FINAL EXAMINATION SECOND SEMESTER 2011/2012 SESSION

COURSE CODE / NAME: BWFF2023 / FINANCIAL MANAGEMENT II
DATE: 5 JUNE 2012 (TUESDAY)
TIME: 2.30PM – 5PM (2 ½ hours)
VENUE: DTSC, DMS, TE, KIA, KTB, KYM, ALPHA College, IKIP & MKM

INSTRUCTION
1. This examination paper has TWO (2) sections printed on TWENTY ONE (21) pages excluding the cover page.
2. SECTION A comprises FORTY (40) multiple choice questions to be answered using the OMR form provided.
3. SECTION B consists of FIVE (5) structured questions. Answer ALL questions in the space provided in the question paper.
4. The examination paper also include FOUR (4) printed pages of ATTACHMENT which consists of financial tables and formula list.
5. Candidates are NOT ALLOWED to take both exam question and exam sheet out of the hall.
6. Candidates are bound by UUM’S RULES AND PROCEDURES ON ACADEMIC FRAUD.

DO NOT OPEN THIS EXAMINATION PAPER UNTIL INSTRUCTED
SECTION A (40 MARKS)

1. A ________ is a restrictive provision on a bond which provides for the systematic retirement of the bonds prior to their maturity.
   A. redemption clause  
   B. conversion feature  
   C. subordination clause  
   D. sinking-fund requirement

2. ________ is secured by real estate.
   A. A debenture  
   B. An income bond  
   C. A mortgage bond  
   D. subordinated debenture

3. Gaban Bhd. sold an issue of 20-year, RM1,000 par value bonds to the public that carry a 11% coupon rate, payable semiannually. It is now 10 years later and the current market rate of interest is 9%. If interest rates remain at 9% until Gaban's bonds mature, what will happen to the value of the bonds over time?
   A. The bonds will sell at a discount and rise in value until maturity.  
   B. The bonds will sell at a discount and fall in value until maturity.  
   C. The bonds will sell at a premium and fall in value until maturity.  
   D. The bonds will sell at a premium and rise in value until maturity.

4. What is the current price of a RM1,000 par value bond maturing in 12 years with a coupon rate of 10%, paid annually, that has a required return of 9%?
   A. RM700.13  
   B. RM845.57  
   C. RM1,071.57  
   D. RM1,123.56

5. Kokimon Bhd. issued bonds bearing a coupon rate of 10%, pay coupons semiannually, have 3 years remaining to maturity, and are currently priced at RM950 per bond. Using the approximation method, the YTM on the Kokimon's bond is________.
   A. 8.25%  
   B. 9.05%  
   C. 11.97%  
   D. 15.25%
6. Ulu Sintok Berhad's preferred stock pays RM5.00 in annual dividends. If your required rate of return is 13%, how much will you be willing to pay for one share?

A. RM26.26  
B. RM38.46  
C. RM46.38  
D. RM65.46

7. Preferred stock valuation usually treats the preferred stock as a

A. perpetuity.  
B. capital asset.  
C. common stock.  
D. long term bond.

8. Turtle & Tortoise Company, whose common stock is currently selling for RM40 per share, is expected to pay a RM2.00 dividend in the coming year. If investors believe that the expected rate of return on Turtle & Tortoise is 14%, what growth rate in dividends must be expected?

A. 5.00%  
B. 6.00%  
C. 9.00%  
D. 14.00%

9. Dragneel & Co. is a new firm in a rapidly growing industry. The company is planning on increasing its annual dividend by 20% a year for the next four years and then decreasing the growth rate to 5% per year. The company just paid its annual dividend in the amount of RM1.00 per share. What is the current value of one share of this stock if the required rate of return is 9.25%?

A. RM35.63  
B. RM38.19  
C. RM41.05  
D. RM45.81

10. The voting procedure where a shareholder grants authority to another individual to vote his/her shares is called ________ voting.

A. proxy  
B. deferred  
C. democratic  
D. cumulative
11. All of the following variables are used in computing the cost of debt EXCEPT
   I. risk-free rate  
   II. market price of the debt  
   III. maturity value of the debt  
   IV. numbers of years to maturity
   A. I only  
   B. II only  
   C. II and III only  
   D. II, III and IV only

12. Why the cost of newly issued common stock is greater than the cost of retained earnings?
   A. Agency cost  
   B. Variable cost  
   C. Floatation cost  
   D. Capital gain tax

13. All else the same, a higher corporate tax rate _______
   A. will not affect the WACC of a firm with debt in its capital structure.  
   B. will decrease the WACC of a firm with some debt in its capital structure.  
   C. will decrease the WACC of a firm with only equity in its capital structure.  
   D. will increase the WACC of a firm with debt and equity in its capital structure.

Use the following information to answer questions 14-16.

