

Fully-Worked Solutions

PRACTICE 3

Section A

1 D

2 D

3 C

4 $I = Prt$

$$= \text{RM}15\,000 \times \frac{2}{100} \times 3$$

$$= \text{RM}900$$

$$\begin{aligned}\text{Total saving} &= \text{RM}15\,000 + \text{RM}\,900 \\ &= \text{RM}15\,900\end{aligned}$$

Answer: C

5 Total interest = $2.5\% \times 4 = 10\%$

$$\text{RM}8\,800 = P \times 1.10$$

$$P = \frac{\text{RM}8\,800}{1.1}$$

$$= \text{RM}8\,000$$

Answer: B

6 D

7 Total amount of dividend

$$= 10\,000 \times 8 \text{ cents}$$

$$= 80\,000 \text{ cents}$$

$$= \text{RM}800$$

Answer: C

8 Average profit = $\frac{2.4}{100} \times \text{RM}5\,000$

$$= \text{RM}120$$

Total savings

$$= \text{RM}8\,000 + \text{RM}120 + \text{RM}80$$

$$= \text{RM}8\,200$$

Answer: D

9 MV = Matured value

P = Principal

$$= \text{RM}15\,000$$

r = Annual interest rate

$$= \frac{4}{100}$$

$$= 0.04$$

n = Number of periods the interest is compounded per year

$$= \frac{12}{6}$$

$$= 2$$

t = Number of years

$$= 5$$

$$MV = P \left(1 + \frac{r}{n} \right)^{nt}$$

$$= 15\,000 \left(1 + \frac{0.04}{2} \right)^{2 \times 5}$$

$$= \text{RM}18\,284.92$$

Answer: C

10 Dividend = $12\,000 \text{ unit} \times \text{RM}0.50 \text{ per unit}$
= $\text{RM}6\,000$

Answer: B

11 Downpayment

$$= 10\% \times \text{RM}85\,000$$

$$= \frac{10}{100} \times \text{RM}85\,000$$

$$= \text{RM}8\,500$$

Balance payment

$$= \text{RM}85\,000 - \text{RM}8\,500$$

$$= \text{RM}76\,500$$

Total interest,

$$I = Prt$$

$$= \text{RM}76\,500 \times \frac{3.5}{100} \times 6$$

$$= \text{RM}16\,065$$

Total repayment

$$= \text{RM}76\,500 + \text{RM}16\,065$$

$$= \text{RM}92\,565$$

$$\begin{aligned}\text{Monthly instalment} &= \frac{\text{RM}92\,565}{72} \\ &= \text{RM}1\,285.63\end{aligned}$$

Answer: B

12 Balance payment = $\text{RM}4\,800 - \text{RM}800$
= $\text{RM}4\,000$

Total interest, $I = Prt$

$$= \text{RM}4\,000 \times \frac{3.5}{100} = \text{RM}450$$

Total repayment

$$= \text{RM}4\,000 + \text{RM}450$$

$$= \text{RM}4\,450$$

$$\begin{aligned}\text{Monthly instalment} &= \frac{\text{RM}4\,450}{30} \\ &= \text{RM}148.33\end{aligned}$$

Answer: B

13 D

14 Total interest

$$= \text{RM}708.33 \times 20 \times 12 - \text{RM}100\,000$$

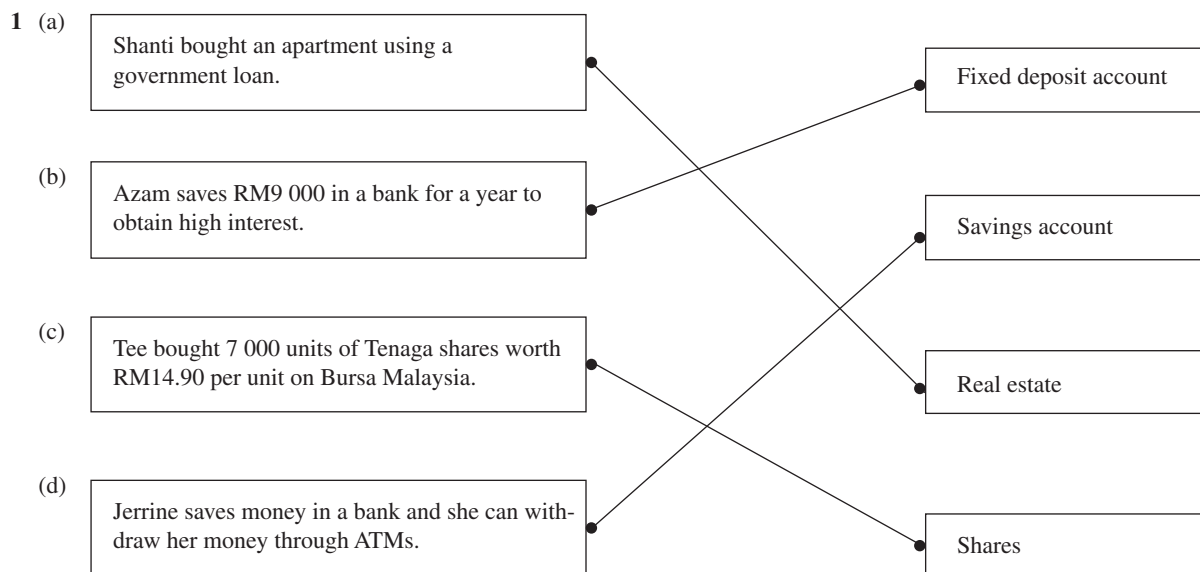
$$= \text{RM}69\,999.20$$

$$\begin{aligned}\text{Annual interest} &= \frac{\text{RM}69\,999.20}{20} \\ &= \text{RM}3\,499.96\end{aligned}$$

