

This Paper Consist of TWO (2) Sections.

[TOTAL: 50 MARKS]

Section A: MULTIPLE CHOICE QUESTIONS

Instruction: Answer ALL Questions

[Total: 20 MARKS]

1. The primary goal of a publicly-owned firm interested in serving its stockholders should be to _____
 - a. Maximize expected total corporate profit.
 - b. Maximize expected EPS.
 - c. Minimize the chances of losses.
 - d. Maximize the stock price per share.
 - e. Maximize expected net income

2. Which of the following mechanisms is used to motivate managers to act in the interest of shareholders?
 - a. Bond covenants.
 - b. The threat of a takeover.
 - c. Pressure from the board of directors.
 - d. Statements a and b are correct.
 - e. Statements b and c are correct

3. Which of the following statements is **most correct**?
 - a. Downward sloping yield curves are inconsistent with the expectations theory.
 - b. The shape of the yield curve depends only on expectations about future inflation.
 - c. If the expectations theory is correct, a downward sloping yield curve indicates that interest rates are expected to decline in the future.
 - d. Statements a and c are correct.
 - e. None of the statements above is correct.

4. Given the following data, find the expected rate of inflation during the next year.
 - k^* = real risk-free rate = 3%.
 - Maturity risk premium on 10-year T-bonds = 2%. It is zero on 1-year bonds, and a linear relationship exists.
 - Default risk premium on 10-year, A-rated bonds = 1.5%.
 - Liquidity premium = 0%.
 - Going interest rate on 1-year T-bonds = 8.5%.
 - a. 3.5%
 - b. 4.5%
 - c. 5.5%
 - d. 6.5%
 - e. 7.5%

5. You read in *The Malaysian Business Journal* that 30-day T-bills are currently yielding 8 percent. Your brother-in-law, a broker at JB Securities, has given you the following estimates of current interest rate premiums:

- Inflation premium = 5%.
- Liquidity premium = 1%.
- Maturity risk premium = 2%.
- Default risk premium = 2%.

On the basis of these data, the real risk-free rate of return is

- a. 0%
 - b. 1%
 - c. 2%
 - d. 3%
 - e. 4%
6. A portfolio manager is holding the following investments:

<u>Stock</u>	<u>Amount Invested</u>	<u>Beta</u>
X	RM10 million	1.4
Y	20 million	1.0
Z	40 million	0.8

The manager plans to sell his holdings of Stock Y. The money from the sale will be used to purchase another RM15 million of Stock X and another RM5 million of Stock Z. The risk-free rate is 5 percent and the market risk premium is 5.5 percent. How many percentage points higher will the required return on the portfolio be after he completes this transaction?

- a. 0.07%
 - b. 0.18%
 - c. 0.39%
 - d. 0.67%
 - e. 1.34%
7. You have been managing a RM1 million portfolio. The portfolio has a beta of 1.6 and a required rate of return of 14 percent. The current risk-free rate is 6 percent. Assume that you receive another RM200,000. If you invest the money in a stock that has a beta of 0.6, what will be the required return on your RM1.2 million portfolio?
- a. 12.00%
 - b. 12.25%
 - c. 13.17%
 - d. 14.12%
 - e. 13.67%

8. A 10-year corporate bond has an annual coupon payment of 9 percent. The bond is currently selling at par (RM1,000). Which of the following statements is **most correct**?
- The bond's yield to maturity is 9 percent.
 - The bond's current yield is 9 percent.
 - If the bond's yield to maturity remains constant, the bond's price will remain at par.
 - Statements a and c are correct.
 - All of the statements above are correct

9. A 12-year bond has a 9 percent annual coupon, a yield to maturity of 8 percent, and a face value of RM1,000. What is the price of the bond?
- RM1,469
 - RM1,000
 - RM 928
 - RM1,075
 - RM1,957

$$PVIFA, 12 \text{ yrs, } 8\% = 7.5361; \quad 9\% = 7.1607$$
$$PVIF, 12 \text{ yrs, } 8\% = 0.3971; \quad 9\% = 0.3555$$

