Diploma in Civil Engineering / Diploma in Electrical & Mechanical Engineering

00216

Term-End Examination

June, 2010

BET-016 : ENGINEERING DRAWING

Time : 2 hours   *Maximum Marks : 70*

Note :   *Part - A is to be attempted on Answer Scripts and Part - B on Drawing Sheet.*

PART - A

Question No. 1 is **compulsory**. *Attempt any five questions from the remaining seven questions :*

1.   Fill in the blanks with appropriate words, selected   **10**
     from the list given below :

     (a)   The Ratio of object length on drawing to
           the Actual length of object is called

           _____ .

     (b)   When measurements are required in 3-units
           _____ scale is used.

     (c)   When the section plane is inclined to the
           Axis of right circular cone and parallel to
           one of its generators, the section is

           _____ .

(d) Value of Eccentricity in case of parabola is always _____ .

(e) What dimensions of an object are given by plan or Top-View ? (_____)

(f) When a point is in front of (V.P.) its Top-View is _____ Reference line.

(g) When a line is inclined to V.P. and parallel to H.P. It has no _____ .

(h) In case of oblique-plane, surface of plane is _____ to both the reference planes.

(i) A cube consists of _____ equal faces.

(j) When a right circular cone is cut by a section plane parallel to the Base, the true shape of section is _____ .

[List of words : (i) Below (ii) Horizontal trace (iii) Above (iv) Circle (v) Hyperbola (vi) Vertical Trace (vii) Equal to one (viii) Perpendicular (ix) Length and Width (x) R.F. (xi) Diagonal (xii) Parabola (xiii) Inclined (xiv) Six (xv) Ten

2. Draw an Arc of 70 mm Radius of any length and then bisect it.   **6**

3. Sketch a cylinder and any type of pyramid with its name of parts.   **6**

4. Differentiate between Aligned and unidirectional methods of dimensioning.   **6**

5. Draw the conventional symbols for 1st angle and 3rd angle projections.   **6**

6. A 3.2 cm long line represents a length of 4-metres. Extend this line to measure length up to 25-metres. Calculate the length of scale.   **6**

7. As per given Fig. No. 1. Find out the position of relative Trace ?   **6**
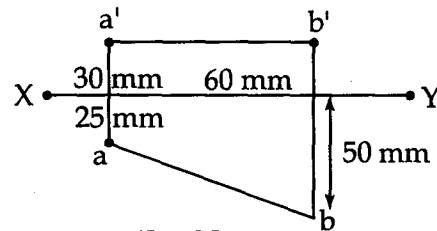

Fig. No. 1

8. Fig. No. 2, shows the Top-View and Front-View 6
of a cone. It is cut by a section. Plane V.T. Show
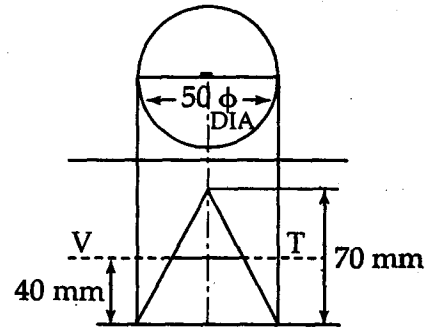its sectional-plan or Top-View.

Fig. No. 2

PART - B

*Attempt **any two** questions. Each question carries **equal** marks :*

9. Construct a diagonal - scale of R.F. $= \dfrac{3}{200}$ **15**

    showing metres, decimetres and centimetres and

    to measure upto 8-metres.

10. A line 'AB' 90 mm long, is inclined at 30° to H.P. **15**

    Its end 'A' is 12 mm below the H.P. and 20 mm

    behind V.P. Its Front view measures 65 mm.

    Draw its projections and also determine its relative

    Traces.

11. A Hexagonal pyramid of base edge 40 mm and **15**

    Axis 70 mm long rests in H.P. with its base. Its

    one base edges is parallel to V.P. It is cut by a

    cutting plane which is inclined at 60° to H.P. and

    passes through a point on Axis 25 mm above its

    base. Draw its Front View and sectional Top-

    View.

12. Draw the following views of the block as shown   **15**
in Figure No. 3 (Using 3rd Angle Projection) :

(a)   Top-View (plan)

(b)   Front-View (elevation)

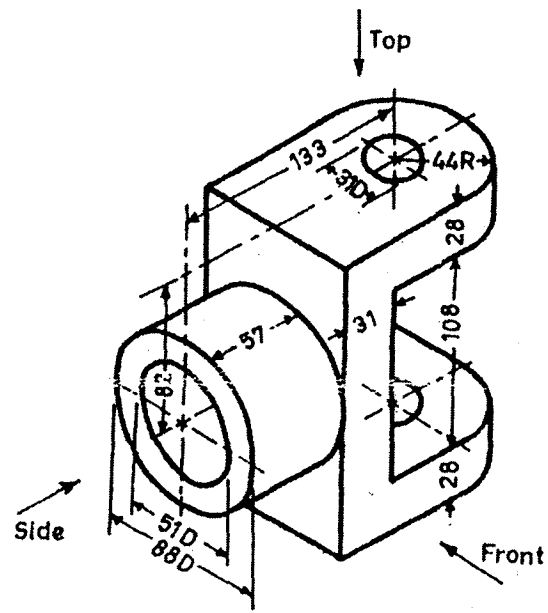(c)   Side-view

Fig. No. 3