

MID-SEMESTER EXAMINATION 2013

Course: Engineering Drawing (ME111)

Department of Mechanical & Civil Engineering, IIT Guwahati

Sulrat Kuttu

Total time: 70 minutes

Exam date: 21-09-2013

Total marks: 50

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Signature: *[Signature]*

NOTE: (1) Answer all 50 questions. (2) Each question carries 1 mark. (3) No Step marking. (4) This exam paper contains 6 pages printed on both sides.

1. A cube of 40 mm is freely suspended from one of its corners; the center of gravity of this cube is at $\frac{40\sqrt{3}}{2}$ mm from base. *X*
2. The sum of the distances of a point on the ellipse from the two foci is equal to length of major axis.
3. In a drawing sheet, left margin is drawn at 20 mm away from its edge.
4. Draw strokes for letter "B". *B X*
5. If a line is inclined at 30° to HP and 60° to VP, then its true length can be seen in side view.
6. What is the least count of mini-drafter you are using in drawing lab? 1 mm
7. A line PQ inclined at 30° to the HP and parallel to VP, it will have 1 trace(s).
8. Eccentricity of conics is a ratio of distance between vertex and focus to distance between vertex and directrix.
9. Arc of circle/Oblong method is used to draw an ellipse, if major and minor axis given.
10. Any chord perpendicular to the axis of parabola is called double ordinate.
11. If the asymptotes are perpendicular to each other then the hyperbola is called rectangular hyperbola.
12. The cycloid is called the hypocycloid when the generating circle rolls along another circle inside it.
13. Vernier and diagonal scales can measure length with the same precision. True or false? True