

AN ROINN OIDEACHAIS
(Department of Education).

BRAINNSE AN MHEADHON-OIDEACHAIS
(Secondary Education Branch).

INTERMEDIATE CERTIFICATE EXAMINATION, 1937.

ELEMENTARY MATHEMATICS (Arithmetic).
FOR GIRLS ONLY.

FRIDAY, 18th JUNE.—MORNING, 10 A.M. TO 12 NOON.

Six questions may be answered.

Mathematical Tables may be obtained from the Superintendent.

1. Find, to the nearest penny, the cost of 6 tons, 7 cwts., 3 qrs. at £2 17s. 9d. per ton.

[16 marks.]

2. Calculate the values of

(i) $76,984 \times 998$;

(ii) 86,050 articles at 7s. 6d. per thousand ;

(iii) 99 per cent. of 25 tons, 12 cwts., 2 qrs.

[16 marks.]

3. The area of a square field is 4 acres, 2,249 sq. yards. How many minutes would it take to walk round it at $3\frac{1}{2}$ miles per hour ?

[16 marks.]

4. To what sum will £96 amount in 219 days at $1\frac{1}{2}\%$ per annum simple interest ? When would it reach £120 at the same rate ?

[16 marks.]

5. A shopkeeper sold a pair of shoes for 27s. 6d. If he made 25% profit on the sale, what did the shoes cost him ? How many more similar pairs must he sell to make a total profit of £16 10s. ?

[16 marks.]

6. Find, to the nearest sq. inch, the area of a circle whose circumference is 3ft. 5 ins.

[17 marks.]

7. A person weighed 10 stone 6 lbs. Sometime later when on a visit to France he found that he weighed 62.8 kilograms. What was his gain or loss in weight? Answer to the nearest lb.

[17 marks.]

37. 8. The amounts paid for electricity by a householder for six successive periods of 2 months each were 28s. 7d. ; 27s. 4d. ; 19s. 9d. ; 16s. 8d. ; 26s. 5d. ; 29s. 3d. What was the average cost per month for electricity during that year?

c). If the cost was made up of a fixed charge of 12s. 10d. per two months and in addition $\frac{3}{4}$ d. per unit of current consumed, how many units were used during the year?

[17 marks.]

9. Solve the following problem graphically :

A leaves Dublin for Limerick, a distance of 120 miles, at 11 a.m. and travels uniformly at 30 miles per hour. B leaves Limerick for Dublin at 11.30 a.m. and travels uniformly at 40 miles per hour. At what time do they meet? How many miles has A still to go when B reaches Dublin?

[17 marks.]