ROINN OIDEACHAIS

(Department of Education).

BRAINNSE AN MHEADHON-OIDEACHAIS (Secondary Education Branch).

LEAVING CERTIFICATE EXAMINATION, 1937.

PASS.

MECHANICAL DRAWING AND DESIGN. BOYS AND GIRLS.

TUESDAY, 22nd JUNE-AFTERNOON 4 TO 6 P.M.

BOYS ONLY.

NOTE.—The use of mathematical instruments, protractors, scales, and set squares, and drawing-boards is allowed.

All construction lines must be clearly shown.

The number of the question must be distinctly marked by the side of each answer. Both sides of the paper may be used.

Questions marked (*) have accompanying diagrams.

The number of marks assigned to each question is stated in brackets.

The number of marks assigned to each question is stated in brackets after the question.

Q. 1. Within a rectangle 5 inches by 2 inches, draw with pencil, pen or brush the word paorais in Gaelie letters one inch high. The middle of the word is to coincide with the centre of the rectangle. The whole word is to be spaced out and at least one letter completed.

Within a rectangle 5 inches by 2 inches, draw with pencil, pen, or brush the word PATRICK in Roman letters one inch high. middle of the word is to coincide with the centre of the rectangle. The whole word is to be spaced out and at least one letter completed.

Q. 2. Construct a scale of 1 inch to 1 foot to show feet and inches and read 6 feet. The scale is to be neatly lettered and numbered.

- *Q. 3. A plan and elevation of a glazed door is given. Draw to a scale of 1 inch to 1 foot the plan and elevation when the door is open at an angle of 45 degrees as shown by the plan on the diagram.
- *Q. 4. The diagram is the plan of the handle of a water tap. The large circle and arcs are each $\frac{1}{2}$ inch radius and the small circles are each $\frac{1}{2}$ inch diameter. Draw full size to the dimension shown. [11,]
- *Q. 5. A plan and elevation of an electric bowl-fire are given. To quarter scale, draw a new plan and elevation when the face of the bowl is vertical and inclined at 45° to the vertical plane.
- Q. 6. Draw a design for a Christmas or Easter Greeting Card not to exceed 5 inches by $3\frac{1}{2}$ inches.

A simple symbol or device or words appropriate to the season and agreeably placed, might form the design. The planning of the whole design should be suggested and a small portion should be finished in black and white or in two colours.

GIRLS ONLY.

NOTE.—The use of mathematical instruments, protractors, scales, T- and set squares, and drawing-boards is allowed.

All construction lines must be clearly shown.

The number of the question must be distinctly marked by the side of each answer. Both sides of the paper may be used.

Questions marked (*) have accompanying diagrams.

The number of marks assigned to each question is stated in brackets after the question.

Q. 1. Within a rectangle 5 inches by 2 inches, draw with pencil, pen, or brush the word maine in Gaelic letters one inch high.

The middle of the word is to coincide with the centre of the

rectangle.

The whole word is to be spaced out and at least one letter completed.

Or

Within a rectangle 5 inches by 2 inches, draw with pencil, pen or brush the word MARY in Roman letters one inch high.

The middle of the word is to coincide with the centre of the rectangle. The whole word is to be spaced out and at least one letter completed. [8]

- Q. 2. Construct a scale of $1\frac{1}{2}$ inch to 1 foot to show feet and inches and read 2 feet. The scale is to be neatly lettered and numbered.
- *Q. 3. A plan and elevation of a small hinged window is given. Draw to a scale $1\frac{1}{2}$ inch to 1 foot the plan and elevation, when the window is open at 45 degrees as shown by the plan in the diagram.

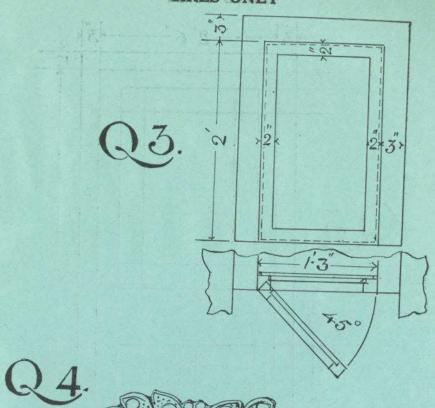
 [10]
- *Q. 4. Draw full size to the dimension shown, the geometric portion of the given figure. The small circles may be indicated by freehand drawing. [12]

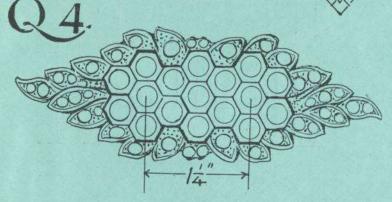
*Q. 5. The elevation of a clockface is given.

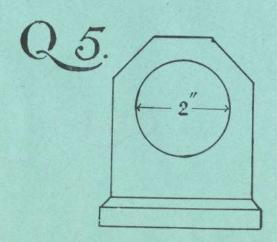
Draw full size to the dimension shown a new elevation of the circular portion of the clockface when its plane is vertical and inclined at 30° to the vertical plane. [14]

Q. 6. Draw a design for a Christmas or Easter Greeting Card not to exceed $\bf 5$ inches by $\bf 3\frac{1}{2}$ inches. A simple symbol or device or words appropriate to the season and agreeably placed might form the design. The planning of the whole design should be suggested and a small portion should be finished in black and white or in two colours. [22]

GIRLS ONLY







BOYS ONLY