10. Which of the following statements is **most correct**?
- The constant growth model takes into consideration the capital gains earned on a stock.
 - It is appropriate to use the constant growth model to estimate stock value even if the growth rate never becomes constant.
 - Two firms with the same dividend and growth rate must also have the same stock price.
 - Statements a and c are correct.
 - All of the statements above are correct
11. Borneo Motors expects to pay a RM2.00 per share dividend on its common stock at the end of the year ($D_1 = \text{RM}2.00$). The stock currently sells for RM20.00 a share. The required rate of return on the company's stock is 12 percent ($k_s = 0.12$). The dividend is expected to grow at some constant rate over time. What is the expected stock price five years from now, that is, what is \hat{P}_5 ? (Hint: you need to find the growth rate first).
- RM21.65
 - RM22.08
 - RM25.64
 - RM35.25
 - RM36.78

12. Which of the following is **not** considered a capital component for the purpose of calculating the weighted average cost of capital (WACC) as it applies to capital budgeting?
- Long-term debt.
 - Common stock.
 - Accounts payable and accruals.
 - Preferred stock.
 - All of the above.
13. TecGuan Brothers is estimating its WACC. The company has collected the following information:
- Its capital structure consists of 40 percent debt and 60 percent common equity.
 - The company has 20-year bonds outstanding with a 9 percent annual coupon that are trading at par.
 - The company's tax rate is 40 percent.
 - The risk-free rate is 5.5 percent.
 - The market risk premium is 5 percent.
 - The stock's beta is 1.4.

What is the company's WACC?

- 9.71%
 - 9.66%
 - 8.31%
 - 11.18%
 - 11.10%
14. Maxis Corporation has been presented with an investment opportunity that will yield cash flows of RM30,000 per year in Years 1 through 4, RM35,000 per year in Years 5 through 9, and RM40,000 in Year 10. This investment will cost the firm RM150,000 today, and the firm's cost of capital is 10 percent. Assume cash flows occur evenly during the year, 1/365th each day. What is the payback period for this investment?
- 5.23 years
 - 4.86 years
 - 4.00 years
 - 6.12 years
 - 4.35 years

15. Perodua Motors is considering a project with the following expected cash flows:

<u>Year</u>	<u>Project Cash Flow</u>
0	-RM700 million
1	200 million
2	370 million
3	225 million
4	700 million

The project's WACC is 10 percent. What is the project's discounted payback?

- a. 3.15 years
- b. 4.09 years
- c. 1.62 years
- d. 2.58 years
- e. 3.09 years

$PVIFA, 10\%, 4 \text{ years} = 3.1699$

$PVIF, 10\%, 4 \text{ years} =$ Year 1 - 0.9091;
Year 2 - 0.8264;
Year 3 - 0.7513;
Year 4 - 0.6830

16. A decrease in a firm's willingness to pay dividends is likely to result from an increase in its

- a. Earnings stability.
- b. Access to capital markets.
- c. Profitable investment opportunities.
- d. Collection of accounts receivable.
- e. Stock price

17. Seloga Manufacturing follows a strict residual dividend policy. The company is forecasting that its net income will be RM500 million this year. The company anticipates that its capital budget will be RM250 million. The company has a target capital structure that consists of 50 percent equity and 50 percent long-term debt. What is the company's anticipated dividend payout ratio?

