##  <br> C09-CHPP-107/C09-EE-107

## 3038

## BOARD DIPLOMA EXAMINATION, (C-09)

MARCH/APRIL-2014 DEEE-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) Take suitable scale wherever required.
(4) All dimensions are in mm .

1. Write the following in 10 mm size vertical letters :
"SMALL THINGS MAKE PERFECTION"
2. Redraw the Fig. 1 to full size and dimension it according to SP:46-1988 :


Fig. 1
3. Draw the front view of the object shown in Fig. 2 :


Fig. 2
4. Draw the auxiliary view of inclined portion of the object shown in Fig. 3 :


Fig. 3

PART—B
$10 \times 4=40$

Instructions : (1) Answer any four questions.
(2) Each question carries ten marks.
(3) All dimensions are in mm .
5. Plot one complete turn of a cylindrical helix 50 mm diameter and 60 mm pitch. Also draw the development of the helical curve.
6. A cone, with base 30 mm diameter and axis 45 mm long, lies on a point of its base on VP such that the axis makes an angle $45^{\circ}$ with VP. Draw the projections of the cone.
7. Draw the front view, top view and side view of the object shown in Fig. 4 :


Fig. 4
8. A hexagonal prism of base edge 30 mm and axis 70 mm is resting with one of its axis parallel to both the planes. It is cut by a sectional plane perpendicular to VP and $45^{\circ}$ to HP. It cuts one of the ends at a distance of 20 mm from the bottom. Draw the sectional top view and true shape of the section.
9. Draw the isometric projection of the object the views of which are given below :


Fig. 5
10. A pentagonal prism of side of base 20 mm and height 50 mm stands vertically on its base, with a rectangular face perpendicular to VP. A cutting plane perpendicular to VP and inclined at $60^{\circ}$ to the axis, passes through the edge of the top left corner of the prism. Develop the lower portion of the lateral surface of the prism.

