

0580/42/O/N/13

- 1 Last year Mukthar earned \$18 900 .  
He did not pay tax on \$5500 of his earnings.  
He paid 24% tax on his remaining earnings.

(a) (i) Calculate how much tax Mukthar paid last year.

$$\frac{24}{100} \times (18000 - 5500) = 3216$$

Answer(a)(i) \$ ..... 3216 ..... [2]

(ii) Calculate how much Mukthar earned each month after tax had been paid.

$$\frac{18900}{12} - \frac{3216}{12} = 1307$$

Answer(a)(ii) \$ ..... 1307 ..... [2]

(b) This year Mukthar now earns \$19 750.50 .

Calculate the percentage increase from \$18 900.

$$\frac{19750.50 - 18900}{18900} \times 100 = 4.5\%$$

Answer(b) ..... 4.5 ..... % [2]

(c) Mukthar has \$1500 to invest in one of the following ways.

- Account A paying **simple** interest at a rate of 4.1% per year
- Account B paying **compound** interest at a rate of 3.3% per year

Which account will be worth more after 3 years and by how much?

$$\text{Account A} = \frac{PNR}{100} + 1500 \Rightarrow \frac{1500 \times 3 \times 4.1}{100} + 1500 = \$1684$$

$$\text{Account B} = P \left(1 + \frac{R}{100}\right)^n = 1500 \left(1 + \frac{3.3}{100}\right)^3 = \$1653$$

$$\therefore 1684 - 1653 = \$31$$

Answer(c) Account ..... A ..... by \$ ..... 31 ..... [5]