| BET-016 |

DIPLOMA IN CIVIL ENGINEERING (DCLE(G)) / DIPLOMA IN ELECTRICAL AND MECHANICAL ENGINEERING (DEME) / DCLEVI / DMEVI / DELVI / DECVI / DCSVI / ACCLEVI / ACMEVI / ACELVI / ACECVI / ACCSVI

Term-End Examination

⊡⊡┙╗╓ December, 2014

BET-016 : ENGINEERING DRAWING

Time : 2 hours   *Maximum Marks : 70*

**Note :** *Part A is to be attempted on an answer script and Part B on a drawing sheet.*

PART A

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

1. (a) What do you understand by R.F. (Representation Fraction) ?   2

    (b) Define "Regular Polygon".   2

    (c) Define the situation of any object in 2nd Angle with respect to the Reference planes (H.P. and V.P.).   2

    (d) Write the name of the curve, generated by a point on the circumference of a circle which rolls along a straight line.   2

    (e) Differentiate between "PLANE" and "SOLID".   2

2. By a line diagram, indicate the "TYPES OF SOLIDS" which are commonly used in Engineering drawing. *6*

3. Explain with the help of sketches the progressive and chain type of dimensioning arrangements. *6*

4. Find out the "TRUE LENGTH" of line 'ab' in the Figure 1. *6*
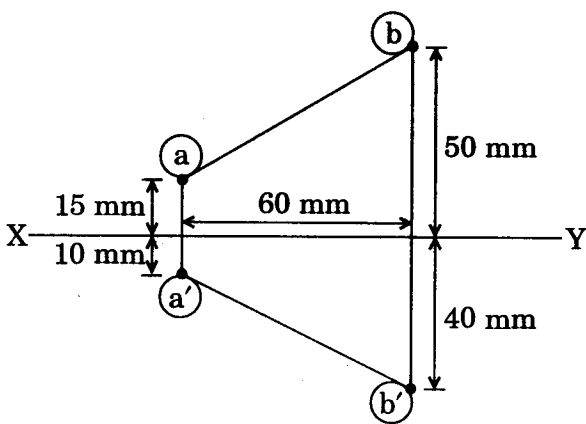
Figure 1

5. Calculated the DEVELOPED LENGTH of a cylindrical shape, having base dia. 49 mm. *6*

6. Write down the various conditions of any straight line with respect to the reference planes i.e. H.P. and V.P.   *6*

7. Construct an equilateral triangle when the altitude is given as 60 mm.   *6*

8. Define Isometric scale and explain how it is constructed.   *6*

PART B

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

9. Construct a parabola when the distance of focus from the directrix is 55 mm.   *15*

10. A hexagonal plane of 35 mm side has one of its corners in H.P. Draw its projections when its surface makes an angle of 45° to H.P. and is perpendicular to V.P.   *15*

11. Draw the projections of a cylinder, having the base dia. 60 mm and its axis 80 mm long; it rests in H.P. on a point of its circumference. Its axis makes an angle of 45° with H.P. and parallel to V.P.   *15*

12. As per Figure 2 Top View and Front View of a Block are given in 3rd-Angle-Projection. Draw its Isometric view. (All the dimensions are in mm). *15*
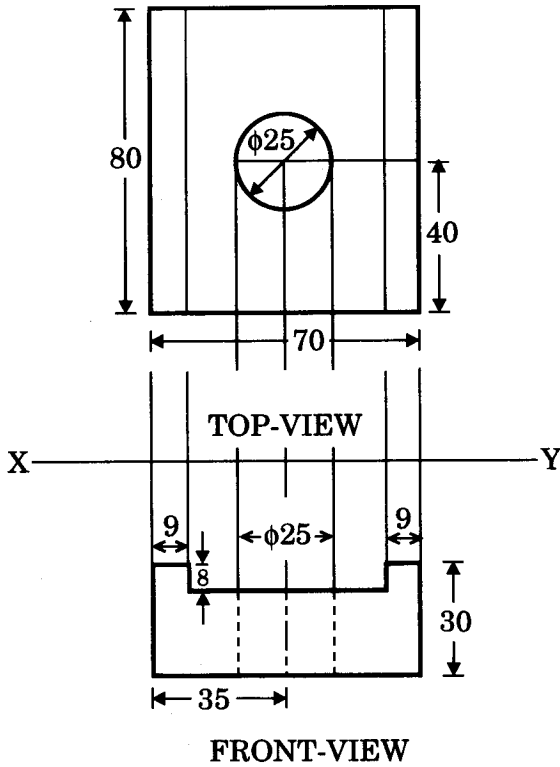

Figure 2