



C16-EC-107

5146

BOARD DIPLOMA EXAMINATION, (C-16)
MARCH/APRIL—2018
DECE—FIRST SEMESTER EXAMINATION
ENGINEERING DRAWING—I

Time : 3 hours]

[Total Marks : 80

PART—A

5×4=20

Instructions : (1) Answer **all** questions.

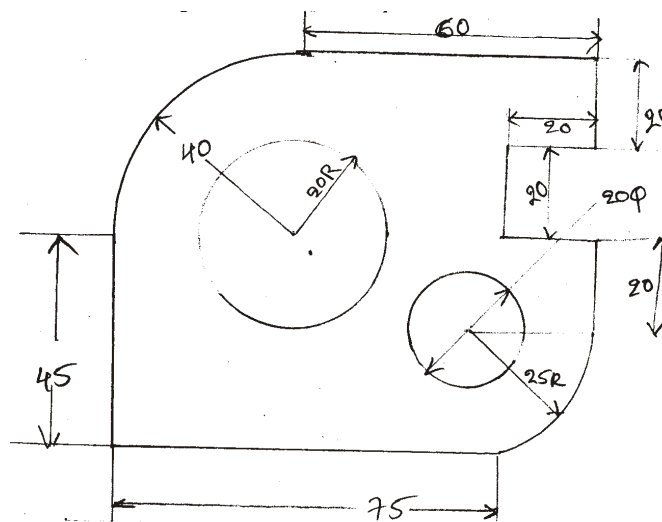
(2) Each question carries **five** marks.

(3) All dimensions are given in mm.

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

“GOVERNMENT OF TELANGANA”

2. Redraw the figure to full-scale as per SP46-1988.



3. Construct a pentagon with the length of the side as 30 mm.

4. Draw the projections of the following points keeping the distance between the projectors as 25 mm on the same reference line :
- (a) 20 mm above HP and 30 mm in front of VP
 - (b) 20 mm above HP and 30 mm behind VP
 - (c) 20 mm below HP and 30 mm behind VP
 - (d) 20 mm below HP and 30 mm in front of VP

PART—B

10×4=40

Instructions : (1) Answer *any four* questions.

(2) Each question carries **ten** marks.

(3) All dimensions are given in mm.

5. Draw a parabola, with the distance of the focus, from the directrix as 50 mm by using eccentric method.
6. Draw a cycloid given radius of generating circle as 25 mm.
7. A square plane *ABCD* of side 30 mm has its plane parallel to HP and 20 mm away from it. Draw the projections of the plane when two of its sides are (a) parallel to VP and (b) inclined at 30° to VP. Draw its projections.
8. A hexagonal pyramid, with side of base 30 mm and axis 60 mm long, is resting with its base on HP such that one of the base edges is inclined to VP at 45° and the axis is 50 mm in front of VP.
9. A cylinder of diameter 40 mm and axis 60 mm long rests with its base on HP. It is cut by a section plane parallel to VP and passing through the solid at a distance 10 mm from the axis. Draw the projections of the cylinder.
10. A pentagonal pyramid with side of base 20 mm and axis 55 mm long rests with its base on HP and with an edge of the base parallel to VP. It is cut by a section plane inclined at 60° to VP and perpendicular to HP and passing through the solid at 5 mm from the axis. Draw the projections of the pyramid and obtain the true shape of the section.

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