AN ROINN OIDEACHAIS
(Department of Education.)

BRAINNSE AN MHEADHON-OIDEACHAIS
(Secondary Education Branch).

INTERMEDIATE CERTIFICATE EXAMINATION, 1939.

ELEMENTARY MATHEMATICS (Arithmetic).
FOR GIRLS ONLY.

FRIDAY, 16*th JUNE.*—MORNING, 10 A.M. TO 12 NOON.

Six questions may be answered.

Mathematical Tables may be obtained from the Superintendent.

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1. Find the cost of

    (i) 4 yards 2 feet 3 inches at 17s. 6d. per yard ;

    (ii) 17 tons 13 cwts. at £4 12s. per ton.

    .[16 marks.]

2. Find, to three places of decimals, the value of
$$\sqrt{108} + \sqrt{1 \cdot 08}.$$

    [16 marks.]

3. To pass an examination in Mathematics a candidate must get 40% of the combined total marks allotted to three papers. On the first paper she gets 55% of the total of 100 and on the second she gets 32% of the total of 150. What percentage must she get out of the total of 150 on the third paper in order to pass ?

    [16 marks.]

4. Find, to two decimal places, the value of
$$\frac{38 \cdot 06 \times (4 \cdot 17)^2}{69 \cdot 4}.$$

    [16 marks.]

5. A barrel is three-quarters full of water. Five gallons are drawn off and it is then one-third full. How much water can the barrel hold ? Find the weight of water which was in the barrel at first.

    [See Tables, page 33.] [16 marks.]

6. The average ages in years of the girls in the five classes of a school are 12·2, 13·5, 14·7, 15·1, 16·8 and the numbers in the classes are 24, 19, 16, 14, 6 respectively. Find the average age of all the girls in the school.

[17 marks.]

7. A farm of 50 acres is represented on a map by $1\frac{1}{4}$ sq. inches. Find the scale of the map in inches to the mile.

How many acres would be represented by a rectangle $2\frac{1}{2}$ inches by $3\frac{1}{2}$ inches on this map?

[17 marks.]

8. How many pieces of linen 9 inches square can be cut from a roll 50 metres long and 1 metre wide?

[See Tables, page 33.]   [17 marks.]

9. A wheel of a motor car is 2 ft. 10 inches in diameter. How many revolutions does it make in 10 minutes when the car is travelling at 35 miles per hour?

[17 marks.]