7052

C20-M-CHOT-RAC–**107**

7052

BOARD DIPLOMA EXAMINATION, (C-20)

SEPTEMBER/OCTOBER—2021

DME - 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) **All** dimensions are in mm.

1. Write the following in Single -Stroke vertical lettering of size 10mm in Capital letters.

"STRENGTHEN THE MORE VALUES"

2. Redraw the following figure to full-scale and dimension it according to SP : 46-1988 by using aligned system.

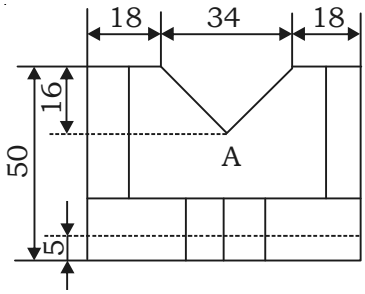


Fig. 1

3. Draw common external tangent to two circles of radii 20 mm and 15 mm. The distance between the centres of circle is 80 mm.

4. Draw the auxiliary view of the object from given views :

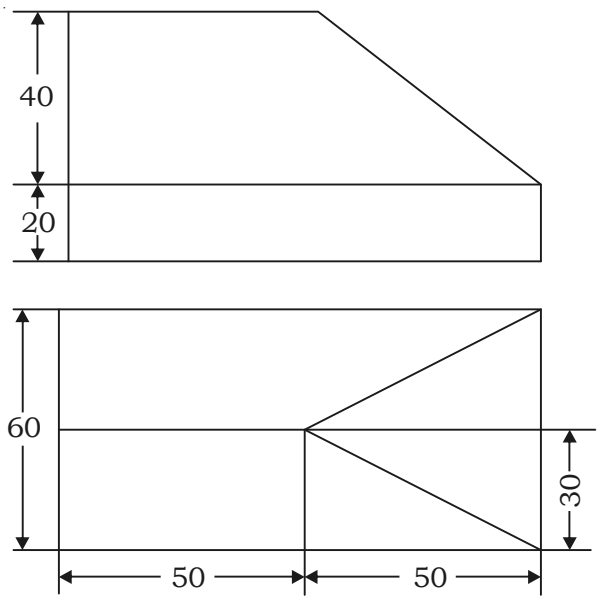


Fig. 2

PART—B

10×4=40

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

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

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

5. Trace a cycloidal curve through a point on the circumference of a circle of 60 mm diameter ; when it rolls through a diameter of 130 mm on a straight line.

6. Draw the projection of a regular hexagon of 25 mm side having one of its sides in the HP and inclined at 60° to the VP and its surface making an angle of 45° to the HP.

7. A regular hexagonal pyramid of base side 30 mm and height 80 mm is resting on the ground with its axis perpendicular to HP and parallel to VP. Two of its base edges are perpendicular to VP and inclined to 30° to HP passes through a point on the axis, 30 mm from the vertex. Draw its sectional Front View and sectional Top View.

8. Draw the front view, top view and side view of the given figure :

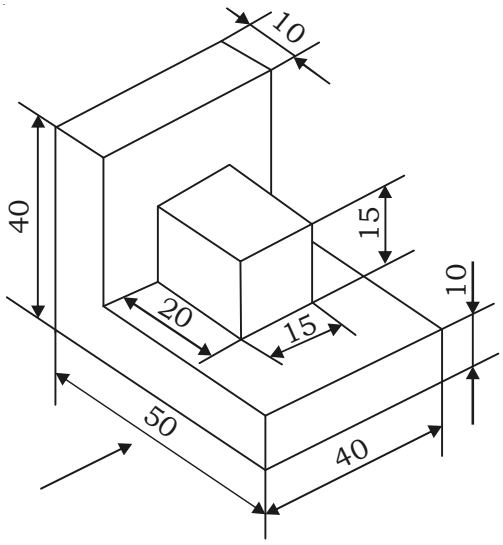


Fig. 3

9. Draw the isometric view of the object for the views given below :

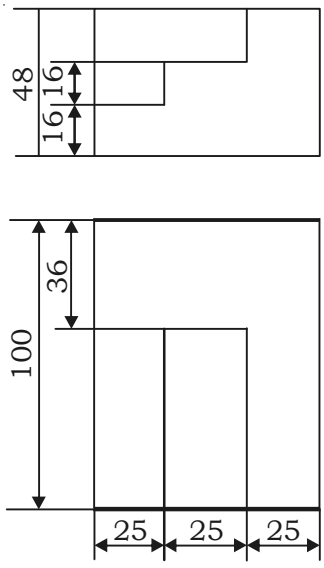


Fig. 4

10. A square pyramid of side 40 mm and height 60 mm,is standing vertically on its base with one of its base edges parallel to VP it is cut by horizontal plane at a height of 30 mm from the base. Develop the lateral surface of the truncated pyramid.

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