## INTERMEDIATE CERTIFICATE EXAMINATION, 1965

## ELEMENTARY MATHEMATICS (Arithmetic)

FOR GIRLS ONLY

WEDNESDAY, 16th JUNE - Morning, 10 to 12

All questions to be answered.
All questions carry equal marks.

1. Simplify (a)  $(4\frac{1}{11} + 2\frac{1}{2}) \times 4\frac{2}{5}$ 

(b) 
$$\frac{2 \cdot 65 \times 1 \cdot 35}{2 \cdot 5}$$

- 2. Calculate the simple interest on £225 for 5 years at  $2\frac{2}{5}\%$  per annum. What rate of interest would yield £35 simple interest on £500 for  $3\frac{1}{2}$  years ?
- 3. Find the cost of the following items and also the total cost:
  - (i) 4 dozen eggs at 4s. 10d. per dozen,
  - (ii) 5 lbs. of butter at 4s. 8d. per lb..
  - (iii)  $3\frac{1}{4}$  lbs. of bacon at 3s. 10d. per lb.,
    - (iv) 2 dozen oranges at 6d. each.
    - (v) 3 lbs. of flour at  $11\frac{1}{2}$ d. per lb.

What would the total amount be if the bill were increased by  $2\frac{1}{20}$ ?

- 4. A carpet 15ft. 9in. by 12ft. is placed on the floor of a room 18ft. by 15ft. What percentage of the floor remains uncovered ?
- 5. A thin sheet of copper forms a cylindrical pipe 20 ins, long and 3 ins, in diameter. Calculate the area of the copper sheet to the nearest square inch. (Take  $\pi = \frac{22}{7}$ )
- 6. A man travels by train 5 days a week and his ticket costs him 2s. 3d. per day. If he does this for all but three of the 52 weeks in a year, find how much he would save by buying a yearly ticket for £18 10s. 0d.
- 7. A wheel makes 350 revolutions while rolling one mile. What is the circumference of the wheel to the nearest inch ?
- 8. A certain article costs a manufacturer 4s. He makes a profit of 25% when selling it to a distributor, who in turn sells it to a shopkeeper at a profit of 20% The shopkeeper sells the article at a profit of 1s. 6d.

Calculate the shopkeeper's selling price and his percentage profit.