MAY SEMESTER 2011
FINAL EXAMINATION

COURSE : MANAGERIAL FINANCE

CODE : BMMF5103

DATE : 14 AUGUST 2011

DURATION : 3 HOURS

TIME : 2.00 PM – 5.00 PM

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INSTRUCTIONS TO CANDIDATES

1. This question paper consists of TWO Parts - PART A and PART B. Read the instructions for each part carefully.

2. Write your answers in the Answer Booklet provided.

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This question paper consists of SIX PAGES of questions printed on both sides of the paper (excluding this page) and ONE page with Formulas.
PART A
INSTRUCTIONS: 1. THERE ARE TWO (2) QUESTIONS IN THIS PART.
2. ANSWER BOTH QUESTIONS.

Question 1

a. Briefly discuss the main objective of a firm. Is it the same with profit maximisation? Describe FIVE (5) roles that a financial manager must assume in pursuing the goal of the firm. [9 marks]

b. Briefly explain the agency problem by giving an example. Do you think the agency problem arise in sole proprietorships and/or partnerships? Why or why not? [6 marks]

c. Discuss the role of corporate ethics and the relationship that exists between ethics and firm’s value. [5 marks]

[TOTAL: 20 MARKS]

Question 2

a. What are the FOUR (4) major financial statements and briefly describe the role of each statement? [8 marks]

b. i) A firm has a debt-equity ratio of 0.45. What is the total debt ratio? [2 marks]

   ii) A firm has total debt of RM1,500 and a debt-equity ratio of 0.55. What is the value of the total assets? [2 marks]

   iii) A firm has net working capital of RM3,600, net fixed assets of RM15,200, sales of RM25,500, and current liabilities of RM1,250. How many RM worth of sales are generated from every RM1 in total assets? [3 marks]

c. Rambles Sdn Bhd currently has RM1,500,000 in accounts receivable. Its days sales outstanding (DSO) is 60 days (based on a 365-day year). The company wants to reduce its DSO to the industry average of 42 days bypressuring more of its customers to pay their bills on time. The company’s CFO estimates that if this policy is adopted, the company’s average sales will fall by 10 percent. Assuming that the company adopts this change and succeeds in reducing its DSO to 42 days and does lose 15 percent of its sales, what will be the level of accounts receivable following the change? [5 marks]

[TOTAL: 20 MARKS]
PART B

INSTRUCTIONS:  
1. THERE ARE FIVE (5) QUESTIONS IN THIS PART.  
2. ANSWER THREE (3) QUESTIONS ONLY.

Question 1

a. Jamal and Nora are interested in saving money for their son’s education. Today is their son’s 8th birthday. Their son will enter college ten years from now on his 18th birthday, and will attend college for four years. All college costs are due at the beginning of the year, so the couple will have to make payments on their son’s 18th, 19th, 20th and 21st birthdays (t = 10, 11, 12, 13). They estimate that the college their son wants to attend will cost RM40,000 the first year (t = 10) and that the costs will increase 8 percent each year (the final college payment will be made 13 years from now).

Currently, Jamal and Nora have RM30,000 in an investment account. They also plan to contribute a fixed amount at the end of each of the next ten years (t = 1, 2, 3, ... 10). Their invested money will be in an account which pays 10 percent interest compounded annually. How much money do Jamal and Nora need to contribute to the account in each of the next ten years?  

[9 marks]

b. Ms. Tay needs RM120,000 to buy her dream car. In her search for the best (low cost) loan, she has gathered the following information from three local banks. Which bank would you recommend Ms. Tay to borrow from?

<table>
<thead>
<tr>
<th>Bank</th>
<th>Annual Payment (RM)</th>
<th>Term (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha</td>
<td>33,289.17</td>
<td>5</td>
</tr>
<tr>
<td>Beta</td>
<td>24,648.66</td>
<td>7</td>
</tr>
<tr>
<td>Chi</td>
<td>21,672.20</td>
<td>9</td>
</tr>
</tbody>
</table>

[7 marks]

c. You have just been promoted as the new assistant branch manager of a local-based international bank. The branch manager, who is an expatriate, has asked you a question on the different types of interest rate quotations. The question he asked is which rate should the bank advertise on monthly-compounded loans - the nominal annual percentage rate or the effective annual percentage rate? And which rate should the bank advertise on quarterly-compounded savings accounts? Explain to the branch manager which quotation would attract consumers and why.  

[4 marks]

[TOTAL: 20 MARKS]
Question 2

a.  

<table>
<thead>
<tr>
<th>Year</th>
<th>Dividends (RM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>4.81</td>
</tr>
<tr>
<td>2010</td>
<td>4.53</td>
</tr>
<tr>
<td>2009</td>
<td>3.95</td>
</tr>
<tr>
<td>2008</td>
<td>3.42</td>
</tr>
<tr>
<td>2007</td>
<td>2.95</td>
</tr>
<tr>
<td>2006</td>
<td>2.50</td>
</tr>
</tbody>
</table>

i) Chandran owns stock in a company which has paid the annual dividends shown above. Calculate the annual compounded growth rate of these dividends over the given period (to the nearest round number). [3 marks]

ii) Calculate the estimated dividend for 2012. [3 marks]

iii) The required return is assumed to be 18 percent. Using the Gordon model, calculate the per share value of the stock. [3 marks]

b. Sophia Management Services has an outstanding issue of 1,000 preferred stock with a RM100 par value, 9 percent annual dividend, and 5,000 shares of common stock outstanding. If the stock is cumulative and the board of directors has passed the preferred dividend for the last two years, how much must preferred stockholders be paid prior to paying dividends to common stockholders? [4 marks]

c. Assume that you are considering the purchase of a RM1,000 par value bond that pays interest of RM70 every six months and has 10 years to maturity. If you buy this bond, you expect to hold it for 5 years and then sell it in the market. You currently require a nominal annual rate of 16 percent, but you expect the market to require a nominal rate of only 12 percent when you sell the bond due to a general decline in interest rates. How much should you be willing to pay for this bond? [7 marks]

[TOTAL: 20 MARKS]
Question 3

a. You have a RM1,000 portfolio which is invested in stocks Aero and Bistro plus a risk-free asset. Four hundred (RM400) is invested in stock Aero. Stock Aero has a beta of 1.3 and stock Bistro has a beta of 0.7.

