R09

Code No: 51013

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD

B.Tech I Year Examinations, December-2014/January-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. Construct a vernier scale to show readings of 1/10th of a meter when 3cm represents 10 m. Construct the scale to read up to 60 m and mark the distances of 35.3 m and 47.3 m on the scale.

2.a) Construct an ellipse when the distance between the focus and the directrix is 30 mm and the eccentricity is 3/4.

b) Draw the tangent and normal at any point P on the curve using directrix.

3. A line AB is 75 mm long. A is 50 mm in front of VP and 15 mm above HP. B is 15 mm in front of VP and is above HP. Top View of AB is 50 mm long. Draw and measure the Front View. Find the true inclinations.

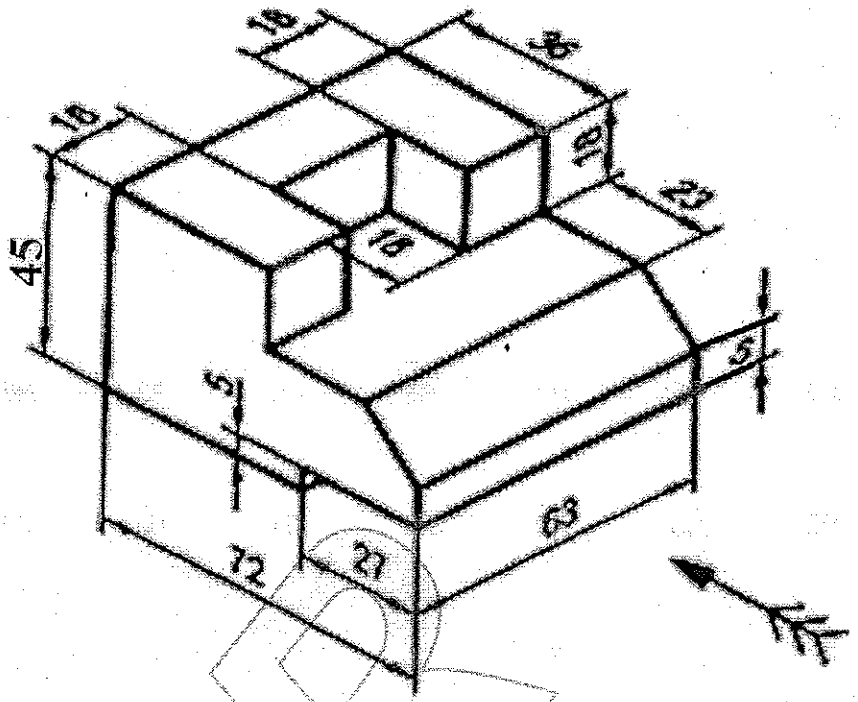
4. A cylinder of diameter 30 mm and axis height 60 mm lying on the ground on a point of its base circle such that the axis is inclined at 45^0 to the HP and the plane containing the axis makes an angle of 30^0 with the VP. Draw the projections of the cylinder.

5. A cone, base 50 mm diameter and axis 60 mm long, rests with its base on HP. It is cut by a section plane perpendicular to HP, inclined at 60^0 to VP and at a distance of 10 mm from its axis. Draw the sectional front view and the true shape of section.

6. A cylinder of 50 mm diameter stands vertically with its base on HP. It is completely penetrated by an cylinder of 50 mm diameter. The axis of the penetrating cylinder is parallel to VP, inclined at 30^0 to HP and bisects the axis of the vertical cylinder. Draw the curves of intersection.

7. A hemisphere of 44 mm diameter is nailed on the top face of a frustum of a hexagonal pyramid, sides of top and bottom faces being 15 mm and 30 mm respectively and its height is 50 mm. The axes of both the solids coincide. Draw the isometric projection of the combination of solids.

8. Draw the front view, top view and side view for the given figure. All dimensions are in mm.



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