## AN ROINN OIDEACHAIS

(Department of Education).

LEAVING CERTIFICATE EXAMINATION, 1943.

## MECHANICAL DRAWING AND DESIGN.

Course B .- Honours.

#### BOYS AND GIRLS.

THURSDAY, 17th JUNE.-Morning, 11.15 to 1.15 P.M.

#### BOYS ONLY.

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

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.

 Only THREE questions to be attempted, the questions may be taken from SECTION A, or SECTION B.

All questions carry equal marks.

#### SECTION A.

(The questions in this Section must be solved accurately with the aid of drawing instruments. All lines used in constructions should be clearly shown.)

- \*1. An outline dimensioned diagram of a Pediment is given. Draw the diagram to the scale of  $1\frac{1}{2}$  inches to 1 foot. An ordinary divided rule may be used as a scale.
- \*2. The diagram gives the plan and elevation of a hexagonal nut. Draw, full-size, a new elevation on X ' Y ' .
- \*3. The diagram represents a Hinge. Draw the diagram full-size to the dimensions indicated.
- \*4. Copy the Celtic ornament shown in the diagram, full-size to the dimensions indicated.

### SECTION B.

- \*5. Draw a design for the lid of an octagonal Powder box, to occupy a regular octagon of 2 inches side. The design must be based on the plant (Arbutus), illustrated in the diagram. (Colour may be used in answering this question.)
- 6. Draw a design for a poster to occupy a rectangle  $6\frac{1}{2}$  inches by  $4\frac{1}{2}$  inches, to be printed in black and white on a coloured ground, or in two colours on a white ground. The poster is to advertise "Pottery." (Colour may be used in answering this question.)
- 7. Draw a design for a repeating circular border, 3 inches wide, the radius of the outer circle to be 4½ inches. The design may be based on Celtic, Floral, or on Geometrical ornament. One repeat should be completed in two colours or in black and white, and the main lines of the adjacent repeats shown.
- 8. Make a design suitable for a Bookmark. Your design should be rectangular in shape, 7 inches by 2 inches. (Colour may be used in answering this question.

#### GIRLS ONLY.

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

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.

Only THREE questions to be attempted. The questions may be taken from SECTION A, or SECTION B.

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#### SECTION A.

(The questions in this Section must be solved accurately with the aid of drawing instruments. All lines used in constructions should be clearly shown.)

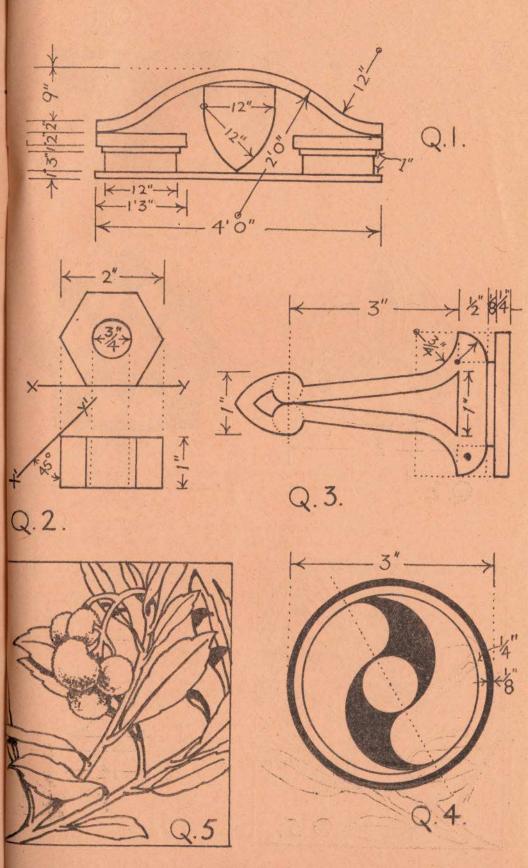
\* 1. An ornamental border for embroidery is shown on the diagram. Draw two repeats of the border according to the figured dimensions.

- \* 2. Copy the pattern shown in the diagram to the dimensions indicated.
- \*3. Draw the given Inlay pattern by inscribing squares within a circle.
- \* 4. An outline dimensioned diagram of a Garden-vase is given. Draw the diagram full-size to the dimensions indicated.

#### SECTION B.

- \*5. Draw a design for the lid of an octagonal Powder box, to occupy a regular octagon of 2 inches side. The design must be based on the plant (Arbutus), illustrated in the diagram. (Colour may be used in answering this question.)
- 6. Draw a design for a poster to occupy a rectangle  $6\frac{1}{2}$  inches by  $4\frac{1}{2}$  inches, to be printed in black and white on a coloured ground, or in two colours on a white ground. The poster is to advertise "Pottery." (Colour may be used in answering this question.)
- 7. Draw a design for a repeating circular border, 3 inches wide, the radius of the outer circle to be  $4\frac{1}{2}$  inches. The design may be based on Celtic, Floral, or on Geometrical ornament. One repeat should be completed in two colours or in black and white, and the main lines of the adjacent repeats shown.
- 8. Make a design suitable for a Bookmark. Your design should be rectangular in shape, 7 inches by 2 inches. (Colour may be used in answering this question.)

# BARSUIN AMAIN - BOYS ONLY.



# δεΔRRCAILÍ AMAIN - GIRLS ONLY

