

CODE NO: 07A10291 SET NO : 2

2006 JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

IV B.TECH II SEMESTER SUPPLEMENTARY EXAMINATIONS

ENGINEERING DRAWING

(COMMON TO ELECTRICAL & ELECTRONIC ENGINEERING, ELECTRONICS & INSTRUMENTATION ENGINEERING AND ELECTRONICS & COMPUTER ENGINEERING)

AUG/SEP 2008

Time: 3 hours
Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. The foci of an ellipse are 80mm apart and the minor axis is 55mm long. Determine the length of the major axis and draw the ellipse by concentric-circle method. Draw a curve parallel to the ellipse and 20mm away from it. [16]
2. A circle of 50mm diameter rolls on the circumference of another circle of 175mm diameter and outside it. Trace the locus of a point on the circumference of the rolling circle for one complete revolution. Name the curve. Draw a tangent and a normal to the curve at a point 125mm from the center of the directing circle. [16]
3. (a) A point A is 2.5 cm above the H.P. and 3 cm in front of the V.P. Draw its Projections.
(b) A point A is 2 cm below the H.P. and 4 cm behind the V.P. Draw its Projections.
(c) Two points A and B are in the H.P. The point A is 30mm in front of the V.P., while B is behind the V.P. The distance between their projectors is 75mm and the line joining their top views makes an angle of 45° with xy. Find the distance of the point B from the V.P. [4+4+8]
4. (a) A 100mm long line is parallel to and 40mm above the H.P. Its two ends are 25mm and 50mm in front of the V.P. respectively. Draw its projections and find its inclination with the V.P.
(b) A line AB, 50mm long, has its end A in both the H.P. and the V.P. Its is inclined at 30° to the H.P and at 45° to the V.P. Draw its projections. [8+8]
5. A circular plane of 60mm diameter, rests on V.P. on a point A on its circumference. Its plane is inclined at 45° to V.P. Draw the projections of the plane when
(a) The front view of the diameter AB makes 30° with H.P. and
(b) The diameter AB itself makes 30° with H.P. [16]
6. (a) Draw the projections of a triangular prism, base 40 mm side and axis 50 mm long, resting on one of its bases on the H.P. with a vertical face perpendicular to the V.P.
(b) A cube of 50mm long edges is resting on the H.P. with its Vertical faces equally inclined to the V.P. Draw its projections.
(c) A triangular prism, base 40 mm side and height 65 mm is resting on the H.P. on one of its rectangular faces with the axis parallel to the V.P. Draw its projections. [4+8+4]
7. Draw the isometric view of the ribbed angle plate, All dimensions are in mm. [16]
8. Draw the front view, top view and left side views of V- block All dimensions are in mm