

AN ROINN OIDEACHAIS

(Department of Education).

BRAINSE AN MHEAN-OIDEACHAIS

(Secondary Education Branch).

LEAVING CERTIFICATE EXAMINATION, 1926.

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, T and set squares, and drawing-boards is allowed.

ALL questions to be attempted.

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.

Q. 1. At the top of your drawing-paper, between horizontal lines, half an inch apart, draw the words:—

NA SÉASÚIR in Gaelic letters.

Or,

THE SEASONS in Roman letters.

*Q. 2. Convert the given scale into a diagonal scale reading inches.

*Q. 3. The diagram represents the crank-wheel of a bicycle. Draw full size according to the figured dimensions. The point A is half way between the centre and circumference of outer circle.

It will be sufficient to complete half the diagram.

*Q. 4. The plan and elevation of a steps are given. Draw an elevation of the steps on a vertical plane making 40° with the line XY.

*Q. 5. The plan of a square-headed bolt with conical shank is given. Draw an elevation of the bolt, full size, when the axis (which is horizontal) is inclined at an angle of 45° with the line XY.

Q. 6. Make a design to fill a quadrant (quarter circle) of seven inches radius standing on its angular point.

The design may be based on Celtic ornament or composed of geometric forms and free-drawn forms, or of natural forms ornamentally treated.

State the material or manufacture for which your design is suited.

Or,

Design in black and white only a repeating Floor Pattern suitable for inlaid wood, inlaid marble, or inlaid linoleum. Each repeat to measure at least three inches.

One repeat must be completed and two others indicated. State the material for which your design is intended.

GIRLS ONLY.

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

ALL questions to be attempted.

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.

Q. 1. At the top of your drawing-paper, between horizontal lines, half an inch apart, draw the words:—

nA SÉASÚIR in Gaelic letters.

Or,

THE SEASONS in Roman letters.

*Q. 2. An embroidered pattern composed of circles and semi-circles is given. Draw full size according to the dimensions given.

*Q. 3. The given figure represents an inlaid linoleum pattern. Draw full size, adhering strictly to the figured dimension.

*Q. 4. The pattern of a table-centre is given. Draw full size to the dimensions shown, the points of the star being at the angles of a regular heptagon inscribed in a circle.

*Q. 5. The elevation of a square trinket-box is given. The lid has four sloping faces, which all make the same angle (30°) with the horizontal. Draw the plan and show the panelling on plan of one sloping face of lid.

The true shape of one sloping face of lid is given.

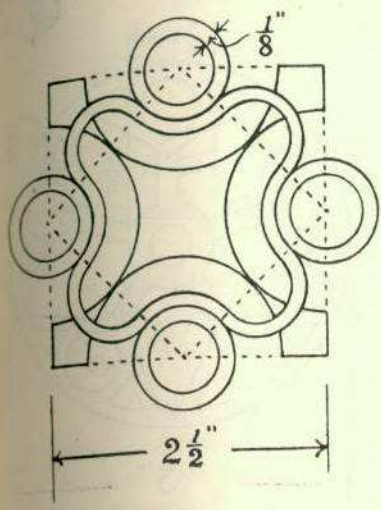
Q. 6. Draw a design for a circular border two and a half inches wide; the radius of the outer circle to be $4\frac{1}{2}$ inches. The design may be based on Celtic ornament or composed entirely of geometric forms, or of geometric and free-drawn forms combined. It will be sufficient to finish half the border.

Or,

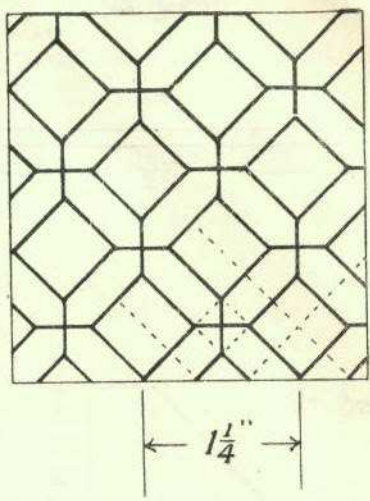
Make a design for a tea-cosy of semi-circular shape, 9 inches diameter. The design may be composed of Celtic ornament or natural forms ornamentally treated. State the material and method of execution by which your design could be suitably carried out.

