

2008 JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

IV B.TECH II SEMESTER SUPPLEMENTARY EXAMINATIONS

ENGINEERING DRAWING

(ELECTRICAL & ELECTRONIC ENGINEERING, ELECTRONIC & COMPUTER ENGINEERING.)

APR/MAY 2008

TIME : 3 HR

MARK : 80

**Answer any FIVE Questions
All Questions carry equal marks**

1. Two straight lines OA and OB make an angle of 75° between them. P is a point 40mm from OA and 50mm from OB. Draw a hyperbola through P, with OA and OB as asymptotes, marking at least ten points.
2. A circle of 35mm diameter rolls on a horizontal line. Draw the curve traced out by a point R on the circumference for one half revolution of the circle. For the remaining half revolution, the circle rolls on the vertical line. The point R vertically above the center of the circle in the starting position.
3. (a) A point P is 15mm above the H.P. and 20mm in front of the V.P. Another point Q is 25mm behind the V.P. and 40mm below the H.P. Draw projections of P and Q keeping the distance between their projectors equal to 90mm. Draw straight lines joining
 - i. their top views and
 - ii. their front views.
- (b) A point 30mm above xy line is the plan view of two points P and Q. the elevation of P is 45mm above the H.P. while that of the point Q is 35mm below the H.P. Draw the projections of the points and state their position with reference to the principal planes and the quadrant in which they lie.
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. It is inclined at 30° to the H.P. and at 45° to the V.P. Draw its projections.
5. A regular hexagonal plane of 30mm side, has a corner at 20mm from V.P. and 50mm from H.P. Its surface is inclined at 45° to V.P. and perpendicular to H.P. Draw the projections of the plane.
6. (a) Draw the projections of a pentagonal pyramid, base 30 mm edge and axis 50mm long, having its base on the H.P. and an edge of the base parallel to the V.P. Also draw its side view.
- (b) Draw the projections of a hexagonal pyramid, base 30 mm side and axis 60 mm long, having its base on the H.P. and one of the edges of the base inclined at 45° to the V.P.
- (c) A square pyramid, base 40mm side and axis 65mm, long has its base in the V.P. One edge of the base is inclined at 30° to the H.P. and a corner contained by that edge is on the H.P. Draw its Projections.
7. Draw the isometric view of the block, two views of which