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—2016

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 in single stroke vertical letters of size 10 mm :

"FORGIVE HONEST MISTAKES"

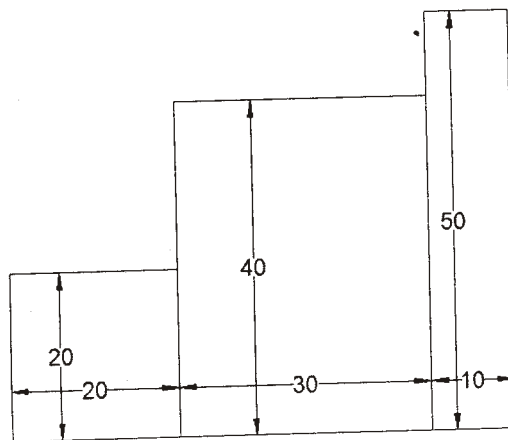**2.** Redraw the following figure in parallel dimensioning :

Fig. 1

3. Draw a common internal tangent to two given circles of equal radii of 20 mm which are 70 mm apart :

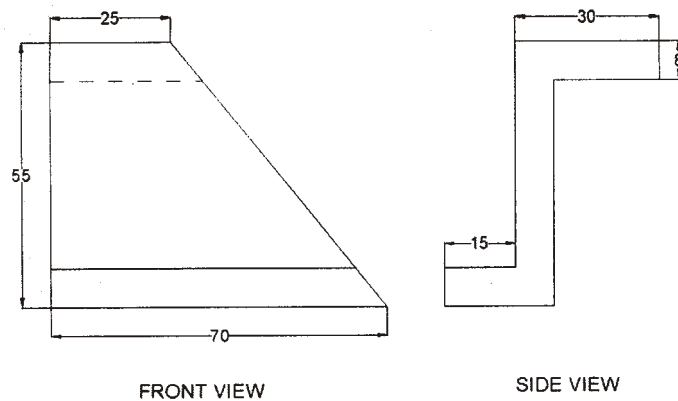**4.** Draw the auxiliary view of the object whose orthographic views are given below :

Fig. 2

PART—B   10×4=40

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

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

(3) All dimensions are in mm.

5. A circle of 50 mm diameter rolls along a line. A point on the circumference of the circle is in contact with the line in the beginning and after one complete revolution, draw the cycloidal path of the point.

6. Draw the projections of a line *AB*, 65 mm in length and making 30° to VP and parallel to HP. The end *A* is 25 mm from both VP and HP.

7. A pentagonal pyramid of base side 40 mm and height 75 mm is resting on HP on its base with one of its sides parallel to VP. It is cut by a section plane inclined at 30° to HP, perpendicular to VP and is bisecting the axis. Draw its front view and sectional top view.

8. Draw the front view, top view and side view of the object shown below :
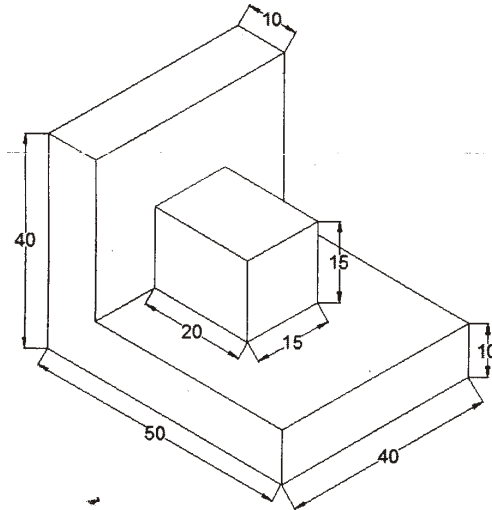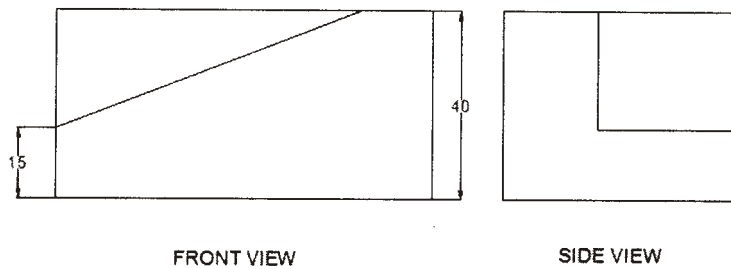

Fig. 3

9. Draw the isometric projection of the object for the orthographic views given below :
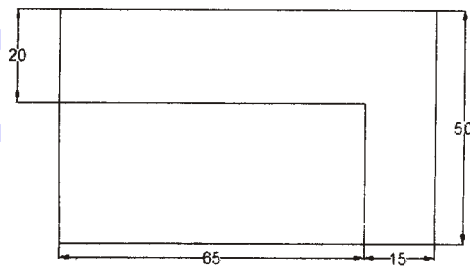

FRONT VIEW   SIDE VIEW

Fig. 4

10. A right circular cone of base 60 mm diameter and 100 mm high rests on its base on HP is cut by a plane inclined at 45° to the HP and perpendicular to VP, also passing through the middle point of the axis. Draw the development of the surface of the truncated cone.

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