1238

Code : 15ME-01D

Register Number | | | | | | | |

I Semester Diploma Examination, Nov./Dec. 2016

ENGINEERING DRAWING (CONVENTIONAL)

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.**

PART – A

1. Mention the types of lines and their applications. **5**

2. Give the conventional representation for the following materials : **5**

   (i) Cast iron

   (ii) Lead

   (iii) Bronze

   (iv) Glass

   (v) Wood

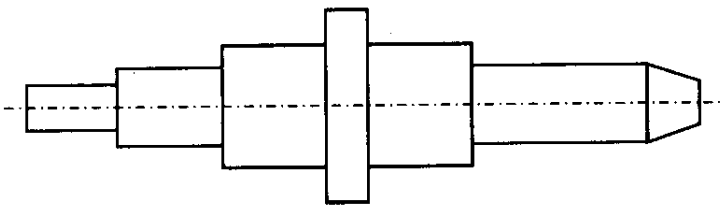
3. Draw the projections of the following points : **2 × 5 = 10**

   (a) Point 'P' is 30 mm above the HP and 45 mm behind the VP.

   (b) Point 'Q' is 25 mm below the HP and 40 mm behind the VP.

PART – B

4. Copy the given sketch to 1 : 1 scale and dimension it adopting aligned system with parallel dimensioning. **10**



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5. Illustrate the dimensioning of the given common features : diameters, radii, arcs and chords. **10**

6. A line 70 mm long lying in VP and inclined at 45° to HP. The lower end of the line is 10 mm above HP, 80 mm infront of Right PP and is away from it than the higher end. Draw the three principal views of the line. **10**

7. Draw the three principal views 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 left PP. **10**

8. A hexagonal lamina of 30 mm sides rests on HP with one of its corners touching it such that the plane surface makes an angle of 45° with HP. The two of the base edges containing the corner on which of the lamina rests makes canal inclinations with HP. Draw its top and front views of the lamina in this position. **10**

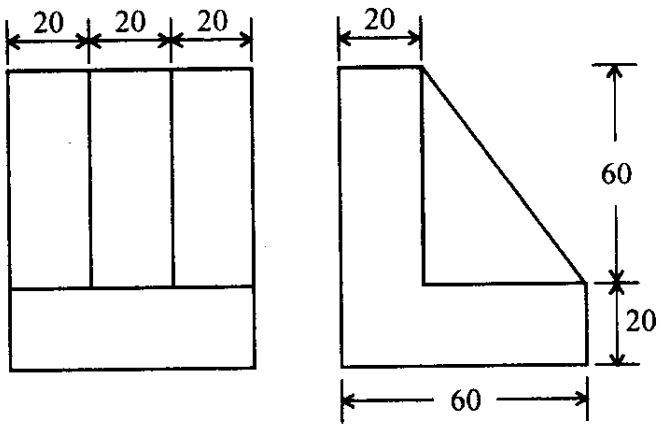
9. A circular lamina 80 mm diameter rests on HP such that the surface of the lamina is inclined at 40° to HP. Draw its top and front views. **10**

10. Draw the top and front views of a rectangular pyramid of sides of base 20 × 25 mm and height 35 mm when it lies with one of its triangular faces containing the longer edge of the base on HP. **10**

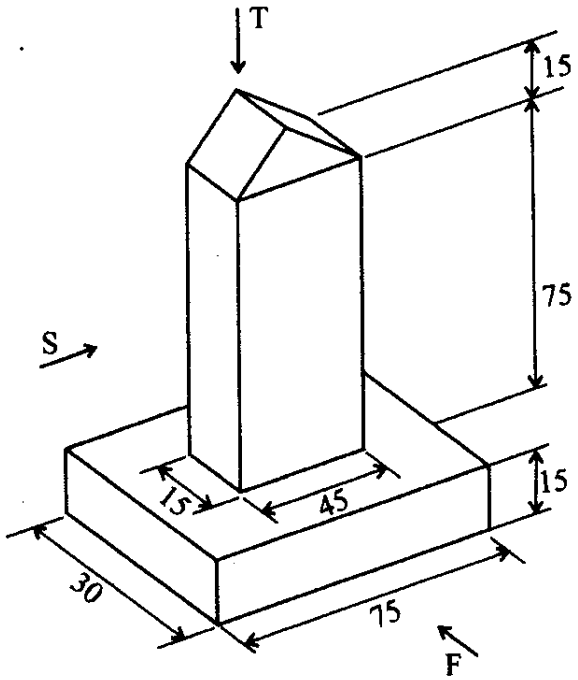
11. Draw the top and front views of a right circular cylinder of base 50 mm diameter and 60 mm long when it lies on HP such that its axis is inclined at 30° to HP. **10**

PART – C

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



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



14. Draw the isometric projection of a hexagonal prism of base edge 30 mm and axis height 70 mm rests with its base on HP such that one of its rectangular lateral faces is parallel to VP. **15**