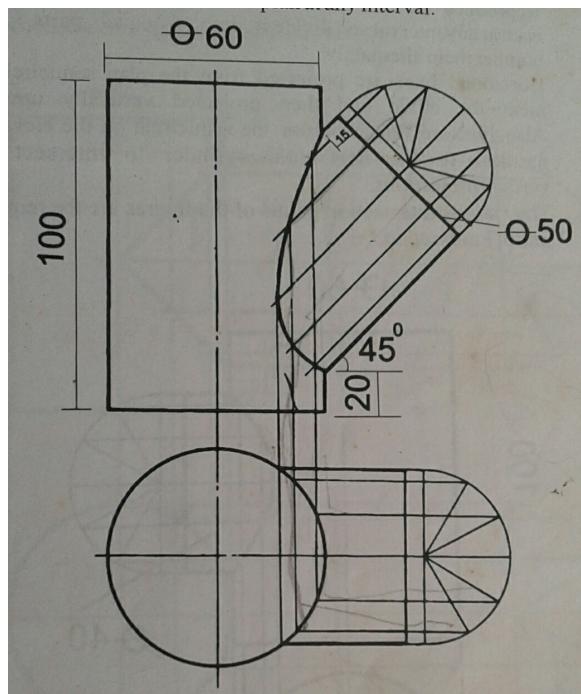
3. Pyramid

4. Conical cylinders.

(a) Two cylinders of unequal diameter meeting at an angle.

### PROCEDURES

1. Reproduce the elevation and plan at any interval.



2. Divide the two semicircles into 6 equal parts and number them alternately.

3. Horizontal lines are projected from the plan semicircle to meet the circle and then projected vertically upward. Also, line is projected from the semicircle on the elevation parallel to the inclined cylinder to intersect the vertical projections.

4. The various intersection points of the figures are the required line of intersection.