

Time: 3 hours

C09-A-107/C09-AEI-107/C09-BM-107/ C09-CH-107/C09-CHST-107/C09-FW-107/C09-IT-107/

 $_{\text{CO9-MET-107/CO9-MNG-107/CO9-PKG-107/CO9-TT-}}107$

3005

BOARD DIPLOMA EXAMINATION, (C-09) OCT/NOV-2014 FIRST YEAR (COMMON) EXAMINATION

ENGINEERING DRAWING

PART—A

 $5 \times 4 = 20$

Total Marks: 60

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

- (2) Each question carries five marks.
- (3) All dimensions are in mm.
- **1.** Print the following in single-stroke capital vertical letters of size 10 mm:

"Work is Worship"

2. Redraw the following as shown in Fig. 1 below and dimension it according to SP:46-1988 :

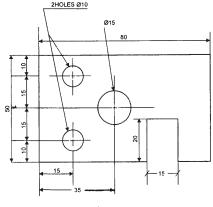


Fig. 1

/**3005** 1 [Contd...

3. Draw the front view of the following in the direction X as shown in Fig. 2:

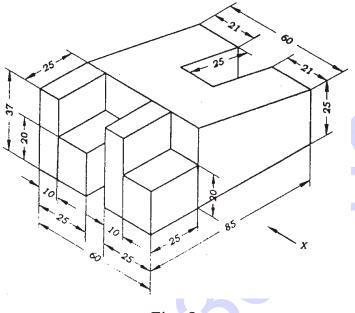


Fig. 2

4. Draw the auxiliary view of the inclined part of the block as shown in Fig. 3:

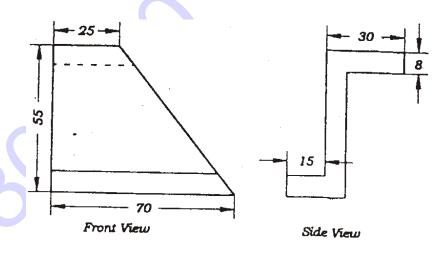


Fig. 3

PART—B 10×4=40

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

- (2) Each question carries ten marks.
- (3) All dimensions are in mm.
- **5.** Draw one convolution of helix of 60 mm diameter and 40 mm pitch.
- **6.** A line *AB* of length 80 mm is parallel to VP and at a distance of 30 mm from it. The end *A* is 25 mm and *B* is 75 mm above HP respectively. Draw its front view, top view and find the angle of the line with HP.
- **7.** Draw front view, top view and left-hand side view of the object as shown in Fig. 4 below:

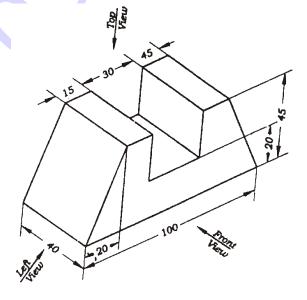


Fig. 4

8. Draw the sectional front view and sectional top view of the object as shown in Fig. 5 below. [Take section plane as X-X]:

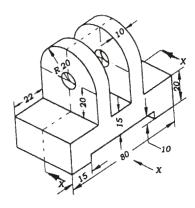


Fig. 5

9. Draw the isometric view of the following, whose views are given in first-angle projection in Fig. 6 below:

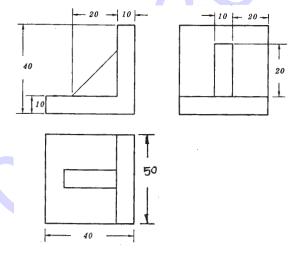


Fig. 6

10. A hexagonal pyramid of base side 25 mm and axis 65 mm long is resting on its base in HP having one of its base sides parallel to VP. It is cut by a sectional plane which is perpendicular to VP, and inclined at 45° to HP and passing through the midpoint of the axis. Draw the development of surface of lower portion of truncated pyramid.