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C20-EC-CHPC-PET-107

7031

BOARD DIPLOMA EXAMINATION, (C-20)

JUNE/JULY—2022

DME – FIRST YEAR EXAMINATION

ENGINEERING DRAWING

Time : 3 hours ]

[ Total Marks : 60

PART—A

5×4=20

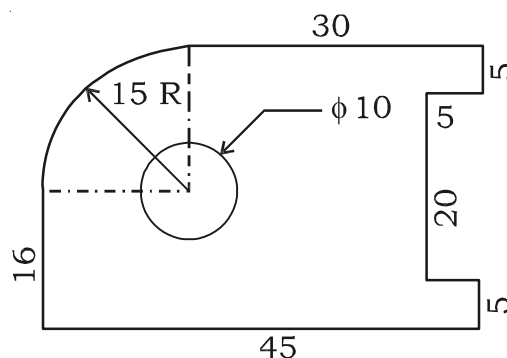
Instructions : (1) Answer all questions.

(2) Each question carries five marks.

1. Write the following using single-stroke capital vertical letters of 14 mm size.

“STATE BOARD OF TECHNICAL EDUCATION”

2. Redraw the following figure and dimension in aligned system :



3. Construct a regular hexagon of side 25 mm by any one of the methods.

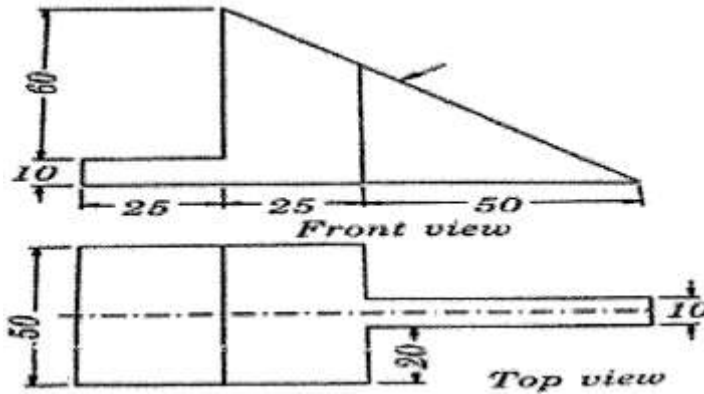
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4. Draw the auxiliary view of an inclined surface given below :

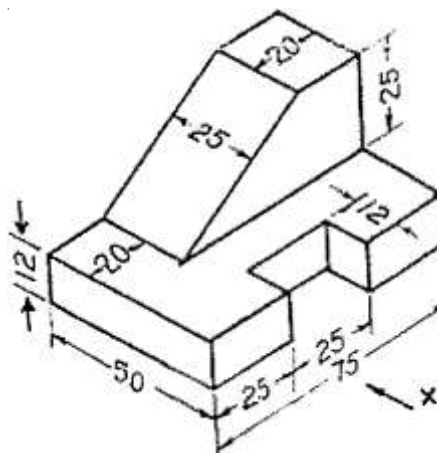


PART—B

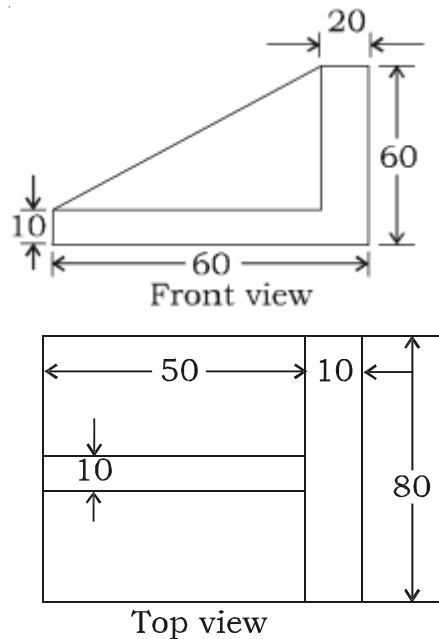
10×4=40

Instructions : (1) Answer *any* four questions.  
 (2) Each question carries ten marks.

5. Construct an ellipse of major axis 80 mm and minor axis 60 mm by concentric circles method.
6. Draw the projections of a cone, base 40 mm diameter and axis 60 mm long resting on HP on a point of its base circle with the axis making an angle of 45° with the HP and parallel to VP.
7. An isometric view of an object is given below. Draw its front view, top view and right side view.



8. A square pyramid with base 40 mm side and axis 80 mm long is resting on the ground with its axis vertical and sides of the base equally inclined to the VP. It is cut by a section plane perpendicular to VP inclined at  $45^\circ$  to HP and bisecting the axis. Draw its sectional top view and true shape of the section.
9. Draw the isometric view of the object given below :



10. A pentagonal prism of base side 30 mm and height 70 mm is standing vertically on HP with one of its vertical faces perpendicular to VP. It is cut by a plane which is inclined at  $45^\circ$  to HP and passing through the midpoint of the axis. Develop the lateral surface of the truncated prism.

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