1265

Code : 15ME-01D

Register Number

I/II Semester Diploma Examination, April/May-2017

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. (a) List the standard sizes of drawing sheets. **5**

(b) Mention the uses of the following drawing instruments : **5**

(i) French curve

(ii) Set square

(iii) Protractor

(iv) Bow compass

(v) Minidrafter

2. Draw the projection of the following points :

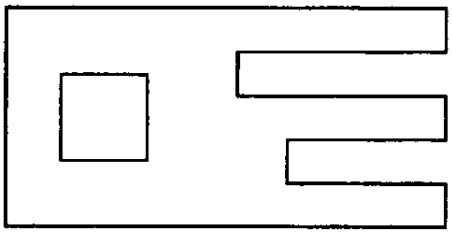
(a) Point P is 40 mm infront of VP, touches HP.

(b) Point Q is 30 mm above HP, 25 mm behind VP **10**

[Turn over

PART – B

3. Copy the given sketch to 1 : 1 scale and dimension adopting unidirectional system with combined dimensioning method. **10**



4. Draw the projection of the following points : **10**
   (i) A is 25 mm above HP and 35 mm infront of the VP.
   (ii) B is 20 mm above the HP and 30 mm behind the VP.
   (iii) C is 30 mm below the HP and touches behind the VP.
   (iv) D is 40 mm infront of VP and 30 mm below HP.
   (v) E is touching both HP & VP.

5. The length of top view of a line which is parallel to VP and inclined at 45° to HP is 50 mm. One end of the line is 15 mm above HP and 25 mm infront of VP. Draw the projections of line and determine its true length. **10**

6. Draw the projections of a line 70 mm long lying in VP and inclined at 35° to HP. The lower end of the line is 10 mm above HP. **10**

7. A square lamina of 30 mm side rests with one of its sides on HP so that the surface of the lamina is inclined at 30° to HP. Draw the top and front views of the lamina. **10**

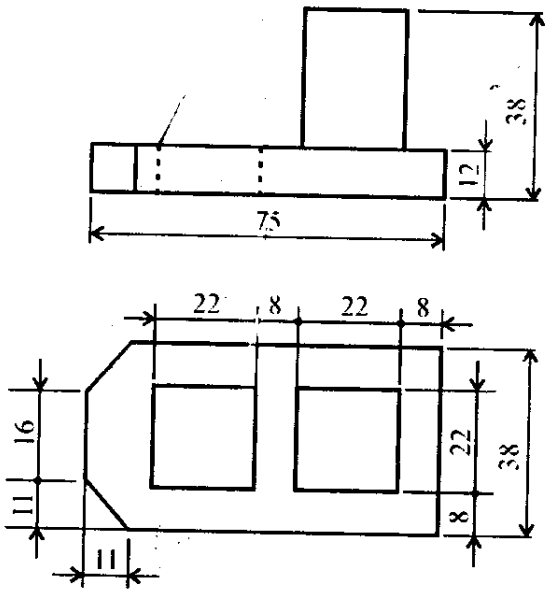
8. A regular pentagonal lamina has its sides as 30 mm. It is resting with one of its corners on HP. The plane surface is inclined at 30° to HP. Draw its projections showing side view. **10**

9. A hexagonal pyramid is resting with one of its triangular lateral surface on HP. Draw the projections if its base edges are 40 mm and the axis height is 65 mm. **10**

10. Draw the top and front views of a right circular cylinder of base 60 mm diameter and 80 mm height when it lies on HP such that its axis is inclined at 30° to HP. **10**

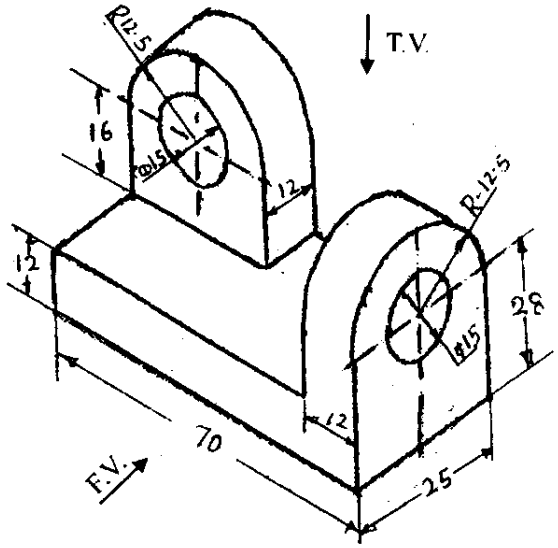
PART – C

11. Draw the isometric view of the component whose orthographic views are given below : 15



All dimensions are in mm

12. Draw the three principal views of the components as shown in fig. 15



All dimensions are in mm

13. A cone of base 40 mm diameter and height 50 mm is kept centrally over hexagonal prism of base side 30 mm and height 30 mm. Draw the isometric projection of combination solids. 15