23017

BOARD DIPLOMA EXAMINATION, (C-23)

OCTOBER/NOVEMBER—2024

FIRST YEAR (COMMON) EXAMINATION

ENGINEERING DRAWING

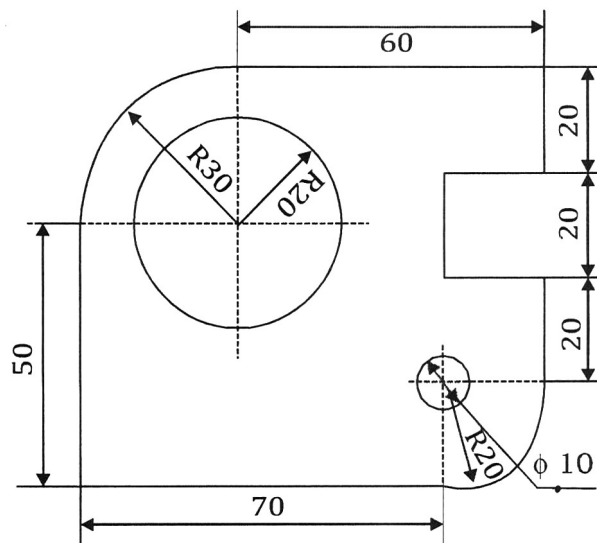*Time* : 3 Hours]　　　　　　　　　　　　　　　　　　[*Total Marks* : 60
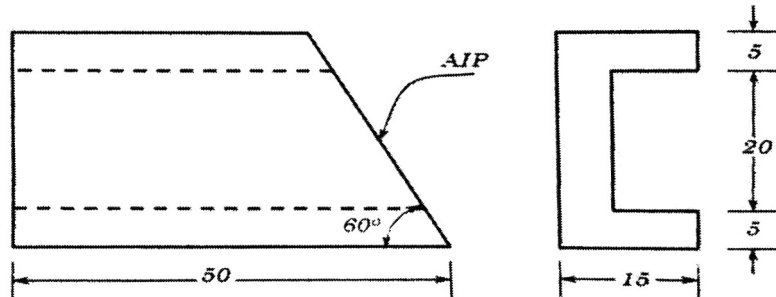
PART—A　　　　　　　　　　　　　　　5×4=20

Instructions : (1) Answer **all** questions.

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

　　　　　　　(3) All the dimensions are in mm.

1. Print the following in 10 mm single stroke capital inclined letters :
　　　　　　　　"ENGINEERING DRAWING"

2. Redraw the following figure to a suitable scale and dimension it as per the code SP 46-1988.

3. Construct a regular pentagon of base length 30 mm.

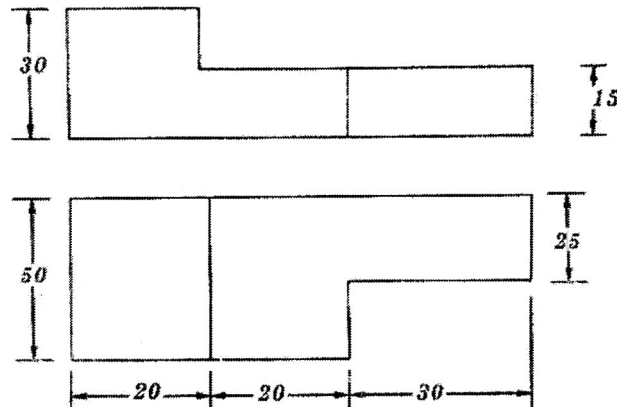**4.** Draw the auxiliary end view, for the views shown in figure.

<div align="center">

PART—B   10×4=40

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

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

   (3) All the dimensions are in mm.

5. Construct an ellipse of major axis 80 mm and minor axis 60 mm long using Concentric circles method.

6. The front view and top view of an object are shown below. Draw its isometric view.

7. Draw the front view, top view and side of the given figure in first angle projection.
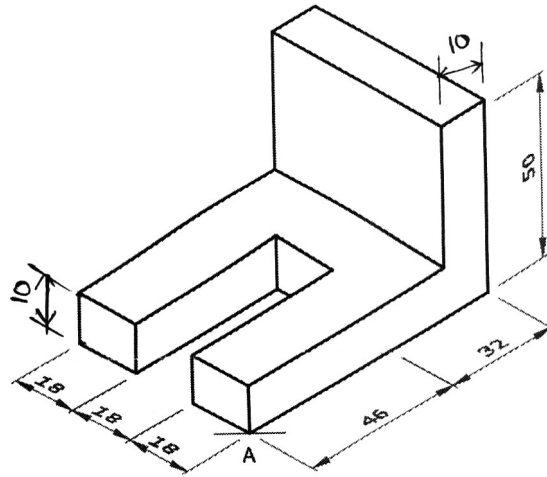
8. Draw the projections of a cone with base 30 mm diameter and axis 50 mm long resting on HP on a point of its base circle with the axis making an angle 45° with HP and parallel to VP.

9. A hexagonal prism of base edge 30 mm and height 60 mm is resting on HP with one of its base edges parallel to VP. It is cut by a plane perpendicular to VP and inclined at 45° to HP and is passing through midpoint of axis of prism. Draw the sectional top view and true shape of the section.

10. A cylinder of diameter of base 40 mm and height 50 mm is standing on its base on HP. A cutting plane inclined at 45° to the axis of the cylinder passes through the left extreme point of top base. Develop the lateral surface of the truncated cylinder.

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