4053

BOARD DIPLOMA EXAMINATION, (C–14)

MARCH/APRIL—2016

DME—FIRST YEAR EXAMINATION

ENGINEERING DRAWING

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

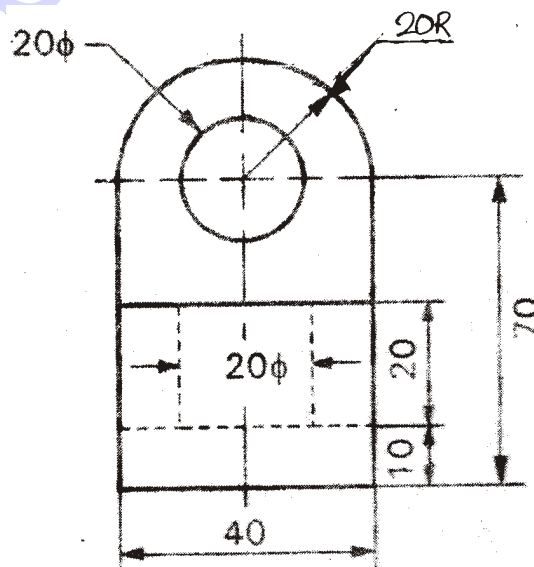**PART—A**   5×4=20

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

(2) Each question carries **five** marks.
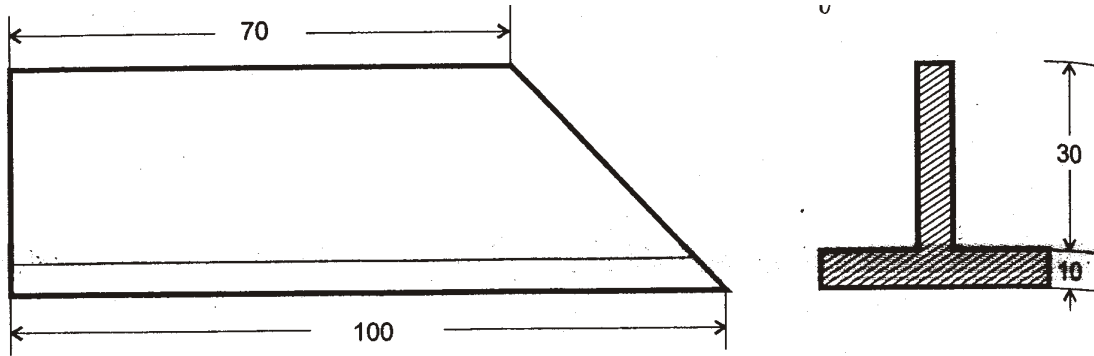
(3) All dimensions are in mm.

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

"DIPLOMA IN ENGINEERING"

2. Redraw the following figure to the full scale by correcting the errors in dimensioning as per SP–46:1988 :

3. Construct a hexagon of 40 mm side using general method.

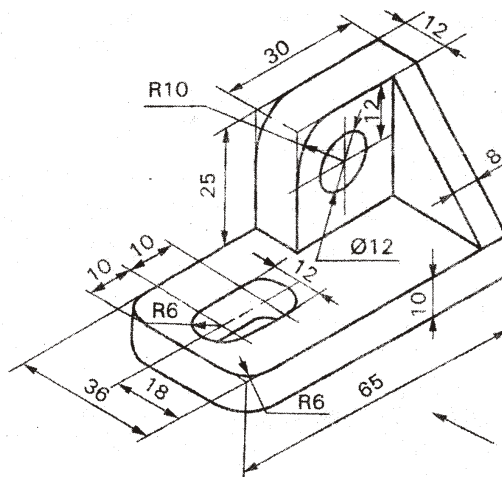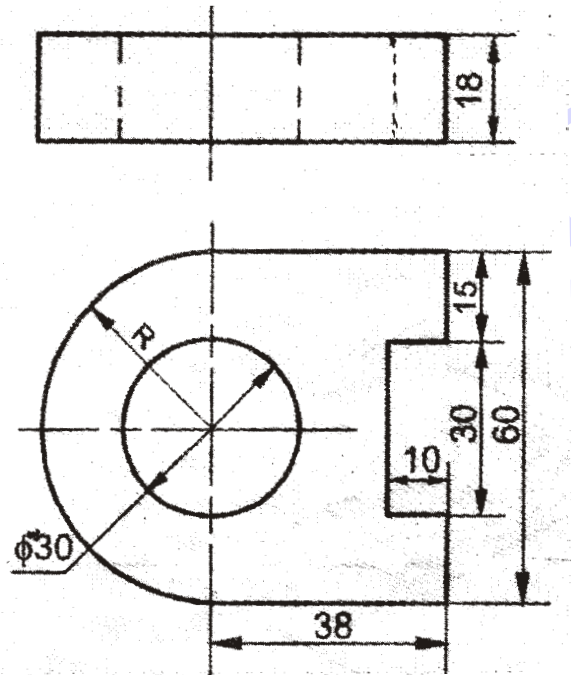**4.** For the T-section views are shown below, draw the auxiliary view for the inclined surface :

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

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

(3) All dimensions are in mm.

5. Draw the involute on an equilateral triangle of side 30 mm.

6. A regular hexagon of 30 mm side has its one edge on HP. The surface of the plane is perpendicular to VP and inclined at 40° to HP. Draw the projections of the plane.

7. Draw the front view and top view of the following figure :

8. A cone of base 40 mm diameter and axis 50 mm, rests with its base on HP. A section plane perpendicular to VP and inclined at 45° to HP, bisects the axis of the cone. Draw the development of the lateral surface of the truncated cone.

9. Draw the isometric views of the object whose orthographic views are given below :

10. A pentagonal pyramid has its base on the HP and the edge of the base nearer the VP parallel to it. A vertical section plane inclined at 45° to the VP, cuts the pyramid at a distance of 6 mm from the axis. Draw the top view and sectional front view.

★ ★ ★