BET-016

Diploma in Civil Engineering / Diploma in Electrical & Mechanical Engineering

Term-End Examination

June, 2011

BET-016 : ENGINEERING DRAWING

Time : 2 hours *Maximum Marks : 70*

Note : ***Question No. 1*** *and* ***2*** *are* ***compulsory*** *and are to be attempted on Answer Script and others on Drawing Sheet. Answer any* ***two*** *questions from the remaining* ***four*** *questions.*

1. Answer the following questions in brief. **7x2=14**

   (a) The trimmed size of a drawing sheet of size A_1 and A_3 are _____ and _____ in mm.

   (b) Define Representative Factor (R.F).

   (c) By line diagram indicate any four 'types of solids' which are commonly used in Engineering Drawing.

   (d) Define Ellipse.

   (e) Define two conic sections except ellipse. Write the names of sections.

   (f) What are the different positions which a point can take with respect to the Reference planes. (HP and VP) ?

   (g) Differentiate between Isometric view and Isometric projections.

2. (a) Draw the projections of the following points. 4

(i) Point 'A' is 30 mm below HP and 35 mm behind VP.

(ii) Point 'B' is 40 mm behind VP and 35 mm above HP.

(b) Construct an Isometric Scale to read upto 70 mm. 3

(c) Construct a plain scale of R.F = $\frac{1}{6250}$ to read upto 10 km. Show on the scale a length of 570 km. 7

3. A line AB 65 mm long has its End 'A' in the HP and 20 mm infront of VP. The line is inclined at 30° to the HP and 45° with VP. Draw its projections. 21

4. Construct a parabola when the distance of focus from the directrix is 50 mm. 21

5. Draw three views of a regular pentagon of 40 mm sides, having one of its side parallel to HP and the surface of the pentagon is inclined at 30° to HP and perpendicular to VP. 21

6. Two Views of a Hexagonal pyramid are given below. Draw its Isometric view. **21**