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Code No: ME1501
GEC-R14

## I B. Tech I Semester Reg./Suppl. Examinations, December 2016 ENGINEERING DRAWING <br> (Civil Engineering)

Time: 3 Hours
Max. Marks: 60
Note: Answer any Five Questions. All questions carry equal marks.

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5 \times 12=60 M
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1. a) Divide a given straight line of length of 100 mm into nine equal parts. (4M)
b) Construct a vernier scale of $\mathrm{R} . \mathrm{F}=1 / 80$ to show feet and inches. Mark 15 feet and 7.2 inches on it.
2. Construct an ellipse when the distance of the focus from the directrix is equal to 50 mm and eccentricity is $\frac{2}{3}$
3. a) The top view of a 75 mm long line measures 55 mm . the line is in the V.P., Its one end being 25 mm above the H.P. Draw its projections.
b) The length of the top view of a line parallel to the V.P .inclined at $45^{\circ}$ to the H.P. is 50 mm one end of the line is 12 mm above H.P. and 25 mm in front of the V.P. Draw the projections of the line and determine its true length.
4. The front view of a 125 mm long line $P Q$ measures 80 mm and its top view measures 100 mm .Its end Q and midpoint M are in the first Quadrant. M being 20 mm from both the planes. Draw the projections the line PQ
5. A plate having shape of an isosceles triangle has base 50 mm long and altitude 75 mm . It is so placed that in the front view it is seen as an equilateral triangle of 50 mm sides and one side inclined at $45^{\circ}$ to XY . Draw its top view.
6. Draw the Projections of a hexagonal pyramid, base 30 mm side and axis 60 mm long, having its base on the H.P. and one of the edges of the base inclined at $45^{\circ}$ to the V.P.
7. A sphere of radius 20 mm is kept centrally on the top face of a square prism of base 40 mm side and height 30 mm . The combination is placed on the top of a cylinder of 70 mm diameter and height 40 mm . All the three solids have the common vertical axis. Draw the isometric projection of the combined solid.
8. Draw front view, top view and side view for the given figure as shown below.
(12M)

