



C16-A-BM-CH-CHST-AEI-MNG-MET-TT-  
IT-PCT-C-CM-EC-CHPC-PET-EE-CHPP-

M-CHOT-RAC-107

6005

BOARD DIPLOMA EXAMINATION, (C-16)

AUGUST/SEPTEMBER—2021

FIRST YEAR (COMMON) EXAMINATION

ENGINEERING DRAWING

Time : 3 hours ]

[ Total Marks : 60

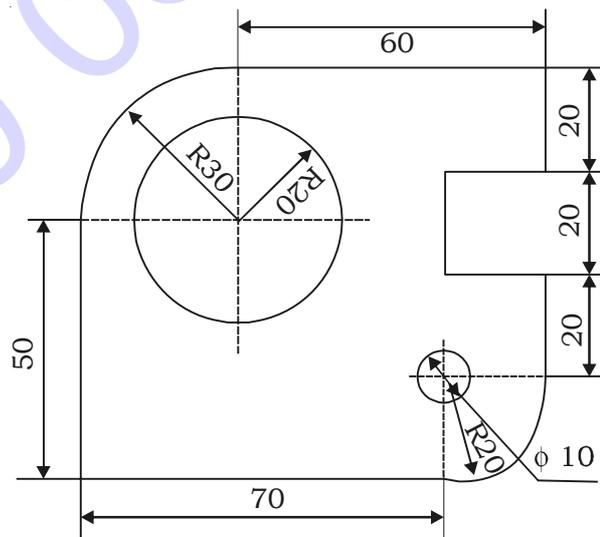
**PART—A**

5×4=20

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

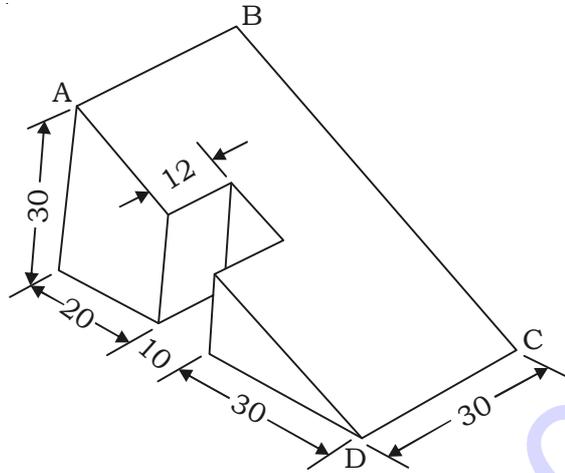
1. Print the following with 10 mm size Vertical upright capital letters.  
“ENGINEERING DRAWING”

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



3. Construct a regular hexagon of base length 30 mm.

4. Draw the auxiliary view of sloping surface of the object shown in figure below.

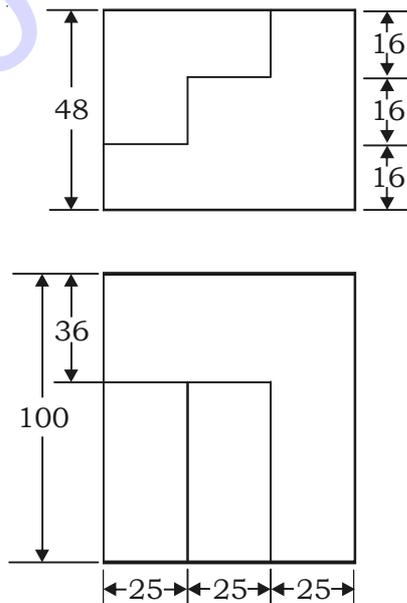


**PART—B**

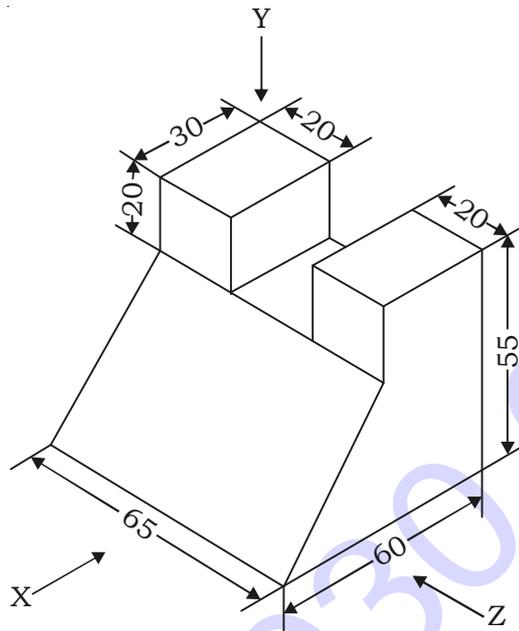
10×4=40

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

5. Construct an ellipse of major axis 80 mm and minor axis 60 mm long using Concentric circles method.
6. Draw the isometric view of the object whose orthographic views are given below :



7. Draw the front view, top view and side of the given figure in first angle projection.



8. Draw an involute of a circle of radius 20 mm.
9. A hexagonal prism of base edge 2 cm and 7 cm long stands on the horizontal plane. It is cut by a plane inclined at  $45^\circ$  to the HP and passing through the midpoint of the axis of the prism. Draw the development of the lateral surface of the bottom part of the prism.
10. A regular hexagonal pyramid of base edge 30 mm and height 65 mm is resting on its base on HP. One of its base sides is parallel to VP. It is cut by cutting plane which is parallel to HP and perpendicular to VP and passing through a height of 45 mm from its bottom. Draw the front view and sectional top view.

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