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C16-EC-107/C16-CHPC-107/C16-PET-107

6031

BOARD DIPLOMA EXAMINATION, (C-16)

OCT/NOV—2017

DECE—FIRST YEAR EXAMINATION

ENGINEERING DRAWING

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

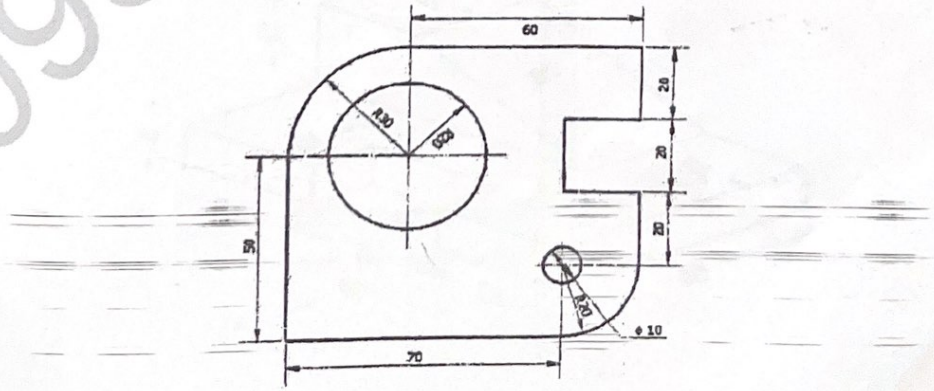
PART—A 5×4=20

Instructions : (1) Answer **all** questions.
(2) Each question carries **five** marks.
(3) Take suitable scale wherever required.
(4) All dimensions are in mm.

1. Print the following in 10 mm size capital single-stroke vertical letters :

DIPLOMA IN MECHANICAL ENGINEERING

2. Redraw the following figure to the full-scale and dimension it as per unidirectional system :



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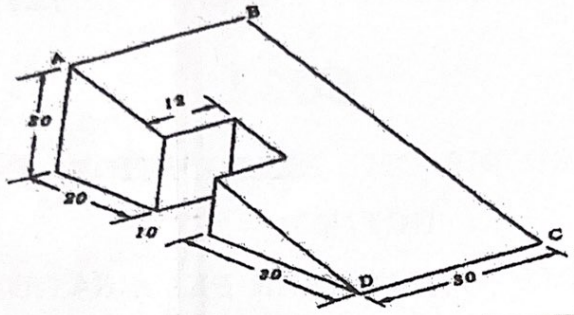
3. Divide a straight line of 95 mm length into seven equal parts.

4. Draw the auxiliary view of the sloping side of the object given below :



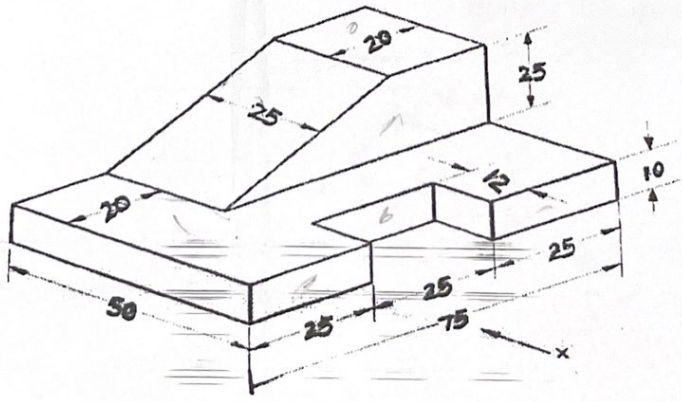
PART—B 10×4=40

Instructions : (1) Answer *any* **four** questions.
(2) Each question carries **ten** marks.
(3) Take suitable scale wherever required.
(4) All dimensions are in mm.

5. Construct a cycloid of a circle of radius 30 mm.

6. Draw the projections of a circle of 50 mm diameter resting on VP on a point on the circumference. The plane is inclined at 45 degrees to VP and perpendicular to HP. The centre of the plane is 45 mm above HP.

7. Draw the front view, top view and side view of the object shown below :



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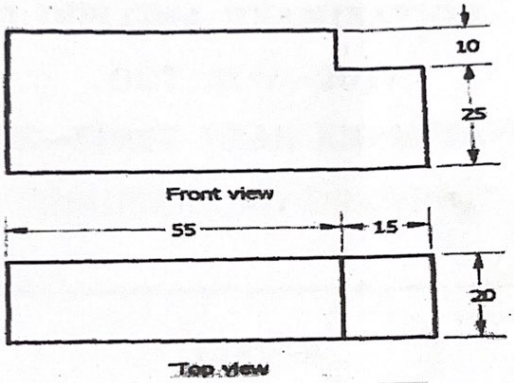
8. A cone 30 mm radius and 70 mm axis is resting on its base on HP. A cutting plane perpendicular to VP and 30 degrees to the HP cuts the cone at mid height of the cone. Draw the front view and sectional top view.

9. Draw an isometric view of an object whose orthographic views are given in the following figure :



10. A cylinder diameter of base 40 mm and height 60 mm is standing on its base on HP. A cutting plane inclined at 45 degrees to the axis of the cylinder passes through the left extreme point of the base. Develop the lateral surface of the truncated cylinder.

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