

	<u>MARK/NOTES</u>																								
<b>QUESTION 1(a) (i)</b>	<b>TOTAL:25 M</b>																								
<p><b>Answer</b></p> <p>Interest <math>I = 10\% \times 1,000</math> <math>= \text{RM } 100</math></p> <p>Value of bond</p> $V_b = I \text{ (PVIFA } 12\%, 10) + M \text{ (PVIF } 12\%, 10)$ $= \text{RM } 100 / (5.6502) + 1,000 / (0.3220) /$ $= 565.02 /$	<p><b>Total: 5 marks</b></p> <p>(/ = 1 mark: total = 5 marks)</p>																								
<b>QUESTION 1(a) (ii)</b>	<b>Total: 5 marks</b>																								
<p><b>Answer</b></p> <p>Dividend <math>D_1 = D_0 (1+g) /</math> <math>= \text{RM } 2 / (1 + 0.05 /)</math> <math>= \text{RM } 2.10 /</math></p> <p>Value of common shares</p> $V_{cs} = \frac{D_1}{R_{cs} - g} /$ $= \frac{\text{RM } 2.10 /}{(0.12 - 0.05) /}$ $= \text{RM } 30 /$	<p>(/ = 0.5 mark: total = 5 marks)</p>																								
<b>QUESTION 1(b) (i)</b>	<b>Total: 5 marks</b>																								
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<p>Credit Effective Cost= <math>\frac{\text{interest}}{\text{Principal}} \times \frac{1}{\text{time}}</math></p> <p><math>\frac{45,000}{(450,000)} \times 1</math> <math>= 13.33\% //</math></p>	<p>(/ = 1 mark: total = 5 marks)</p>																								

**QUESTION 1(b)(ii)****Answer**

PRINCIPLE(B1)		450,000.00	/
RATE(R)		0.08	/
TIME (T)	9/12	0.75	/
COM. BALANCE(CB)	(100 - 20) / 100	0.80	
BASIC(B2)	450,000 ÷ 0.8 )	562,500.00	
INTEREST	( 562,500X0.08X0.75)	33,750.00	//

$$\begin{aligned} \text{Credit Effective Cost} &= \frac{\text{interest}}{\text{Principal} - \text{interest}} \times \frac{1}{\text{time}} \\ &= \frac{33,750}{(450,000 - 33,750)} \times \frac{1}{0.75} \\ &= 10.81\% // \end{aligned}$$

Roses Company Ltd should choose Bank B / since Bank B provide a low credit effective cost (10.81%) / as compared to Bank A (13.33%). /

**QUESTION 2(a)****Answer**

THREE (3) working capital principles.

1. Hedging /
  - moderate principle /
  - permanent assets (fixed and current assets) are financed with long-term financing /
  - temporary current assets are financed with short-term financing./
2. Aggressive/
  - risky principle /
  - using short term debt to finance all current assets and some of fixed assets./
3. Conservative/
  - very safe principle /
  - all the fixed assets and most of the current assets are financed by long term debt or equity /

**Total:  
10 marks**

(/ = 1 mark:  
total = 10  
marks)

**TOTAL:25 M**

**Total:  
5 marks**

(/ = 0.5 mark:  
total = 5 marks)

**QUESTION 2(b)****Answer**

The account receivables collection procedure if the customer exceeds beyond the credit period.

1. distributing warning letter /
    - prepare and send it to the customer /
  2. making phone call /
    - contact the customer by phone /
  3. giving a final warning letter /
    - prepare and send it to the customer /
  4. reporting to the debt collection agencies /
    - contact legal collection agencies or /
    - inform company's lawyer to take further actions /
    - bring the case to court and declare bankruptcy /
- (any suitable answers are accepted)

**Total:  
10 marks**

(/ = 0.5 mark:  
total = 5 marks)

