ED IMPORTANT QUESTIONS
for I Mid from Unit 1&2

1. Construct an ellipse, with the distance of the focus from the directrix as 50mm and eccentricity
is 2/3. Also draw a normal and tangent to the curve at a point 40 from the directrix

2. Draw an epicycloid if a circle of 40mm diameter rolls outside another circle of 120mm diameter.
for one revolution

3. Draw an involute of a circle 40mm diameter. Draw a tangent and normal to the curve at a point.
of 95mm from the center of the circle

4. A point A is on HP and 40 in front of VP. Another point B is on VP and below HP. Line joining their
front view makes an angle 45° to XY, while their top view makes an angle 30°. Find the distance of the
point B from HP.

5. Draw the projections of point B lying in I quadrant such that its shortest distance from the reference
line is 50 and is equidistance from HP and VP. The point is 30 from P. P. Draw the projections of the
point and determine its distance from HP and VP

6. Draw an involute of a regular hexagon of side 25 mm. Draw a tangent and a
normal to the curve at a distance of 100 mm. from the centre of the hexagon.

7. Construct a parabola when the distance of the focus from the directrix is 50 mm. Also draw
a normal and tangent to the curve at a point 40 mm. from the directrix.

8. A circle of 40 mm. diameter rolls along a line for one revolution clockwise. Draw a
locus of a point on the circle with the line. Also draw the tangent and the normal
to the curve at a point 35 mm. from the directing line.

9. A point P is 30 mm. and 50 mm. respectively from two straight lines which are at
right angles to each other. Draw a rectangular hyperbola from P within 10 mm.
distance from each line.

10. A line AB 60 mm long and inclined at 30 degrees to H. P and parallel to V. P. The
end A of the line is 20 above H.P and 30 mm in front of V.P. Draw the projections
of the line

11. Two points A and B are on HP; the point A is 30 in front of VP while B is 45 behind VP. The line joining their top vies makes an angle 45° to XY. Find the horizontal distance between the two points.

12. a) A is 35mm above H.P and 40mm infront of V.P
b) B is lying on H.P and 50mm infront of V.P
c) C is lying on H.P and 55mm infront of V.P
d)D is lying on V.P and 55mm above H.P
e) E is on HP and 30 mm behind VP
f) F is on VP and 40 above HP

13. The front view of a 75 mm long line AB measures 55 mm. The line is parallel to the H.P and
one of its ends is in the V.P and 25 mm above the H.P. Draw the projections of the line and determine its inclination with the V.P.

14. A line AB 60 mm long and inclined at 30^0 to H. P and parallel to V. P. The end A of the line Is 20 above H.P and 30 mm in front of V.P. Draw the projections of the line

15. Draw the projections of a 75 mm long straight-line PQ inclined 60^0 to the V.P and its one. end 15 mm in front of it; parallel to and 25 mm above H.P

16. A 100mm long line AB parallel to and 40 mm above the H.P. Its two ends are25 mm and 50 mm in front of V.P respectively. Draw its projections and find its inclination with the V. P

17. A line AB of 100 mm length is inclined at an angle of 30^0 to H.P and 45^0 to V.P. The point A is 15 above H.P and 20 mm in front of V.P. Draw the projections of the line