Total No. of Questions : 5 Total No. of Printed Pages : 3

ECS-186

B.E. (IInd Sem.) (CGPA) (Civil Engg.) Exam.-2013

ENGINEERING GRAPHICS

Paper - CE-205

Time Allowed : Three Hours
Maximum Marks : 60

Note : Attempt all questions. Assume missing data wherever is required. Use one sheet only but both sides of the sheet may be used.

Q.I The area of a field is 50,000 sqm. The length and breadth of the field, on the map is 10 cm and 8 cm respectively. Construct a diagonal scale which can read upto one metre. mark the length of 235 metre on the scale. What is R.F. of the scale.

or

Show by means of a drawing that when the diameter of the directing circle is twice that of the generating circle, the hypocycloid is a straight line, the diameter of the generating circle equal to 50mm.

Q.II A line PQ 75 mm long, has its end P in the V.P. and the Q in the H.P. The line is inclined at 30° to the H.P. and at 60° to the V.P. draw its projection.

or

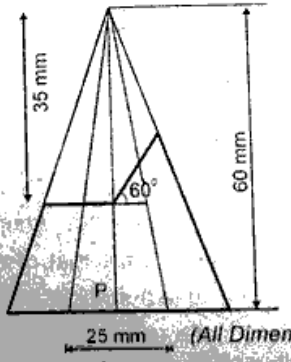
The top view of a 75 mm long line AB measures 65mm, while the length of its front view is 50mm. Its one end A is in the H.P. and 12 mm in front of the V.P. Draw the projection of AB, determine its inclination with the H.P. and the V.P.

Q.III A thin 30°–60° set square has its longest edge in the V.P. and inclined at 30° to the HP its surface makes an angle of 45° with the V.P. Draw its projection.

or

Draw the projection of a cone base 75mm diameter axis 100 mm long, lying on the H.P. on one of its generator with the axis parallel to the V.P.

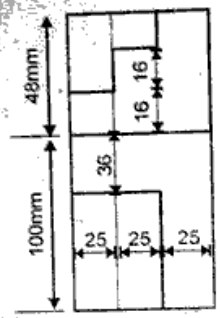
Q.IV Draw the development of the lateral surface of the part 'P' of the hexagonal pyramid shown in figure—



(All Dimension are in mm)

or

Draw the isometric view of the model of steps two views of which are shown in figure—



(All Dimension are in mm)

Q.V A square pyramid base 40 mm side and axis 65 mm long has its base on the H.P. and all the edges of the base equally inclined to the V.P. it is cut by a section plane perpendicular to V.P. Inclined at 45° to the H.P. and bisecting the axis. Draw its sectional top view, sectional side view and true shape of the section.

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