**QUESTION 2(c)****Answer**

	FORMULA	CALCULATION	TOTAL	
SALES ( S )			5,000,000	/
ORDERING COST ( O )			1,000	/
CARRYING COST ( C )		10% X PP	1	///
PURCHASING PRICE (PP)			10	/
EOQ (Q)	$2SO$	$2 \times 5000000 \times 1000$	10,000,000,000	
	$2SO/C$	$2 \times 5000000 \times 1000 / 1$	10,000,000,000	
	$\sqrt{2SO/C}$	$\sqrt{2 \times 5000000 \times 1000 / 1}$	100,000 unit	///
AVERAGE INVENTORY ( AVG INV )	$(Q \div 2) + SS$	$100000 / 2 + 0$	50,000	/
TOTAL CARRYING COST ( TCC )	$((Q \div 2) + SS) \times C$	$(100000 / 2 + 0) \times 1$	50,000	///
NUMBER OF ANNUAL ORDER (NO)	$S \div Q$	$5000000 / 100000$	50	/
TOTAL ORDERING COST ( TOC )	$(S \div Q) \times O$	$(5000000 / 100000) \times 1000$	50,000	///
TOTAL INVENTORY COST ( TIC )	$TIC = TCC + TOC$	$50000 + 50000$	RM100,000	///

**Total:  
10 marks**

(/ = 0.5 mark:  
total = 10  
marks)

<p><b>QUESTION 3 (a)</b></p> <p><b><u>Answer</u></b></p> <p>Step 1: Identify potential capital investment /</p> <p>Step 2: Forecast future net cash flow /</p> <p>Step 3: Analyze potential investment /</p> <p style="padding-left: 40px;">i. Screen out undesirable investment using payback or ARR method</p> <p style="padding-left: 40px;">ii. Further analysis using NPV or IRR method.</p> <p>Step 4: Choose among alternative investment when the resources are not sufficient to fund all profitable project /</p> <p>Step 5: Perform post-audits after making capital investment. /</p> <p><b>QUESTION 3 (b)(i)</b></p> <p><b><u>Answer</u></b></p> <p>Payback Period for machine A</p> <p><math display="block">\text{PBP} = 165000 / 35000 /</math> <math display="block">= 4.71 \text{ years} /</math></p> <p>Payback Period for machines B</p> <p><math display="block">\text{PBP} = 4 + (165000 - 149000) / 62000 /</math> <math display="block">= 4 + 0.258</math> <math display="block">= 4.26 \text{ years} /</math></p> <p><b>QUESTION 3 (b)(ii)</b></p> <p><b><u>Answer</u></b></p> <p>Machine A</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Year</th> <th style="width: 20%;">Cah flow</th> <th style="width: 25%;">PVIFA (14%)</th> <th style="width: 40%;">PV</th> </tr> </thead> <tbody> <tr> <td>1-6</td> <td>35000</td> <td>3.8887 /</td> <td>136104.50 /</td> </tr> <tr> <td></td> <td></td> <td>TPV</td> <td>136104.50</td> </tr> <tr> <td></td> <td></td> <td>Investment</td> <td>165000.00</td> </tr> <tr> <td></td> <td></td> <td>NPV</td> <td>-28,895.50 /</td> </tr> </tbody> </table> <p>Machine B</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Year</th> <th style="width: 20%;">Cah flow</th> <th style="width: 25%;">PVIF (14%)</th> <th style="width: 40%;">PV</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>25000</td> <td>0.8772</td> <td>21930.00</td> </tr> <tr> <td>2</td> <td>36000</td> <td>0.7695 /</td> <td>27702.00 /</td> </tr> </tbody> </table>	Year	Cah flow	PVIFA (14%)	PV	1-6	35000	3.8887 /	136104.50 /			TPV	136104.50			Investment	165000.00			NPV	-28,895.50 /	Year	Cah flow	PVIF (14%)	PV	1	25000	0.8772	21930.00	2	36000	0.7695 /	27702.00 /	<p><b><u>TOTAL:25 M</u></b></p> <p><b>Total:</b> <b>5 marks</b></p> <p>(/ = 1 mark: total = 5 marks)</p> <p><b>Total:</b> <b>10 marks</b></p>
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3	38000	0.6750 /	25650.00 /	
4	50000	0.5921 /	29605.00 /	
5	62000	0.5194 /	32202.00 /	
6	65000	0.4556 /	29614.00 /	
		TPV	166703.00 /	
		Investment	165000.00	
		NPV	1703.00 /	

