



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

6005

BOARD DIPLOMA EXAMINATION, (C-16)  
MARCH/APRIL—2017  
FIRST YEAR (COMMON) EXAMINATION  
ENGINEERING DRAWING

Time : 3 hours ]

[ Total Marks : 60

PART—A

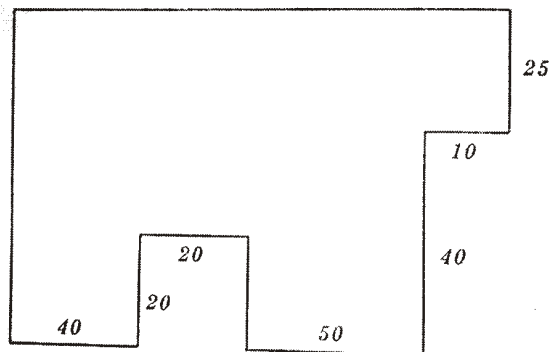
5×4=20

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

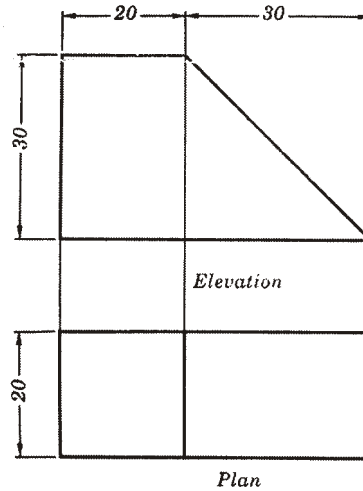
1. Write the following using single-stroke capital upright letters of 10 mm size :

‘SWACHH BHARAT ABHIYAN’

2. Redraw the following figure in parallel dimensioning :



- \* 3. Construct a regular pentagon of side 30 mm.
4. Draw the auxiliary view of the inclined surface of the given views :

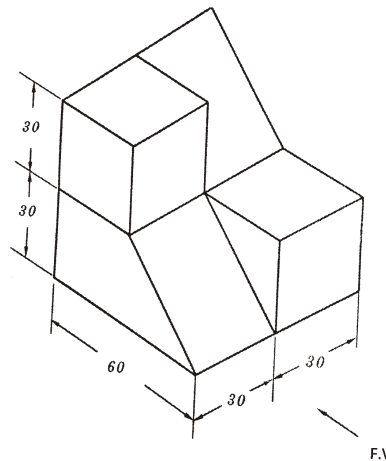


**PART—B**

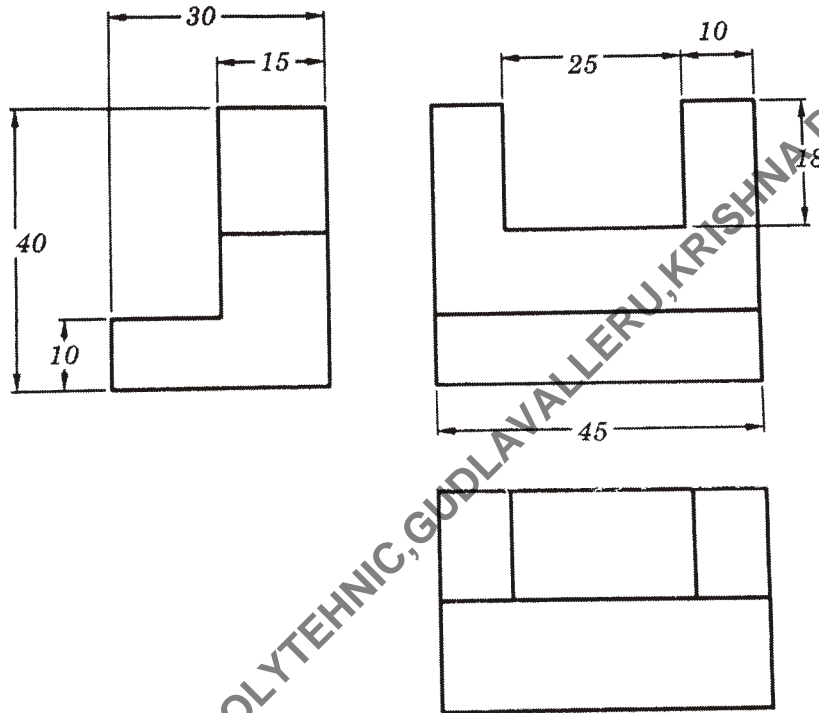
10×4=40

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

5. Draw the cycloid curve for a circle of radius 20 mm.
6. Draw the projections of cone with base diameter of 30 mm and height 60 mm resting on HP on a point of its base circle and its axis is making an angle  $45^\circ$  with HP and parallel to VP.
7. An isometric view of an object is given below. Draw its front view, top view and left side view.



- \* 8. 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.
9. Draw the isometric view of the object for the views given below :



10. A cone of base diameter 40 mm and height 60 mm is standing vertically on HP. It is cut by a plane which is inclined at  $45^\circ$  to HP, perpendicular to VP and passing through the midpoint of the axis. Develop the lateral surface of the frustum of the cone.

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