$$\begin{aligned}\text{Interest rate} &= \frac{\text{RM}3\,499.96}{\text{RM}100\,000} \times 100\% \\ &= 3.49996\% \\ &= 3.50\%\end{aligned}$$

Answer: A

Section B

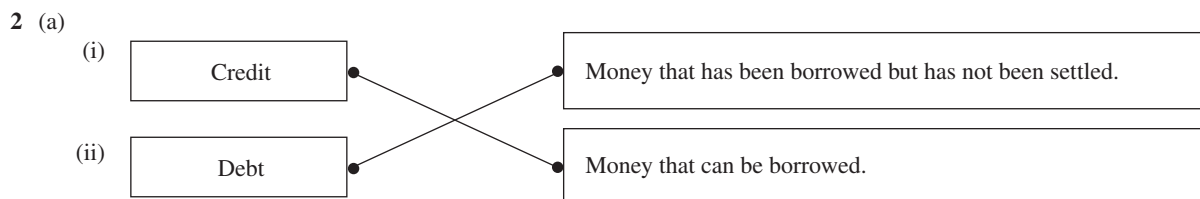


2 (a)

	Types of saving	High interest	Low interest	No interest
(i)	Fixed deposit	✓		
(ii)	Current account			✓

(b)

	Types of saving and investment	High return	High liquidity
(i)	Fixed deposit		✓
(ii)	Gold investment	✓	



(b)

Stop incurring new debts.	✓
Transfer credit card balances from a bank to another that offers lower interest rates.	✓
When settling one debt, double the other debt.	
The surplus money is more profitable if it is kept in fixed deposits rather than used to pay off debts.	

Section C

1 (a) Income distribution

$$= \text{RM}15\,000 \times \frac{6.5}{100} \times \frac{9}{12} \leftarrow I = Prt$$

$$= \text{RM}731.25$$

(b) $MV = P\left(1 + \frac{r}{n}\right)^{nt}$

$$= 10\,000\left(1 + \frac{0.04}{4}\right)^{14} \leftarrow \begin{matrix} n = 4, t = 3.5 \\ \therefore nt = 14 \end{matrix}$$

$$= \text{RM}11\,494.74$$

(c) (i) Expected monthly rental

$$= \text{RM}250 \times 20$$

$$= \text{RM}5\,000$$

(ii) Total returns

$$= \text{RM}520\,000 - \text{RM}450\,000 + \text{RM}5\,000 \times 12$$

$$= \text{RM}130\,000$$

$$\text{Return on investment} = \frac{\text{RM}130\,000}{\text{RM}450\,000} \times 100$$

$$= 28.89\%$$

- 2 (a) • Credit card users need to settle the debt payment within the period stipulated by the bank to enjoy interest free period.
- Pay the outstanding balance listed on the credit card statement.
 - The minimum amount paid by the credit card holder provides opportunity for the bank to charge interest on the balance and may also incur late payment charge.
 - Pay within the cash discount period for payment of debts.

(Choose two out of four choices)

(b) $P = \text{RM}12\,000$, $r = 3.5\%$

$t = 3$ years, $n = 2$

$$MV = P \left(1 + \frac{r}{n} \right)^{nt}$$

$$= 12\,000 \left(1 + \frac{0.035}{2} \right)^6$$

$$= \text{RM}13\,316.43$$

$P = \text{RM}13\,316.43$, $r = 4\%$

$t = 3$ years 9 months

$= \frac{15}{4}$ years, $n = 4$

$$MV = P \left(1 + \frac{r}{n} \right)^{nt}$$

$$13\,316.43 \left(1 + \frac{0.04}{4} \right)^{15}$$

$$= \text{RM}15\,459.96$$

(c) Balance = Cash price – Down payment

$$= \text{RM}1\,200 - \text{RM}200$$

$$= \text{RM}1\,000$$

Interest charged = Prt

$$= 1\,000 \times 0.08 \times \frac{10}{12}$$

$$= \text{RM}66.67$$

Total money repaid = Cash price + Total interest charged

$$= 1\,000 + 66.67$$

$$= \text{RM}1\,066.67$$

Monthly instalment = $\frac{\text{Total money repaid}}{\text{Number of payments}}$

$$= \frac{1\,066.67}{10}$$

$$= \text{RM}106.67$$