

Code No: Z0223

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD

B.Tech I Year Examinations, December-2014/January-2015

ENGINEERING DRAWING

(Common to EEE, EIE)

Time: 3 hours

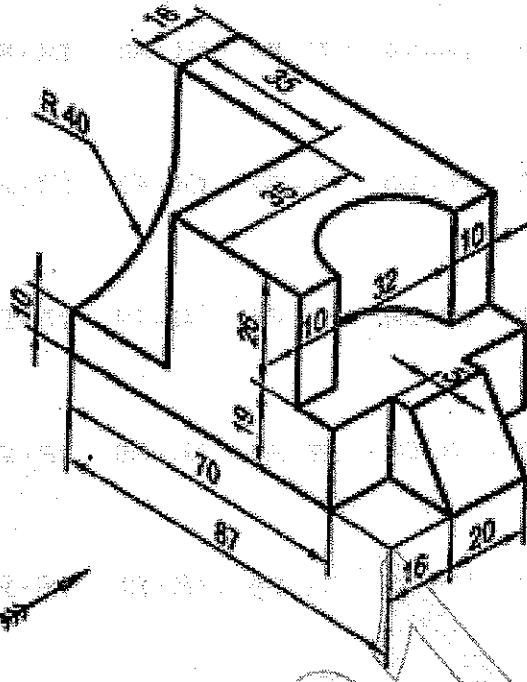
Max. Marks: 80

Answer any five questions

All questions carry equal marks

1. The major axis of an ellipse is 100 mm and the minor axis is 55 mm. Find the foci and construct the ellipse by Intersecting Arcs Method.
2. The diameter of the rolling circle is 36 mm and the diameter of the base circle is 108 mm. Draw a hypocycloid. Draw a tangent and normal at any point on the curve.
3. A line PQ 95 mm long has its end P in both HP and VP. It is inclined at an angle of 45° to HP and 30° to VP. Draw projections of the line.
4. A square prism, side of base 30 mm and axis 50 mm long, has its axis inclined at 60° to HP. It has an edge of its base in the HP and inclined at 45° to VP. Draw its projections.
5. A cone, diameter of base 52 mm and axis 68 mm long is resting on the HP on one of its generators such that the axis is parallel to VP. It is cut by a horizontal section plane 13 mm above the HP. Draw its sectional top view and true shape of the section.
6. A thin pentagonal metal sheet of side 30 mm has a square hole of side 20 mm with centrally punched through it. The sheet is resting on HP on one of its sides parallel to VP and the surface of the sheet inclined at 30° to HP. One of the sides of the hole is parallel to the side on which the metal sheet rests. Draw its projections.
7. A cylindrical slab 50 mm in diameter and 45 mm thick is surmounted by a cube of 30 mm edge. A square pyramid of altitude 45 mm and side of 25 mm rests on the top of the cube with the side of its base parallel to the sides of the top of the cube. The axes of the solids are collinear. Draw the isometric projection.

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



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