#### ROINN OIDEACHAIS AN

(Department of Education).

BRAINNSE AN MHEADHON-OIDEACHAIS (Secondary Education Branch).

LEAVING CERTIFICATE EXAMINATION, 1935.

## HONOURS.

# MECHANICAL DRAWING AND DESIGN. BOYS AND GIRLS.

WEDNESDAY, 19th JUNE .- AFTERNOON, 4 TO 6 P.M.

### BOYS 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. Construct a diagonal scale of 2.25 inches to 30 feet; and 10 then use it to draw the given elevation of a building.
- \*Q. 2. Copy the given diagram of a metal cover to the dimensions shown.
- \*Q. 3. Draw, to a scale of 1 inch to 1 foot the elliptic arch shown in diagram.
- \*Q. 4. The diagram shows a plan and elevation of a Petrol Pump. Draw a new elevation of the pump on a vertical plane represented in plan by X1 Y1 which makes equal angles with base edges.

Scale 3 inches to 1 foot. [12]

\*Q. 5. The diagram of a door with leaded light is given.

Draw, to a scale of  $\frac{3}{4}$  inch to 1 foot a new elevation of the door when it is open at an angle of 30° as shown on plan. 11]

Q. 6. Draw a design for a Show Card to occupy a rectangle 51 inches by 3 inches to be printed in black and white on a coloured ground or in two colours on a white ground. The design is to include the words "DÓIS MÓIN" or "BURN TURF" in bold letters.

State the process by which your design could be reproduced.

[22]

### 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. Copy the triangular tile shown in diagram, using the figured dimensions.
- \*Q. 2. The diagram shows a circular table mat. Draw full size to the dimensions indicated.
- \*Q. 3. Draw, with instruments, the geometrical basis on which the given repeating pattern is constructed. It will be sufficient to complete half the diagram.
- \*Q. 4. The elevation of a circular Sporting Cup is given. Draw the elevation full size to the dimensions indicated. Show how you would adapt and project two repeats of the given border on to the band A.
- Q. 5. Draw two parallel lines  $\mathbf{1_2^{\perp}}$  inches apart. Construct a rhombus of 2 inches side having two of its sides in these two parallel lines. Within the rhombus inscribe a square. [8]
- Q. 6. Draw a design for the top of a circular Hat Box 1 foot 3 inches in diameter. The design may be based on Celtic or Floral ornament and the word 11 ACA1 or HATS is to form an important feature of the design. Your design should be suitable for Modelled Leather, Stencilling, Inlay, or Painted Ornament.

State the material for which your design is suited.

Scale 1 full size.

GIRLS ONLY



