23018   EC-CM-107

BOARD DIPLOMA EXAMINATION, (C-23)

OCTOBER/NOVEMBER—2024

FIRST YEAR (COMMON) EXAMINATION

ENGINEERING DRAWING

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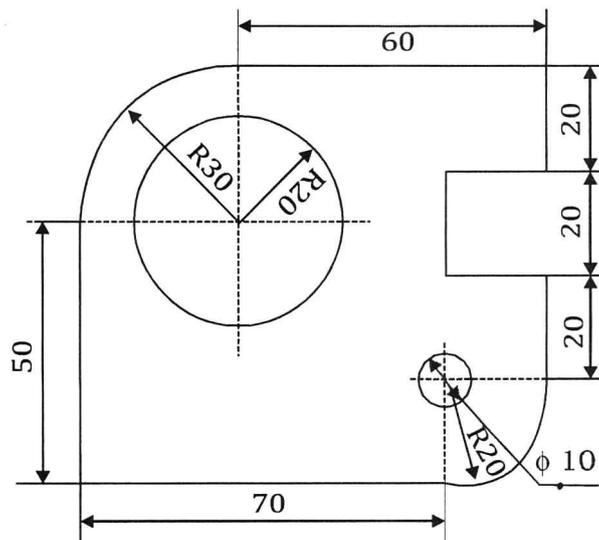
PART—A   5×4=20

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

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

(3) All the dimensions are in mm.

1.   Print the following in single stroke capital vertical lettering of size 10 mm :
  "IMPORTANCE OF ENGINEERING DRAWING"

2.   Redraw the following figure to the full scale using parallel dimensioning method.

3. Draw tangent to a circle of radius 35 mm from a point 75 mm away from its centre.

4. A line of length 65 mm is resting in V.P. and makes an angle of 45° with H.P. Draw the projections of line using first angle projection.

<div align="center">

PART—B　　　　　　　　　　　　10×4=40

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

　　　　　　　　　(2) Each question carries **ten** marks.
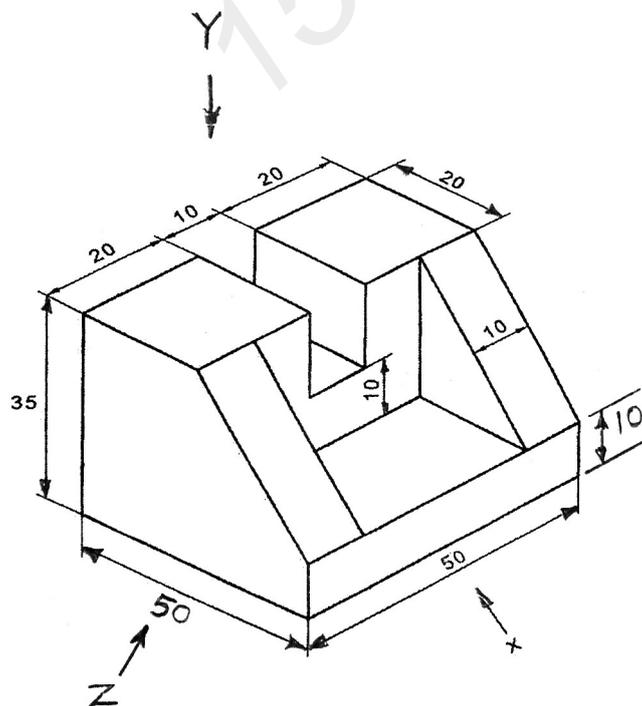
　　　　　　　　　(3) All the dimensions are in mm.

5. A circle of 50 mm diameter roils along a line. A point on the circumference of the circle is in contact with the line in the begining and after making one complete revolution. Draw the cycloidal path of the point.

6. A rectangular plane of length 40 mm and breadth 30 mm is inclined at 30° to H.P. Its shorter side being parallel to H.P makes an angle of 45° with V.P. Draw the projections of rectangular plane.

7. A right circular cone of base diameter 30 mm and axis 50 mm long lies in V.P. on a point of its base such that the axis is making an angle of 60° with V.P. Draw the projections of Cone.

8. A square prism with a base side of 45 mm and axis length of 80 mm is resting in H.P. such that two of its vertical faces are equally inclined to V.P. It is cut by a section plane parallel to V.P, perpendicular to H.P and passing through midpoints of two adjacent sides of its base. Draw sectional front view and top view of the square prism.

9. Draw front view, top view and left side view of the following object in the directions shown.
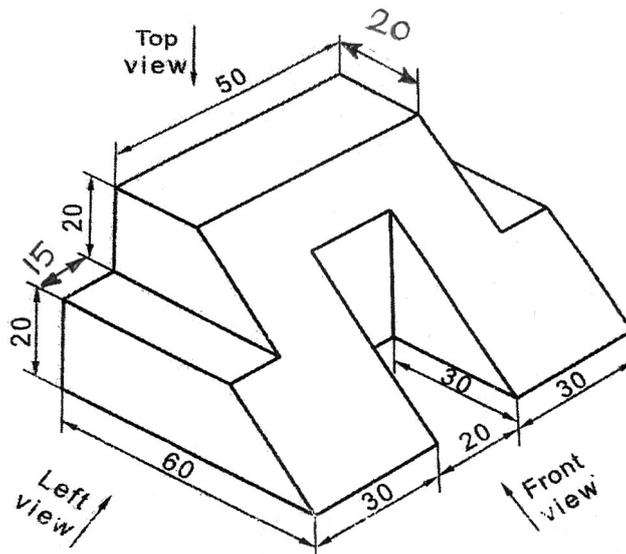
10. Draw front view, top view and left side view of the following object in X, Y and Z directions respectively.

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