ARITHMETIC (Q 1, PAPER 1)

1997

1 (a) A machine broke down at 0935 hours. It was repaired at 1210 hours. For how many hours and minutes was the machine out of order? (b) IR£2500 was invested for three years at compound interest. The rate of interest was 4% per annum for the first year and 3% per annum for the second year. Calculate the amount of the investment after two years. If the investment amounted to IR£2744.95 after three years, calculate the rate of interest per annum for the third year. (c) (i) The length and breadth of a rectangle are in the ratio 9:5, respectively. The length of the rectangle is 22.5 cm. Find its breadth. (ii) Tea served in a canteen is made from a mixture of two different types of tea, type A and type B. Type A costs IR£4.05 per kg. Type B costs IR£4.30 per kg. The mixture costs IR£4.20 per kg. If the mixture contains 7 kg of type A, how many kilograms of type B does it contain?

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Answers

1 (a) 2 hours, 35 minutes

(b) £2678, 2.5%

(c) (i) 12.5 cm (ii) 10.5 kg
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