

CODE: 17CA03101

B. Tech I Year I Semester Regular Examinations, December 2017

ENGINEERING DRAWING

(CSE)

Time: 3 hours

Max Marks: 70

Answer all **five** units (5 x 14 = 70 Marks)

UNIT-I

1. Construct a parabola, with the distance of the focus from the directrix as 50mm. Also draw normal and tangent to the curve, at a point 40mm from the directrix.

OR

2. A circle of 40mm diameter rolls along a line for one revolution clock-wise. Draw the locus of a point on the circle, which is in contact with the line. Also draw a tangent and a normal to the curve at a point 35mm from the directing line.

UNIT-II

3. A point lying 20mm below the XY line is the top view of three points P, Q and R. P is 25mm below HP, the point Q is 35mm above HP and the point R is in HP. Draw the projection of the three points and state their positions with the reference planes and the quadrants in which they lie.

OR

4. A line AB 70mm long has one of its end 'A' is 20mm in front of VP and 15mm above HP. The line is inclined at 25° to HP and 40° to VP. Draw its top and front views.

UNIT-III

5. An equilateral triangular lamina of 30mm sides lies with one of its edges on HP such that the surface of the lamina is inclined to HP at 60°. The edge on which it rests is inclined to VP at 60°. Draw the projections of the plane surface.

OR

6. A regular pentagonal lamina of 30mm side has one side on ground. Its plane is inclined at 45° to HP and perpendicular to VP. Draw its front view, top view and side view.

UNIT-IV

7. A pentagonal prism side of base 25mm and axis 65mm long rests with one of its corners of its base on HP. Its axis is inclined at 30° to HP and parallel to VP. Draw its projections.

OR

8. A cone of base 60mm diameter and height 80mm long lies with one of its generators on HP and the axis appears to be inclined to VP at an angle of 40° in the top view. Draw its top and front views.

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9. A hexagonal pyramid of 30 mm side of base and height 65mm rests with its base on HP and one of its base edge is parallel to VP. Draw the isometric view of the pyramid.

OR

10. A square pyramid with base side 30mm and height 50mm is resting on a cube of side 60mm. The two sides of the base of the pyramid are parallel to the sides of the cube and also their axes coincide each other. Draw the isometric projection of the combination of the solids.
