

C14-M/CHOT/RAC-107

4053

BOARD DIPLOMA EXAMINATION, (C-14) MARCH/APRIL—2017

DME—FIRST YEAR EXAMINATION

ENGINEERING DRAWING

Time: 3 hours [Total Marks: 60

PART—A

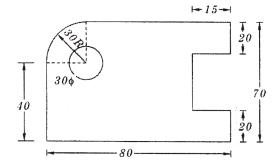
 $5 \times 4 = 20$

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 capital lettering of 10 mm size.

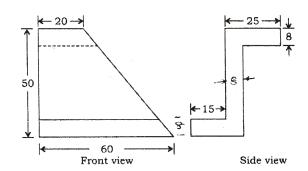
"DIPLOMA EXAMINATIONS"

2. Redraw the following figure to full-size scale and dimension it according to SP-46:1988:



3. Construct a hexagon of side 25 mm by using compass.

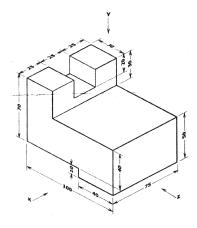
 4. Draw the auxiliary view of inclined surface of the object shown in figure below:



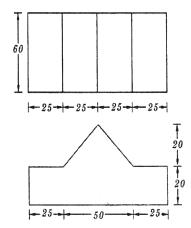
PART—B

 $10 \times 4 = 40$

- **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 of a circle of radius 20 mm.
 - **6.** Draw the projections of a cylinder of diameter 50 mm and height 80 mm when it rests on its base such that its axis is inclined at 30° to HP and parallel to VP.
 - 7. A pentagonal prism, 30 mm base side and 50 mm axis is standing on HP on its base whose one side is perpendicular to VP. It is cut by a section plane inclined at 45° to HP, through midpoint of axis. Draw the front view, sectional top view.
 - 8. Draw the orthographic views of the object shown in the figure below:



/4053 [Contd... **9.** Draw the isometric drawing of an object whose front view and top views are given below:



10. A cone of base diameter 40 mm and height 80 mm is standing vertically on HP. It is cut by a plane which is inclined at 45° and passing through the midpoint of the axis. Draw the development of the lateral surface of the cone bottom portion.

* * *