H.T.No. | | | | | | | | | | |

**Code No: ME1501** **GEC-R14**

# I B. Tech I Semester Reg./Suppl. Examinations, December 2016

# ENGINEERING DRAWING

**(Electrical and Electronics Engineering)**

**Time: 3 Hours** **Max. Marks: 60**

**Note: Answer any Five Questions. All questions carry equal marks.**

1. a) Inscribe a hexagon in a circle of diameter 60 mm. (5M)
   b) Distance between Delhi and Chennai is 1800 km. on a railway map, it is represented by 36cm length. Calculate the RF and draw a diagonal scale to read up to a single kilometer. Mark the distances:(i) 76 km. (ii) 593 km. (7M)
2. Construct an ellipse, when the distance of the focus from the directrix equal to 60 mm and eccentricity 2/3. Also draw a normal and tangent to the curve at a point 35 mm from the focus. (12M)
3. a) A point 30 mm above xy line is the plan view of two points P and Q. The elevation of P is 45 mm above HP while that of Q is 35 mm below HP. Draw the projections of the points and state their position with reference to principal planes and the quadrant in which they lie. (6M)
   b) Two pegs on a wall are 4.5meters apart. The distance between the pegs measured parallel to the floor is 3.6 m apart. If one peg is 1.5 m above the floor, find the height of the second peg and the inclination of the line joining the two pegs , with the floor (6M)
4. The distance between the end projectors of a line AB when measured parallel to the line of intersection of HP and VP is 50 mm. The end B is 60 mm above HP and 50 mm in front of VP. The end A is 10 mm above HP .The line is inclined at $30^0$ to HP .Complete the projections and determine the inclination of line with VP. (12M)
5. Draw the projections of a regular hexagon of 25 mm side, having one of its sides in HP and inclined at $60^0$ to VP and its surface making an angle of $45^0$ with HP. (12M)
6. a) Draw the projections of hexagonal prism with edge of base 25 mm and axis 50 mm when it rests on its base on VP with edge of base inclined at $40^0$ to HP. (6M)

b) Draw the projections of a pentagonal prism of base 25 mm side and axis 60 mm long, when it is resting on one of its edges of base on VP with its axis inclined at $40^0$ to VP. (6M)

7. a) Draw the isometric view of pentagonal pyramid of base side 30 mm and height 60 mm when the axis is perpendicular to VP. (6M)

b) Draw the isometric view of circular plane of diameter 40 mm when the plane is

i) Vertical

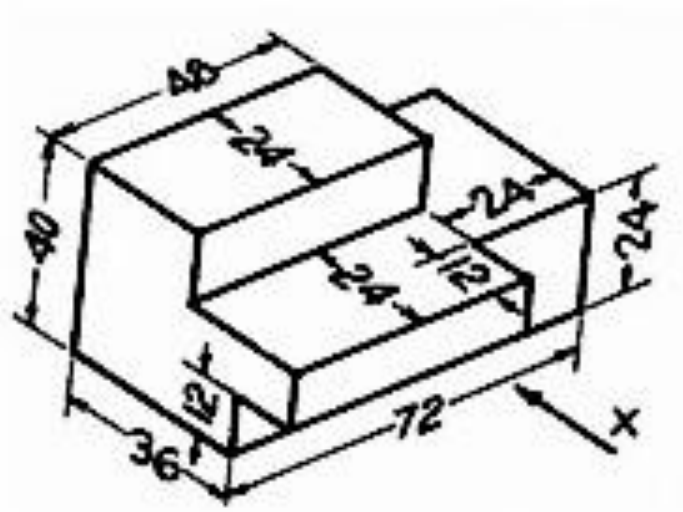
ii) Horizontal. (6M)

8. Draw the following views for the object shown.

i) Front view

ii) Top view

iii) Left side view (12M)




*****