6031

C16–EC/CHPC/PET–**107**

6031

BOARD DIPLOMA EXAMINATION, (C–16)

OCT/NOV—2018

DECE—FIRST YEAR EXAMINATION

ENGINEERING DRAWING

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

PART—A 5×4=20

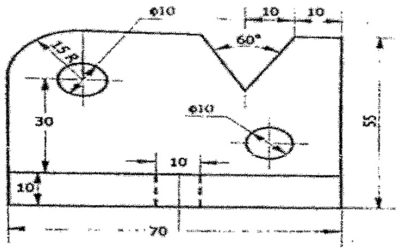
Instructions : (1) Answer **all** questions.

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

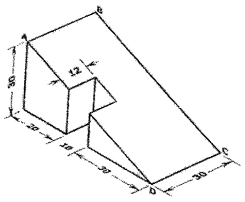
1. Print the following in single-stroke vertical lettering of 10 mm size in capital letters:

"ALL DIMENSIONS ARE IN MM"

2. Redraw the following figure to the full scale by correcting the errors in dimensioning as per SP–46:1988:



3. The distance between the centres of two circles of 60 mm and 90 mm diameters is 120 mm. Draw an external common tangent to the two circles.



4. Draw the auxiliary view for the inclined surface of the following object :

PART—B

10×4=40

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

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

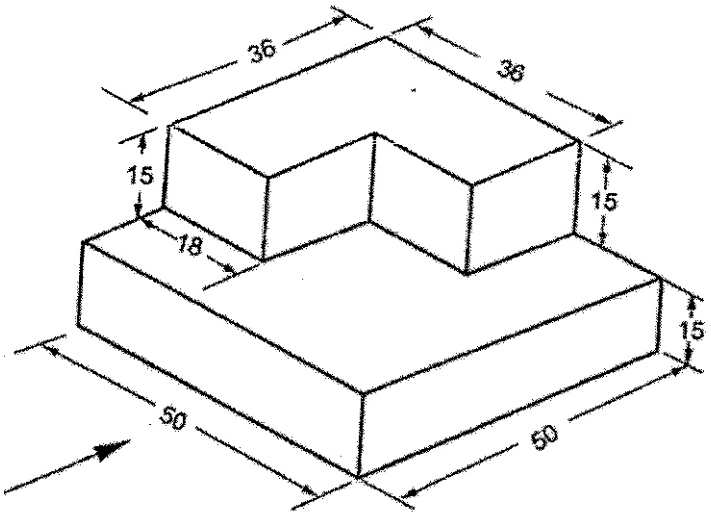
(3) All dimensions are in mm.

5. Construct a cycloidal curve through a point on the circumference of a circle of radius 40 mm.

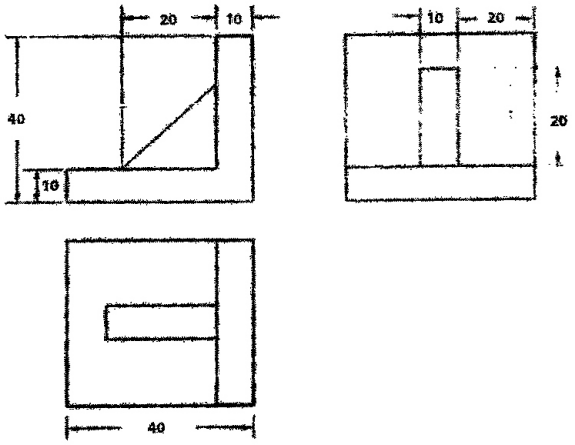
6. Draw the projections of a cone, base 30 mm diameter and axis 50 mm long resting on HP on a point of its base circle with the axis making an angle 45° with HP and parallel to the VP.

7. A square prism of base side 45 mm and height 90 mm is resting on HP with its base. All the vertical faces are equally inclined to the VP. A vertical section plane passes through the midpoints of two adjacent sides of base and cuts it. Draw top view and sectional front view of the prism.

8. Draw the front view, top view and side view of the object shown below :



9. Draw the isometric view of the ribbed angle plate shown in figure below. All dimensions are in mm and the views are given in the first angle :



10. A cone of base diameter 40 mm and slant height 60 mm is standing vertically on HP. It is cut by a plane which is inclined at 45° to the HP, perpendicular to VP and passing through the midpoint of the axis. Develop the lateral surface of the frustum.

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