UNIVERSITI SAINS MALAYSIA
Master of Business Administration

First Semester Examination
Academic Session 1998/99

August/September 1998

AGW610 - FINANCE AND ACCOUNTING FOR MANAGEMENT

Time: [3 hours]

INSTRUCTIONS:
Please make sure that this examination paper consists of **SEVEN (7)** printed pages before you begin.

Answer any **FIVE** questions.

1. Financial Data for Dooley Sportswear December 31, 1996

Inventory	RM 206,250
Long-tem debt	300,000
Interest expense	5,000
Accumulated depreciation	442,500
Cash	180,000
Net sales (all credit)	1,500,000
Ordinary shares	800,000
Accounts receivable	225,000
Operating expenses	525,000
Notes payable - current	187,500
Cost of goods sold	937,500
Plant and equipment	1,312,500
Accounts payable	168,750
Marketable securities	95,000
Prepaid insurance	80,000
Accrued wages	65,000
Retained earnings - current year	?
Income taxes	5,750

Required

a. From the scrambled list of items presented above, prepare an income statement and balance sheet for Dooley Sportswear Company.

b. From the information presented above, calculate the following financial ratios for the Dooley Sportswear Company.

current ratio	gross profit margin
acid test ratio	operating profit margin
average collection period	net profit margin
inventory turnover	times interest earned

[20 Marks]

2. a. Identify any financial weaknesses revealed in the statement of cash flow for the Setiawan Pulpwood Mill, Bhd.

Setiawan Pulpwood Mill, Inc., Statement of Cash Flow

Cash flow from operating activities		
Net income	RM 500,000	
Add (deduct) to reconcile net income to net cash flow		
Decrease in accounts receivable	RM 200,000	
Increase in inventories	(400,000)	
Increase in prepaid expenses	(100,000)	
Depreciation expense	600,000	
Decrease in accrued wages	(50,000)	
Net cash flow from operating activities		RM 750,000
Cash flow from investing activities		
Purchase (sale) of plant equipment		(2,250,000)
Cash flow from financing activities		
Issuance of bonds payable	RM 5,000,000	
Repayment of short-term debt	(3,000,000)	
Repayment of long-term debt	(500,000)	
Payment of dividends	(1,000,000)	
Net cash from financing activities		500,000
Net increase (decrease) in cash for the period		RM(1,000,000)

b. "Profits can be manufactured but cash needs to be generated. Cash - not profits - is king". Comment.

[20 Marks]

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3. Saringat Corporation manufactures pharmaceutical products that are sold through a network of sales agents located in Malaysia and Singapore. The agents are currently paid an 18 percent commission on sales, and this percentage was used when Saringat prepared the following Pro Forma Income Statement for the fiscal year ending June 30, 1998.

Saringat Corporation
Pro Forma Income Statement
For the Year Ending June 30, 1998
(in thousands)

Sales		RM 26,000
Cost of goods sold:		
Variable	RM 11,700	
Fixed	2,870	14,570
Gross profit		RM 11,430
Selling and administrative costs:		
Commissions	RM 4,680	
Fixed advertising cost	750	
Fixed administrative cost	1,850	7,280
Operating income		RM 4 ,150
Fixed interest cost		650
Income before income taxes		RM 3,500
Income taxes (40%)		1,400
Net income		RM 2,100

Since the completion of the above statement, Saringat has learned that its agents are requiring an increase in the commission rate to 23 percent for the upcoming year. As a result, Saringat's president has decided to investigate the possibility of hiring its own sales staff in place of the network of sales agents and has asked Pauzi, Saringat's controller, to gather information on the costs associated with this change.

Pauzi estimates that Saringat will have to hire eight salespeople to cover the current market area, and the annual payroll cost of each of these employees will average RM80,000, including fringe benefit expense. Travel and entertainment expense is expected to total RM600,000 for the year, and the annual cost of hiring a sales manager and sales secretary will be RM150,000. In addition to their salary, the eight salespeople will each earn commissions at the rate of 10 percent on the first RM2 million in sales and 15 percent on all sales over RM2 million. For planning purposes, Pauzi expects that all eight salespeople will exceed the RM2 million mark and that sales will be at the level previously projected. Pauzi believes that Saringat should also increase its advertising budget by RM500,000.

