

UNIVERSITI SAINS MALAYSIA
Master of Business Administration

First Semester Examination
Academic Session 1997 / 98

September 1997

AGW610 - FINANCE & ACCOUNTING FOR MANAGEMENT

Time : [3 hours]

INSTRUCTIONS:

Please make sure that this examination paper consists of **EIGHT (8)** printed pages before you begin.

Answer **FOUR (4)** questions.

1. (a) Instead of hunting for a summer job after finishing her junior year in college, H.K.Chee organized a lawn service company in her neighborhood. To start her business on June 1, she deposited RM1,350 in a new bank account in the name of her company. The RM1,350 consisted of a RM500 loan from her father and RM850 of her own money.

Using the money in current account, Chee rented lawn equipment, purchased supplies, and hired neighborhood secondary school students to mow and trim the lawns of neighbors who had agreed to pay her for the service. At the end of each month, she mailed bills to her customers.

On August 31, Chee was ready to dissolve her business and go back to college for the semester. Because she had been so busy, she had not kept any records other than her checkbook and a list of amounts owed to her by customers.

Her checkbook had a balance of RM1,760 and the amount owed to her by customers totaled RM435. She expected these customers to pay her during October. She planned to return unused supplies to Suburban Landscaping Company for a full credit of RM25. When she brought back the rented lawn equipment, Suburban Landscaping also would return a deposit of RM100 she had made in June. She owed Suburban Landscaping RM260 for equipment rentals and supplies. In addition, she owed the students who had worked for her RM50, and she still owed her father RM350. Although Chee feels she did quite well, she is not sure just how successful she was.

Required:

- (i) Prepare a balance sheet dated June 1 and one dated August 31 for Chee Lawn Care Company.
- (ii) Comment on the performance of Chee Lawn Care Company by comparing the two balance sheets. Did the company have a profit or a loss? (Assume that Chee used none of the company's assets for personal purposes.)
- (iii) If Chee wants to continue her business next summer, what kind of information from her recordkeeping system would help make it easier to tell whether or not she is earning a profit?

(15 marks)

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- (b) Compare and contrast the objectives and functions of financial accounting, management accounting and financial management in business entities. (10 marks)

2. (a) Uncle Bubba's Seafood chain had the following condensed balance sheet at the end of operation for 19X1:

Uncle Bubba's Seafood
Balance Sheet
December 31, 19X1

| | | | |
|----------------------|------------------|---------------------|------------------|
| Cash | RM 30,000 | Current Liabilities | RM 25,000 |
| Other current assets | <u>60,000</u> | L-T Notes Payable | 38,000 |
| | <u>90,000</u> | Bonds Payable | 50,000 |
| Investments | 25,000 | Share Capital | 147,000 |
| Fixed assets (net) | 90,000 | Retained earnings | <u>65,000</u> |
| Land | <u>120,000</u> | | |
| | <u>RM325,000</u> | | <u>RM325,000</u> |

During 19X2, the following occurred

- Uncle Bubba's sold some of its investments for RM12,300 which resulted in a gain of \$300.
- Additional land for a plant expansion was purchased for RM22,000.
- Bonds payable were paid in the amount of RM8,500.
- An additional RM25,000 in share capital was issued.
- Dividends of RM13,000 were paid to shareholders.
- Net income for 19X2 was RM38,000 after allowing for RM11,000 in depreciation.
- A second parcel of land was purchased through the issuance of RM10,000 in bonds, and RM4,800 in long- term notes payable.

Required:

- (i) Prepare a cash flow statement for 19X2.
- (ii) Prepare a condensed balance sheet for Uncle Bubba's as of December 31, 19X2. (17 marks)
- (iii) How does the notion risk and return govern the behaviour of financial managers ? (8 marks)

3. (a) Baker Company, a manufacturer of quality handmade pipes, has experienced a steady growth in sales over the last five years. However, increased competition has led Alice Baker, the company president, to believe that an aggressive advertising campaign will be necessary in 19x4 to maintain the company's present growth. To prepare for the 19x4 advertising campaign, the company's accountants have presented Baker with the data in the table below, based on 19x3 operation.

| Variable Cost per Pipe | Annual Fixed Costs | |
|-------------------------------|---------------------------|-------------------|
| Direct labor RM 8.00 | Manufacturing | RM 25,000 |
| Direct materials 3.25 | Selling | 40,000 |
| Variable overhead <u>2.50</u> | Administrative | <u>70,000</u> |
| RM <u>13.75</u> | | <u>RM 135,000</u> |

Sales volume in 19x3 was 20,000 units at RM25 per pipe. Target sales volume for 9x4 is RM550,000, or 22,000 units. Assume a 34 percent tax rate.

Required:

- (i) Compute the 19x3 after-tax net income.
- (ii) Compute the breakeven volume in units for 19x3.
- (iii) Baker believes an additional selling expense of RM11,250 for advertising in 19x4, with all other costs remaining constant, will be necessary to achieve the sales target. Compute the after-tax net income for 19x4, assuming the target sales volume and expenditure for advertising occur as planned.

