Roll No.	1	6	0	2	-	2	1	-	7	3	3	-			

	VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS-CBCS) DEPARTMENT OF MECHANICAL ENGINEERING **B.E. I – SEMESTER, 2021-22** **UI21ES030CE :: ENGINEERING DRAWING**	**ED** **CSE-A** **2021-22**
SHEET 1	**Conic sections and Regular polygons**	

1. Draw a line of length 113mm and divide it into 6 equal parts
2. Draw a line of length 40 mm and divide it into 5 equal parts
3. Construct an ellipse whose eccentricity is 2/3 and the distance of the focus from directrix is equal to 50mm.
4. A point P moves in a plane in such a way that the distance from the fixed point and the fixed straight line are equal. Construct a curve (tracing the locus of point P) when the fixed point is located at 55mm from the fixed straight line . Draw Tangent TT and normal NN to this curve at a point 35mm from the focus. Name the curve
5. Draw a straight line AB of any length. Mark a point F 68mm from AB. Trace the path of a point P moving in such a way that the ratio of its distance from the point F to its distance from AB is 4:3. Name the curve. Draw a tangent and normal to the curve at a point on 50mm from F
6. A point P moves in a plane in such a way that the distance from the fixed point and the fixed straight line is 2:3. Construct a curve when the fixed point is located at 35mm from the fixed straight line. Draw a tangent and normal to it at a point 60mm from the directrix
7. Construct a regular pentagon, regular Hexagon with a common side of 40mm using general method
8. Construct a regular Octagon of side 30mm with one of its side vertical using general method
9. Construct a regular Heptagon of side 35mm using general method

NOTE: The final solution should be drawn with HB grade pencil
All construction lines should be drawn with 2H grade pencil
Dimensioning should be done with H grade pencil

Questions to study

1. Define a conic curve and eccentricity of a conic curve
2. List the applications of a) parabola b) ellipse c) hyperbola
3. If a cutting plane cuts a cone ,discuss different cutting positions of the cutting plane to obtain a) circle b) ellipse c) parabola d) hyperbola