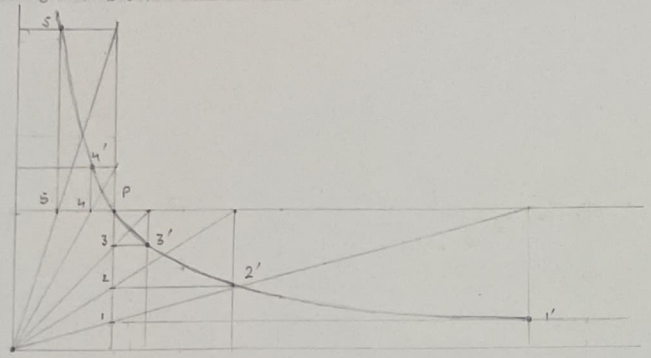
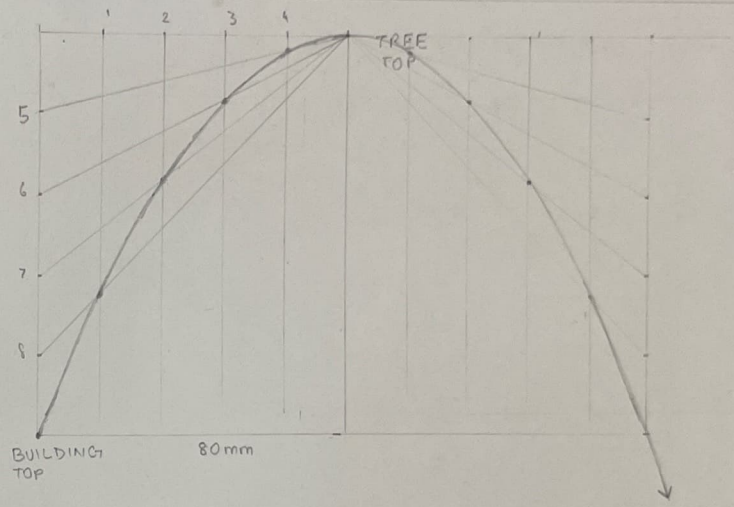
ENGINEERING CURVES

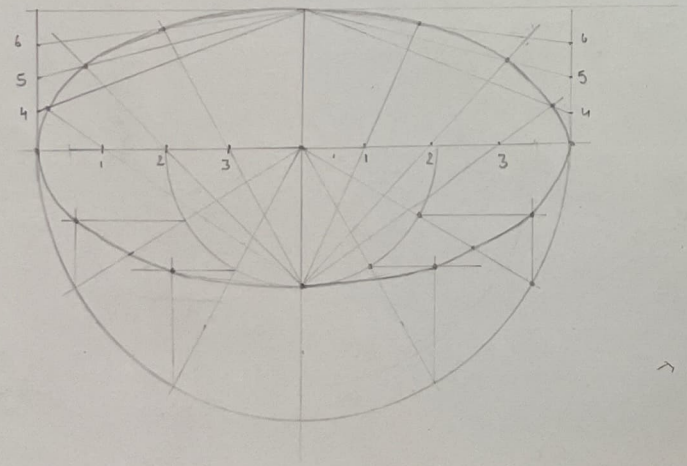
1. A Pt. P IS 25mm & 35mm RESPECTIVELY FROM TWO STRAIGHT LINES WHICH ARE AT 90°. DRAW A HYPERBOLA FROM P WITHIN 8mm DISTANCE OF EACH LINE.



3. A BOY, STANDING ON THE TERRACE OF A BUILDING OF 15m HEIGHT, THROWS A BALL, WHICH HAS ITS HEIGHT FLIGHT AND CROSSED AND JUST CROSSES A TREE OF 25m HEIGHT. TRACE THE PATH OF THE BALL, IF THE DISTANCE BETWEEN THE BUILDING AND THE TREE IS 8m.



2. THE FOCI OF AN ELLIPSE ARE 120mm APART. THE MINOR AXIS IS 70mm LONG. DRAW HALF ELLIPSE BY RECTANGLE METHOD & OTHER HALF BY CONCENTRIC CIRCLES METHOD.



4. A CURVE IS THE LOCUS OF THE Pt., MOVING IN A PLANE, SUCH THAT THE RATIO OF ITS DISTANCES FROM THE FOCUS TO THAT OF DIRECTRIX IS CONSTANT AND EQUAL TO ONE. GIVEN THE DISTANCE BETWEEN FOCUS F & THE DIRECTRIX DD. i.e. RF = 36mm