

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (Sem.-1st, 2nd) (2011 & 2012 Batch)

ENGINEERING DRAWING

Subject Code : BTME-102

Paper ID : [A1110]

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.

SECTION-A

I. 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.

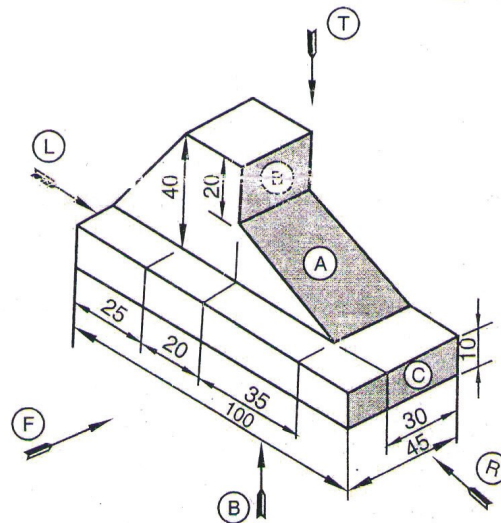
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SECTION-B

- 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)
- 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)
- 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)
- 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

- 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 \perp to HP passing 15 mm away from the axis. Draw its top view and the sectional front view. (8)
- Draw the development of a sphere of 60 mm diameter by LUNE method. (8)
- Draw the isometric projection of the Frustum of a cone having base diameter 50 mm and 40 mm height with top diameter of 25 mm. (8)
- 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)



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