Code No: 51013 **R09**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.Tech I Year Examinations, June - 2015

ENGINEERING DRAWING

(Electronics and Communication Engineering)

Time: 3 hours **Max. Marks: 75**

Answer any five questions

All questions carry equal marks

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1. A point moves such that the sum of its distances from two fixed points 100mm apart is always constant and is equal to 140mm. Draw the locus of the point. Draw also the tangent and normal to the curve at any point on it. [15]

2. The length of the plan of a straight line AB is 40mm and length of the elevation is 60mm. The plan ab is inclined at 40^0 to XY line. Draw the projections of the line AB, assuming point A to be situated on HP and 10mm in front of VP. Also find the true length and inclinations with HP and VP. [15]

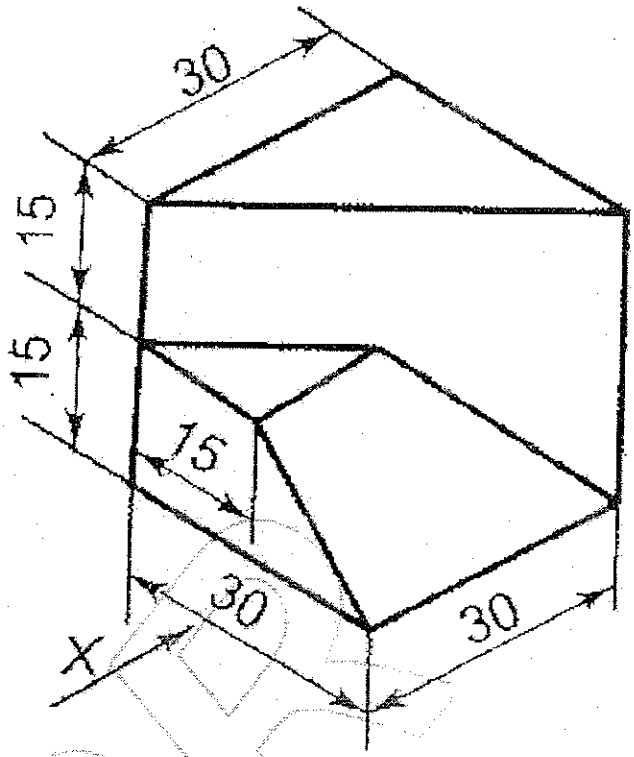
3. A pentagonal plate of side 30mm is resting on HP on one of its sides with its surface inclined at 45^0 to HP and the resting side is inclined at 55^0 to VP. Draw its projections. [15]

4. A pentagonal prism, having a base with a 30 mm side and a 60 mm long axis, is resting on a face on the H.P. with its axis making 30^0 with the V.P. It is cut by a horizontal section plane passing through a point 10 mm below the top longer edge. Draw its sectional top view. [15]

5. A cone 70 mm base diameter and 60 mm axis stand vertically on HP. A vertical cylinder 50 mm diameter penetrates the cone. Their axes are parallel and are offset by 10 mm and the plane containing them is parallel to VP. Draw the curve of intersection. [15]

6. A hexagonal prism having base with a 30 mm side and a 70 mm long axis is resting on its base on the H.P. with a side of base parallel to the V.P. It is cut by an A.I.P. making an angle of 45^0 with the H.P. and bisecting the axis. Draw its isometric view of the bottom portion. [15]

7. Draw the elevation, top view and side view of the object shown in figure. All dimensions are in mm. [15]



8. A hexagonal prism, side of base 30 mm, length 90 mm lies with a rectangular face on the ground, so that the corner of that face nearest to the picture plane is 30 mm to the left of the eye and 15 mm behind the picture plane. The longer edges of the prism recede at 45 to the picture plane towards the right. The distance of eye from picture plane is 130 mm and its height from the ground is 75 mm. Draw the perspective view of the prism. [15]

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