

Code No: 09A10291

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD

B. Tech I Year Examinations, November/December-2013

ENGINEERING DRAWING

(Common to EEE, EIE)

Time: 3 hours

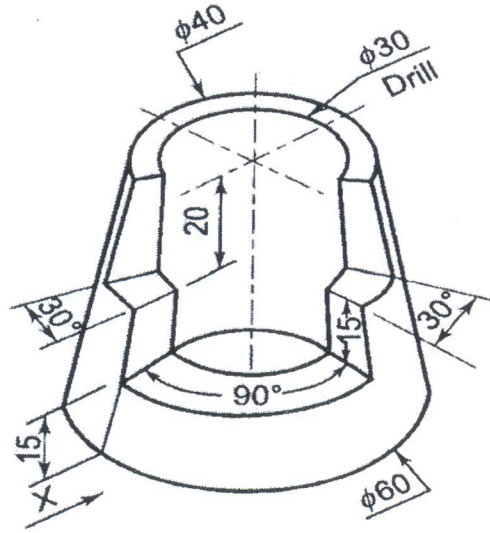
Max. Marks: 75

Answer any five questions
All questions carry equal marks

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- 1.a) The distance between two stations is 100 km and on a road map it is shown by 30 cm. Draw a diagonal scale and indicate distances of 46.8 km and 32.4 km on it.
- b) Draw an ellipse of major diameter 130mm and minor diameter 90mm. [15]
2. A line PQ, inclined at 30° to the H.P., has the end P at 20 mm above the H.P. and 10 mm in front of the V.P. The front view of the line is 70 mm long and inclined at 60° to the reference line. Draw the projections of the line and determine its true length and inclinations with the principal planes. Also, locate its traces. [15]
3. A pentagonal pyramid, having a base with a 30 mm side and a 60 mm long axis, has one of the edges of the base is in the H.P. The solid is tilted in such a manner that the highest point of the base is 40 mm above the H.P. and the edge of the base on which it is resting is parallel to the V.P. Draw its projections. [15]
4. A cylinder, with a 50 mm base diameter and a 60 mm long axis, rests on its base on the H.P. It is cut by a section plane perpendicular to both the H.P. and the V.P. such that its distance from the axis is 18 mm. Draw its front, top and sectional end views. [15]
5. A vertical cylinder 70mm diameter is penetrated by a square prism of side 30mm and its axis is parallel to both HP and VP. Rectangular faces of the prism are equally inclined to the VP. Axis of vertical cylinder intersecting the axis of the horizontal square prism. Draw the projections showing curves of intersection. [15]
6. A paper weight consists of three portions. The bottom-most portion is a cylinder with a 80 mm diameter and 25 mm height. On it is situated the middle portion which is the frustum of a cone with a 80 mm base diameter, 50 mm top diameter and 40 mm height. The topmost portion is hemi-sphere with a 30 mm radius. Draw the isometric projection of the section. [15]

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



8. A cube on 5 mm edge lies with a face on the ground and an edge on the picture plane. All the vertical faces are equally inclined to PP. The SP is 80 mm from PP and 60 mm from GP. The edge of the cube in contact with the picture plane is situated 10 mm to the right of the station point. Draw the perspective view of the cube. [15]