(25/25 \* 10 =  
10 marks)

### QUESTION 3 (b)(iii)

#### Answer

Machine A

$$\begin{aligned} \text{PI} &= \text{TPV} / \text{T. Investment} \\ &= 136104.50 / 165000 / \\ &= 0.82 / \end{aligned}$$

Machine B

$$\begin{aligned} \text{PI} &= \text{TPV} / \text{T. Investment} \\ &= 166,703.00 / 165000 / \\ &= 1.01 / \end{aligned}$$

### QUESTION 3 (c)

#### Answer

Payback Period for Machine A is 4.71 years compared to machine B is 4.26 years. Shorter period is better compared to the long period to payback. Choose machine B since payback period of Machine B is shorter. ///

Net Present Value for Machine A is (28895.50) compared to machine B is 1703.00. Positive NPV is better compared to negative NPV. Since the NPV of machine B is positive and higher than NPV of machine A. Machine B should be selected. ///

Profitability index for Machine A is 0.82 compared to machine B is 1.01. Machine B should be chosen at its profitability index is greater than 1.0 and is higher than profitability index of machine A (0.82). ///

Based on the above criteria, machine B is the best project to make an investment. /

**Total:  
10 marks**

(/ = 1 mark:  
total =10  
marks)

<p><b>QUESTION 4 (a)</b></p> <p><b><u>Answer</u></b></p> <p>Leverage is related to fixed cost. /  Fixed costs are business costs that are not directly related to the level of production or output. /  Example: rent, depreciation, insurance, preferred dividends and interest. //  Leverage means the company will boost up income by using the fixed cost. /</p> <p><b>QUESTION 4 (b)(i)</b></p> <p><b><u>Answer</u></b></p> <p>i) Degree of Operating Leverage (DOL)</p> $\text{DOL} = \frac{S - VC}{S - VC - FC}$ $= \frac{30000000 - 16000000}{30000000 - 16000000 - 7000000}$ $= \frac{14000000}{7000000}$ $= 2 \quad \text{TIMES} \quad //$ <p>ii) Degree of Financial Leverage (DFL)</p> $\text{DFL} = \frac{\text{EBIT}}{\text{EBIT} - I}$ $= \frac{7000000}{7000000 - 1000000}$ $= \frac{7000000}{6000000}$ $= 1.17 \quad \text{TIMES} \quad //$ <p>iii) Degree of Combination Leverage (DCL)</p> $\text{DCL} = \text{DOL} \times \text{DFL}$ $= 2 \times 1.17 /$ $= 2.33 \quad \text{TIMES} \quad /$	<p><b><u>TOTAL:25 M</u></b></p> <p><b>Total: 5 marks</b></p> <p>(/ = 1 mark: total = 5 marks)</p> <p><b>Total: 10 marks</b></p> <p>(/ = 1 mark: total = 10 marks)</p>
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**QUESTION 4 (c)****Answer**

i) percentage change in Earnings Before Interest and Tax (EBIT)

$$\text{DOL} = \frac{\% \text{ change in EBIT}}{\% \text{ change in Sales}}$$

$$\begin{aligned} \text{i) \% change in EBIT} &= \% \text{ change in Sales} \times \text{DOL} / \\ &= 20\% \times 2 // \\ &= 40\% // \end{aligned}$$

ii) percentage change in Earning Per Share (EPS)

$$\text{DFL} = \frac{\% \text{ change in EPS}}{\% \text{ change in EBIT}}$$

$$\begin{aligned} \text{ii) \% change in EPS} &= \% \text{ change in EBIT} \times \text{DFL} / \\ &= 40\% \times 1.17 // \\ &= 46.8\% // \end{aligned}$$

**Total:  
10 marks**

(/ = 1 mark:  
total = 10  
marks)