# AN ROINN OIDEACHAIS.

AN BRAINSE GAIRM-OIDEACHAIS.

CERTIFICATE EXAMINATIONS

for

DAY VOCATIONAL COURSES, 1950.

## MECHANICAL DRAWING.

Tuesday, 27th June, 10-12.30 p.m.

#### INSTRUCTIONS:

- (a) Not more than four questions may be attempted, two of these must be selected from Section A and two selected Draw questions from Section A on one sheet of paper and questions from Section B on a separate sheet.
- (b) A maximum of 10 marks will be awarded for accuracy and neatness of arrangement.
- (c) The number of the question must be distinctly marked by the side of each answer.
  - (d) Work on one side of the paper only.

### SECTION A.

- Draw full 1. Fig. 1 shows a pictorial view of a bracket. size from this view:-
  - (a) a front elevation looking in direction of arrow A;
  - (b) an end elevation looking in direction of arrow B;
  - (c) a plan projected from the front elevation.

Insert 5 of the main dimensions.

2. Fig 2 shows elevation and plan of a sphere and an equilateral triangular prism. Reproduce these two views full size and show (looking in direction of arrow) a section end elevation cut by the vertical plane AA.

- 3. Convert the orthographic drawing, Fig. 3, into a pictorial drawing using either oblique or isometric projection. Full size.
- 4. Draw full size the development of the two pieces of the spent match holder shown in Fig. 4.

Back plate is flat and the front semi-conical. (Development of cone.)

#### SECTION B.

- 5. Draw full size the outline of the front of the try square as shown (Fig. 5). Constructions to be shown. (Angles in a semi-circle.)
- 6. Draw the geometrical design Fig 6. Bands are all 4" wide.

(Outline is based on an equilateral triangle.)

7. Fig 7 shows a part of an ornamental iron gate. Draw this view full size. Show clearly all construction lines. No marks given for guess work.

(Lines and circles touching.)

- 8. (a) Construct a scale, 1"=100 feet, to read up to 500 feet by units of 25 feet.
  - (b) Draw the triangular plot of ground ABC (Fig. 8) to this scale (1"=100 feet).
  - (c) Construct a right-angled triangle to the same scale, having the same base AB and to have the same area as the triangle ABC.
  - (d) Measure the hypotenuse of the new triangle. (Properties of equal triangles.)