6055

BOARD DIPLOMA EXAMINATION, (C–16)

SEPTEMBER/OCTOBER - 2020

DME—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 and use first angle of projection.

1. Write the following using vertical letters of 10 mm height :

CHANDRAYAAN-2 WAS LAUNCHED ON 22/07/2019

2. Redraw the following figure (Fig. 1) and dimension it as per SP : 46-1988 :
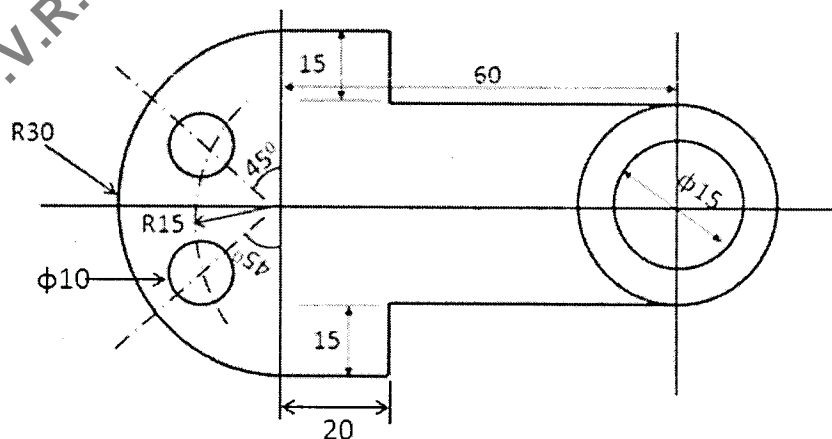

Fig. 1

3. Divide the line of 75 mm length into nine equal parts.

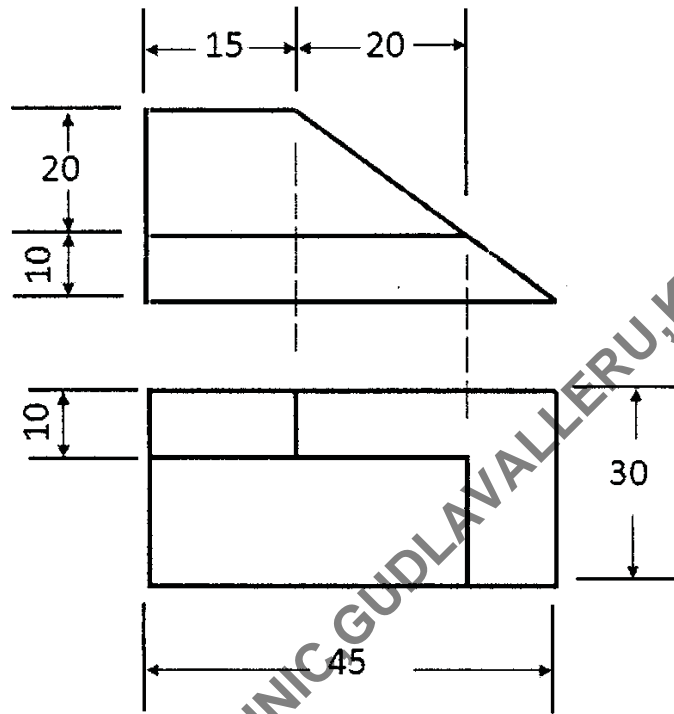**4.** Draw the auxiliary view of the inclined surface shown in Fig. 2 :

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 coin of radius 20 mm rolls on a straight surface. Draw the profile traced by any point on the circumference of the coin.

6. A pentagonal plane *ABCDE* 30 mm side has its plane inclined 50° to HP. Its side *BC* is resting on horizontal plane and making an angle of 25° to VP. Draw the projections keeping the corner *B* nearer to VP.

7. A regular hexagonal pyramid of side 30 mm and height 75 mm is resting on its base on HP. One of its base sides is parallel to VP. It is cut by a cutting plane, which is parallel to HP and perpendicular to VP and passing through a height of 45 mm from its bottom. Draw its sectional front view and top view.

