4005

BOARD DIPLOMA EXAMINATION, (C-14)

MARCH/APRIL—2021

FIRST YEAR (COMMON) EXAMINATION

ENGINEERING DRAWING

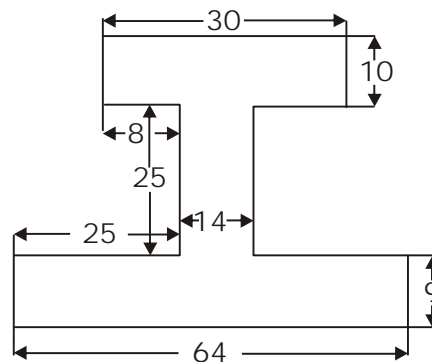*Time* : 3 hours]   [*Total Marks* : 60

PART—A

10×2=20

Instructions :   (1) Answer *any* **two** questions.

(2) Each question carries **ten** marks.

(3) **All** dimensions are in mm.

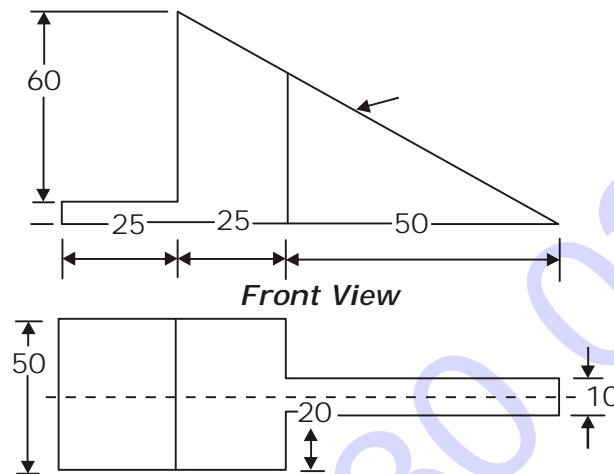**1.** Print following in single stroke-vertical lettering of 10 mm size in capital letters:

"MECHANICAL ENGINEERING"

2. Redraw the following figure to the full scale by correcting the errors in dimensioning as per SP-46 : 1988 :

3. Construct a hexagon of 25 mm side using any method.

4. Draw the auxiliary view of the inclined surface of the given views :

Front View

PART—B

**Instructions :** (1) Answer *any* **three** questions.

(2) Each question carries **thirteen** marks.

(3) **All** dimensions are in mm.

(4) **One** mark carries for neatness.

5. Construct an ellipse of major axis 80 mm and minor axis 60 mm by concentric circles method.

6. A regular hexagon of 30 mm side has its one edge on HP. The surface of the plane is perpendicular to VP and inclined at 40° to HP. Draw the projections of the plane.

7. A hexagonal pyramid of base side 30 mm and axis 75 mm long is resting on its base in HP having a base side parallel to VP. It is cut by a section plane which is inclined at 30° to HP, perpendicular to VP and passing through a point on the axis at a distance of 35 mm from the vertex. Draw its sectional front view and sectional top view.
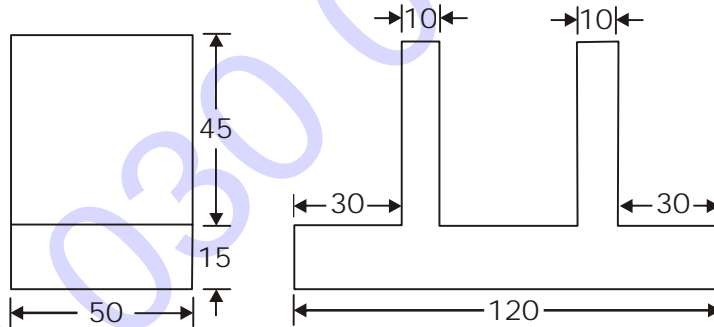
8. Draw the front view, top view and side vies of the object shown below.
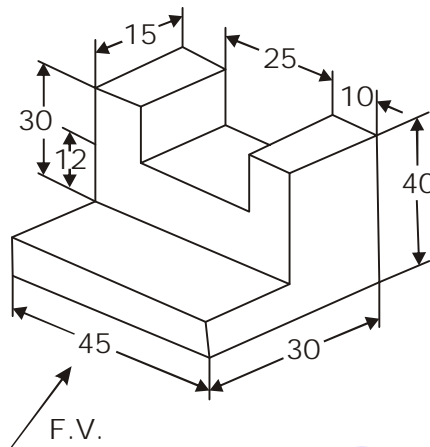
9. Draw an isometric view of an object whose orthographic views are given in the following figure.

10. Develop the lateral surfaces of a square prism whose side of base is 40 mm and height 60 mm.

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