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C16–C/CM–107

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BOARD DIPLOMA EXAMINATION, (C–16)

MARCH/APRIL—2017

DCE—FIRST YEAR EXAMINATION

ENGINEERING DRAWING

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

PART—A 5×4=20

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

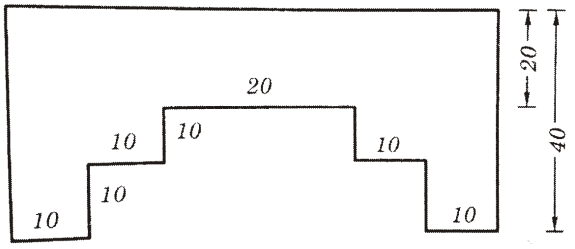
(2) Each question carries **five** marks.

(3) All dimensions are in mm.

1. Write the following using single-stroke capital upright letters of 10 mm size :

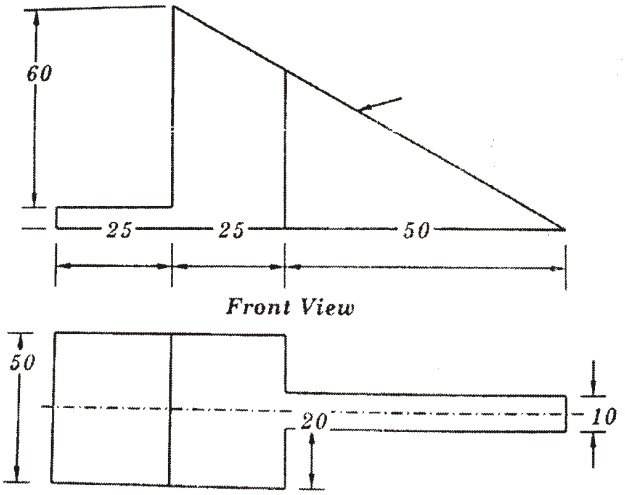
"INTERNET OF THINGS"

2. Redraw the following figure in progressive dimensioning :



3. Draw an arc of 30 mm radius tangential externally to two circles of radii 20 mm and 15 mm.

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



PART—B

10×4=40

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

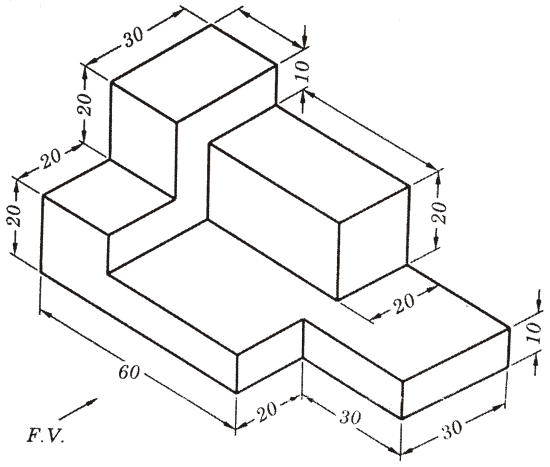
(2) Each question carries **ten** marks.

(3) All dimensions are in mm.

5. Draw the involute of a circle of radius 20 mm.

6. Draw the projections of a pentagon which is perpendicular to VP and making an angle of 45° to HP also one of its sides is on HP. Take side of pentagon as 30 mm.

7. An isometric view of an object is given below. Draw its front view, top view and right-side view.



8. A hexagonal pyramid stands on the HP with one of its base edges parallel to VP. The pyramid is cut by a plane passing through the midpoint of the vertical height at an angle of 30° to HP and perpendicular to VP. Draw the sectional top view, sectional end view of the object. Take base side of pyramid as 30 mm and height of pyramid as 60 mm.

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

10. A hexagonal prism of base side 20 mm and height 50 mm is standing vertically on HP with one of its vertical faces parallel to VP. It is cut by a plane which is inclined at 45° to HP and passing through the left top corner of the prism. Develop the lateral surface of the truncated prism.

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