6005

BOARD DIPLOMA EXAMINATION, (C-16)

OCTOBER/NOVEMBER—2023

FIRST YEAR (COMMON) EXAMINATION

ENGINEERING DRAWING

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

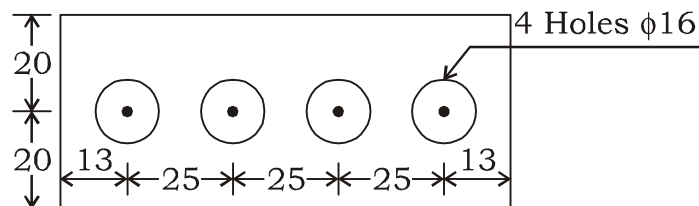**PART—A**   5×4=20

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

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

(3) All dimensions are in mm.

1. Write the following in single stroke, upright lettering with 10 mm size.
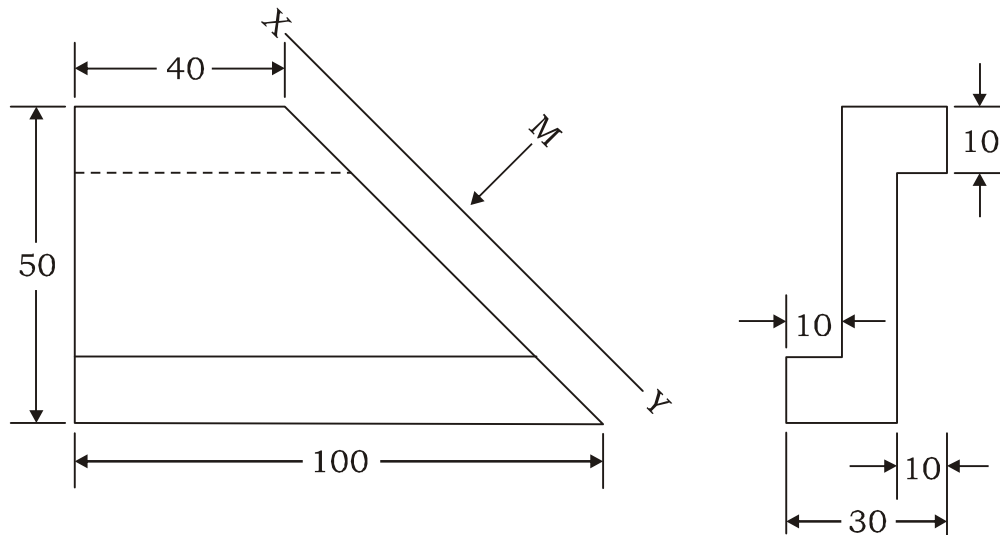
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2. Redraw the following figure and show the dimensions in progressive dimensioning.

3. A ball when thrown up in the air reaches a maximum height of 50 m. The horizontal distance travelled by the ball is 100 m. Trace the parabolic path.

4. Draw the auxiliary view of sloping surface of the object shown in the figure below.

<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 dimensions are in mm.

5. A circle of 50 mm diameter rolls along a straight line. Draw a curve traced out by a point P on the circumference for one complete revolution. Name the curve.

6. A circular plane of side 50 mm is touching the VP with a point on its circumference. The plane is inclined at 45° to VP and perpendicular to HP. The center of the plane is 40 mm above HP. Draw its projections.

7. A regular pentagonal prism of side 30 mm and 60 mm height is resting with an edge of its base on HP such that the rectangular face containing the edge is inclined at 60° to the HP and axis is parallel to its VP. Draw the projections.

<div align="center">

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8. The front view and right side view of an object are given below. Draw its Isometric view.
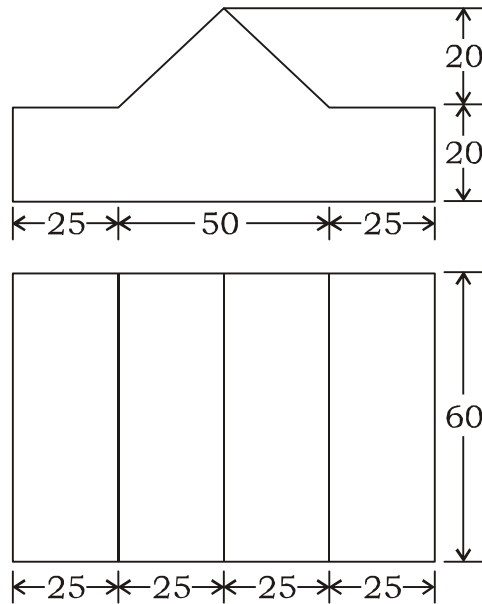
9. Draw the front view and top view of the given figure in first angle projection.
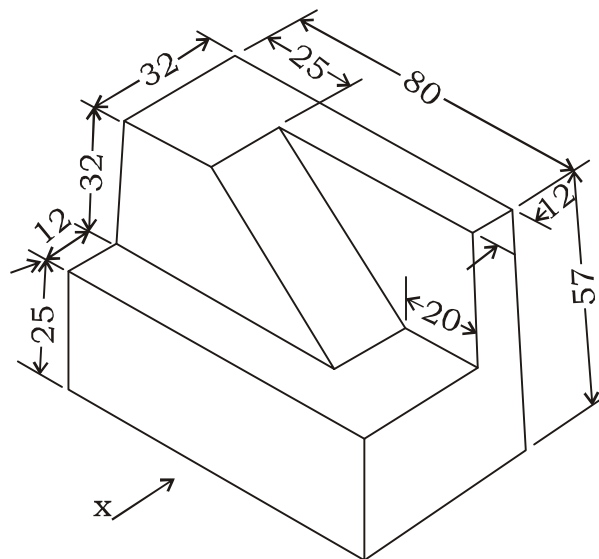
10. A vertical cylinder base diameter 50 mm, height 70 mm is cut by a cutting plane, inclined at 45° to the HP and passing through a point 30 mm above the base on the axis. Draw the development of the lower portion of the cylinder.

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