Roll No.   **Total No. of Pages : 02**

Total No. of Questions : 09

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B.Tech. (Sem.–1st, 2nd) (2011 & 2012 Batch)
ENGINEERING DRAWING
Subject Code : BTME-102
Paper ID : [A1110]

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Time : 3 Hrs.   **Max. Marks : 60**

INSTRUCTION TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION - B & C. have FOUR questions each.**
3. **Attempt any FIVE questions from SECTION B & C carrying EIGHT marks each.**
4. **Select atleast TWO questions from SECTION - B & C.**

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SECTION-A

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l. **Write briefly :**

(a) Name the two recommended systems of dimensioning and show any one of them with the help of a sketch.

(b) What do you mean by Representative Facts (R.F.). Show it by a suitable example?

(c) Name the various types of scales (at least four).

(d) Differentiate between Ist Angle and IIIrd Angle of projections.

(e) What is meant by Orthographic projections?

(f) Name the two auxiliary planes and write their use.

(g) Draw the projections of a point 10 mm above HP and 20 mm in front of VP.

(h) What do you mean by the Trace of a Line. Show it by a sketch.

(i) Name atleast three solids of revolution.

(j) What is Intersection of surfaces and its importance.

SECTION-B

2. The distance between two cities A & B is 300 kilometers. Its equivalent distance on the map measures only 6 cms. What is the R.F?
Draw a diagonal scale to show hundreds of kilometres, tens of kilometres and kilometres. Indicate on the scale, the distance of 313 kms. (8)

3. A straight line AB is 50 mm long and it makes an angle of 35° with H.P. and 45° to VP. The end 'A' is 15 mm in front of VP and 20 mm above HP. Draw the projections of the line. (8)

4. Draw the projections of a rhombus having diagonals 100 mm and 40 mm long. The bigger diagonal is inclined at 30° to HP with one of its end point in HP. (8)

5. Draw the projections of a cylinder 50 mm dia and axis 60 mm long, is resting on a point of base circle in HP with its axis inclined at 45° to HP and parallel to V.P. (8)

SECTION-C

6. A cube of 40 mm edges, is resting on one of its face in HP with a vertical face inclined at 30° to VP. It is cut by a sectional plane parallel to VP and ⊥ to HP passing 15 mm away from the axis. Draw its top view and the sectional front view. (8)

7. Draw the development of a sphere of 60 mm diameter by LUNE method. (8)

8. Draw the isometric projection of the Frustom of a cone having base diameter 50 mm and 40 mm height with top diameter of 25 mm. (8)

9. Draw the front view of the object shown below in the direction (F) and top view in the direction (T). All dimensions are in mm. (8)