



C09-A-107/C09-AEI-107/
C09-BM-107/C09-C-107/
C09-CM-107/C09-CH-107/
C09-CHPP-107/C09-CHPC-107/
C09-CHOT-107/C09-CHST-107/
C09-EC-107/C09-EE-107/
C09-IT-107/C09-MET-107/
C09-M-107/C09-MNG-107/
C09-PET-107/C09-TT-107/
C09-RAC-**107**

3005

BOARD DIPLOMA EXAMINATION, (C-09)

JUNE—2019

FIRST YEAR (COMMON) EXAMINATION

MACHINE DRAWING

Time : 3 hours]

[Total Marks : 60

PART—A

5×4=20

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

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

(3) Take suitable scale whenever required.

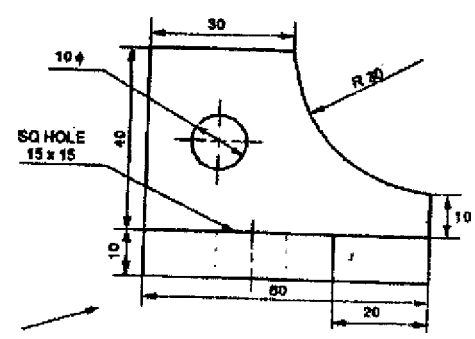
(4) All dimensions are in mm.

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

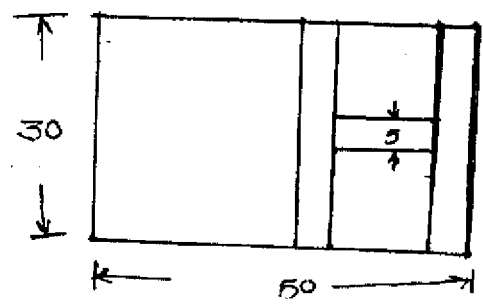
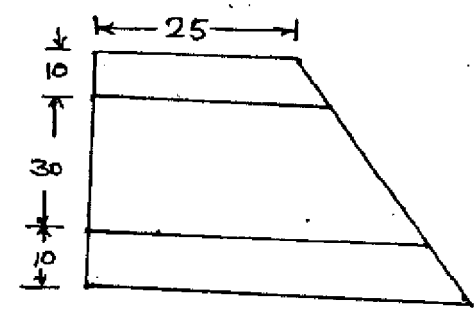
“GOVERNMENT POLYTECHNIC”

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2. Redraw the following figure and dimension it as per SP : 46-1988 :



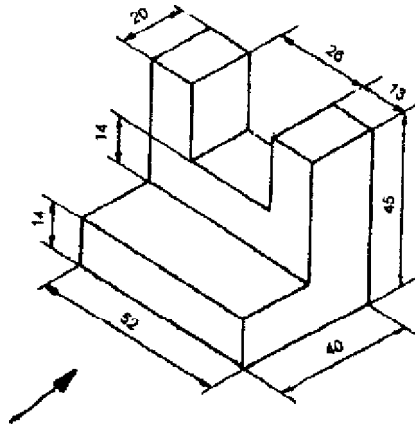
3. Draw the auxiliary view of the sloping surface of the object shown in the following figure :



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4. Draw the top view of the following pictorial drawing in first angle :

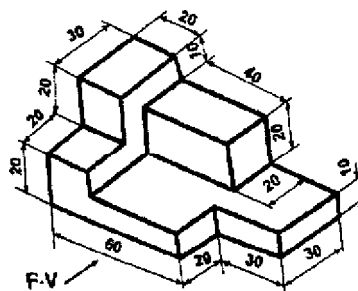


PART—B

10×4=40

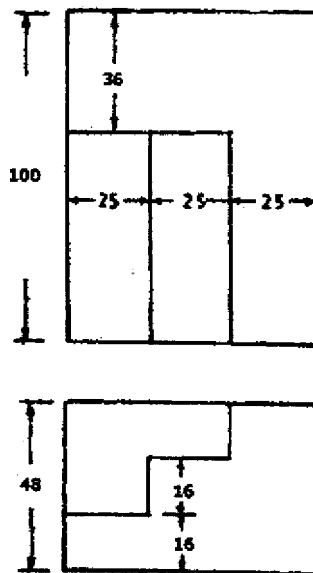
- Instructions :** (1) Answer *any four* question.
(2) Each question carries **ten** marks.
(3) Take suitable scale whenever required.
(4) All dimensions are in mm.

5. Draw an involute of a hexagon of side 20 mm. Draw a normal and a tangent to the curve at a point 60 mm from the center of the hexagon.
6. A hexagonal prism of side of base 25 mm, axis 50 mm long has one of its rectangular faces parallel to the ground. Its axis is perpendicular to the VP and 35 mm above the ground. Draw its projections when near end is 20 mm in front of VP.
7. Draw the front, top and right-side view of the following object shown below :



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8. Draw the isometric view of the object from the following orthographic views :



9. A cylinder of 40 mm diameter and 80 mm long is resting on one of its base on HP. It is cut by a section plane perpendicular to VP and inclined at 50° to HP and passing through a point on the axis 15 mm from the top end. Draw front view, sectional top view and true shape of the section.
10. A pentagonal prism of side of base 20 mm and 50 mm, stands vertically on its base, with a rectangular face perpendicular to VP. A cutting plane perpendicular to VP and inclined at 60° to the axis passes through the edge of the top base of the prism. Develop the lower portion of the lateral surface of the prism.

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