LCCI International Qualifications from EDI

Series 2 Examination 2010

CERTIFICATE IN MANAGEMENT ACCOUNTING

Level 3

Monday 17 May

Subject Code: 3024/M

Time allowed: **3 hours**

INSTRUCTIONS FOR CANDIDATES

- Answer all **5** questions.
- All questions carry equal marks.
- Write your answers in blue or black ink/ballpoint. Pencil may be used only for graphs, charts, diagrams, etc.
- Begin your answer to each question on a new page.
- All workings must be shown.
- All answers must be correctly numbered but need not be in numerical order.
- You may use a calculator provided the calculator gives no printout, has no word display facilities, is silent and cordless. The provision of batteries and their condition is your responsibility.

QUESTION 1

A company manufactures and sells three products. The budgeted data for the coming period is as follows:

	Product P	**Product Q**	**Product R**
Sales volume (units)	6,000	5,000	9,000
Selling price (per unit)	RM120.00	RM147.00	RM105.00
Variable costs (per unit)	RM83.00	RM99.00	RM63.00

Fixed costs for the period are budgeted at RM 715,680.

REQUIRED

(a) Calculate the budgeted net profit. (4 marks)

(b) Calculate for the coming period, assuming the budgeted sales mix is maintained, the:

(i) number of units to be sold in order to break even for:

Product P
Product Q
Product R (7 marks)

(ii) total sales revenue required in order to earn a net profit of RM245,000. (5 marks)

(c) Suggest **four** ways in which the company can improve the overall contribution/sales ratio. (4 marks)

(Total 20 marks)

QUESTION 2

Company A manufactures a single product which has variable costs of RM60 per unit. The company is considering alternative selling prices for the product and has estimated sales demand per period at various selling prices as follows:

Sales units	Selling price per unit
5,000	RM100
4,600	RM110
3,200	RM130
2,000	RM150
1,000	RM180

Fixed costs per period are expected to remain constant at RM100,000 over the above range of output.

REQUIRED

(a) Determine the selling price that the company should set for the product in order to maximise profit.

(6 marks)

Company B manufactures a single product which is sold for RM140 per unit. Variable costs of the product are as follows:

	RM per unit
Direct material	50
Skilled labour – 3 hours at RM18 per hour	54

The company does not incur variable overhead costs, but its fixed overhead costs are RM200,000 per period.

There is a shortage of the skilled labour used in the manufacture of the product.

The company has received a one-off order for 1,000 units of a special version of its existing product at a selling price of RM168 per unit. Production of the special version of the product would require, in addition to the direct materials for the existing product, a special component which could be purchased from an external supplier for RM25 per unit. Alternatively, the company could manufacture the special component by utilising 500 skilled labour hours and direct materials costing RM13,600.

REQUIRED

(b) Advise the company, using appropriate workings, whether it should:

(i) purchase the special component from an external supplier or manufacture it, if the one-off order is accepted. (7 marks)

(ii) accept the order for the supply of the special version of the existing product. (7 marks)

(Total 20 marks)

QUESTION 3

A retail company has prepared budgets for its revenue and costs for the following months:

	Month 1	**Month 2**	**Month 3**	**Month 4**	**Month 5**	**Month 6**
	RM000	RM000	RM000	RM000	RM000	RM000
Sales	90	94	102	100	96	108
Purchases	46	44	48	45	44	50
Salaries and wages	18	20	21	22	20	23
Overheads	29	32	33	30	35	36

The following additional information is available:

1. 20% of the sales in each month are expected to be for cash and the remainder on credit. Of the credit sales, 70% is expected to be paid in the month of sale, 28% in the month following sale and the balance is expected to be bad debts.

2. 40% of purchases are paid for in the month of purchase in order to take advantage of a 5% cash discount offered by a supplier. The remainder of purchases is paid for in the month following purchase.

3. Salaries and wages are paid in the month in which they are earned.

4. Overheads, which include RM6,000 depreciation charge per month, are paid one month in arrears.

5. Office equipment costing RM15,000 is to be purchased and paid for in Month 5.

6. The cash balance at the start of Month 4 is expected to be RM1,500.

REQUIRED

(a) Prepare a cash budget for the company for each of Months **4, 5** and **6**.

(17 marks)

(b) Identify **three** benefits that the company may gain from preparing a cash budget.

(3 marks)

(Total 20 marks)

QUESTION 4

(a) Distinguish between an investment centre and a profit centre.

(4 marks)

Company Z is comprised of two divisions, X and Y. Division X manufactures a single product that can be sold to the external market for RM24.00 per unit or transferred to Division Y for further processing into its only product. The following are Division X's standard costs of manufacturing 25,000 units in a given period:

	RM00
Direct materials	134
Direct labour	120
Production overheads:	
variable	96
fixed	150
	500

Division X incurs variable selling and distribution costs of RM1.80 per unit if the product is sold to the external market.

In a typical period, Division X sells 60% of the product to the external market and transfers 40% to Division Y for further processing. Division Y's standard costs of converting the intermediate product transferred internally, into the final product, in a typical period are as follows:

	RM00
Direct labour	100
Production overheads:	
variable	60
fixed	80
	240

Division Y's final product is sold to the external market for RM52.00 per unit and the division incurs variable costs of RM3.00 for selling and distributing it.

REQUIRED

(b) Calculate the profits for each of Division X and Division Y for a period using the following transfer prices:

(i) market value less selling and distribution costs (8 marks)

(ii) standard variable production costs. (6 marks)

(c) Recommend which transfer price should be adopted by Company Z based on your answer to part (b), giving a reason for your advice.

(2 marks)

(Total 20 marks)

QUESTION 5

Mario Limited is considering investing in new equipment to expand production of an existing product over the next four years. The equipment under consideration is expected to cost RM800,000, with a residual value of RM50,000 after four years, and it would be depreciated on a straight-line basis.

The forecast of additional sales of the product is as follows:

Year	Units
1	6,000
2	8,000
3	5,000
4	3,000

The product sells for RM150 per unit and its variable cost is RM90 per unit. Additional fixed costs of RM50,000 (excluding depreciation) are expected to be incurred per annum from operating the new equipment. All annual fixed costs and unit variable costs, as well as the selling price, are expected to remain constant over the four-year period.

The company expects a payback of the investment in new equipment within three years, an accounting rate of return of 20%, as well as a positive net present value. It is assumed that net cash flows occur at the end of the years to which they relate.

The company's cost of capital is 15% per annum.

Discount factors for 15 %:

Year	
1	0.870
2	0.756
3	0.658
4	0.572

REQUIRED

(a) Calculate, in relation to the investment in new equipment, the:

(i) payback period (8 marks)

(ii) accounting rate of return (using the average investment value) (5 marks)

(iii) net present value. (5 marks)

(b) Advise the company on whether the investment in new equipment is worthwhile, giving reasons for your decision.

(2 marks)

(Total 20 marks)

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