

## C16-EC/CHPC/PET-107

## 6031

## BOARD DIPLOMA EXAMINATION, (C-16) SEPTEMBER/OCTOBER - 2020 DECE—FIRST YEAR EXAMINATION

ENGINEERING DRAWING

Time: 3 hours]

Total Marks : 60

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 vertical letters of 14 mm height: "SAY PROUDLY WE ARE INDIANS"
- **2.** Redraw the correct means of Fig. 1 and indicate it with chain and unidirectional dimensioning :

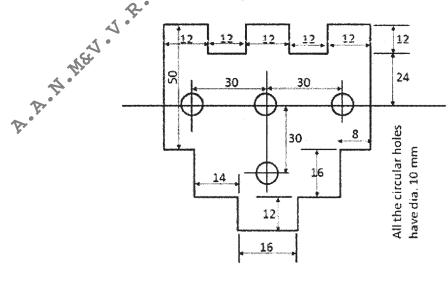
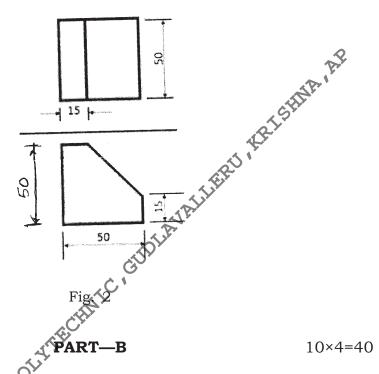


Fig. 1

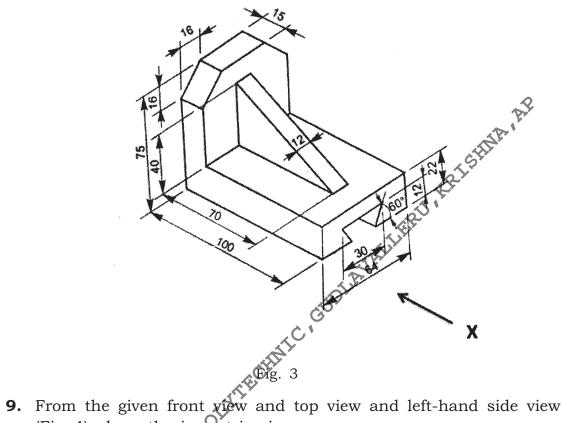
- **3.** Construct a regular pentagon of side 30 mm. Use any one of the methods.
- **4.** Draw the auxiliary view of the inclined surface shown in Fig.2:



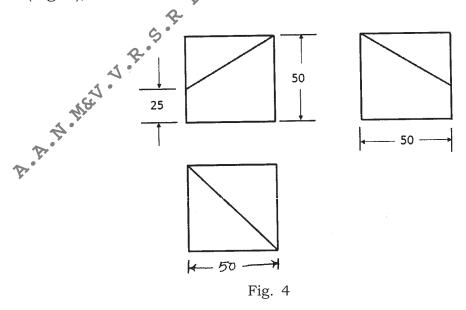
Instructions: (1) Answer any four questions.

- (2) Each question carries ten marks.
- (3) All dimensions are in mm.
- 5. Draw an involute to a circle of radius 20 mm.
- **6.** Alline *AB*, 90 mm long, is inclined at 30° to the HP and 45° to the VP. Its end *A* is 12 mm above the HP and 20 mm in front of the VP. Draw the projections of line *AB*.
- **7.** A hexagonal prism of base edge 25 mm and height 60 mm is resting on HP with one of its base edges parallel to VP. It is cut by a plane perpendicular to VP and inclined at 30° to HP and is passing through midpoint of axis of prism. Draw the sectional top view and true shape of the section.

8. Draw the front view, top view and right-hand side view of the object shown in the Fig. 3:



(Fig. 4), draw the isometric view:



**10.** A hexagonal prism of base side 30 mm and height 65 mm is resting on the ground with one of its base edges parallel to VP and is cut by a plane making 60° to HP and passing through the axis at a height of 40 mm from base. Develop the lateral surface of the prism when its truncated portion is removed.

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