## I B. Tech-II Semester-Regular/Supplementary Examinations

April 2019

## ENGINEERING DRAWING (ELECTRONICS \& COMMUNICATION ENGINEERING)

Duration: 3 hours

Max. Marks: 70
Answer any $\boldsymbol{F I V E}$ questions. All questions carry equal marks

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5 \times 14=70 \mathrm{M}
$$

1. Construct a diagonal scale of $1 / 50$, showing meters, decimeters and centimeters and to measure up to 8 m . Mark a length of $5.48 \mathrm{~m}, 2.17 \mathrm{~m}$ and 6.39 m on it.
2. A Circle of 50 mm diameter rolls along a Straight line without slipping. Draw the Curve traced out by a point ' $P$ ' on the circumference, for one complete revolution of the circle. Name the curve. Draw a tangent to the curve at a point on it 40 mm from the line.
3. a) A point $P$ is on VP and 30 mm below HP. Another point $Q$ is on VP and above HP. The line joining their front views makes an angle of $45^{\circ}$ with XY line. Find the height of the point Q if the distance between their top views is 75 mm .
4. b) A 90 mm long line has one end on HP and the other end on VP. Draw the projections when the line inclined at $30^{\circ}$ to HP and $60^{\circ}$ to VP. Show the traces.
5. A pentagonal plate is resting one of its edges on HP which is inclined at $30^{\circ}$ to VP. Draw the projections when the plate is inclined at $45^{\circ}$ to HP.
6. Draw the projections of a square pyramid of base edge 35 mm and axis 60 mm long when it is resting on one of its face edges on HP and the axis is inclined at $30^{\circ}$ to VP.

14 M
6. A pentagonal prism of 25 mm base edge and axis 60 mm long is resting on one of its base edges on HP which is perpendicular to VP and the axis is inclined at $45^{\circ}$ to HP. Draw the projections when it is cut by a plane parallel to HP passing through the midpoint of the axis.

14 M
7. Draw the isometric view of a cone of 50 mm base diameter and 60 mm long axis, when it is placed centrally on a billet (Square prism) of 50 mm base edge and 20 mm height. 14 M
8. Draw the Front view, top view and both the side views of the component shown in the Fig.


