INSTRUCTIONS TO CANDIDATES

1. This question paper consists of SIX QUESTIONS. Answer FOUR QUESTIONS only.

2. Write your answers in the Answer Booklet provided.

This question paper consists of SEVEN PAGES of questions printed on both sides of the paper (excluding this page) and ONE page with Formulas.
INSTRUCTIONS:  1. THERE ARE SIX (6) QUESTIONS IN THIS PAPER.
2. ANSWER FOUR (4) QUESTIONS ONLY.

Question 1

a. Mitra Citra Sdn. Bhd. is a company selling bottled iced tea. The company wishes to expand its operations into the bottled lemonade business. Which of the following factors should the company incorporate into its capital budgeting decision as it decides whether or not to enter the lemonade business? Why or why not?

Factor 1: If the company enters the lemonade business, its iced tea sales are expected to fall 5 percent as some consumers switch from iced tea to lemonade.

Factor 2: Two years ago, the company spent RM3 million to renovate a building for a proposed project which was never undertaken. If the project is adopted, the plan is to have the lemonade produced in this building.

Factor 3: If the company does not produce lemonade, it can lease the building to another company and receive after-tax cash flows of RM500,000 a year.

[9 marks]

b. Your company has a cost of capital equal to 10%. If the following projects are mutually exclusive, and you only have the information that is provided, which should you accept? Why?

<table>
<thead>
<tr>
<th>Payback (years)</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRR</td>
<td>18%</td>
<td>20%</td>
<td>20%</td>
<td>12%</td>
</tr>
<tr>
<td>NPV (Millions)</td>
<td>RM40</td>
<td>RM75</td>
<td>RM35</td>
<td>RM100</td>
</tr>
</tbody>
</table>

[4 marks]
Masa Depan Bhd. is considering to develop a new computer model. However, there are two mutually exclusive new computer models in consideration. Each will require a net investment of RM5,000. The cash flow figures for each project are shown below:

<table>
<thead>
<tr>
<th>Period</th>
<th>Project A (RM)</th>
<th>Project B (RM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2,000</td>
<td>3,000</td>
</tr>
<tr>
<td>2</td>
<td>2,500</td>
<td>2,600</td>
</tr>
<tr>
<td>3</td>
<td>2,250</td>
<td>2,900</td>
</tr>
</tbody>
</table>

Project B, which will use a new type of laser disk drive, is considered a high-risk project, while Project A is of average risk. The company adds 2 percentage points to arrive at a risk-adjusted cost of capital when evaluating a high-risk project. The cost of capital used for average-risk projects is 12 percent.

Calculate the Net Present Value (NPV) for Projects A and B. Which model should be chosen? Why?  

[7 marks]

d) Kota Sendayan Bhd. is considering the purchase of land and the construction of a new plant. The land, which would be bought immediately (at t = 0), at the costs of RM100,000 and the building, which would be erected at the end of the first year (t = 1), would cost RM500,000. It is estimated that the firm's after-tax cash flow will be RM100,000 starting at the end of the second year, and that this incremental flow would increase at a 10 percent rate annually over the next 10 years.

What is the approximate payback period?  

[5 marks]

[TOTAL: 25 MARKS]
Question 2

a. Telaga Emas Bhd. has a weighted average cost of capital of 11.5 percent. Its target capital structure is 55 percent equity and 45 percent debt. The company has sufficient retained earnings to fund the equity portion of its capital budget. The before-tax cost of debt is 9 percent, and the company’s tax rate is 30 percent.

If the expected dividend next period \((D_1)\) and current stock price are RM5 and RM45, respectively, what is the company’s growth rate?

[7 marks]

b. Dinamika Bhd. has a capital structure which consists of 60 percent long-term debt and 40 percent common stock. You have obtained the following information:

i) The before-tax yield to maturity on the company’s bonds is 8 percent.

ii) The company’s common stock is expected to pay a RM3.00 dividend at year end \((D_1 = RM3.00)\), and the dividend is expected to grow at a constant rate of 7 percent a year. The common stock currently sells for RM60 a share.

iii) Assume the firm will be able to use retained earnings to fund the equity portion of its capital budget.

iv) The company’s tax rate is 40 percent.

