BRAINSE AN GHAIRMOIDEACHAIS

CERTIFICATE EXAMINATIONS FOR DAY VOCATIONAL COURSES, 1963.

MECHANICAL DRAWING.

Thursday 20th June, - 10 a.m. to 12.30 p.m.

INSTRUCTIONS

1. Not more than four questions may be attempted; two of these must be selected from Section 1 and two selected from Section II.
2. The number of the question must be distinctly marked by the side of each answer.
3. Work on one side of the paper only.
4. All questions carry equal marks; a maximum of 5 marks will be awarded for accuracy and neatness of arrangement in respect of each question.
5. Examination number must be distinctly marked on each sheet of paper used.

SECTION I.

(Answer either 1 (A) or 1 (B), and any one other question from this Section).

1(A). The drawing at Fig. 1A represents a woodwork joint. Make a full size drawing of the assembled joint showing:-

(a) an elevation looking in the direction of arrow X,
(b) an end elevation looking in the direction of arrow Y,
(c) a plan view.

All dimensions required for making the joint should be shown on the completed drawing.

1(B). The drawing at Fig. 1B represents a metalwork project.
Draw free-hand on the $\frac{1}{8}$" squared paper supplied, the following views of the project in good proportion and correct projection:-

(a) an elevation,
(b) an end elevation,
(c) a plan.

Show by means of properly drawn dimension lines the number of dimensions you would require in order to make the project. (It is not necessary to give actual dimensions.)

2. The elevation and plan of a clock case are shown at Fig. 2.
Draw full size an ISOMETRIC or an OBLIQUE projection of the clock case.

3. The elevation of a regular hexagonal based pyramid is shown at Fig. 3.
The pyramid is cut by an inclined plane at an angle of 30° as indicated. Draw full size:-

(a) the elevation of the truncated portion,
(b) the side elevation of the truncated portion looking in the direction of arrow X
(c) a plan projected from (a),
(d) the true shape of the section.

Index correctly on each view the corners cut by the inclined plane.

4. The single line outline of a bed-end lamp shade is shown at Fig. 4.
Draw the development of back and semi-conical surface of this fitment.

SECTION II.

(Answer two questions from this Section)

5. Construct a scale of $1\frac{1}{4}$ inches representing one foot, to read up to six feet.
Using this scale draw the pillar box elevation shown at Fig. 5.

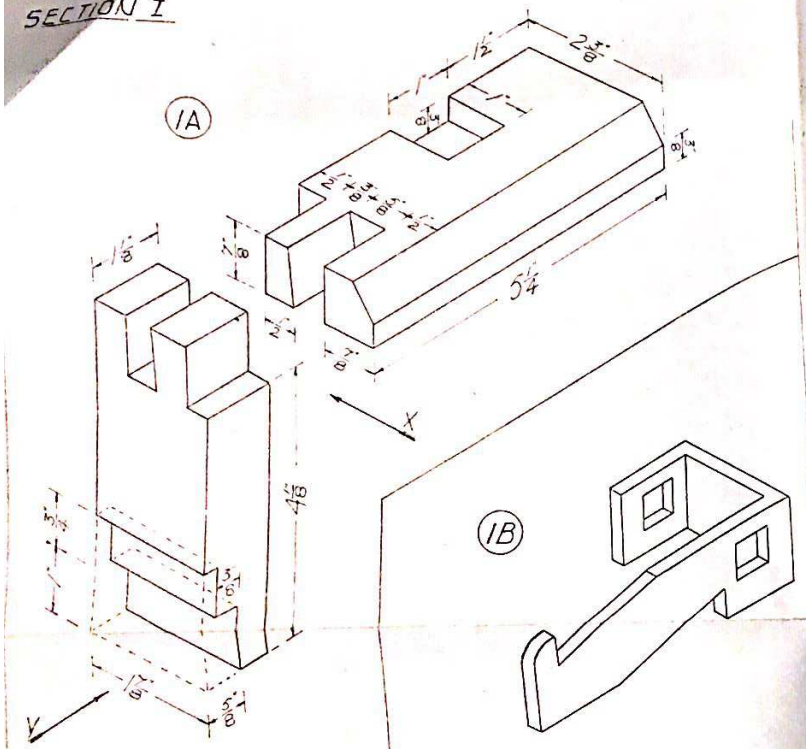
6. A piece of wire is bent to the shape and dimensions indicated in Fig. 6.

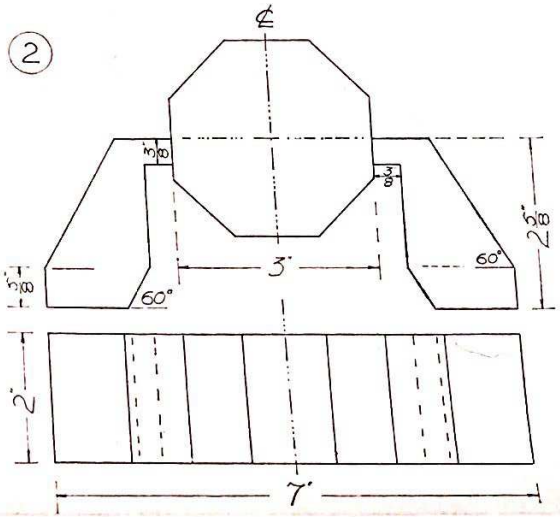
Another piece of the same wire 9 inches long has to be bent to a similar shape. Draw this enlarged shape using proportional division of lines to obtain the correct dimensions.

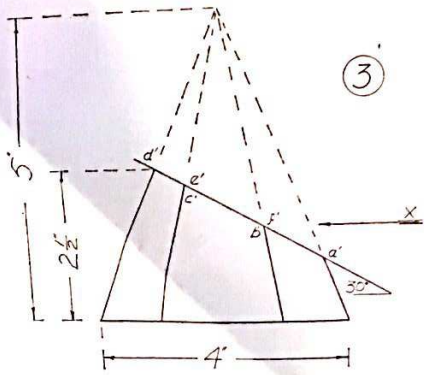
7. A balanced blade which revolves in a clockwise direction is shown at Fig. 7. Draw the blade full size in the position shown. Assume the blade is revolved $\frac{2}{3}$ of a complete revolution and then re-draw the blade in its new position.

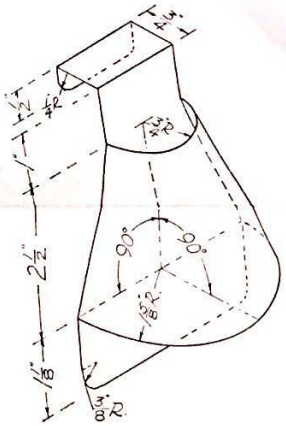
8. A design based on four equal circles inscribed in a circle, is shown at Fig. 8. Draw the design to the dimensions given. All construction lines must be clearly shown.

SECTION I









SECTION II