UNIVERSITI SAINS MALAYSIA
Master of Business Administration

First Semester Examination
Academic Session 1999/2000

September 1999

AGW 610 - FINANCE ACCOUNTING FOR MANAGEMENT

Time: [3 hours]

INSTRUCTIONS:

Please make sure that this examination paper consists of **NINE (9)** printed pages before you begin.

Answer any **FIVE** out of **SEVEN** questions.

Question 1

The chief executive of Plymouth Trading Limited has been reviewing the company's balance sheets over the past few years. In particular, he has been concentrating on the financial year just ended at 31 December 1998.

He is puzzled over the apparently strange combination of circumstances which have seen the company incur significant losses in the year to 31 December 1998 and also move from an overdraft at December 1997 to positive cash balances at December 1998.

The balance sheets are as follows:

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	1998		1997	
	000	000	000	000
Fixed Assets		50		100
Current Assets				
Inventories	46		100	
Debtors	55		72	
Cash at Bank	20		-	
	121		172	
Current Liabilities				
Creditors	75		45	
Bank Overdraft	-		25	
	75		70	
Net Current Assets		46		102
		96		202
Ordinary Share Capital		100		70
Profit and Loss Account		(4)		132
		96		202

The summary profit and loss accounts are as follows:

	1998	1997
	RM000	RM000
Sales	250	270
Cost of Sales	220	120
Gross Profit	30	150
Selling and Distribution Costs	(70)	(85)
Administrative Expenses	(96)	(60)
Operating (Loss)/Profit	(136)	5

Further information is available:

1. The loss for the year includeda depreciation charge of RM10,000.
2. There were no purchases of fixed assets during 1998.
3. There were no gains or losses on the disposal of fixed assets in the year.
4. The company has an agreed bank overdraft facility of RM50,000.

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In recent management meetings, concerns have been expressed by:

(1) the production director whose attempts to increase output levels are being thwarted by delays in supplies of key raw materials. Further investigation reveals that suppliers are suspending deliveries to the company due to late payments of their invoices.

(2) the sales director who is being adversely influenced by the rundown in stockholdings of finished goods. Orders are being lost to competitors due to the inability to offer short delivery times. Also, he is receiving complaints from customers that they are being harassed to pay their accounts on strictly 30 days term, when previous practice allowed up to 60 days credit.

The chief executive has called in the company's financial director and asked him to explain the reasons behind the improvement in the cash position during 1998. Also, he wishes to assess Plymouth's performance.

Required:

(a) *Prepare a Cash Flow Statement for 1998 high lighting operating, Investing and Financing activities.*

(b) *Comment on the significant movements in cash over the year, suggesting areas for further investigation.*

[20 marks]

Question 2

Executive Cars plc have produced their Annual Report and Accounts for the year to 31 December 1998.

Consolidated Profit and Loss Account

	1998	1987
Turnover	830.4	746.5
Cost of sales	646.2	577.8
Gross Profit	184.2	168.7
Distribution costs	(20.6)	(19.7)
Administrative expenses	(56.8)	(41.2)
Operating profit	106.8	107.8
Net income from investments	14.0	13.5
Profit on ordinary activities before taxation	120.8	121.3
Taxation	(37.4)	(33.7)
Profit on ordinary activities after taxation	83.4	87.6
Dividends	(17.2)	(24.1)
Retained profit	66.2	63.5

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Consolidated Balance Sheet

	1998	1997
Fixed assets	237.4	176.6
Current assets		
Inventory	104.7	87.0
Debtors	43.2	48.4
Cash at Bank	271.6	156.2
	419.5	291.6
Creditors: amounts falling due within one year	(346.2)	(234.2)
Net Current Assets		
Total assets less current liabilities	310.7	234.0
Creditors: amounts falling due after more than one year	(77.5)	(67.0)
	233.2	167.0
Capital and reserves		
Called-up share capital	45.2	45.2
Share premium	2.8	2.8
Profit and loss account	185.2	119.0
	233.2	167.0

Share capital comprises 180.9 million ordinary shares of 25 cents each. Following the publication of these results, market price stands currently at RM5.80 per share, compared to RM4.50 a year ago.

Your father has a holding of 10,000 ordinary shares in Executive Cars plc. He is disappointed with the lack of growth in operating profits, together with the large cut in dividends. He asks your advice on the strength of the company in comparison with 1997 results.

Required:

(a) Carry out a full ratio analysis on the accounts of Executive Cars plc, paying particular attention to the areas of liquidity, profitability and efficiency. Provide a commentary on the ratios you calculate.

(b) Conclude your analysis by advising your father on the key stock market ratios, outlining your overall impression of the company's performance.

[20 marks]

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Question 3

Stoddart Transformers Ltd manufactures a special product for automobile sensing systems. The standard selling price of the product is RM160 per unit, and the company has the following monthly budgets for production and sales for the quarter to 31 March (assume that there is no change in stock levels).

	Units
January	1,500
February	1,800
March	1,600

The management accountant has prepared the following standard product cost specification per unit

		RM
Direct material	20kgs at RM4 per kg	80
Direct labour	5 hours at RM5 per hour	25
Variable manufacturing overhead	5 hours at RM2 per hour	10
Fixed manufacturing overhead	5 hours at RM1 per hour	5
		120

Both variable and fixed manufacturing overhead are allocated to production on the basis of direct labour hours.