- a. 75%
- b. 55%
- c. 50%
- d. 25%
- e. 47%

18. GulaPerak Sdn. Bhd. has annual sales of RM80,000,000 and keeps average inventory of RM20,000,000. On average, the firm has accounts receivable of RM16,000,000. The firm buys all raw materials on credit, its trade credit terms are net 35 days, and it pays on time. The firm's managers are searching for ways to shorten the cash conversion cycle. If sales can be maintained at existing levels but inventory can be lowered by RM4,000,000 and accounts receivable lowered by RM2,000,000, what will be the net change in the cash conversion cycle? Use a 365-day year. Round to the closest whole day.
- +105 days
 - 105 days
 - +27 days
 - 27 days
 - 3 days
19. Your company has been offered credit terms on its purchases of 4/30, net 90 days. What will be the nominal annual cost of trade credit if your company pays on the 35th day after receiving the invoice? (Assume a 365-day year.)
- 30%
 - 304%
 - 3%
 - 87%
 - 156%
20. LayHong Glass Company buys on terms of 2/15, net 30 days. It does not take discounts, and it typically pays 30 days after the invoice date. Net purchases amount to RM730,000 per year. On average, how much "free" trade credit does Phillips receive during the year? (Assume a 365-day year.)
- RM30,000
 - RM40,000
 - RM50,000
 - RM60,000
 - RM70,000

- End of Section A -

Answer to Multiple Choice Questions	
Question Number	Answer
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Total Score	

Section B

Instruction: **Answer ALL Three (3) Questions**

[TOTAL: 30 MARKS]

1. TH Group is considering a proposal to enter a new line of business. In reviewing the proposal, the company's CFO is considering the following facts:
- The new business will require the company to purchase additional fixed assets that will cost RM600,000 at $t = 0$. For tax and accounting purposes, these costs will be depreciated on a straight-line basis over three years. (Annual depreciation will be RM200,000 per year at $t = 1, 2, \text{ and } 3$.)
 - At the end of three years, the company will get out of the business and will sell the fixed assets at a salvage value of RM100,000.
 - The project will require a RM50,000 increase in net operating working capital at $t = 0$, which will be recovered at $t = 3$.
 - The company's marginal tax rate is 35 percent.
 - The new business is expected to generate RM2 million in sales each year (at $t = 1, 2, \text{ and } 3$). The operating costs excluding depreciation are expected to be RM1.4 million per year.
 - The project's cost of capital is 12 percent.

REQUIRED:

[Total: 10 marks]

What is the project's net present value (NPV)?

Year	Present Value of RM1 Due At the End of n Periods	Present Value of an Annuity RM1 per period for n Period
	12%	12%
1	0.8929	0.8929
2	0.7972	1.6901
3	0.7118	2.4018
4.	0.6355	3.0373

Answer To Question 1.

2. JayCorp is an all-equity firm with 175,000 shares outstanding. The company's stock price is currently RM80 a share. The company's EBIT is RM2,000,000, and EBIT is expected to remain constant over time. The company pays out all of its earnings each year, so its earnings per share equal its dividends per share. The firm's tax rate is 30 percent.

The company is considering issuing RM800,000 worth of bonds and using the proceeds for a stock repurchase. If issued, the bonds would have an estimated yield to maturity of 8 percent. The risk-free rate is 5 percent and the market risk premium is also 5 percent. The company's beta is currently 1.0, but its investment bankers estimate that the company's beta would rise to 1.2 if it proceeded with the recapitalization.

REQUIRED:

[Total: 10 marks]

What would be the company's stock price following the repurchase transaction?

Answer to Question 2

3. Siva & Sons recently reported sales of RM100 million, and net income equal to RM5 million. The company has RM70 million in total assets. Over the next year, the company is forecasting a 20 percent increase in sales. Since the company is at full capacity, its assets must increase in proportion to sales. The company also estimates that if sales increase 20 percent, spontaneous liabilities will increase by RM2 million. If the company's sales increase, its profit margin will remain at its current level. The company's dividend payout ratio is 40 percent.

REQUIRED:

[Total: 10 marks]

Based on the ADDITIONAL FUND NEEDED (AFN) formula, how much additional capital must the company raise in order to support the 20 percent increase in sales?

Answer to Question 3.

***** END OF QUESTIONS *****