



C09-A/AEI/BM/C/CM/CH/CHPP/  
CHPC/CHOT/CHST/EC/EE/  
IT/MET/M/MNG/PET/  
TT/RAC-107

3005

BOARD DIPLOMA EXAMINATION, (C-09)  
SEPTEMBER/OCTOBER - 2020  
FIRST YEAR (COMMON) EXAMINATION  
MACHINE DRAWING

Time : 3 hours ]

[ Total Marks : 60

PART—A

5×4=20

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

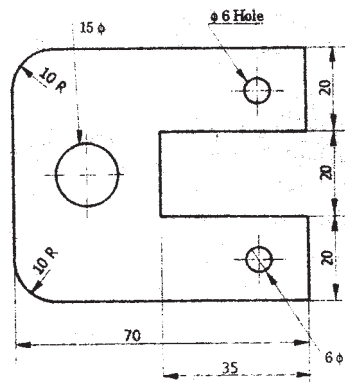
(2) Each question carries **five** marks.

(3) All dimensions are in mm.

1. Print the following in single-stroke vertical letter of size 12 mm as prescribed in SP : 46-1998 :

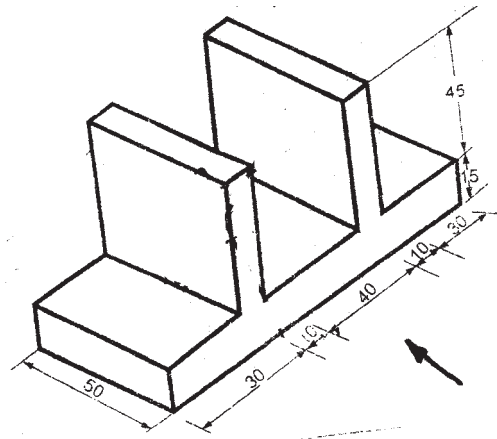
**“PERMANENT IDENTIFICATION NUMBER”**

2. Read the dimensional drawing shown in figure below. Draw the same to full scale as per SP : 46-199.

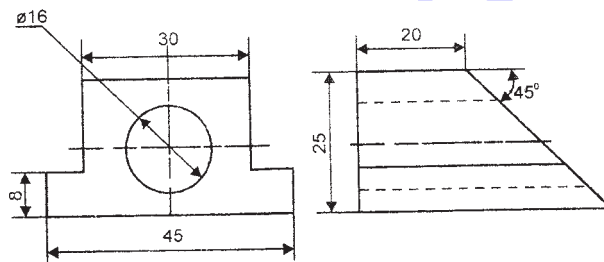


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3. Draw the front view of the given figure.



4. Draw the auxiliary view for the given orthographic views as shown in below.



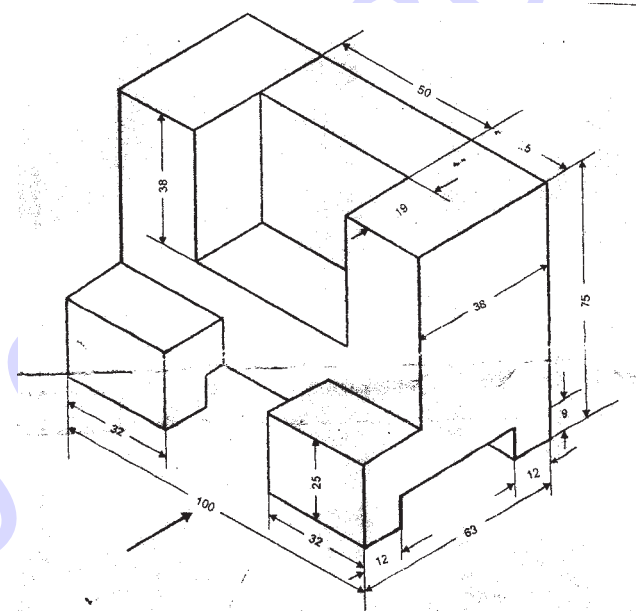
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**PART—B**

10×4=40

**Instructions :** (1) Answer *any four* questions.  
(2) Each question carries **ten** marks.

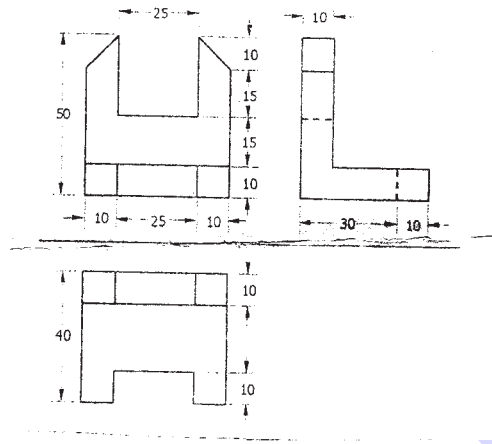
5. Draw a cycloid of a circle of radius 25 mm.
6. A pentagonal pyramid side of base 25 mm and axis 50 mm long is resting on one of its faces on HP such that its axis is parallel to VP. Draw the projections.
7. Draw the front, top and right side views of the following object shown below in first angle.



8. A pentagonal prism of base side of 35 mm and height 70 mm has its base in HP and one of its rectangular faces makes an angle of 30 degrees with VP. It is cut by a section plane which is inclined at 55 degrees to HP, perpendicular to VP and passing through one of the vertical edges at height of 25 mm from the base. Draw its sectional front view and top view.

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9. Draw the isometric view of the object whose orthographic view are shown in figure.



10. Draw the development of truncated hexagonal pyramid of side 30 mm and axis 60 mm resting its base on HP and one of its base edge parallel to VP and it is cut by a cutting plane passing through the centre of the axis inclined at an angle of 30 degrees to HP.

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