4044

BOARD DIPLOMA EXAMINATION, (C–14)

MARCH/APRIL—2016

DEEE—FIRST YEAR EXAMINATION

ENGINEERING DRAWING

Time : 3 hours]　　　　　　　　　　　　　　[*Total Marks* : 60

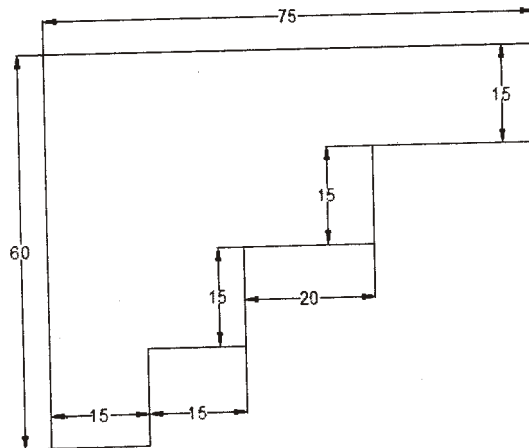**PART—A**　　　　　　　5×4=20

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

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

　　　　　　　(3) All dimensions are in mm.

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

　　"FREE HAND LETTERING"

2. Draw the following dimensions in parallel and chain dimensioning :

3. Divide a line of 55 mm length into 6 equal parts.

4. Draw the auxiliary view for the inclined surface of the object given below :
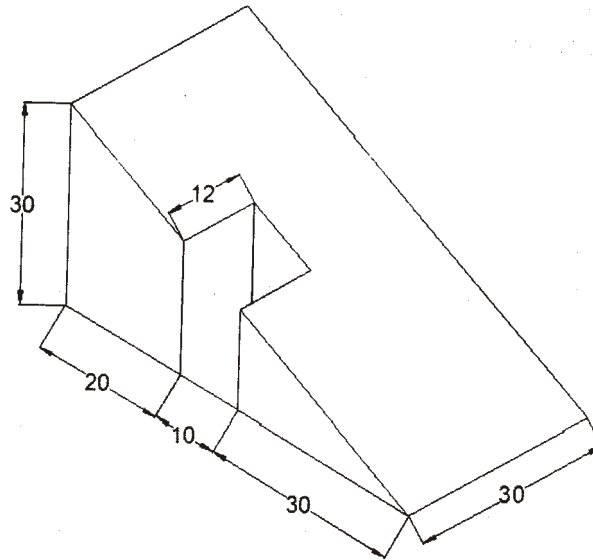
**PART—B**   10×4=40

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

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

(3) All dimensions are in mm.

5. Draw the involute of a circle of diameter 30 mm.

6. A pentagonal prism of base side 25 mm and height 60 mm is resting on HP with one of its base sides which is perpendicular to VP, such that the axis is making an angle of 45° to HP and parallel to VP. Draw the projections.

7. A square pyramid with side of the base 30 mm and axis 50 mm long is resting with its base on HP with one of its base edges parallel to VP. It is cut by a cutting plane which is at 30° to HP and perpendicular to VP and cuts the axis at a height of 25 mm from the base. Draw the front view and sectional top view.
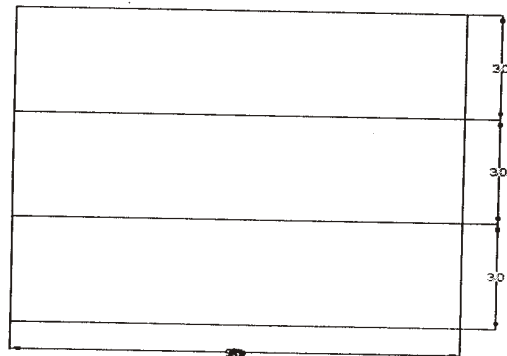
8. Draw the front view, top view and side view of the object shown below :
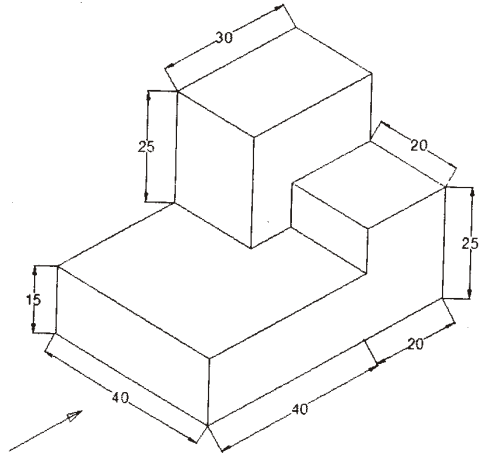
9. Draw the isometric projection of the object for the orthographic views given below :
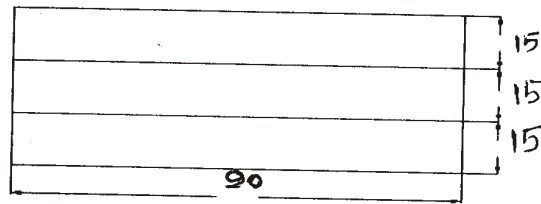
10. A right circular cone of diameter 50 mm and height 80 mm long is resting on its base on HP. It is cut by a section plane which is perpendicular to VP, inclined at 60° to HP and passing through a point on the axis at a height of 40 mm from the base. Draw the surface development of the bottom portion of the truncated cone.

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