C16S-A/CH/CHST/EI/FW/MNG/MET/IT/
TT/PKG/C/CM/EC/EE/M-107

5105

BOARD DIPLOMA SUPPLEMENTARY EXAMINATION, (C-16S)
JUNE / JULY - 2020
I SEMESTER (COMMON) EXAMINATION
ENGINEERING DRAWING - 1

Time : 2 Hours] [Total Marks : 60

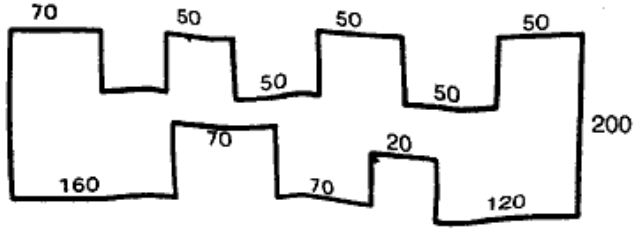
PART - A 3×5=15

Instructions : *(1) Answer any THREE questions.*
(2) Each question carries FIVE marks.
(3) All dimensions are in mm.
(4) Take suitable scale wherever required.

1 Print the following title in simple single stroke capital vertical letters of 10mm size.

"SWACHH BHARAT ABHIYAN"

2 Draw the following figure to a suitable scale and dimension as per chain dimensioning.



3 Inscribe a regular pentagon in a circle of 60mm diameter.

4 A line AB is 30 mm long and inclined at 30° to V.P. and parallel to H.P. The end A of the line is 15mm above H.P. and 20mm infront of V.P. Draw its projections.

PART - B 3 × 15 = 45

Instructions : *(1) Answer any THREE questions.*
(2) Each question carries FIFTEEN marks.
(3) All dimensions are in mm. Use first angle projection.
(4) Use suitable scale wherever required.

5 Draw Ellipse whose major and minor axes are 120mm and 80 mm by concentric circles method.

6 Draw a cycloid given the radius R=25 mm of the generating circle, also draw a tangent and normal to it at any point.

7 A pentagonal plane of side 40 mm is perpendicular to H.P. and makes an angle of 45° with V.P. Draw its projections.

8 A hexagonal pyramid of side 30mm and height 60mm is resting with its base on H.P. and one of its base edges is parallel to V.P. Draw its projections.

9 A square pyramid with side of the base 30mm and axis 50mm long is resting with its base on H.P. and one of its base edges is parallel to V.P. It is cut by a cutting plane which is at 30° to H.P. and perpendicular to V.P. and cuts the axis at a height of 25mm from the base. Draw front view and sectional top view.

10 A hexagonal pyramid, with side of base 30mm and axis 75mm long, is resting with its base on H.P. and two edges of the base are parallel to V.P. It is cut by a section plane parallel to H.P. and passing through the axis at a point 30mm from the apex. Draw the projections of the remaining pyramid.