



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

**3005**

**BOARD DIPLOMA EXAMINATION, (C-09)**  
**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.

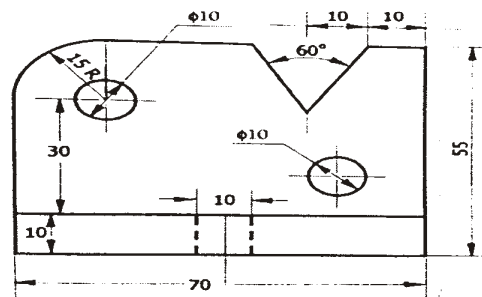
(2) Each question carries **five** marks.

(3) All dimensions are in mm.

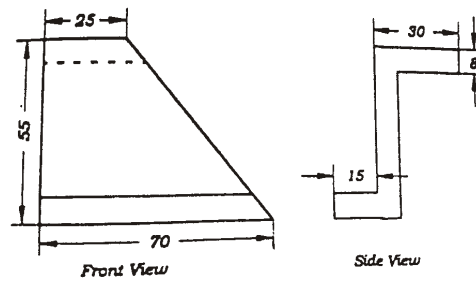
1. Print the following words in single-stroke vertical capital lettering of 10 mm size :

“INFORMATION TECHNOLOGY”

2. Redraw the following figure to full-size scale and dimension it as per SP : 46–1988 by using unidirectional system :



3. Construct an internal tangent to two circles whose radii are 30 mm and 20 mm and distance between their centres is 80 mm.
4. Draw the auxiliary view for the inclined surface of the following views :



### PART—B

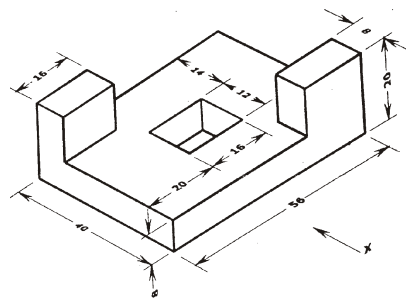
10×4=40

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

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

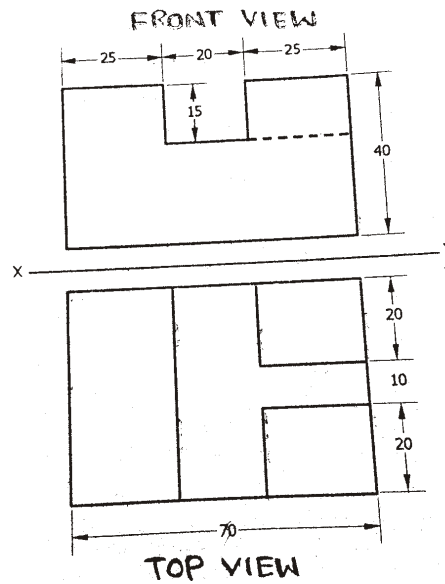
(3) All dimensions are in mm.

5. Construct an ellipse by concentric circles method with the major axis 100 mm and minor axis 60 mm.
6. A regular pentagon  $ABCDE$  of side 30 mm is inclined at  $45^\circ$  to the VP. Its side  $AB$  is perpendicular to HP. Draw the projection of the pentagon.
7. Draw the front view, top view and left-hand side view of the object as shown in the figure below.



8. A square prism of base side 45 mm and height 90 mm is resting on HP with its base. All the vertical faces are equally inclined to the VP. A vertical section plane passes through the mid points of two adjacent sides of base and cuts it. Draw top view and sectional front view of the prism.

9. Draw the isometric view of the block whose orthographic views are given below in first angle projection of drawing.



10. A hexagonal prism of side of base 20 mm and height 50 mm is standing vertically on HP with its one of rectangular faces parallel to VP. It is cut by a section plane which is inclined at  $45^\circ$  to HP, perpendicular to VP and passing through one of the top corners of the prism. Develop the lateral part of the prism.

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