R09

Code No: 09A10491

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD
B. Tech I Year Examinations, May/June-2013
ENGINEERING DRAWING
(ECE)

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

Answer any five questions
All questions carry equal marks

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1. An area of 144 sq.cm. on a map represents an area of 36 sq.km. on the field. Find the R.F. of the scale for this map and draw a diagonal scale to show kilometres, hectametres and decameters and to measure upto 10 km. Indicate on this scale a distance of 7.56 km.

2. A line AB measures 75 mm and has end A 10 mm infront of V.P. and 15 mm above H.P. and the other end B, 55 mm infront of V.P and 50mm above HP. Draw the projections of the line and find the inclinations of the line with both the reference planes. Also, draw the traces.

3. A square pyramid of 35 mm side and 60 mm height rests on one of its triangular faces on the H.P, such that the base edge is inclined at 40^0 to V.P. Draw the projections of pyramid. When the apex is nearer to the viewer?

4. A vertical cone of 50 mm diameter of base and height 65 mm is resting on its base in H.P and is cut by a section plane perpendicular to V.P and inclined at 60 degrees to H.P and passes through a point 25 mm above the base. Draw the development of the lateral surface upper portion of the cone.

5. A vertical cylinder of 60 mm diameter is penetrated by a horizontal square prism of side 30mm and length 100mm., the axis of which is parallel to V.P and all the edges of the square prism are equally inclined to H.P. Draw their projections showing the curves of intersection. Axes of both the solids intersect at a height of 30 mm from the base of the cylinder.

6. Draw the isometric projection of square prism of side 8cm and height 12 cms when the axis is a) vertical b) horizontal

7. Draw the three views for the component shown in Fig.1

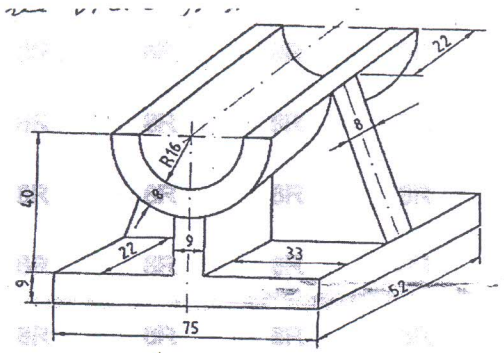

Fig. 1

All dimensions are in mm

8. Draw the perspective view of cube of 40mm edge resting on ground on one its faces. It has one of its vertical edges in the pp and all vertical faces are equally inclined to the picture plane. The station point is 30mm infront of pp, 60 mm above the ground plane and is contained by a central plane 15 mm to the left of the centre of the cube.

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