



C14-A-107/C14-BM-107/C14-CH-107/  
C14-CHST-107/C14-AEI-107/C14-MNG-107/  
C14-MET-107/C14-IT-107/C14-TT-107/C14-PCT-**107**

**4005**

**BOARD DIPLOMA EXAMINATION, (C-14)**

**MARCH/APRIL—2017**

**FIRST YEAR (COMMON) EXAMINATION**

**ENGINEERING DRAWING**

*Time : 3 hours ]*

*[ Total Marks : 60*

**PART—A**

5×4=20

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

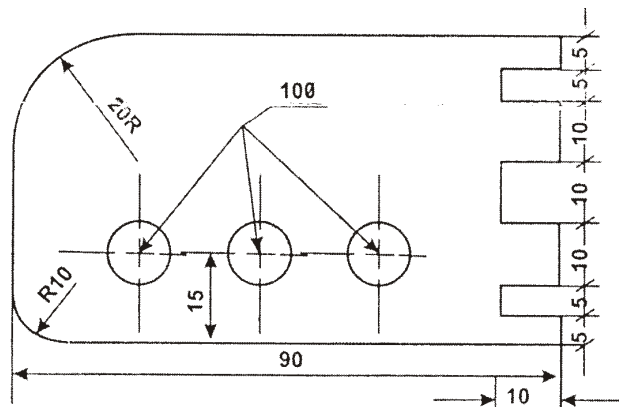
(2) Each question carries **five** marks.

(3) All dimensions are in mm.

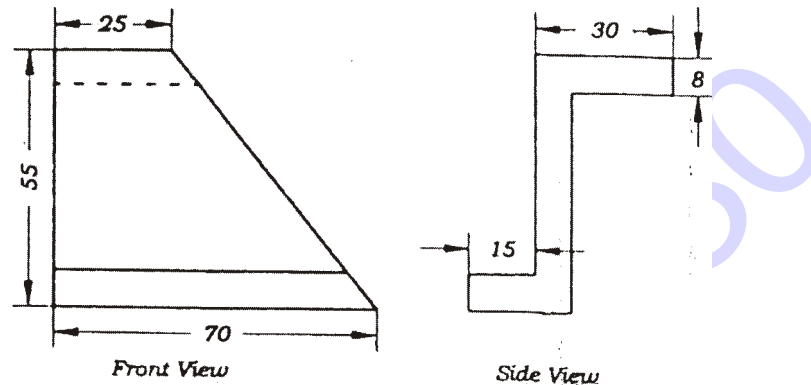
**1.** Print the following in single-stroke vertical capital lettering of 10 mm size as per SP : 46-1988 :

“PRACTICE MAKES MEN PERFECT”

**2.** Redraw the following figure to full size scale and dimension it according to SP : 46-1988 :



- \* 3. Draw an arc of 14 mm radius tangential externally to a circle of 20 mm radius and to a line of any length.
4. Draw the auxiliary view of inclined surface of the object shown in the figure below :



### PART—B

10×4=40

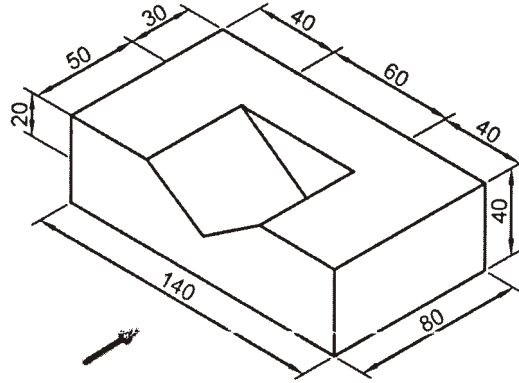
- Instructions :** (1) Answer *any four* questions.  
 (2) Each question carries **ten** marks.  
 (3) All dimensions are in mm.

5. Construct a rectangular hyperbola through a point *P* which is at a distance of 30 mm and 20 mm from the two asymptotes.
6. A circular plane of diameter 60 mm is touching the VP with a point on its circumference. The plane is inclined at  $45^\circ$  to VP and perpendicular to HP. The center of the plane is 40 mm above HP. Draw its projections.

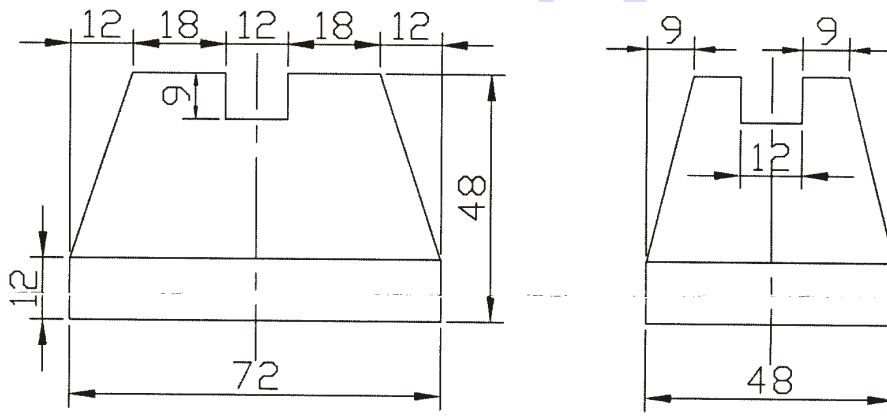
- \* 7. A pentagonal pyramid of base side 40 mm and height 80 mm is resting on HP on its base with one of its base sides parallel to VP. It is cut by a plane inclined at  $30^\circ$  to HP, perpendicular to VP and bisecting the axis. Draw the front view, sectional top view and true shape of the section.

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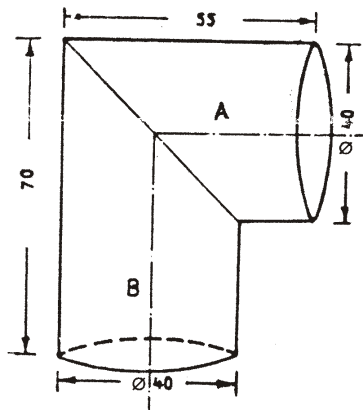
8. Draw the front view, top view and right-side view of the object shown in the figure below :



9. Draw the isometric view of the object from the following orthographic views :



10. Draw the development of an elbow in two pieces at 90° shown in the figure below :



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