## 

C16-EE-107

## 5153

## BOARD DIPLOMA EXAMINATION, (C-16) MARCH/APRIL-2018 <br> DEEE—FIRST SEMESTER EXAMINATION

## ENGINEERING DRAWING—I

Time : 3 hours ]

PART—A
$5 \times 4=20$
Instructions : (1) Answer all questions.
(2) Each question carries five marks.

1. Print the following in Single-Stroke Vertical letters in 10 mm size :
‘GREAT MINDS DISCUSS IDEAS'
2. Redraw the following figure in Full-scale according to SP : 46-1988 :

3. Draw the tangent to a circle of radius 30 mm from a point which is at a distance of 80 mm from the center of the circle.
4. The surface of a pentagone of side 40 mm is parallel and 25 mm in front of the VP. One of its sides makes an angle of $30^{\circ}$ with HP. Draw its projections.

PART—B
$10 \times 4=40$
Instructions : (1) Answer any four questions.
(2) Each question carries ten marks.
5. Draw ellipse whose major and minor axis are 80 mm and 60 mm by concentric circles method.
6. Draw an involute of a circle of radius 20 mm .
7. A pentagonal prism side of base 25 mm and axis 50 mm long rests on HP with one of its edges such that the base containing that edge makes an angle of $30^{\circ}$ with HP and its axis is parallel to VP. Draw its projections.
8. Draw the projections of a cone base 30 mm diameter and axis 50 mm long resting on HP on a point of its base circle with the axis making an angle $45^{\circ}$ with HP and parallel to VP.
9. A hexagonal pyramid of base side 30 mm and height 75 mm is resting on the ground with its axis vertical. It is cut by a plane inclined at $30^{\circ}$ to the HP and passing through a point on the axis at 20 mm from the vertex. Draw the sectional front view, top view and true shape.
10. Draw sectional front view and top view for the object shown below :


