5736

AN ROINN OIDEACHAIS M.118

LEAVING CERTIFICATE EXAMINATION, 1980

TECHNICAL DRAWING - COMMON LEVEL - PAPER II

FRIDAY, 20 JUNE, 9.30 - 12.00

N.B. ANSWER EITHER SECTION A OR SECTION B

SECTION A (ENGINEERING)

ALL DIMENSION ARE IN MILLIMETRES

INSTRUCTIONS

(a) All questions to be attempted.
(b) Drawings and sketches should be in pencil unless otherwise stated.
(c) Where dimensions are omitted they may be estimated.
(d) Credit will be given for neat orderly presentation of work.
(e) Candidates should work on one side of the paper only.
(f) The Examination Number should be written on each drawing sheet used.

1. Details of a LENS HOLDER are given in Fig. 1, with the parts list tabulated below.

Index	Part	No. Regd.
1.	Base	1.
2.	Bracket	1.
3.	Ring	1.
4.	Adjusting Screw	1.
5.	Retainer	1.
6.	Nut	1.

(a) Assemble the parts with face C of part 1 aligned with face C of part 2 and draw, full size, in first angle projection the following views.

(i) A sectional elevation along the axis A-A of the base.
(ii) An end elevation in the direction of the arrow B.

(b) Insert the following on your drawing:-

(i) LENS HOLDER.
(ii) Projection symbol.
(iii) Six leading dimensions. (110 marks)

2. An exploded view of an anti-vibration device is shown in Fig. 2.

(a) Sketch freehand the following views of the assembly.

(i) A sectional elevation, looking in the direction of arrow X.
(ii) A plan view projected from (i).

The views should be sketched in either first or third angle projection. The sketch should be in good proportion to the dimension given and be freehand on the plain drawing paper supplied.

(b) Title the sketch ANTI-VIBRATION DEVICE and insert the projection symbol. (40 marks)

3. (a) Two views of a casting are shown in Fig. 3.
Trace in ink, on the tracing paper provided, a sectional elevation of the casting. The section should be taken at the cutting plane B-B and viewed in the direction of the arrows.

OR

(b) An assembly drawing of a pulley and bracket is shown in Fig. 4.
Make fully dimensioned working drawings of the pulley (PART 1) and the pin (PART 2). The dimensions for the drawings should be taken from the scale provided.
The drawings should be full size in orthographic projection. The number and choice of views are at the candidate's discretion but must be sufficient to include a complete shape description of the components.

(50 marks)

SECTION B (BUILDING)

INSTRUCTIONS

(a) Answer four questions.
(b) All questions carry equal marks.
(c) Construction lines must be shown on all solutions.
(d) Write the number of the question distinctly on the answer paper.
(e) First or third angle projection may be used.
(f) All measurements are given in millimetres.

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1. Draw an isometric view of the portion of the stone sill shown in elevation and plan in Fig. 1. Scale 1:5.

2. Fig. 2 shows the elevation and plan of an octagonal kiosk with base and roof. Make a perspective drawing of the structure when the station point (spectator) is as shown, the picture plane 8000 from the station point and the horizon line 4000 above the ground. Scale 1:100.

