

AN ROINN OIDEACHAIS.

AN BRAINSE GAIRM-OIDEACHAIS.

CERTIFICATE EXAMINATIONS

for
DAY VOCATIONAL COURSES, 1956.

MECHANICAL DRAWING.

Thursday, 14th June—10 a.m. to 12.30 p.m.

INSTRUCTIONS.

1. Either 1A or 1B of the first question in Section A is compulsory.

If 1B is selected, the sketching must be done on the squared paper provided.

2. Not more than four questions may be attempted, two of these must be selected from Section A and two selected from Section B. All attempted questions, except 1B, may be drawn on one sheet of paper.

3. A maximum of ten marks will be awarded for accuracy and neatness of arrangement.

4. The number of the question must be distinctly marked by the side of each answer.

5. Work on one side of the paper only.

6. Examination Number must be distinctly marked on each sheet of paper used.

SECTION A.

1A. The drawing represents a Woodwork Exercise. Make a dimensioned drawing, giving a front elevation, end elevation and plan of the *assembled joint*. Drawing should be full size and all essential dimensions should be shown.

[25 marks.]

Or,

1B. The figure represents a Metalwork Exercise. Make a freehand workshop sketch of the object in *good proportion*, showing a front elevation, end elevation and plan. All bends are at right angles. All dimensions necessary for the making of the exercise should be shown. Compasses must not be used.

[25 marks.]

2. The projections of a square based pyramid resting on a square based prism are shown in Fig. 2. Draw the given views and also (a) an elevation looking in direction of arrow, and (b) the true shape of the triangular face A.O.B. Indicate positions of A.O.B. in *all three views*.

[25 marks.]

3. Two views of a lamp shade are shown in Fig. 3. Draw, one quarter full size, the development of the surfaces, assuming that the covering material is cut out in *one piece*.

[25 marks.]

4. Make an oblique or isometric projection of the solid shown in Fig. 4.

[25 marks.]

SECTION B.

5. Construct a scale of 1 inch to 1 perch reading to yards (assume Irish measure—7 yd. to a perch). Using this scale draw the plan of a plot of ground as shown in Fig. 5. Measure and write in the length of the side AB to the nearest yard.

[20 marks.]

6. Draw, full size, the outline of the diagram shown in Fig. 6. Show all necessary construction lines. (circles touching and intersecting).

[20 marks.]

7. Draw, full size, the design shown in Fig. 7. The sides marked X are equal in length. Show all necessary construction lines.
(regular octagon in square).

[20 marks.]

8. The perimeter of a triangle is 8 in. and its sides are in the proportion of 2, 3, 4. Construct this figure.

Construct a square having its diagonal five-eighths of the total length of the perimeter of the triangle.
(division of lines).

[20 marks.]