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Required

a. Calculate Saringat Corporation's break-even point in sales ringgit for the fiscal year ending June 30, 1998, if the company hires its own sales force and increase in advertising costs.

b. If Saringat Corporation continues to sell through its network of sales agents and pays the higher commission rate, determine the estimated volume in sales ringgit for the fiscal year ending June 30, 1998, that would be required to generate the same net income as projected in the Pro Forma Income Statement presented above.

c. Describe the general assumptions underlying break-even analysis that might limit its usefulness in this case.

[20 Marks]

4. The Seberang Jaya plant of Pinang Company produces a pesticide. At the beginning of the year, the Seberang Jaya plant had the following standard cost sheet:

Direct materials (5 lbs. @ RM1.60)	RM 8.00
Direct labor (1.5 hrs. @ RM9.00)	13.50
Fixed overhead (1.5 hrs. @ RM2.00)	3.00
Variable overhead (1.5 hrs. @ RM1.50)	2.25
Standard cost per unit	RM 26.75

The Seberang Jaya plant computes its overhead rates using practical volume, which is 72,000 units. The actual results for the year are:

- Unit produced: 70,000
- Materials purchased: 372,000 pounds at RM1.50
- Materials used: 368,000 pounds
- Direct labor: 112,000 hours at RM8.95
- Fixed overhead: RM214,000
- Variable overhead: RM175,400

Required

a. Compute price and usage variances for materials
b. Compute the labor rate and labor efficiency variances
c. Compute the fixed overhead spending and volume variances
d. Compute the variable overhead spending and efficiency variances
e. Provide plausible explainations for the variances above.
f. Planning and control are two sides of the same coin. Discuss with reference to the variance computations above.

[20 Marks]

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5. Mr. Tobi, president of Kuntakinte Company, is considering the purchase of a computer-aided manufacturing system. The annual after-tax cash benefits/savings associated with the system are described below:

Decreased waste	RM 300,000
Increased quality	400,000
Decrease in operating costs	600,000
Increase in on-time deliveries	200,000

The system will cost RM 9,000,000 and will last ten years. The company's cost of capital its 12%.

Required

a. Calculate the payback period for the system. Assume that the company has a policy of only accepting projects with a payback of five years or less. Would the system be acquired?

b. Calculate the NPV and IRR for the project. Should the system be purchased -- even if it does not meet the payback criterion?

c. The project manager reviewed the projected cash flows and pointed out that two items had been missed. First, the system would have a salvage value, net of any tax effects, of RM1,000,000 at the end of 10 years. Second, the increased quality and delivery performance would allow the company to increase its market share by 20%. This would produce an additional annual after-tax benefit of RM300,000. Recalculate the payback period, NPV, and IRR given this new information (for the IRR computation, initially ignore salvage value). Does the decision change? Suppose that the salvage value is only half what is projected. Does this make a difference in the outcome? Does salvage value have any real bearing on the company's decision?

d. What is an optimal capital budget, and how is it determined?

[20 Marks]

6. You have determined the following costs of capital:

After-tax cost of debt:	6%
Cost of preference shares	10%
Cost of retained earnings	14%
Cost of new ordinary shares	15%

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The firm expects to have RM 700,000 in additions to retained earnings in the coming year and its optimal capital structure is 5% preference, 25% debt, and 70% ordinary equity.

a. Calculate the weighted average cost of capital using retained earnings for the equity component?

b. Calculate the weighted average cost of capital using newly issued ordinary share for the equity component.

c. Calculate the equity break point.

d. Draw the marginal cost of capital schedule for the firm.

e. Why is debt considered on an after-tax basis while preference and ordinary shares are not?

f. In what ways is preference share similar to a debt obligation?

g. When is it appropriate to use the dividend growth model to measure the cost of equity?

h. The risk-return tradeoff - we won't take on additional risk unless we expect to be compensated with additional return. Comment.

[20 Marks]

7. a. What are some of the problems involved in the use of profit maximisation as the goal of the firm? How does the goal of maximisation of shareholder wealth deal with those problem?

b. You hold a diversified portfolio of stocks and are considering investing in the XYZ Company. The firm's prospects look good and you estimate the following probability distribution of returns:

Probability	Return
70%	15%
20%	9%
10%	20%

The return on the market is 13.5% and the risk free rate is 7%. You have calculated XYZ's beta from past returns as 1.3.

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Required

(i) What is the expected return for XYZ?

(ii) Why is the standard deviation of possible returns for XYZ not an important statistic in this situation?

(iii) What is the required return for XYZ according to the CAPM?

(iv) Based on your calculations in (i) and (ii) above, should you buy this stock? Why or why not?

(v) Efficient capital markets - the markets are quick and the prices are right. Discuss.

[20 Marks]

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