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C09–CM–107

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BOARD DIPLOMA EXAMINATION, (C–09)

MARCH/APRIL—2014

DCME—FIRST YEAR EXAMINATION

ENGINEERING DRAWING

Time : 3 hours] [*Total Marks* : 60

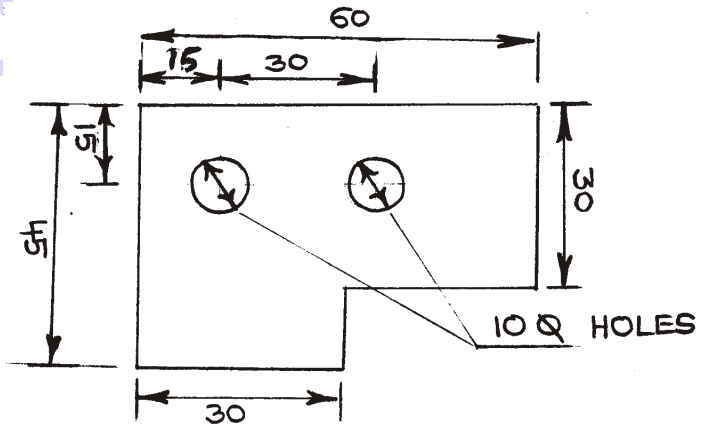
PART—A 5×4=20

Instructions : (1) Answer **all** questions.
(2) Each question carries **five** marks.
(3) All dimensions are in mm.
(4) Use first angle projection.

1. Print the following in single-stroke vertical letters of 12 mm size :

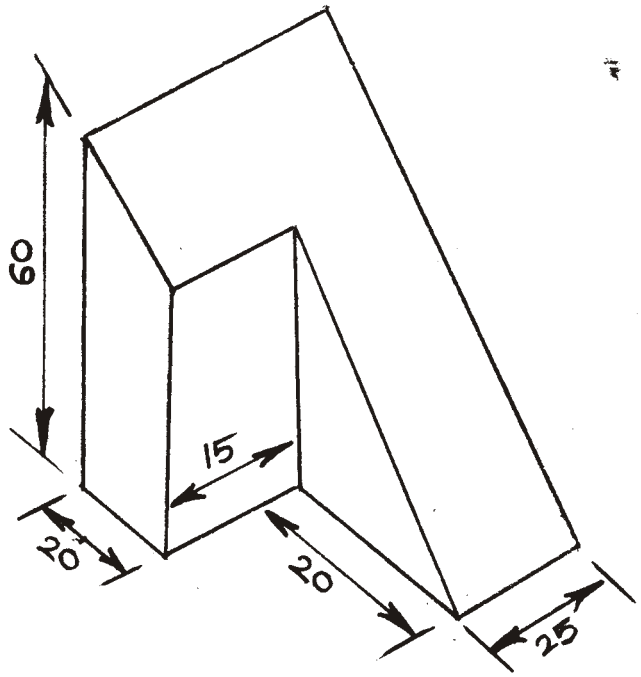
"SCIENTIFIC METHOD TO FIND THE SOLUTION"

2. Redraw the following figure to full scale and dimension it using aligned dimensioning method :



3. A right circular cone of base diameter 36 mm and axis 50 mm long is resting on its base in VP and having its axis parallel to HP. Draw its projections (Front view and Top view).