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- (iv) Compute the breakeven volume in sales dollars for 19x4 assuming the additional RM11,250 is spent for advertising.
- (v) If the additional RM11,250 is spent for advertising in 19x4, what is the 19x4 dollar sales volume required to earn the 19x3 after-tax net income ?

(15 marks)

- (b) Randison Resorts, Ltd. has approached NAU Technical Printers, Inc. with a special order to produce 300,000 two-page brochures. Most of NAU Technical's work consists of recurring short-run orders. Randison Resorts is offering a one-time order, and NAU Technical does have the capacity to handle the order over a two-month period.

Randison's management has stated that the company is unwilling to pay more than RM48 per 1,000 brochures. The following cost data were assembled by NAU Technical's controller for this decision analysis: direct materials (paper) would be RM26.50 per 1,000 brochures. Direct labor costs would be RM6.80 per 1,000 brochures. Direct materials (ink) would be RM4.40 per 1,000 brochures. Variable production overhead would be RM6.20 per 1,000 brochures. Machine maintenance (fixed cost) is RM1.00 per direct labor ringgit. Other fixed production overhead amounts to RM2.40 per direct labor ringgit. Variable packing costs would be RM4.30 per 1,000 brochures. Also, the share of general and administrative expenses (fixed costs) usually allocated to printing is RM5.25 per direct labor ringgit.

Required:

- (i) Prepare an analysis for NAU Technical's management to use in deciding whether to accept or reject Randison Resorts' offer. What decision should be made ?
- (ii) What is the lowest possible price NAU Technical can charge per thousand and still make a RM6,000 profit on the order ?

(10 marks)

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4. (a) Yang Corporation is reviewing an investment proposal. The initial cost is RM52,500. The estimate of the book value of the investment at the end of each year, the net after-tax cash flows for each year, and the net income for each year are presented in the schedule below. All cash flows are assumed to take place at the end of the year. There will be no salvage value at the end of the investment's life.

| Year | Initial Cost and Book Value | Annual Net After-tax Cash Flows | Annual Net Income |
|------|-----------------------------|---------------------------------|-------------------|
| 1 | RM 35,000 | RM 20,000 | RM 2,500 |
| 2 | 21,000 | 17,500 | 3,500 |
| 3 | 10,500 | 15,000 | 4,500 |
| 4 | 3,500 | 12,500 | 5,500 |
| 5 | -0- | 10,000 | 6,500 |
| | | <u>RM 75,000</u> | <u>RM 22,500</u> |

Yang uses a 12% after-tax target rate of return for new investment proposals.

Required:

- (i) Calculate the project's payback period.
- (ii) Calculate the accounting rate of return on the investment proposal. Base your calculation on the initial cost of the investment.
- (iii) Calculate the proposal's net present value. Is the project's IRR greater or less than the hurdle rate?

(13 marks)

- (b) The Press Company is multi-divisional company, and its managers have been delegated full profit responsibility and complete autonomy to accept or reject transfers from other divisions. Division A produces a subassembly with a ready competitive market. This subassembly is currently used by Division B for a final product which is sold outside at RM1,400. Division A charges Division B market price for the subassembly which is RM900 per unit. Variable costs are RM600 and RM550 for Divisions A and B, respectively.

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The manager of Division B feels that Division A should transfer the subassembly at a lower price than market because at this price, Division B is unable to make a profit.

Required:

- (i) Calculate Division A's and Division B's contribution margin if transfers are made at the market price, and also the total contribution margin for the company.
- (ii) Assume that Division A can sell all of its production in the open market. Should Division A transfer goods to Division B ? If so, at what price ?
- (iii) Assume Division A can sell in the open market only 500 units at RM800 per unit, out of the 1,000 units which it can produce every month, and that a 20 percent reduction in price is necessary to sell full capacity. Should transfers be made to Division B ? If so, how many units should it transfer and at what price ? Submit a schedule showing comparisons of profit under the different available alternatives to support your decision.

(12 marks)

5. (a) FH Bakery is a new firm specializing in all natural ingredient pastry products. In attempting to determine what the financial position of the firm should be, the financial manager obtained the following average ratios for the baking industry for 1996:

| | |
|--|---------|
| Ordinary equity to total assets | 60 % |
| Total asset turnover | 3 times |
| Long-term debt to total capitalization | 25 % |
| Current ratio | 1.2 |
| Quick ratio | 0.75 |
| Average collection period (360-day year) | 10 days |

Complete the accompanying pro forma balance sheet for FH Bakery assuming 1997 sales (all credit) are RM 450,000.

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**Frog Hollow Bakery
Pro Forma Balance Sheet
December 31, 1997**

| | | | | | |
|----------------------|----|--|-------------------|----|--|
| Cash | RM | | Current debt | RM | |
| Account receivable | | | Long term debt | | |
| Inventory | | | Ordinary equity | | |
| Total current assets | | | Total liabilities | | |
| Fixed assets | | | and equity | | |
| Total assets | | | | | |

(15 marks)

- (b) Contrast the objectives of maximising earnings with that of maximising wealth. If all companies had an objective of maximising shareholder wealth, would people overall tend to be better or worse off?

(5 marks)

- (c) Discuss briefly 5 of the axioms on which finance is built and which motivate the techniques and tools introduced by Keown, Scott, Martin and Petty.

(5 marks)

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