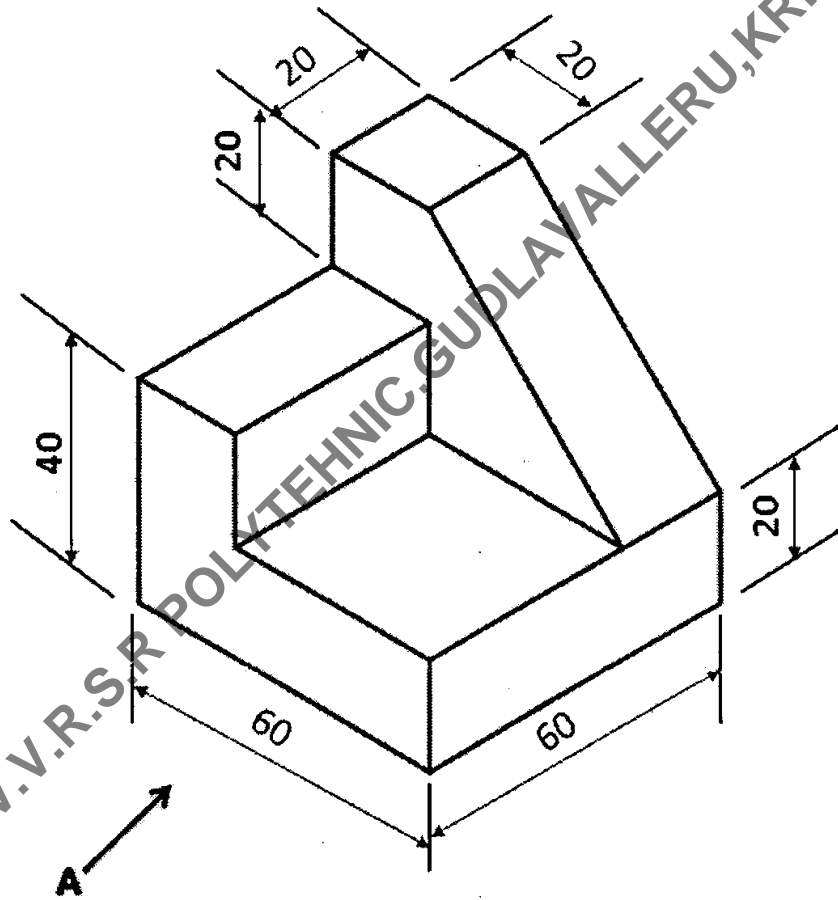**8.** Draw the front view, top view and right-hand side view of the object as shown in Fig. 3 :

Fig. 3

9. Draw the isometric view from the given front view and top view shown in Fig. 4 :
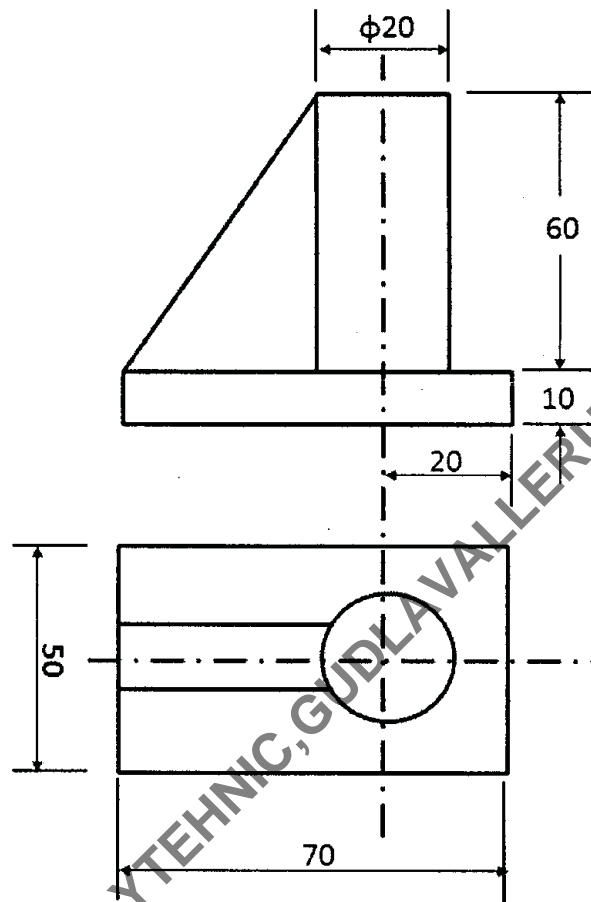

Fig. 4

10. A cylinder, base diameter 30 mm and height 50 mm, is standing on its base on HP. A cutting plane inclined at 45° to the axis of the cylinder, passes through the left extreme point of the top. Develop the lateral surface of the truncated cylinder.

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