

B.Tech. I Year(R07) Supplementary Examinations, May/June 2010

**ENGINEERING DRAWING**

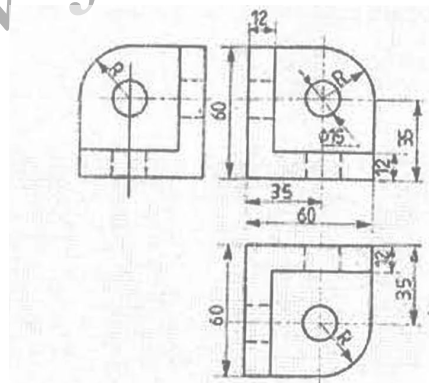
(Common to Electrical & Electronics Engineering, Electronics & Communication Engineering, Computer Science & Engineering, Electronics & Instrumentation Engineering, Information Technology, Electronics & Control Engineering, Electronics & Computer Engineering, Computer Science & System Engineering and Bio-Technology) )

Time: 3 hours

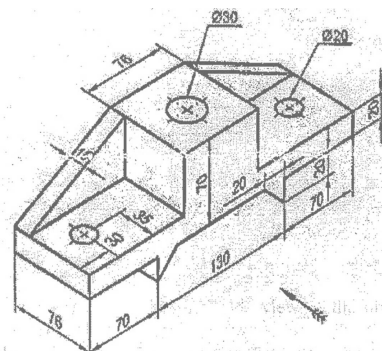
Max Marks: 80

Answer any FIVE questions  
All questions carry equal marks  
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- Construct a rectangular hyperbola when a point p on it is at a distance of 18 mm and 34 mm from two asymptotes. Also draw a tangent to the curve at a point 20 mm from an asymptote.
  - A parallelogram has sides 100 & 80 mm at an included angle of  $70^\circ$ . Inscribe an ellipse in the parallelogram. Find the major and minor axis of the curve.
- 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 H.P. Draw its projections.
  - The front view of a line, inclined at  $30^\circ$  to the V.P. is 65 mm long. Draw the projection of the line, when it is parallel to and 40 mm above the V.P., its one end being 30 mm in front of the V.P.
- Draw the projections of a cylinder, base 30 mm diameter and axis 40 mm long, rests with a point of its base circle on H.P. such that the axis is making an angle of  $30^\circ$  with H.P. and its top view perpendicular to V.P.
- The foci of an ellipse of 90 mm apart and the minor axis is 65 mm long. Determine the length of the major axis and draw half the ellipse by concentric circles method and other half by oblong method.
- Draw the projections of a hexagonal prism side of base 25 mm and height 60 mm resting with its base on H.P. such that one of its rectangular faces is parallel to V.P.
  - A pentagonal pyramid of base 25 mm side and axis 65 mm long is resting on an edge of base projections of pyramid when axis is perpendicular to V.P. base is at 15 mm from V.P.
- A right regular hexagonal prism of side of base 25 mm and altitude 55 mm has a square hole coincide one of the faces of the square hole is parallel to one of the faces of the hexagon. Draw the isometric projection of a prism with the hole.
  - A cylinder of base 50 mm diameter and axis 70 mm long is lying on the H.P. Draw its isometric projection when the axis is horizontal.
- Three views of a casting are shown below. Draw the isometric view of the casting (dimensions are in mm)



- Draw the front view, top view and left side view of the object shown below (dimensions in mm).



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