GIRLS ONLY.

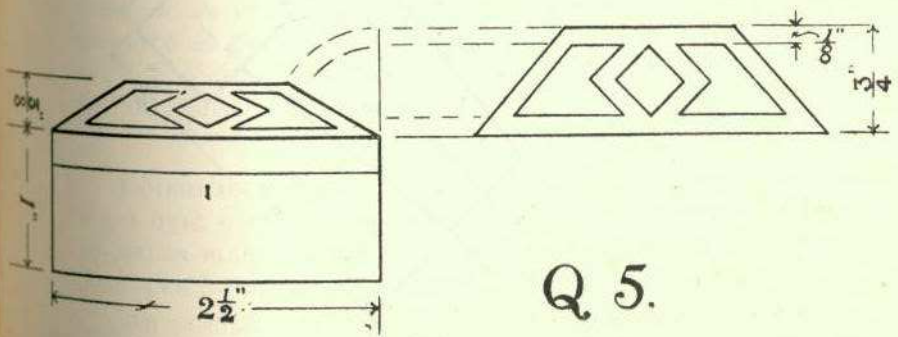
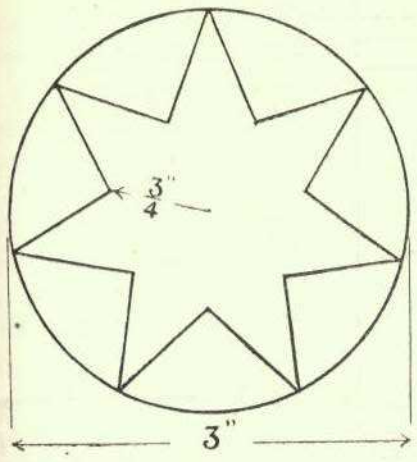
Q. 2.



Q. 3.

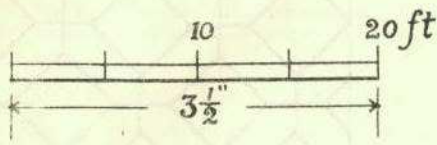


Q. 4.

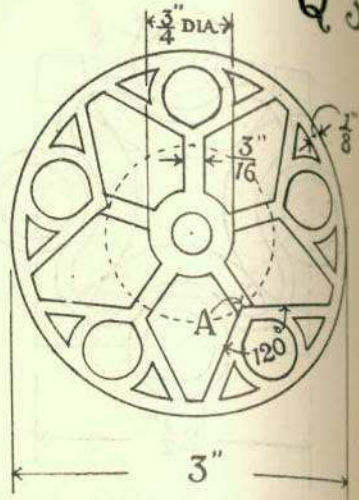


Q. 5.

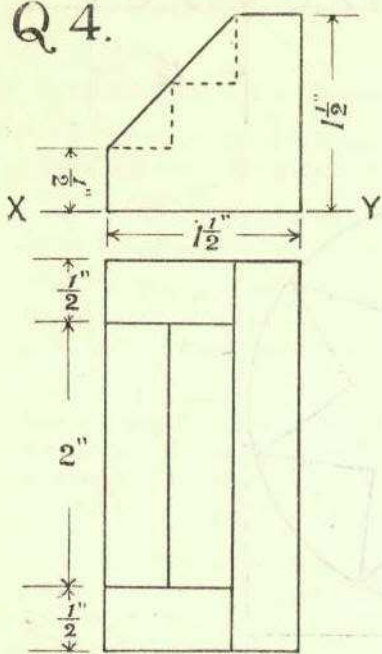
Q 2.



Q 3



Q 4.



Q 5.