The capital structure for Zahab Bab Sdn. Bhd. is as follows:

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<thead>
<tr>
<th>Type of financing</th>
<th>Characteristics</th>
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<tbody>
<tr>
<td>Bond</td>
<td>Coupon interest rate: RM120 annually</td>
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<td>Market price: RM1,125</td>
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<td>Maturity: 10 years</td>
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<td>Tax bracket: 28%</td>
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<td>Flotation costs: RM67.50 per share</td>
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<td>Preferred Stock</td>
<td>Dividend: RM2.15</td>
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<td>Market price: RM20</td>
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<td>Flotation costs: RM2.10 per share</td>
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<tr>
<td>Common stock</td>
<td>Dividend paid last year: RM2.50</td>
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<td>Market price: RM35</td>
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<td>Dividend growth: 6%</td>
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<td>Flotation costs: RM1.25 per share</td>
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</tbody>
</table>
14. What is the after tax cost of bond?
   A. 6.71%
   B. 7.99%
   C. 8.99%
   D. 10.99%

15. What is the cost of preferred stock?
   A. 11.22%
   B. 12.01%
   C. 14.55%
   D. 16.77%

16. What is the cost of common stock?
   A. 12.89%
   B. 13.85%
   C. 14.89%
   D. 16.77%

17. The period of time required for an investment’s discounted cash flows to recover the initial investment of the project is called the ________.
   A. payback period
   B. net present value
   C. internal rate of return
   D. discounted payback period

18. For the net present value (NPV) criteria, a project is acceptable if NPV is ________, while for the profitability index (PI), a project is acceptable if PI is ________.
   A. ≥ than 0 ; ≥ than 1
   B. ≥ than 1 ; ≥ than 1
   C. ≥ than 0 ; ≥ than 0
   D. ≥ than 1 ; ≥ than 0

19. Disadvantages of an internal rate of return (IRR) are all of the following EXCEPT
   A. possibility of multiple IRRs.
   B. recognizes time value of money.
   C. required detailed long-term project’s free cash flows’ forecasts.
   D. assumes cash flows over the life of the project are reinvested at the IRR.
20. Which of the following statement is **FALSE**?

A. If the NPV of a project is positive, then the PI is more than one.
B. A project should be accepted when the IRR is more than the required return.
C. The payback method considers cash flows after the payback has been reached.
D. When several sign reversals in the cash flow stream occur, a project can have more than one IRR.

21. Mutually exclusive projects occur when

A. projects are independent.
B. projects have uneven cash flows.
C. more than one firm can use the projects.
D. a set of investment proposals perform essentially the same function.

22. In capital budgeting, the term capital rationing implies

A. that no retained earnings available.
B. that no external funds can be raised.
C. that limited funds are available for investment.
D. that no fresh investment is required in current year.

23. Relevant cash flows for a project are best described as

A. sunk cash flows.
B. incidental cash flows.
C. accounting cash flows
D. incremental cash flows.

24. Mr. Hazami is considering including the cost of research and development that was conducted six years ago in calculating cash flows of a new project. Apparently, Mr. Hazami does not understand the concept of

A. sunk cost.
B. overhead cost.
C. side-effect cost.
D. opportunity cost.

25. Which of the following costs would you consider in relevant cash flow?

I. sunk cost
II. overhead cost
III. opportunity cost
IV. interest expense

A. I and II only
B. I and IV only
C. II and III only
D. I, II and III only
26. The change in net working capital when evaluating a capital budgeting decision is
   A. the increase in current assets.
   B. the increase in current liabilities.
   C. the change in current liabilities minus the change in current assets.
   D. the change in current assets minus the change in current liabilities.

27. The basic variables that must be considered in initial outlay are all of the following EXCEPT
   A. cost of new asset.
   B. change in depreciation.
   C. increase in working capital.
   D. shipping and installation costs.

28. Which of the following should be included in the terminal cash flow?
   A. Salvage value
   B. Recapture in working capital
   C. Installation and shipping cost
   D. Both A and B are correct

29. A firm's operating breakeven point is sensitive to all of the following variables EXCEPT
   A. interest expense.
   B. sales price per unit.
   C. fixed operating costs.
   D. variable operating cost per unit.

30. The firm's operating breakeven point is the point at which
   A. EBIT is zero.
   B. EBIT is less than sales.
   C. total operating costs are zero.
   D. total operating costs equal total fixed costs.

31. In general, as the level of sales rises above the break-even point, the degree of operating leverage
   increases
   B. fluctuates
   C. decreases
   D. remains constant
32. Which of the following is NOT a component of a firm's capital structure?

A. Bonds
B. Common stock
C. Preferred stock
D. Accounts payable

33. The firm's _________ is the mix of long-term debt and equity utilized by the firm, which may significantly affect its value by affecting return and risk.

