c16-c/cm-107

## 5118

BOARD DIPLOMA EXAMINATION, (C-16) MARCH/APRIL-2018 DCE-FIRST SEMESTER (COMMON) EXAMINATION

## ENGINEERING DRAWING-I

Time : 3 hours ]

PART—A
$5 \times 4=20$
Instructions : (1) Answer All questions.
(2) Each question carries five marks.
(3) All dimensions are in mm .

1. Write the following using single stroke capital vertical letters of 10 mm size :

## SWACHH BHARAT ABHIYAN

2. Draw the figure given below to a suitable scale and dimension as per chain dimensioning :

3. Inscribe a regular pentagon in a circle of 60 mm diameter.
4. Draw exterior and interior tangents to two given circles of equal radii.

Instructions : (1) Answer any four questions.
(2) Each question carries ten marks.
(3) All dimensions are in mm .
5. Construct a parabola with distance of focus from directrix as 50 mm . Also draw a tangent and normal to the curve through a point 40 mm from the directrix.
6. Draw an involute of a given circle of radius 50 .
7. A 100 mm long line is parallel to and 40 mm above the HP. Its two ends are 20 mm and 35 mm in front of the VP. Draw its projections.
8. Draw the projections of a circle of 40 mm diameter having its plane vertical and inclined at $30^{\circ}$ to VP. The centre of circle is 35 mm above HP and 25 mm in front of VP.
9. Draw the projections of a cube of 50 mm long edge, resting on the ground on one of its corners. Its base is inclined at $45^{\circ}$ to HP.
10. A square pyramid, with side of the base 30 mm and axis 50 mm long, is resting with its base on HP with one of its base edges parallel to VP. It is cut by a cutting plane which is at $30^{\circ}$ to HP and perpendicular to VP and cuts the axis at a height of 25 mm form the base. Draw front view and sectional view.

