1154 **Code : 15ME-01D**

Register Number | | | | | | | |

I Semester Diploma Examination, April/May-2016

ENGINEERING DRAWING

Time : 4 Hours] **[Max. Marks : 100**

Note : (i) Part – **A** is *compulsory*.
(ii) Answer any **five** questions from Part – **B** and **two** questions from Part – **C**.
(iii) Adopt first angle projection method.

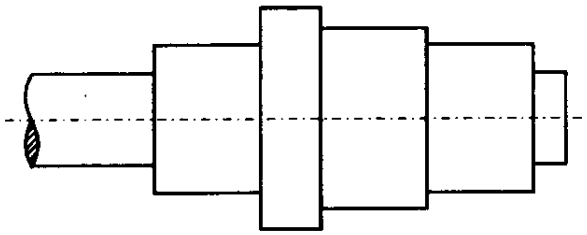
PART - A

1. Mention the types of lines and their applications. **5**
2. Illustrate the various elements of dimensioning with the help of sketch. **5**
3. Draw the projection of the following points : **2 × 5 = 10**
   (a) Point P is 40 mm infront of VP, 50 mm above HP.
   (b) Point Q is 30 mm above HP, 50 mm behind the VP.

PART – B

4. Illustrate the dimensioning of the given common features : **10**
   (a) Diameter
   (b) Radii
   (c) Arcs
   (d) Chords

5. Copy the given sketch to 1 : 1 Scale and dimension it by adopting aligned system of dimensioning with chain dimensioning. **10**



6. A point P is 40 mm infront of VP. 50 mm above HP and 30 mm infornt of left PP. Draw the three principal views of the point. **10**

7. Draw the projection of a line 80 mm long, when it is placed parallel to both HP and VP. One of the ends of the line is 70 mm above HP, 60 mm infront of VP and 30 mm infront of the right PP. **10**

8. A square lamina ABCD of 30 mm side rests on the corner C such that the diagonal AC appears as at 30° to the VP in the top view, draw the projections of the Lamina. **10**

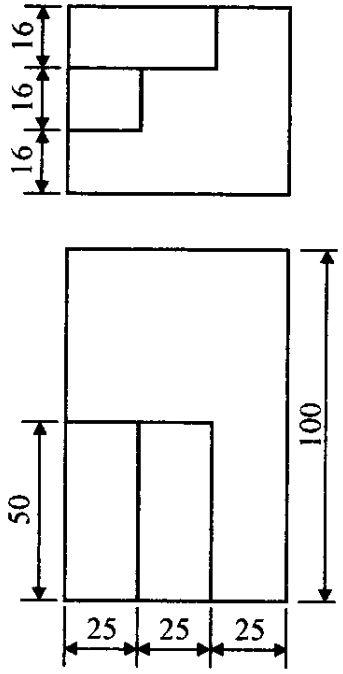
9. A Hexagonal Lamina of 30 mm sides rests on HP on one of its sides. The side which is on HP is perpendicular to VP and the surface of lamina is inclined HP at 45°. Draw the projection of lamina. **10**

10. Draw the top and front views of a triangular prism of 35 mm side of triangular faces and height 60 mm rests with one of its longer edges on HP such that the axis is parallel to VP and the rectangular face opposite to the slant edge on which the prism rests in perpendicular to VP. **10**

11. Draw the top and front views of cone of 60 mm diameter of base and axis 80 mm long lying on HP with its axis inclined at 45° to it and parallel to VP. **10**

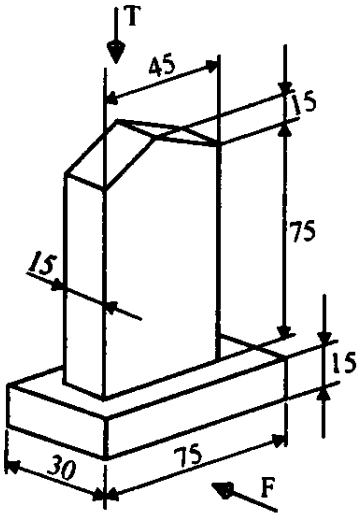
PART – C

12. Draw the isometric view of the component whose orthographic views are given below. **15**



All dimensions are in mm.

13. Draw the three principal views of the components as shown in the figure. **15**



All dimensions are in mm.

14. A square prism base side 40 mm, height 50 mm is placed centrally on a rectangular slab sides 100 mm × 60 mm and thickness 20 mm. Draw the isometric projection of the combination. **15**