

Candidates should answer *all* the questions in Section A and not more than *three* questions in Section B.

NOTE: *These instructions apply also to the papers for 1960—1956, inclusive.*

## SECTION A

1. Simplify :  $\frac{\frac{1}{3}(\frac{1}{2} + \frac{1}{5})}{\frac{1}{5}(\frac{1}{2} + \frac{1}{3})} \div \frac{3\frac{1}{7} - \frac{3}{5} \times 2\frac{2}{7}}{3\frac{1}{7} \div \frac{3}{5} - 2\frac{2}{7}}$

2. Find, to the nearest shilling, the cost of repairing a road 2 miles 7 furlongs 25 perches long at £77 18s. 4d. per mile.

3. What rate per cent of simple interest would be required in order that £275 should grow to an amount of £333 8s. 9d. in five years?

4. A man who takes 7 steps in three seconds walks  $6\frac{1}{4}$  kilometres in an hour. Find, to the nearest centimetre, the length of his step.

5. The average daily rainfall in a certain district for the month of December was 1.38 inches. Excluding Christmas Day, the average daily rainfall was 1.39 inches. How many inches of rain fell on Christmas Day?

## SECTION B

6. A person has £2 10s.  $6\frac{1}{2}$ d. in pennies and halfpennies, and the numbers of halfpennies exceeds the number of pennies by 34. How many of each kind has he?

[30 marks.]

7. A shopkeeper makes a profit of 12% by selling oranges at 1s. 8d. per dozen. What percentage profit would he make by selling them at 7 for a shilling?

[30 marks.]

8. It is proposed to cover the floor of a rectangular room, 19 ft. 6 ins. long and 18 ft. broad, with carpet 27 inches wide, which costs 18s. 9d. per yard. How much would be saved by leaving a border  $2\frac{1}{4}$  feet wide all around by the walls, staining this border with stain, which costs 1s. 6d. per sq. yd., and covering the remainder with carpet?

[30 marks.]

9. A man, in his will, left two fifths of his money to his wife, and the remainder to his three sons in the ratio of their ages. The children were 18 yrs., 15 yrs., and 6 yrs. old, respectively. If the second son got £1,680, how much altogether did the man leave in the will?

[35 marks.]

10. A gallon of spirits containing  $11\frac{1}{4}\%$  of water is mixed with three gallons of spirits containing  $6\frac{7}{12}\%$  of water, and to this half a gallon of water is added. Find the percentage of water in the mixture.

[35 marks.]