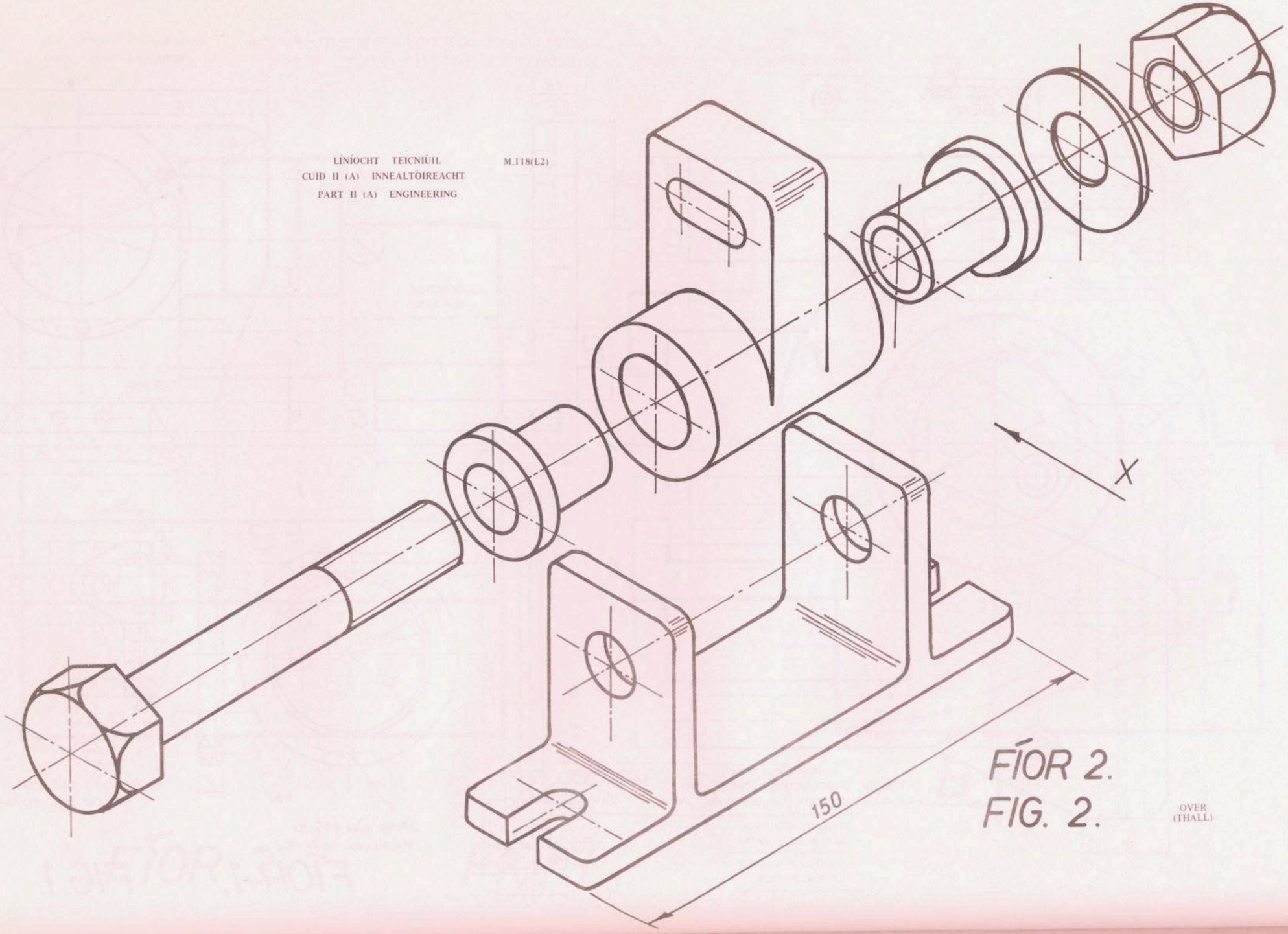
3. The elevation and sectional plan of a window ope are shown in Fig. 3. Draw the given views and show a development of surfaces A, B and C. Scale 1:10.

4. Fig. 4 shows the plan of three lean-to roof surfaces. All the surfaces have a pitch of 35°. Draw the plan and project the elevation. Show the development of surface B and find the dihedral angle between surfaces A and B. Scale 1:100.

5. The elevation and end-view of the outline of a building are shown in Fig. 5. Draw the given views, project the plan and show the shadows cast when the direction of the light is 45° in elevation and 45° in plan from the left-hand side. Scale 1:100.

6. Fig. 6 shows the cross-section through a parabolic concrete shell roof penetrated by a tapering square chimney stack. Draw the given cross-section and develop the surfaces of the chimney stack above roof level. Scale 1:10.

