

4018

BOARD DIPLOMA EXAMINATION, (C-14) APRIL/MAY—2015 DCE—FIRST YEAR EXAMINATION

Time: 3 hours | Total Marks: 60

ENGINEERING DRAWING

PART—A

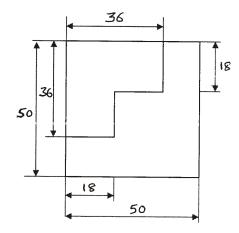
 $5 \times 4 = 20$

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

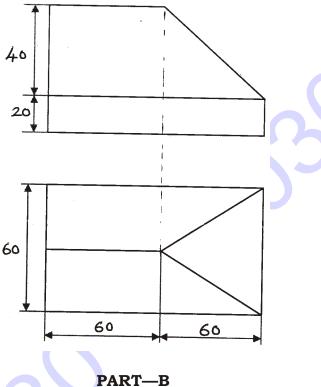
- (2) Each question carries five marks.
- (3) Take suitable scale wherever required.
- (4) All dimensions are given in mm. Use first angle projection.
- **1.** Print the following in single-stroke vertical lettering of 10 mm size :

"WORK IS WORSHIP"

2. Redraw the following figure to full scale and dimension it using chain dimensioning method, as per SP:46-1988:



- **3.** Divide a line of 100 mm long into six equal parts.
- **4.** Draw the auxiliary view of the inclined surface of the object shown in figure below:

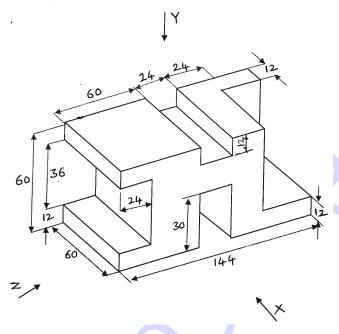


 $10 \times 4 = 40$

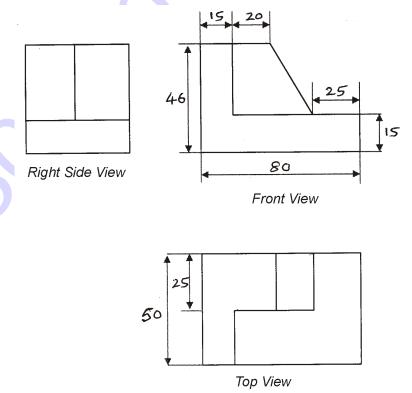
Instructions: (1) Answer any **four** questions.

- (2) Each question carries ten marks.
- (3) All dimensions are given in mm. Use first angle projection.
- **5.** Construct an ellipse by concentric circles method, if the length of major axis is 100 mm and length of minor axis is 60 mm.
- **6.** A hexagonal prism, with side of base 25 mm and axis 60 mm long, is resting on one of its rectangular faces on HP. Draw the projections of the prism, when its axis is inclined at 45° to VP.
- 7. A pentagonal pyramid of base side 40 mm and height 80 mm is resting on HP on its base with one of its base sides parallel to VP. It is cut by a plane inclined at 30° to HP, perpendicular to VP and is bisecting the axis. Draw its front view, sectional top view and true shape of the section.

8. Draw the orthographic views of the component shown in the figure below:



9. Draw the isometric drawing of an object whose orthographic projections are given below:



10. A cone of base diameter 50 mm and height 60 mm is standing vertically on HP. It is cut by a plane which is inclined at 45° to HP, perpendicular to VP and passing through the mid-point of the axis. Draw the development of the truncated cone.

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