4. Draw the auxiliary view of the inclined surface of the given object :



PART—B

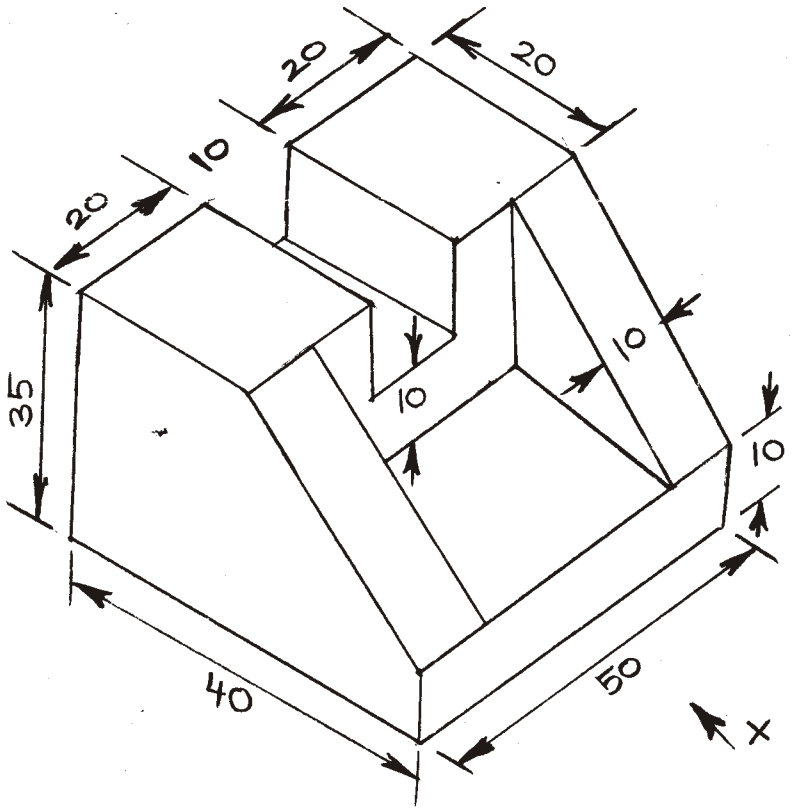
10×4=40

Instructions : (1) Answer *any* **four** questions.
(2) Each question carries **ten** marks.
(3) All dimensions are in mm.
(4) Use first angle projection.

5. Draw an involute on a circle of radius 15 mm.

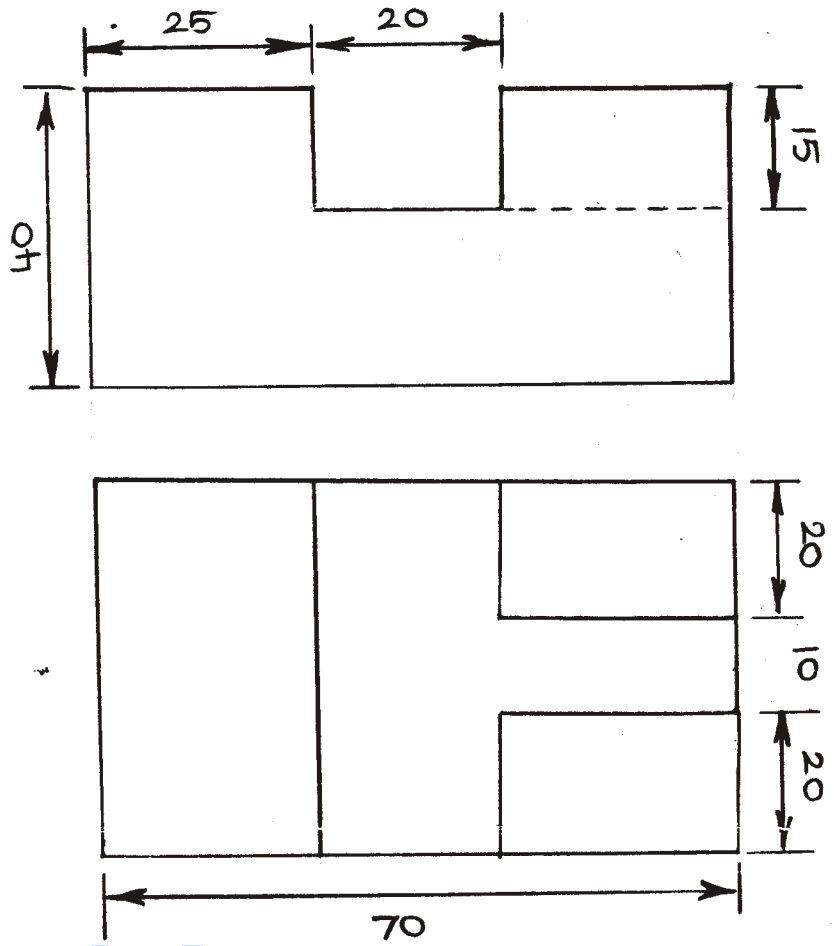
6. A hexagonal plane of side 35 mm is perpendicular to HP and makes an angle of 45° to VP. Draw its projections.

7. Draw the front view, top view and left-side view of the given block :



8. A regular hexagonal pyramid of side 30 mm and height 65 mm is resting on its base in HP and one of its base sides is parallel to VP. It is cut by a cutting plane which is perpendicular to VP, makes an angle of 45° to HP and passing through a height of 45 mm from its bottom. Draw its front view and sectional-top view.

9. Draw the isometric projection from the two views (front view and top view) of the given object :



10. A right circular cylinder of diameter 55 mm and 66 mm long resting on HP is cut by a section plane which is perpendicular to VP, inclined at 60° to HP and passing through a point on the axis at a height of 30 mm from its base. Draw the surface development of bottom position of truncated cylinder.

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