# I B. Tech I Semester Supplementary Examinations Dec - 2016 <br> ENGINEERING DRAWING <br> (Com. to ECE, EIE, Bio-Tech.E, E Com. E, Agri.E, EEE) 

Time: $\mathbf{3}$ hours
Max. Marks: 70
Question Paper Consists of Part-A and Part-B Answering the question in Part-A is Compulsory, Three Questions should be answered from Part-B
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1. a) Two views of a casting are shown in figure . Draw the isometric view of the casting (All dimensions are in mm ).

b) A room measures 8 m long, 5 m wide and 4 m high. An electric bulb hangs in the centre of the ceiling and 1 m below it. A thin straight wire connects the bulb to a switch kept in one of corner of the room and 1.25 m above the floor. Draw the projections of the wire, also determine its true length and slope with the floor.

## PART-B

2. a) Construct a vernier scale of $1: 40,000$, showing kilometres, hectometres and decametres and long enough to measure 5 km . Mark distances of 2.34 km and 3.92 km on the scale. b) Inscribe an ellipse in a rectangle having sides 120 mm and 80 mm long.

## Subject Code: R13109/R13

## Set No - 1

3. a) A point $P$ is 25 mm in front of the V.P. and 40 mm above the H.P. Another point Q is 40 mm in front of the V.P. and 25 mm above the H.P. The distance measured between the projectors is 40 mm . Draw the projections and find the distance between $P$ and $Q$. b) Draw the projections of a 70 mm long straight line, in the following positions
i) Parallel to and 40 mm in front of the V.P and in the H.P.
ii) Perpendicular to the H.P, 20 mm in front of the V.P and its one end 15 mm above the H.P.
iii) Perpendicular to the H.P, in the V.P. and its one end in the H.P.
(7M+9M)
4. The front view of a 120 mm long line $P Q$ measures 80 mm and its top view measures 100 mm . Its end $Q$ and the mid-point $M$ are in the first quadrant, $M$ being 20 mm from both the planes. Draw the projections of the line PQ.
5. A regular hexagon of 40 mm side has a corner in the HP . Its surface is inclined at $45^{\circ}$ to the HP and the top view of the diagonal passing through the corner which is in the HP makes an angle of $60^{\circ}$ with the VP. Draw its projections.
(16M)
6. a) Square pyramid base 40 mm side, axis 60 mm long has its base in V.P. one edge of base inclined to $30^{\circ}$ to H.P. and corner contained by that edge is on H.P. Draw its projections
b) A cone of base diameter 40 mm and axis 70 mm long rests with one of the points on the circumference of its base on H.P. Its axis is inclined at $35^{\circ}$ to H.P. and parallel to V.P. Draw its projections.
( $8 \mathrm{M}+8 \mathrm{M}$ )
7. Draw the Front View, Top view\& Both side views of the figures shown below. All dimensions are in mm .
(16M)


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