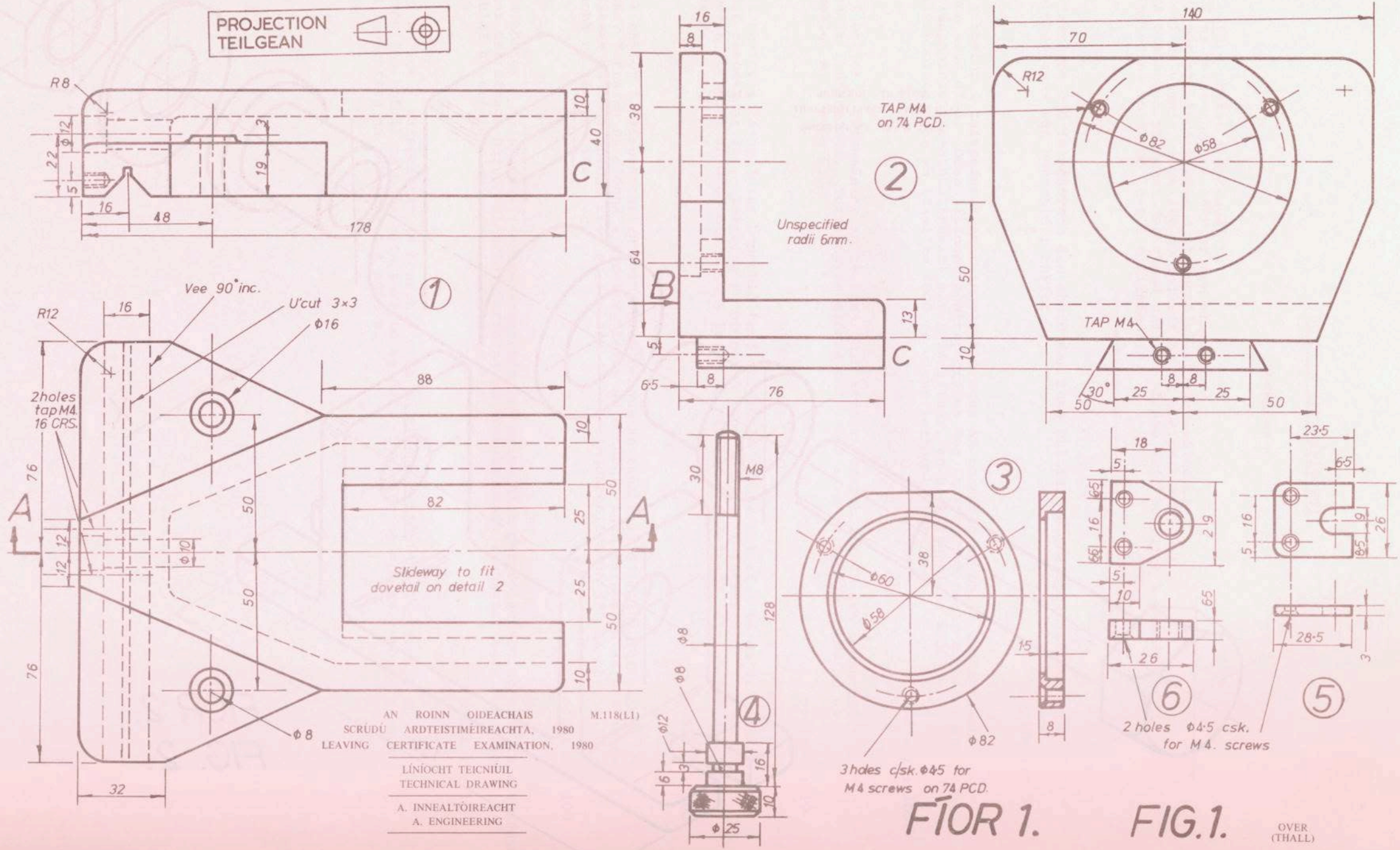
7. Fig. 7 shows the plan and sectional elevation of a hopper whose sides are splayed at 60°. Draw the given views and find the true shape of surfaces A and B. Scale 1:5.



FÍOR 2.
FIG. 2.

OVER
(THALL)

5'236



AN ROINN OIDEACHAIS M.118(L1)
SCRÚDÚ ARDTEISTIMÉIREACHTA, 1980
LEAVING CERTIFICATE EXAMINATION, 1980

LÍNÍOCHT TEICNIÚIL
TECHNICAL DRAWING

A. INNEALTÓIREACHT
A. ENGINEERING

FÍOR 1. FIG.1.