How much needs to be invested in stock Bistro if you want a portfolio beta of 0.90? [6 marks]

b. i) In terms of risk measurement, how is the standard deviation different from beta? [3 marks]

ii) Briefly discuss the relationship between the size of the standard deviation and the level of risk for a financial security. [3 marks]

iii) By giving an example, explain when is the coefficient of variation preferred over the standard deviation for comparing asset risk. [3 marks]

c. Suppose you are managing a stock portfolio consisting of a mixture of high and low beta stocks. You have information which leads you to believe that the stock market is likely to be very weak in the immediate future, i.e., you are confident that the market is about to drop sharply. If you want to take advantage of the situation to maximize the value of your portfolio, what would you do now? Explain your answer. [5 marks]

[TOTAL: 20 MARKS]
Question 4

a. Project X has an internal rate of return of 20 percent. Project Y has an internal rate of return of 15 percent. Both projects have a positive net present value. Does this mean Project X has a shorter payback than Project Y? Explain your answer.  
[4 marks]

b. Would the firm's cost of external equity capital be the same as the required rate of return on the firm's outstanding common stock? Why or why not?  
[4 marks]

c. i) In capital budgeting, why is the focus on cash flows rather than on net income? Should interest payments be considered in capital budgeting? How about the changes in net operating working capital? Provide the arguments to support your answers.  
[6 marks]

ii) Adams Audio is considering whether to make an investment in a new type of technology. The company has already spent RM3 million researching the technology. The new technology will affect the cash flows produced by its other operations. If the investment is not made, then the company will be able to sell one of its laboratories for RM2 million. Based on this information, which factor(s) should be considered when determining the relevant cash flows of the new technology? Explain your answers.  
[6 marks]

[TOTAL: 20 MARKS]
Question 5

Pandalela Products manufactures a variety of household products. The company is considering introducing a new detergent. The company’s CFO has collected the following information about the proposed product. (Note: You may or may not need to use all of this information, use only the information that is relevant.)

- The project has an anticipated economic life of 4 years.
- The company will have to purchase a new machine to produce the detergent. The machine has an up-front cost (t = 0) of RM2 million. The machine will be depreciated on a straight-line basis over 4 years (that is, the company’s depreciation expense will be RM500,000 in each of the first four years (t = 1, 2, 3, and 4). The company anticipates that the machine will last for four years, and that after four years, its salvage value will equal zero.
- If the company goes ahead with the proposed product, it will have an effect on the company’s net operating working capital. At the outset, t = 0, inventory will increase by RM140,000 and accounts payable will increase by RM40,000. At t = 4, the net operating working capital will be recovered after the project is completed.
- The detergent is expected to generate sales revenue of RM1 million the first year (t = 1), RM2 million the second year (t = 2), RM2 million the third year (t = 3), and RM1 million the final year (t = 4). Each year the operating costs (not including depreciation) are expected to equal 50 percent of sales revenue.
- The company’s interest expense each year will be RM100,000.
- The new detergent is expected to reduce the after-tax cash flows of the company’s existing products by RM250,000 a year (t = 1, 2, 3, and 4).
- The company’s overall WACC is 10 percent. However, the proposed project is riskier than the average project for Pandalela Products; the project’s WACC is estimated to be 12 percent.
- The company’s tax rate is 40 percent.

a. Determine the relevant cash flows for this project. [9 marks]
b. What is the internal rate of return of the project? [5 marks]
c. What is the net present value of the project? [4 marks]
d. Should the company proceed with the project? Why? [2 marks]

[TOTAL: 20 MARKS]

QUESTION PAPER ENDS HERE
FORMULA:

\[ FV = PV(1 + i)^n \]
\[ PV = FV/(1 + i)^n \]
\[ FVA_{ord} = A[((1 + i)^n - 1)/i] \]
\[ PVA_{ord} = A[(1 - (1 + i)^n)/i] \]
\[ FVA_{due} = A[((1 + i)^n - 1)/i](1 + i) \]
\[ PVA_{due} = A[(1 - (1 + i)^n)/i](1 + i) \]
\[ PV = A/i \]
\[ k = RFR + \beta(R_m - RFR) \]
\[ k = (D_t/P_0) + g \]
\[ E(R) = \sum P_i \times R_i \]
\[ \sigma^2 = \sum P_i \times (R_i - E(R))^2 \]
\[ \sigma = \sigma^{(1/2)} \]
\[ CV = \sigma / E(R) \]
\[ E(R)_{port} = \sum w_i \times E(R)_i \]
\[ \beta_{port} = \sum w_i \times \beta_i \]

debt-equity ratio = total debt/total equity

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

total asset turnover = sales/total assets
DISEDIAKAN OLEH:

UNIT PENILAIAN DAN PEPERIKSAAN
OPEN UNIVERSITY MALAYSIA