What is the company’s weighted average cost of capital (WACC)?

[6 marks]

c. “A company has a capital structure which consists of 50 percent debt and 50 percent equity. Its cost of equity will always be greater if not equal to the cost of debt.”

Do you agree or disagree with the statement above? Why? Elaborate your answer.

[6 marks]

d. An increase in the risk-free rate is likely to increase the marginal costs of both debt and equity financing. Why is this so? Justify your answer by providing examples.

[6 marks]

[TOTAL: 25 MARKS]
Question 3

a. i) "Portfolio A has one security, while Portfolio B has 100 securities. Because of diversification effects, we would generally expect Portfolio B to have the lower relevant risk".

   Is it possible for Portfolio A to be less risky? Why or why not? [3 marks]

ii) "Portfolio A has one security, while Portfolio B has 100 securities. Because of diversification, we know that Portfolio B will have a lower relevant risk".

   Does this mean Portfolio B will have a lower beta than Portfolio A? Why or why not? [3 marks]

b. Stock A has a beta of 1.5 and Stock B has a beta of 0.5. According to the Capital Asset Pricing Model (CAPM), which stock will yield higher return? Why is this so? (Assume the market is in equilibrium). [4 marks]

c. Company X has a beta of 1.6, while Company Y's beta is 0.7. The risk-free rate is 7 percent, and the required rate of return on an average stock is 12 percent. Now the risk-free rate rises by 1 percentage point, the required return on the market rises to 14 percent, and betas remain constant. Calculate the difference between required return on Stock X and Stock Y before the changes. After all of these changes have been reflected in the data, by how much will the required return on Stock X exceed that of Stock Y? Is the difference in stock return bigger or smaller after the changes? [7 marks]

d. A money manager is holding the following portfolio:

<table>
<thead>
<tr>
<th>Stock</th>
<th>Amount Invested (RM)</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>300,000</td>
<td>0.6</td>
</tr>
<tr>
<td>2</td>
<td>300,000</td>
<td>1.0</td>
</tr>
<tr>
<td>3</td>
<td>500,000</td>
<td>1.4</td>
</tr>
<tr>
<td>4</td>
<td>500,000</td>
<td>1.8</td>
</tr>
</tbody>
</table>

The risk-free rate is 6 percent and the portfolio's required rate of return is 12.5 percent. The manager would like to sell all of her holdings of Stock 1 and use the proceeds to purchase more shares of Stock 4. What would be the portfolio's required rate of return following this change? [8 marks]

[TOTAL: 25 MARKS]
Question 4

a. i) Two firms have the same current ratio, 0.75, and the same amount of sales. However, Firm A has a higher inventory turnover ratio than Firm B. Therefore, we can conclude that the quick ratio of Firm A will be **smaller** than that of Firm B? Do you agree? Why or why not?  

[3 marks]

ii) Both Company R and Company S have the same operating income (EBIT) and basic earning power (BEP) ratio. Company S, however, has a lower times-interest-earned (TIE) ratio. Which company has a higher interest expense? Why is this so?  

[3 marks]

b. Your company has a current ratio of 1.9 times. You want to increase the company’s current ratio. Suggest **TWO (2)** measures that can be introduced to achieve your goal.  

[6 marks]

c. Wira Bola Sdn. Bhd. has RM800,000 of debt outstanding, and it pays an interest rate of 10 percent annually on its bank loan. Wira Bola's annual sales are RM3,200,000; its average tax rate is 40 percent; and its net profit margin on sales is 6 percent. If the company does not maintain a times interest earned (TIE) ratio of at least 4 times, its bank will refuse to renew its loan, and bankruptcy will result. What is the company's current TIE ratio?  

