



C16-EC/CHPC/PET-107

6031

BOARD DIPLOMA EXAMINATION, (C-16)

MARCH/APRIL—2018

DCHST—FIRST YEAR EXAMINATION

ENGINEERING DRAWING

Time : 3 hours ]

[ Total Marks : 60

PART—A

5×4=20

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

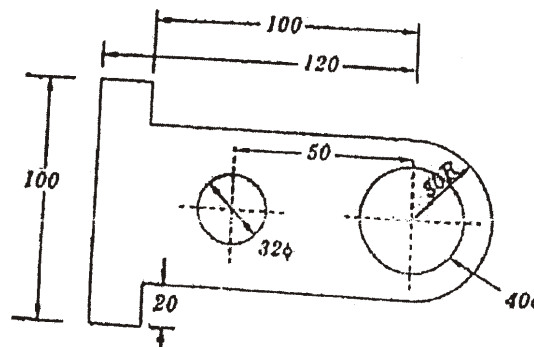
(2) Each question carries **five** marks.

(3) All dimensions are in mm.

1. Write the following in single-stroke vertical lettering of size 14 mm in capital letters :

“DEPARTMENT OF TECHNICAL EDUCATION”

2. Redraw the following figure and dimension it as per SP : 46-1988 :



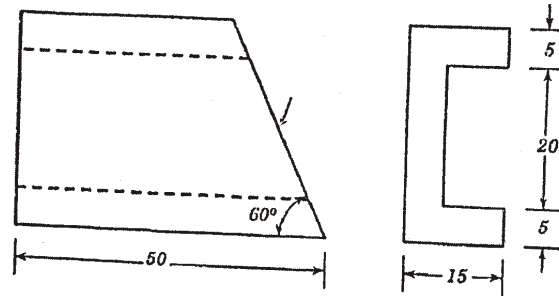
/6031

1

[ Contd...

WWW.MANARESULTS.CO.IN

3. Divide a line of 105 mm long into six equal parts.
4. Draw the auxiliary view of the object shown below :



### PART—B

10×4=40

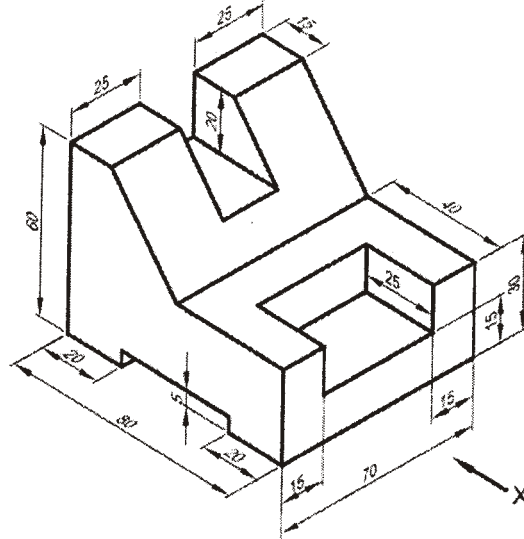
**Instructions** : (1) Answer *any four* questions.

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

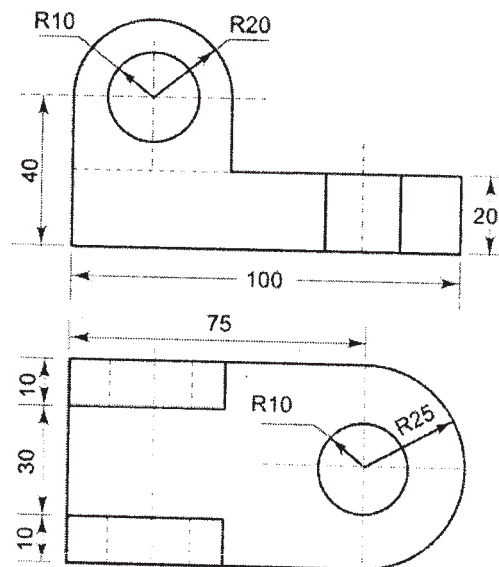
(3) All dimensions are in mm.

5. Construct a cycloidal curve through a point on the circumference of a circle of radius 30 mm for one complete revolution.
6. Draw the top and front views of a right circular cylinder of base 45 mm diameter and 60 mm long, when it lies on HP such that its axis is inclined at  $35^\circ$  to HP.
7. A hexagonal prism of base edge 30 mm and height 60 mm is resting on HP with one of its base edges parallel to VP. It is cut by a plane perpendicular to VP and inclined at  $45^\circ$  to HP and is passing through midpoint of axis of prism. Draw the sectional top view and true shape of the section.

8. Draw the front view, top view and left-hand side view of the object as shown in the figure below :



9. From the given front view and top view, draw the isometric view :



10. Develop the lateral surface of a truncated cone of base dia 60 mm and a vertical height of 80 mm, when it is cut by a plane inclined at an angle of  $45^\circ$  to horizontal plane and passes through the midpoint of its axis in the elevation.

\*\*\*