

## SECTION A

1. Find to the nearest shilling the value of:
- (a)  $\text{£}9\ 15\text{s.}\ 4\frac{1}{2}\text{d.} \times 19\cdot9$ ;
- (b)  $\text{£}4\ 4\text{s.}\ 4\frac{1}{2}\text{d.} \div 8\frac{1}{2}$ .
2. Find the cost of 8 tons 15 cwt. at  $\text{£}17\ 6\text{s.}\ 8\text{d.}$  per ton if  $2\frac{1}{2}\%$  discount is allowed for cash.
3. In what time will the simple interest on  $\text{£}62\ 10\text{s.}$  be  $\text{£}6\ 11\text{s.}\ 3\text{d.}$  at  $3\frac{1}{2}\%$  per annum?
4. Eggs bought at  $6\text{s.}\ 3\text{d.}$  for 20 are sold at  $5\text{s.}\ 3\text{d.}$  for 12. Find the percentage profit.
5. (a) If the thickness of a penny is  $\cdot0625$  inches, what is the value in  $\text{£ s. d.}$  of a pile of pennies  $1\frac{3}{4}$  ft. in height?
- (b) Which of these three sums of money is nearest to the average of the three:—  
 $0\cdot2\%$  of  $\text{£}41\ 13\text{s.}\ 4\text{d.}$ ;  $125\%$  of  $1\text{s.}\ 6\text{d.}$ ;  
 $0\cdot0625$  of  $\text{£}1\ 7\text{s.}\ 4\text{d.}$ ?

## SECTION B

6. A copper collection which amounts to  $\text{£}30$  has the same number of pennies and halfpennies. Write the total weight of the coins as a decimal of a ton, correct to two decimal places.  
 (3 pennies or 5 halfpennies weigh one ounce.)

7. A rectangular plot of ground has an area of 30 sq. yds. If its length is increased by 3 yds., its area becomes 45 sq. yds. What is the area of a path running all round the original plot, on the inside,  $1\frac{1}{2}$  ft. wide?

[30 marks.]

8. The mixture for a cake is composed of flour, margarine, and sugar in the ratio by weight of 3 : 2 : 1, respectively. The mixture loses  $\frac{1}{10}$  of its weight in baking. What weight of each ingredient would be needed to make a cake  $13\frac{1}{2}$  lb. weight?

[30 marks.]

9. From a tank full of water 5% is drawn off, then  $\frac{1}{2}$  of the remainder, and then 300 gallons. If the tank is now  $\frac{1}{10}$  full, find in kilograms the weight of the water in a full tank.

1 gallon = 4.546 litres, 1 litre of water weighs 1 kilogram.

[35 marks.]

10. ABC is a triangular field, right-angled at C, the rent of which at the rate of £10 10s. per acre is £88 4s. AC measures 24 chains, and AB measures 550 yards. A wire fence which surrounds this field is taken down and placed around a rectangular field, one side of which is 300 yards. Find the area of the rectangular field to the nearest half acre.

[35 marks.]