OVER
(THALL)

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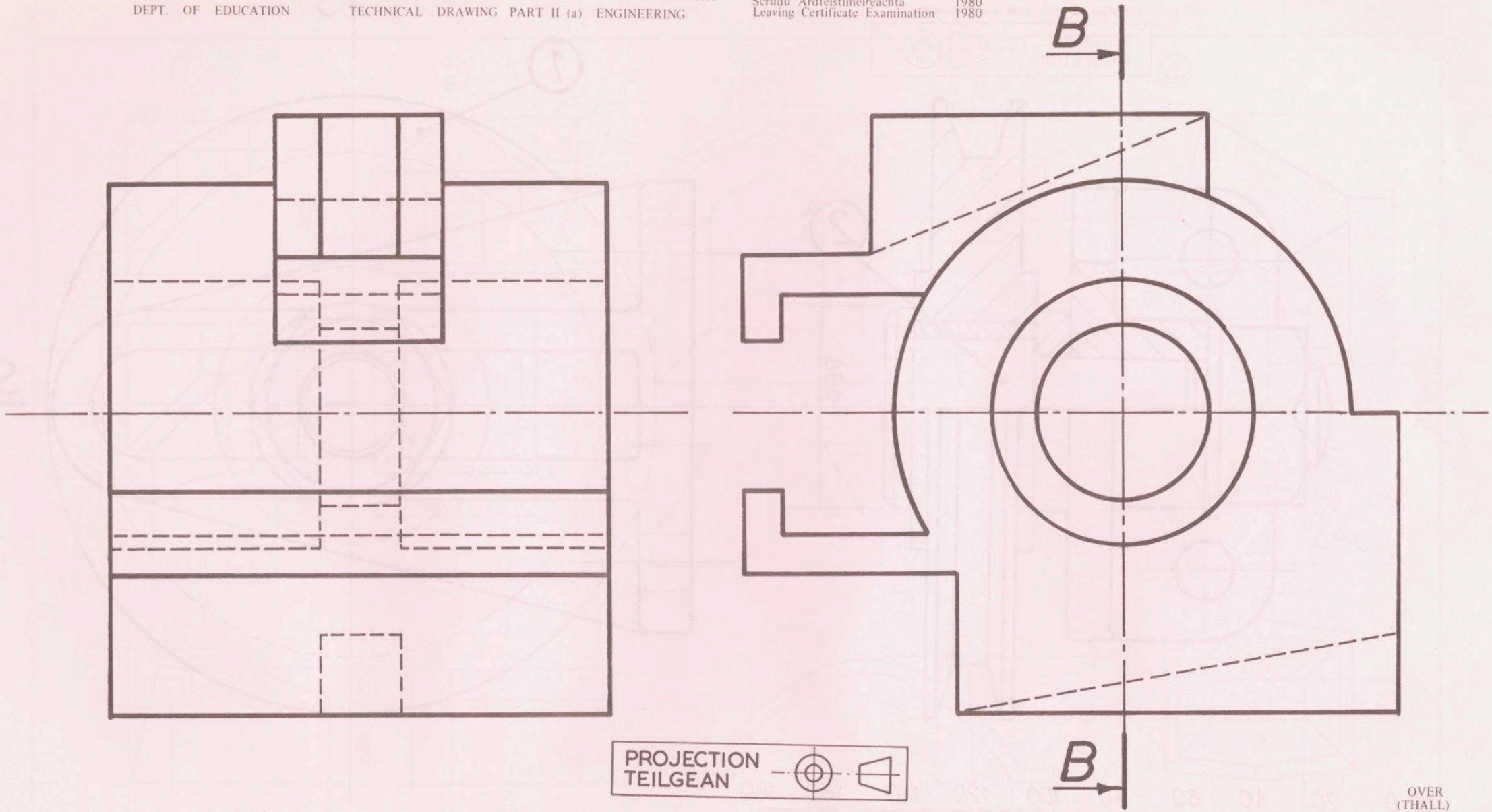
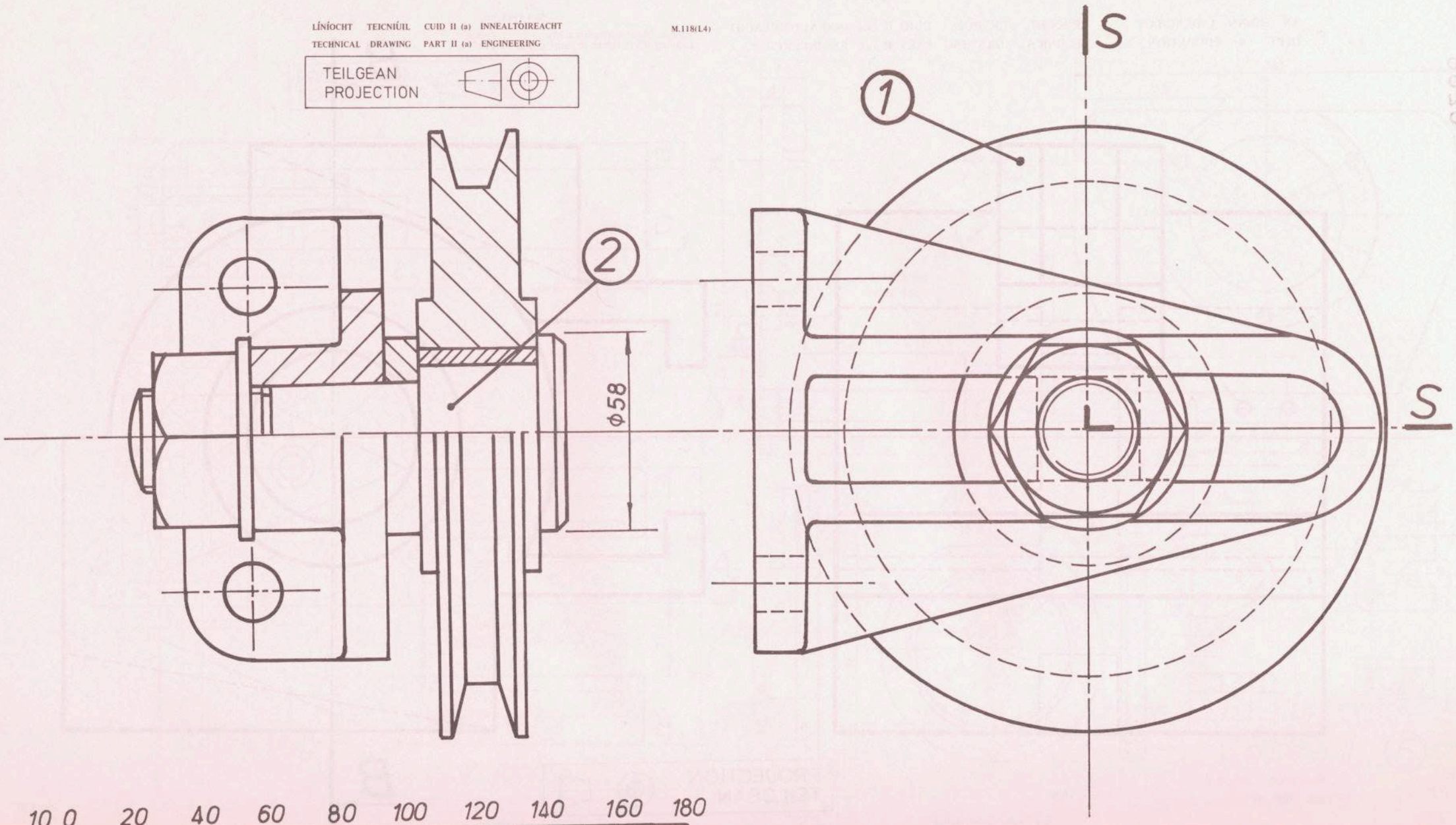


