

Total No. of Questions : 5      Total No. of Printed Pages : 6

**EC - 186**

**B.E. II Sem. Civil Engg. Exam.-2013**

**ENGINEERING DRAWING**

Paper : CE-205

Time Allowed : Three Hours

Maximum Marks : 60

Note : Attempt all questions. assume missing data wherever necessary. Solve all question in one drawing sheet. Pencil may be used at both \* de.

Q.1. Draw any three

- A room of  $1728\text{m}^3$  volume is shown by a cube of 216 cm volume. Find R.F. and construct a plain scale measure up to 42 m. Mark a distance of 22 m on the scale.
- Draw a scale of full size, showing 1/1000 inch. measure upto 5 inches.
- Draw parabola if distance between focus & directrix is 50 mm

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(2)

d) Draw Hypocycloid if radius of generating circle is 25 mm & radius of directing circle is 50 mm.

Q.2. A room is  $4.8\text{ m} \times 4.2\text{ m} \times 3.6\text{ m}$  high. Determine graphically the distance between a top corner and bottom corner diagonally opposite to it.

OR

Two lines AB & AC make an angle of  $120^\circ$  between them in their f.v. & topview AB is parallel to both the H.P. & V.P. Determine the real angle between AB & AC.

Q.3. draw the projection of a rhombus having diagonals 125 mm and 50 mm long. The smaller diagonals of which is parallel to both the principal planes, while the other is inclined at  $30^\circ$  to the H.P.

OR

A hexagonal pyramid base 25 mm side and axis 50 mm long, has an edge of its base on the ground its axis is inclined at  $30^\circ$  to the ground and parallel to the V.P. Draw its projection.

Q.4. A cone diameter of the base 60 mm & axis 70 mm long is resting on its base on the H.P. it is cut by an A.I.P. So that the true shape of the section is an isosceles triangle having 50 mm base. Draw the plan, elevation and the true shape of section.

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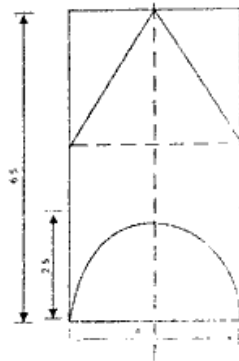
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(3)

OR

Draw the development of the lateral surface of the cylinder cut as shown in fig.

(All dimensions are in cm)



- Q.5. The outside dimension of a box made of 4 c.m. thick plate are 90 cm × 60 cm × 60 cm height. The depth of the lid on outside is 12 c.m. Draw the isometric view of box when lid is 90° open

OR

Draw the isometric view of hexagonal nut for 24 mm diameter bolt, assuming approximate dimension. The threads are to be neglected.

