

Roll No. ....

**8108**

Printed Pages : 2

**BT-1 / D-14**

**ENGINEERING GRAPHIC AND DRAWING**

**Paper-ME-105 E**

**Syllabus – 2010-11**

*Time allowed : 3 hours]*

*[Maximum marks : 100*

*Note : Attempt only five questions, selecting at least one question from each unit.*

**Unit-I**

1. The shortest distance of a point E from reference line is 50 mm. Draw its projections, if the point is placed at a height of 26 mm above H.P. Mention all the assumptions regarding the quadrant and scale used clearly alongside the solution. 20
2. Draw a Vernier scale of R.F. = 1/25 to read up to 4 meters. On it show lengths 2.39 m and 0.91 m.

**Unit-II**

3. The end E of line EF, 80 mm long is in both the HP and the VP. The line is inclined at 35° to the HP and 40° to the VP. Draw its projections. Also locate its traces. 20
4. A triangular plane is in the form of an isosceles triangle having base with a 30 mm side and altitude of 40 mm. It is kept in the first quadrant such that the surface is perpendicular to both H.P. and V.P. Draw its projections when the base is parallel to the V.P. 20

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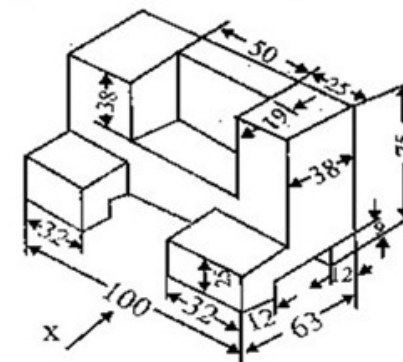
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**Unit-III**

5. A Pentagonal pyramid of base side 30 mm, axis length 55 mm has one of its slant faces in the VP and the axis parallel to and 30 mm above the HP. Draw its projections. 20
6. A cube of 40 mm edge stands on one of its faces on HP with a vertical face making 45° to VP. A hole of 30 mm diameter and whose axis is perpendicular to VP and parallel to HP is drilled centrally through the cube such that the hole passes through the opposite vertical edges of the cube. Obtain the development of the lateral surface of the cube with the hole. 20

**Unit-IV**

7. Draw the front view, top view and right side view of the following object. 20



8. Draw the three orthographic views of Hexagonal Nut and Square headed bolt. 20

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