FÍOR 3. FIG. 3.

OVER
(THALL)

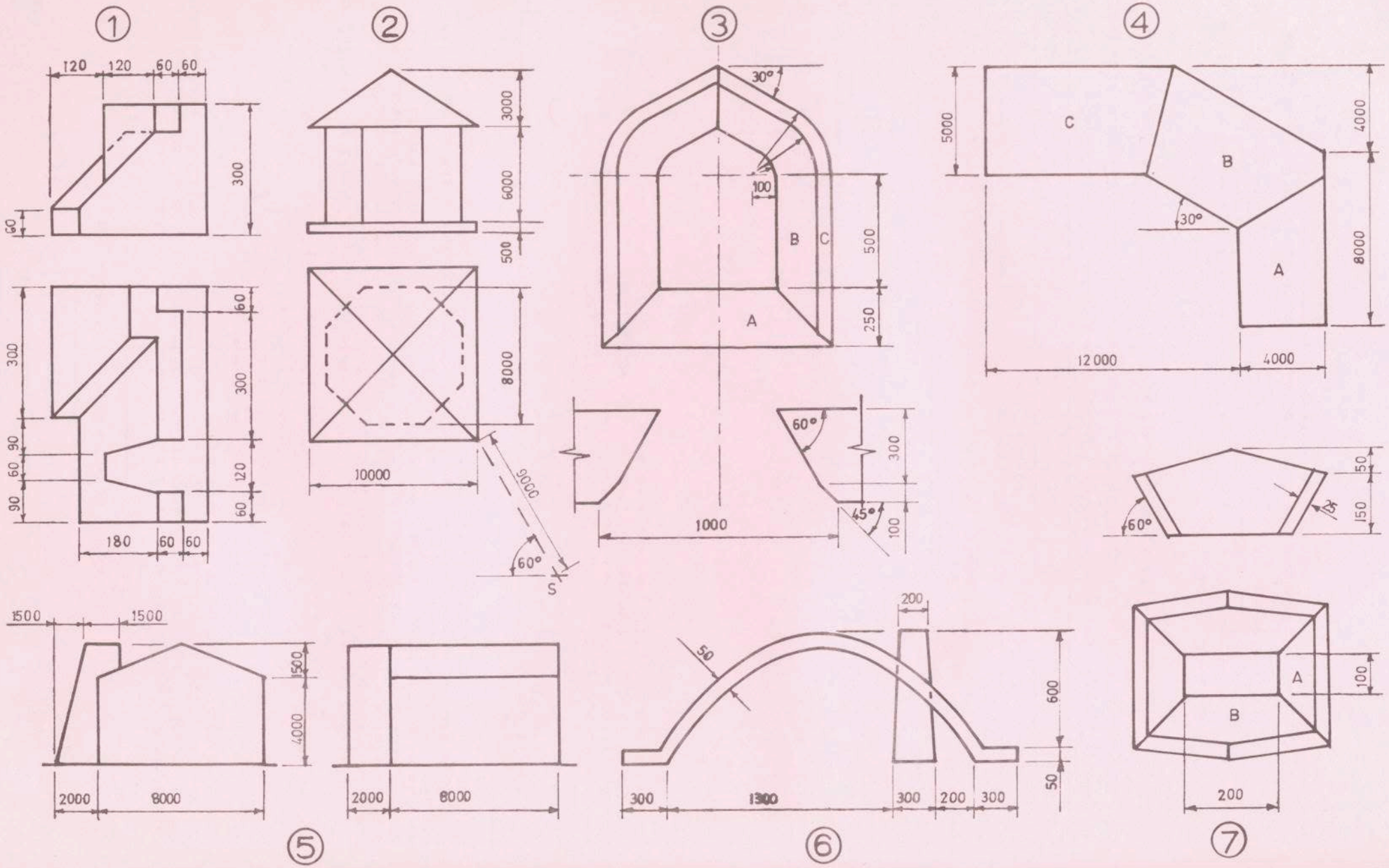
TEILGEAN
PROJECTION



FÍOR 4. FIG. 4.

OVER
(THALL)

AN ROINN OIDEACHAIS — LÍNÍOCHT TEICNIÚIL — CUID II (b) — Scrúdú Ardteistiméireachta 1980

DEPT. OF EDUCATION — TECHNICAL DRAWING — PART II (b) — Leaving Certificate Examination 1980

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