A. capital budget
B. dividend policy
C. working capital
D. capital structure

34. Financing a portion of a firm's assets with securities bearing a fixed rate of return in hopes of increasing the return to stockholders refers to

A. business risk.
B. financial risk.
C. financial leverage.
D. operating leverage.

35. Which type of dividend payment policy has the disadvantage that if the firm's earnings drop or if a loss occurs in a given period, dividends may be low or nonexistent?

A. Regular dividend policy
B. Fluctuate dividend policy
C. Constant-payout-ratio policy
D. Low-regular-and-extra dividend policy

36. Which of the following types of firms are most likely NOT to payout cash dividends?

A. Large, mature firms.
B. Rapidly growing firms.
C. International corporations.
D. Firms with modest growth.

37. ____________ suggest that the value of the firm is not affected by the firm's dividend policy.

A. The clientele effect
B. The informational content
C. The relevance of dividends
D. The optimal capital structure
38. If you ignore taxes and transaction costs, a stock repurchase will

I. increase the earnings per share.
II. reduce the total assets of a firm.
III. reduce the total equity of a firm.
IV. reduce the PE ratio more than an equivalent stock dividend.

A. I and II only
B. III and IV only
C. I, II, and III only
D. I, III, and IV only

39. Which of the following tend to increase the appeal of a firm's stock to the average investor?

I. A reverse stock split for a low-priced stock.
II. The declaration of stock dividend by a growth firm.
III. The distribution of a special dividend by dividend-paying firm.
IV. A cancellation of dividends by a firm which has a long history of increasing dividends.

A. I and IV only
B. II and III only
C. I, II, and III only
D. II, III, and IV only

40. The date before which a new purchaser of stock is entitled to receive a declared dividend, but on or after which she does not receive the dividend, is called the ______ date.

A. record
B. ex-rights
C. declaration
D. ex-dividend
SECTION B (60 MARKS)

QUESTION ONE (20 MARKS)

Syarikat Sirna Sdn. Bhd. is considering replacing an old machine. The old machine was bought three years ago for RM60,000 and has a remaining economic life of three years. The salvage value after three years is RM8,000. It can be sold today for RM15,000. The cost of new machine is RM84,000 and requires RM10,000 increase in current assets and RM6,000 increase in current liabilities to support it. It also has an economic life of three years and a salvage value of RM15,000. The transportation and insurance costs are RM800 and RM1,200 respectively.

The following is an estimate of earnings (before depreciation & taxes) for the next three years attributable to each machine:

<table>
<thead>
<tr>
<th>Year</th>
<th>Old Machine RM</th>
<th>New Machine RM</th>
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<tbody>
<tr>
<td>1</td>
<td>40,000</td>
<td>70,000</td>
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<tr>
<td>2</td>
<td>40,000</td>
<td>90,000</td>
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<tr>
<td>3</td>
<td>40,000</td>
<td>70,000</td>
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</tbody>
</table>

Assuming the following:
- The company is taxed at 26%.
- Depreciation is calculated on a simplified straight line basis.
- Syarikat Sirna Sdn. Bhd. requires a minimum rate of return of 15%.
Based on information in page 9

a) Calculate the following cash flows:
   i. The initial outlay (in Year 0).

   (4 marks)
ii. The annual cash inflows (Year 1-3).

(8 marks)

iii. The terminal value (Year 3).

(3 marks)
b) By using the net present value (NPV) method, recommend a decision for Syarikat Sirna Sdn. Bhd.

(5 marks)
QUESTION TWO (12 MARKS)

Edison Sdn. Bhd. produces incandescent bulbs, selling 700,000 bulbs per year. Each bulb produced has a variable operating cost of RM2.00 and sells for RM4.00. Fixed operating costs are RM450,000. The firm has annual interest charges of RM50,000, preferred dividends of RM6,500, and a 26% tax rate.

a) Calculate the operating breakeven point in units.

(2 marks)

b) Calculate Edison's earnings before interest and tax (EBIT).

(2 marks)

c) Calculate Edison's degree of operating leverage (DOL).

(2 marks)

d) Calculate Edison's degree of financial leverage (DFL).

(2 marks)

e) Calculate Edison's degree of total leverage (DTL).

(2 marks)
f) Briefly discuss Edison’s operating and financial risks that your answers illustrate.

(2 marks)

QUESTION THREE (8 MARKS)

ABC Sdn. Bhd. is comparing two different capital structures for financing a new project that will cost RM200,000. The two structures are described below:

**Plan A: Finance with 30% debt and 70% common equity**
- Debt (bonds) RM60,000
- Common equity RM140,000

**Plan B: Finance with 80% debt and 20% common equity**
- Debt (bonds) RM160,000
- Common equity RM40,000

New common stock can be sold for RM8 per share. The bonds can be issued with a 7% coupon rate. ABC currently has 30,000 shares outstanding. The firm’s corporate tax rate is 26%.

a) Calculate the indifference level of EBIT between the two plans.

