



C16-A/BM/CH/CHST/AEI/MNG/  
MET/TT/IT/PCT—107

6005

BOARD DIPLOMA EXAMINATION, (C-16)  
MARCH/APRIL—2018  
FIRST YEAR (COMMON) EXAMINATION

ENGINEERING DRAWING

Time : 3 hours ]

[ Total Marks : 60

**PART—A**

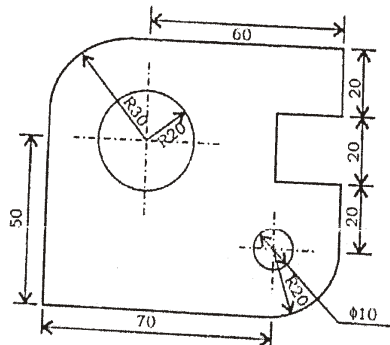
5×4=20

- Instructions :** (1) Answer **all** questions.  
(2) Each question carries **five** marks.  
(3) All dimensions are in mm.

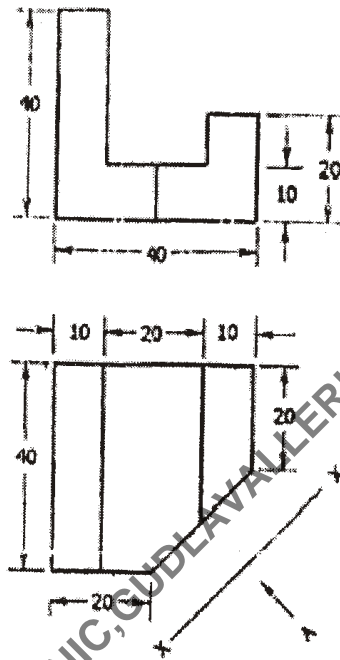
1. Write the following in single-stroke slant lettering of size 10 mm in capital letters :

“ALL DIMENSIONS ARE IN MM”

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



- \* 3. Draw the tangents to a circle of diameter 40 mm from point  $P$  at a distance of 60 mm from the centre.
4. Draw the auxiliary view of the object shown below :



**PART—B**

10×4=40

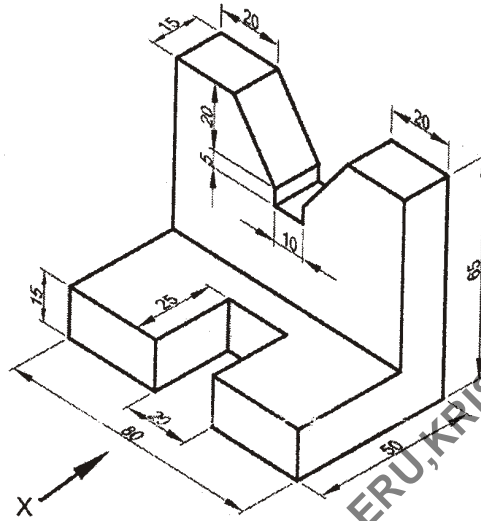
**Instructions :** (1) Answer *any four* questions.

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

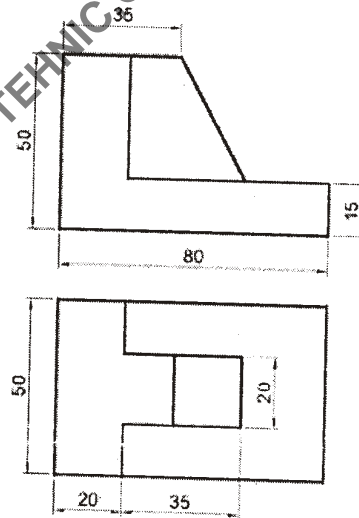
(3) All dimensions are in mm.

5. Draw an involute to a circle of radius 20 mm.
6. Draw the projections of a cone with base 30 mm diameter and axis 50 mm long resting on HP on a point of its base circle with the axis making an angle  $45^\circ$  with HP and parallel to VP.
7. A pentagonal pyramid of base side 40 mm and height 80 mm is resting on HP, such that one of its base side is parallel to VP. It is cut by a plane inclined at  $30^\circ$  to HP, perpendicular to VP and is bisecting the axis. Draw its front view and sectional top view.

- \* 8. Draw the front view, top view and right-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. A hexagonal prism of base 30 mm side and height 60 mm is standing with its base on ground with one of its base edges parallel to VP. It is cut by a section plane, inclined at  $45^\circ$  to HP and perpendicular to VP and passing through the mid-point of axis of prism. Draw the development of lateral surface of prism.

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