During February, 2,000 transformers were produced and sold. The following actual data have been extracted from the company's accounting records for February.

Selling price per unit	RM162
Direct materials costs	45,000kgs at RM3.75 per kg
Direct labour costs	9,800 hours at RM5.10 per hour
Variable manufacturing overhead	RM19,000
Fixed manufacturing overhead	RM9,000

Required:

(a) Prepare a report to management on the company's performance in February, highlighting the range of variances which can be identified from the information available.

(b) Include in your report the possible causes of the variances identified.

[20 marks]

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Question 4:

Apply cost-volume-profit analysis to each of the situation described below:

(a) Assume that fixed costs of Celtics Company are RM180,000 per year, variable cost is RM12 per unit, and selling price is RM30 per unit. Determine the break-even point in sales dollars.

(b) Hawks Corporation breaks even when its sales amount RM89,600,000. In 1997, its sales were RM14,400,000, and its variable costs amounted to RM5,760,000. Determine the amount of its fixed costs.

(c) The sales of Niners Corporation last year amounted to RM20,000,000, its variable costs were RM6,000,000, and its fixed costs were RM4,000,000. At what level of sales dollars would the Niners Corporation break even?

(d) What would have been the net income of the Niners Corporation in part (c), if sales wolume had been 10% higher but selling prices had remained unchanged?

(e) What would have been the net income of the Niners Corporation in part (c), if variable costs had been 10% lower?

(f) What would have been the net income of the Niners Corporation in part (c), if fixed costs had been 10% lower?

(g) Determine the break-even point in sales dollars for the Niners Corporation on the basis of the data given in (e) and then in (f).

Answer each of the preceding questions.

[20 marks]

Question 5

(a) Great Expectations, a wedding and meternity clothing manufacturer, has a cost of equity of 16 percent, and a cost of preferred stock of 14 percent. Their before-tax cost of debt is 12 percent and their marginal tax rate is 40 percent. Assume that the most recent balance sheet, shown below, reflects the optimal capital structure. Calculate Great Expectations' after-tax weighted average cost of capital.

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Great Expectations
Balance Sheet
31 December 1996

Assets		Liabilities and Equity	
Cash	RM 50,000		
Accounts Receivable	90,000	Long-term Debt	RM 600,000
Inventories	300,000	Preferred Stock	250,000
Plant & Equip, net	810,000	Common Stock	400,000
Total Assets	RM1,250,000	Total L. & E.	RM1,250,000

(b) Babe's Dog Obedience School, Inc., wants to maintain its current capital structure of 50 percent common equity, 10 percent preferred stock, and 40 percent debt. Their cost of common equity is 13 percent and the cost of preferred stock is 12 percent. The bank's effective annual interest rate is 11 percent and the cost of preferred stock is 12 percent. The bank's effective annual interest rate is 11 percent for amounts borrowed that are less than or equal to RM1 million, and 13 percent for amounts between RM1 million and RM2 million. If more than RM2 million is borrowed, the effective annual interest rate charged is 15 percent. Babe's tax rate is 40 percent. The firm expects to realize RM2,750,000 in net income this year after preferred dividends have been paid.

(i) Calculate the marginal cost of capital if RM900,000 is needed for an upcoming project.

(ii) Calculate the marginal cost of capital if RM1,500,000 is needed for the project instead.

(iii) If a different project is adopted, and RM2,005,000 is needed for it, what is the marginal cost of capital?

[20 marks]

Question 6:

The board of directors of Huntley Products Limited is considering the following investment proposal:

	Proposal	***Cost (RM)***
A.	Installation of mainframe computer system	180,000
B.	Purchase of extra warehouse space	200,000
C.	Research and development of a new project	100,000
D.	Creation of a formal staff training system	40,000
E	Introduction of approved quality assurance scheme	70,000

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Each project will provide benefits in terms of lower cash outflows, over the next five years, as follows:

Proposal A: anticipates cost savings of RM66,000 per annum over each of the next five years.

Proposal B: expects annual cash flows to be reduced by RM145,000 in only the first two years of this period, with no benefits thereafter.

Proposal C: since this relates to the development of a new product, no benefits are expected till year 3, but thereafter at the rate of RM73,000 per annum.

Proposal D: is looking for annual cost savings of RM16,000 in each of these five years.

Proposal E: substantial savings of RM70,000 per annum are expected to accrue over this period.

Each proposal is structured into two equal phases of cost incurrence and cash flow benefits. If necessary, the board is prepared to undertake the first phase of any proposal without pushing on to the second phase.

The current funds available for this investment are limited to RM300,000 and therefore, it is not possible to carry out all proposal at this time.

The board has decided that the minimum return on any project must be 10% per annum.

However, the directors are unsure how to proceed to evaluate these proposals.

Required

(a) Carry out an assessment of the proposal, with a view to advising the directors of the criteria applicable in ranking the investment proposal.

(b) Prepare a list of other factors which the directors need to consider before coming to a final conclusion.

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Notes:

- Ignore taxation
- The present value of RM1, at 10% discount rate is:

End of Year	*Present Value*
1.	0.909
2.	0.826
3.	0.751
4.	0.683
5.	0.621

[20 marks]

Question 7

(a) Define and differentiate securities traded in the money market and capital market

(b) Construct and analyse yield curve to depict the interest rate on securities.

[20 marks]

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