(5 marks)

b) If EBIT is expected to be RM20,000, which plan will result in higher EPS? Why?

(3 marks)
QUESTION FOUR (10 MARKS)

NZ Sdn. Bhd. has RM5 million in earnings after taxes and 1 million shares outstanding. The stock trades at a P/E of 10. The firm has RM2.5 million in excess cash.

a) Compute the current price of the share. (2 marks)

b) If the RM2.5 million is used to pay dividends, how much will dividends per share be? (1 mark)

c) If the RM2.5 million is used to repurchase shares in the market at a price of RM40 per share, how many shares will be acquired? (2 marks)

d) What will the new earnings per share (EPS) be? (2 marks)

e) If the P/E remains constant, what will the new price of the securities be? By how much, in terms of dollars, did the repurchase increase the share price? (3 marks)
QUESTION FIVE (10 MARKS)

(A) Below are the expected after-tax cash flows for a corn farming project in Perlis. The project has an initial cash outlay of RM20,000 and a required rate of return of 15%.

<table>
<thead>
<tr>
<th>Year</th>
<th>Expected Cash Flows for a Corn Farming Project (RM)</th>
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<td>1</td>
<td>12,000</td>
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<td>2</td>
<td>8,000</td>
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<td>3</td>
<td>6,000</td>
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<td>4</td>
<td>2,000</td>
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<td>5</td>
<td>2,000</td>
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</tbody>
</table>

i) What is the payback period for the project?  

(2 marks)

ii) Calculate the profitability index (PI) of the project.  

(3 marks)
iii) Should the corn farming project be accepted based on your answer (ii) above? Why or why not?

(2 marks)

(B) Generic Manufacturing Sdn. Bhd. buy a new machine for RM17,482 and they receive a cash inflow of RM1,800 per year for 15 years. What is the internal rate of return (IRR)?

(3 marks)

END of QUESTIONS
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<th>Period</th>
<th>1%</th>
<th>2%</th>
<th>3%</th>
<th>5%</th>
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The factor is now to four decimal places. © 1993 The Cryostat Press, All rights reserved.
### Future Value of $1 at the End of n Periods

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#### Financial Calculator Keys:

\[ F = \frac{P \times (1 + r)^n}{1 + r} \]

### Table of Future Value

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**Note:** The table above shows the future value of $1 for various periods and interest rates. The values are rounded to 5 decimal places.
APPENDIX 1

\[ V_b = I(PVIFA_{i,n}) + M(PVIF_{i,n}) \quad \text{or} \quad V_b = I \left[ 1 - \frac{1}{(1+i)^n} \right] + \frac{M}{(1+i)^n} \]

\[ CY = \frac{PMT}{V_b} \quad V_{ps} = \frac{D}{k} \]

\[ V_{cs} = \frac{D_1}{(1+k)} + \frac{P_1}{(1+k)} \]

\[ \bar{k} = \frac{D_1}{P_0} + g \]

\[ \bar{k} = \frac{D}{P_0} \]

\[ k_{cs} = k_{rf} + \beta (k_m - k_{rf}) \]

\[ YTM = \frac{I + \left[ \frac{M - P_0}{n} \right]}{\left[ \frac{M + P_0}{2} \right]} \]

\[ D_t = D_0 (1 + g)^t \]

\[ D_n = D_{n-1} (1 + g) \]

\[ WACC = (w_d)(k_d)(1-T) + (w_{ps})(k_{ps}) + (w_{cs})(k_{cs}) \]

\[ k_d = \frac{I + \left[ \frac{M - NP}{n} \right]}{\left[ \frac{M + NP}{2} \right]} \quad k_{ps} = \frac{D}{NP} \]

\[ k_{cs-internal} = \frac{D_1}{P} + g \quad k_{cs-external} = \frac{D_1}{NP} + g \]
\[ NPV = \sum_{t=1}^{n} \frac{FCF}{(1+k)^t} - IO \]

\[ PI = \frac{\sum_{t=1}^{n} \frac{FCF}{(1+k)^t}}{IO} \]

\[ IO = \sum_{t=1}^{n} \frac{FCF}{(1+IRR)^t} \]

\[ DOL = \frac{Q \times (P - VC)}{Q \times (P - VC) - FC} \]

\[ DFL = \frac{EBIT}{EBIT - I - (PD \times \frac{1}{1-T})} \]

\[ DCL = DOL \times DFL \]

\[ EAA = \frac{NPV}{PVIFA_{i,n}} \]

\[ \frac{(EBIT - I)(1-t) - P}{s} = \frac{(EBIT - I)(1-t) - P}{s} \]

\[ Q_{BE} = \frac{FC}{P - VC} \]

\[ S_{BE} = \frac{FC}{1 - \frac{VC}{s}} \]