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Total No. of Questions : 5] [Total No. of Printed Pages : 4

B.E. IInd Semester (CGPA) Examination, 2017

EFS–319

CIVIL ENGG.

(Engg. Graphics)

Paper : CE-205

Time : 3 Hours] **[Maximum Marks : 60**

Note :– Attempt all questions.

1. The area of a field is 50000 sq.m. The length and the breath of the field, on the map is 10 cm and 8 cm respectively construct a diagonal scale to read up to a single meter and long enough to measure up to 500 m. Mark a length 235 m on the scale. What is the R.F. of the scale ?

Or

A thin circular disc of 50 mm diameter is allowed to roll without slipping from upper edge of slopping plank which is inclined at 150 with the horizontal plane. Draw the curve traced by the point on the circumference of the disc. 12

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

Or

Draw the projection of the following points on a Common reference line, keeping the distance between their projection 30 mm apart :

(a) Point A is 20 mm, below the H.P. and 50 mm infront of V.P.

(b) Point B is in the H.P. and 40 mm, behind the V.P.

(c) Point C is 30 mm infront of V.P. and in the H.P.

(d) Point D is 50 mm above the H.P. and 30 mm behind the V.P.

(e) Point E is 20 mm below the H.P. and 50 mm behind the V.P.

(f) Point F is in V.P. and 50 mm below the H.P.

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3. A circular plate of negligible thickness and 65 mm diameter appears as an ellips is in the front view and having its major axis 60 mm long and miner axis is 45° mm long draw its cop view when the major axis of ellips is horizontal.

Or

A Regular pentagonal pyramid with the side of its base 30 mm and height 80 mm rest on an edge of the base. The base is tilted until its apex is 50 mm above the level of the edge of the base on which it vests. Draw the projection of pyramid, when the edge on which it nest, is parallel to the V.P. and apex of the pyramid points toward V.P. 12

4. A cylinder of 40 mm diameter 60 mm height and having its axis vertical, is cut by a sectional plane perpendicular to the V.P. inclined at 45° to the H.P. and intersecting the axis 32 mm from the base. Draw the sectional view, and true shape of the section.

Or

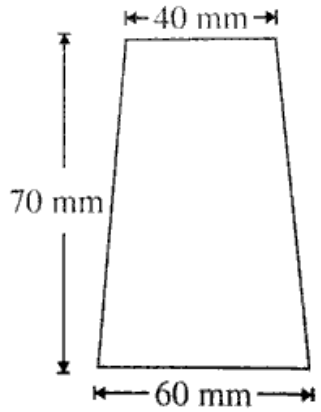
A vertical cylinder of 80 mm diameter is completely penetrated by another cylinder of 60 mm diameter, their axis bisecting each other at right angles. Draw

their projection showing curves of penetration, assuming the axis of the penetrating cylinder to be parallel to the V.P. 12

5. A hexagonal prism having the sides of the base 25 mm and the height of 60 mm is vesting on one of its corner of the base and its axis is inclined 30° to the H.P. Draw its projection and also prepare the isometric view of the prism in the above stated condition.

Or

The projected fig. shows the frustum of a cone. Draw its projection and also draw its isometric view.



12