Code No: 09A10591 **R09**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD
B. Tech I Year Examinations, December-2012
ENGINEERING DRAWING
(Common to CSE, MEP)

Time: 3 hours

Answer any five questions
All questions carry equal marks

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1. A fixed point F is 7.5 cm from a fixed straight line. Draw moving in such a way that its distance from the fixed straig distance from F. Name the curve. Draw normal and tangent at a point 6 cm from F. [15]

2. The distance between the end projectors of a line AB is 70 mm and the projectors through the traces are 110 mm apart. The end of a line is 10 mm above the HP. If the top view and the front view of the line make 30^0 and 60^0 with XY line respectively, draw the projections of the line and determine the traces, the angles with the HP and the VP and the true length of the line. [15]

3. A regular pentagonal pyramid, base 30 mm side and height 80 mm rests on one edge of its base on the ground so that the highest point in the base is 30 mm above the ground. Draw its projection when the axis is parallel to the VP. [15]

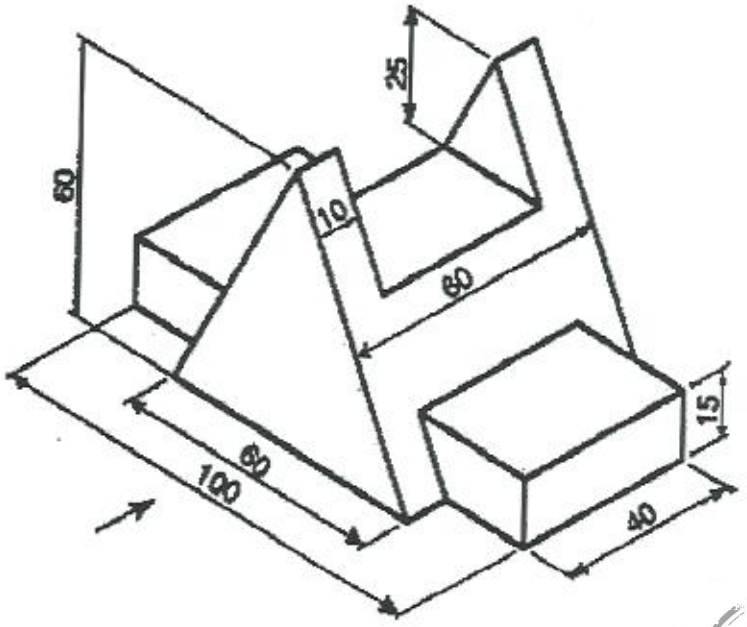
4. A hexagonal pyramid, base 30 mm side and axis 65 mm long, is resting on its base on the HP with two edges parallel to the VP. It is cut by a section plane, perpendicular to the VP inclined at 45^0 to the HP and intersecting the axis at a point 25 mm above the base. Draw the front view, sectional top view, sectional side view and true shape of the section. [15]

5. A right circular cylinder of 75 mm diameters penetrates another of 100 mm diameter, their axes being at right angles to each other but 10 mm apart. Draw the projections of the curves of intersection on a plane parallel to the axes of the cylinders. [15]

6. A cone, base 50 mm diameter and axis 70 mm long, stands on HP. It is cut by a section plane perpendicular VP, inclined at 45^0 to HP and passing through a point on the axis 35 mm above the base. Draw the isometric projection of the truncated cone showing the cut surface. [15]

7. A square lamina of 40 mm side lies on the ground plane. One of its corners is touching the picture plane and an edge is inclined at 60^0 to picture plane. The station point is 40 mm in front of picture plane, 60 mm above the ground plane and lies in a central plane which is at a distance of 35 mm to the right of the corner touching the picture plane. Draw the perspective projection of the lamina. [15]

8. Draw the elevation, plan and left and right views of the part shown in the figure (all dimensions are in mm). [15]



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