1273 **Code : 15ME21D**

Register Number | | | | | | | |

II Semester Diploma Examination, Nov./Dec. 2017

ENGINEERING GRAPHICS-II

Time : 4 Hours | **| Max. Marks : 100**

Note : (i) Part – **A** is *compulsory*.
(ii) Answer any **two** full questions each from PART – **B, C** & **D**.

PART – A

1. A hexagonal prism of 35 mm side of base and height 70 mm rests on one of its rectangular faces on HP with its axis parallel to VP. Draw its top and front views. **1 × 10 = 10**

PART – B

2. A pentagonal pyramid, base 35 mm side and axis 60 mm long, has one of its slant edges on HP such that the two of its triangular faces containing the slant edge on which it rests are equally inclined to HP. The top view of the axis appears to be inclined at 45° to VP. Draw the top and front views of the pyramid when its base is nearer to the observer than its apex. **15**

3. A cone of base diameter 60 mm and axis 80 mm long rests on HP with its axis inclined at 45° and 30° with VP and HP respectively. Draw the top and front views of the cone. **15**

4. A square pyramid of 50 mm edges of the base and height 70 mm rests on its base on HP with one of its base edges parallel to VP. It is cut by a section plane perpendicular to VP and inclined at 45° to HP. The section plane passes through the midpoint of the axis. Draw its front view, sectional top view and true shape of the section. **15**

PART – C

5. A cone, diameter of base 60 mm and axis 70 mm long is resting on its base on HP. It is cut by a section plane perpendicular to VP and inclined at 45° to HP. The section plane passes through a point on the axis 40 mm above the base. Draw the front view, sectional top view and true shape of the section. **15**

6. A hexagonal prism of 20 mm side of base and 60 mm high stands vertically with one of its rectangular faces parallel to VP. It is cut by a section plane perpendicular to VP and inclined at 45° to HP. The cutting plane passes through a point on the axis which is at a distance of 15 mm from the top end of the prism. Develop the lower portion of the lateral surfaces of the prism. **15**

7. A cone of base diameter 60 mm and height 70 mm and having its axis vertical is cut by a section plane perpendicular to VP and inclined at 30° to HP and intersecting the axis 40 mm above the base. Draw the development of the lateral surface of the truncated cone. **15**

PART – D

8. Draw the three views of the object as shown in Figure-1. **15**

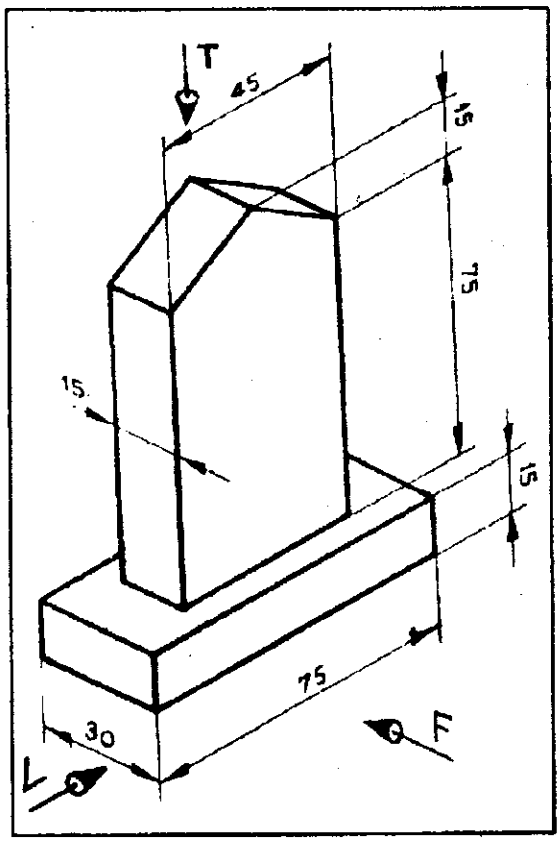

Fig. 1

9. Draw the isometric view of the object whose orthographic views are given in the Figure-2. **15**

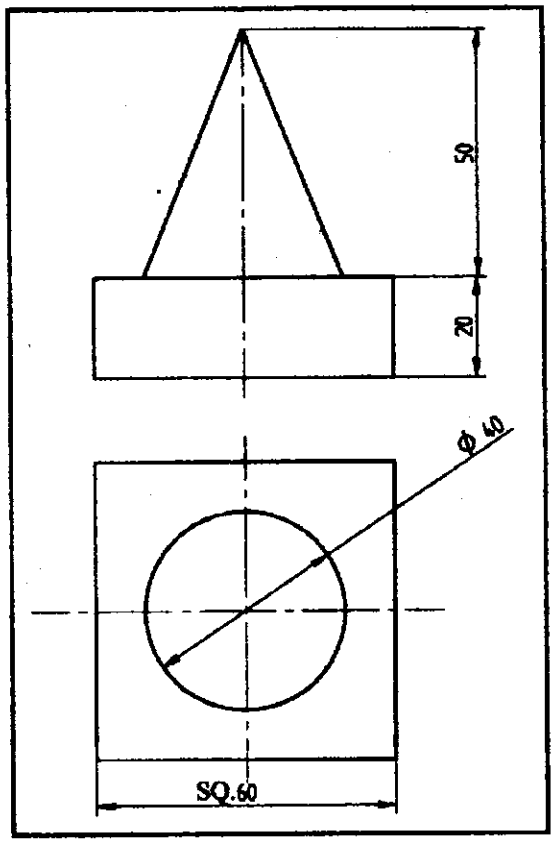

Fig. 2

10. Draw the isometric view of a square pyramid of base edges 50 mm and height 80 mm rests on the top of the cube of side 100 mm. The two sides of the base of the pyramid are parallel to the top edges of the cube. **15**