[6 marks]

d. Mesra Alam Sdn. Bhd. has the following simplified balance sheet:

<table>
<thead>
<tr>
<th>Cash</th>
<th>RM 25,000</th>
<th>Current liabilities</th>
<th>RM200,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory</td>
<td>190,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>125,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net fixed assets</td>
<td>360,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>RM700,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>RM700,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The company has been advised that their credit policy is too generous and that they should reduce their days’ sales outstanding to 36.5 days (assume a 365-day year). The increase in cash resulting from the decrease in accounts receivable will be used to reduce the company’s long-term debt. The interest rate on long-term debt is 10 percent and the company’s tax rate is 30 percent. The tighter credit policy is expected to reduce the company’s sales to RM750,000 and result in EBIT of RM70,000. What is the company’s expected ROE after the change in credit policy?  

[7 marks]

[TOTAL: 25 MARKS]
Question 5

a. "Disregarding risk, if money has time value, it is impossible for the present value of a given sum to be greater than its future value".

Is the above statement true? Explain your answer. [5 marks]

b. A young couple is planning for the education of their two children. They plan to invest the same amount of money at the end of each of the next 16 years, i.e., the first contribution will be made at the end of the year and the final contribution will be made at the time the oldest child enters college.

The money will be invested in securities that are certain to earn a return of 8 percent each year. The oldest child will begin college in 16 years and the second child will begin college in 18 years. The parents anticipate college costs of RM25,000 a year (per child). These costs must be paid at the end of each year. If each child takes four years to complete their college degrees, then how much money must the couple save each year? [7 marks]

c. You have just bought a house and have a RM125,000, 25-year mortgage with a fixed interest rate of 8.5 percent with annual payments. Over the next five years, what percentage of your mortgage payments will go toward the repayment of principal? [8 marks]

d. Suppose someone offered you the choice of two equally risky annuities, each paying RM10,000 per year for five years. One is an ordinary (or deferred) annuity, the other is an annuity due. Which one will you choose? Explain your answer. [5 marks]

[TOTAL: 25 MARKS]
Question 6

a. If the goal of a firm is to maximise the shareholders' wealth, does it mean profit is not important at all? Explain your answer. [5 marks]

b. Discuss the importance of corporate governance to an organisation. [6 marks]

c. "It is said that globalisation has brought more threats than opportunities to corporations". Within the context of financial management, do you agree or disagree with the statement? Give examples to support your answer. [7 marks]

d. How can agency problem be minimised when a company uses debt? Elaborate your answer. [7 marks]

[TOTAL: 25 MARKS]

QUESTION PAPER ENDS HERE
FORMULA

\[ FV = PV(1 + i)^n \]
\[ PV = FV/(1 + i)^n \]
\[ FVA_{ord} = A[((1 + i)^n - 1)/i] \]
\[ PVA_{ord} = A[(1 - (1 + i)^n)/i] \]
\[ FVA_{due} = A[((1 + i)^n - 1)/i](1 + i) \]
\[ PVA_{due} = A[(1 - (1 + i)^n)/i](1 + i) \]
\[ PV = A/i \]
\[ k = RFR + \beta(Rm - RFR) \]
\[ k = (D_i/P_0) + g \]
\[ E(R) = \sum p_i x R_i \]
\[ s^2 = \sum p_i x (R_i - E(R))^2 \]
\[ s = s^{(1/2)} \]
\[ CV = s / E(R) \]
\[ E(R)_{port} = \sum w_i x E(R)_i \]
\[ \beta_{port} = \sum w_i x \beta_i \]

current ratio = current assets/current liabilities

quick ratio = current assets – inventory/current liabilities

inventory turnover = sales/inventory

times interest earned = EBIT/interest expense

debt ratio = total debt/total assets

return on assets = net income/total assets

return on equity = net income/total equity

days sales outstanding = account receivables/(sales/365)

basic earning power = EBIT/total assets

net profit margin = net income/sales