



Institute of Certified Management Accountants of Sri Lanka

Intermediate Stage September 2009 Examination

Examination Date : 19th September 2009
Examination Time: 9.30 a.m. 12.30 p.m.

Number of Pages : 06
Number of Questions: 06

Instructions to candidates:

1. Time allowed is **three (3)** hours.
2. Answer **all** questions in **Section A**, **any two (2)** questions from **Section B** and **any one (1)** question from **Section C**
3. Answers should be entirely in the **English language**.

<u>Subject</u>	<u>Subject Code</u>
Advanced Management Accounting	(AMA / 602)

Section A

Answer **all** questions

Question No: 1(40 Marks)

- (1.1) A company engaged in making of a quality product has obtained results which are below the ability of the company. With a view to generate increased income to enhance the profitability, the chairman and the board of directors employed a new general manager.

The new general manager carried out a detailed study of systems, operations, budget and performance of the organization. The results of his assessment proved that the budgeted results are very easy to achieve as the company's capabilities according to the resources available are above expectations. As the targets given in the budget are very low it was not challenging for the employees and the new general manager was of the opinion that employees would be better motivated by setting budgets with higher expected output. Average monthly production and sales previously, before Aug.-2009, had been 5000 and the budget had been previously been set at this level.

The standard costing system was in operation in the company. The new general manager held discussions with the finance director and the management accountant along with senior managers, on matters pertaining to the performance of the company. Several discussions were held and they focused on the standard cost card prepared in respect of various elements of costs.

It was decided to allow the standard costing prepared earlier to remain the same with a change in the budgeted output and sales. Based on company's availability of resources the budgeted output was changed upwards, for August 2009 to 7000 units. The standard cost card is given as follows:

	Price Per Unit (Rs.)
Direct Material 3Kgs at Rs.30/- per Kg	90
Direct Labour 2 hours at Rs.20/- per hour	40
Variable overheads 2 hours at Rs.10/-	20
Fixed Overheads 2 hours at Rs.15/- per hour (based on 7000 units)	30
Total Production Cost	180
Profit Margin	20
Budgeted Selling Price	200

Fixed overheads are absorbed to production on the basis of labour hours. Absorption costing method is used by the company.

The new general manager changed the suppliers of the raw materials, in order to improve the quality. Further, he made material changes to the operations and reduced the fixed overheads significantly. He argued that the quality of the product will attract the customers. The chairman is concerned that the new general manager is too ambitious in increasing sales targets because, if targets set are too optimistic they may act as a demotivator, in the event the targets are unrealistic and unachievable.

Actual results for the company for the month of August 2009 is as follows:

	(Rs.)
Units Produced: 6000	
Materials 17000Kgs at Rs.32/- per Kg	544,000
Labour 12500 hours at Rs.18/- per hour	225,000
Variable Overheads	100,000
Fixed Overheads	<u>173,900</u>
Total	1,042,900
Closing Stock (700 × 180)	<u>(126,000)</u>
Cost of Sales	916,900
Actual Profit	<u>355,100</u>
Sales (5300 Units)	<u><u>1,272,000</u></u>

At the beginning of August 2009 there were no inventories. At the end of August 2009 closing stock was valued at standard cost, at 180 per unit.

The finance director suggested that marginal costing should be considered in the future for decision making and that the absorption costing is misleading.

You are required to:

- (a) Prepare the operating statement for August 2009. Showing all operating variances. Reconciling the budgeted profit with the actual profit. **(15 Marks)**
- (b) Taking into consideration of (a) above, comment on the following.
 - (i) If an ideal budget is prepared as a challenge to employees, assuming that such a budget will motivate the employees what adverse effects may results in such a budget.
 - (ii) Give reasons for sales material and labour variances. **(06 Marks)**
- (c) Calculate the marginal costing profit.
What is the cause of difference between the marginal costing profit and the absorption costing profit? **(04 Marks)**

[Total for 1.1 - 25 Marks]

(1.2) (a) State the other terms used to describe relevant cost and explain these briefly. **(03 Marks)**

(b) A customer met the managing director of XYZ Ltd and made an offer of Rs.70,000/- for a specific job. The managing director advised the relevant officer to prepare the requirements to analyze the profitability of the offer.

The requirements prepared are as follows:

Material	Units Required	Material Units in Store	Book Value Per Unit	Realizable Value Per Unit	Replacement Price Per Unit
P	600	400	5	6	7
Q	400	400	4	5	6
R	800	-	-	-	8
S	400	200	3	4	5

- Material P is not used by the company at present.
- Material Q is not used by the company but can be used for another job as a substitute for 500 units of material T. The price of material T is Rs.7/- per unit.
- Material S is currently used for manufacturing items.
If material units of S are used for this job they would need to be replaced for other production demand.

Labour

Number of labour hours required will be 400 at Rs.50/- per hour. As the availability of labour hours are limited, labour required for this job should be obtained by transferring labour utilized for other products. Due to this reason the loss of contribution per labour hour is Rs.30/-.

Variable Overheads

Rate per hour is Rs.20/-

Fixed Overheads

Absorption rate per hour is Rs.10/-

Advice whether the job should be accepted.

(10 Marks)

(c) Explain the meaning of minimum price.

(01 Mark)

(d) What is the minimum price of this job.

(01 Mark)

[Total for 1.2 - 15 Marks]

(Total 40 Marks)

End of Section A

Section B

Answer two questions only

Question No:2 (20 Marks)

- (a) State briefly the stages in graphical approaches to linear programming. **(05 Marks)**
- (b) A company makes the products X & Y. The selling price and cost details are given as follows:

	X (Per Unit)	Y (Per Unit)
	Rs.	Rs.
Selling Price	120	80
Direct Material	50	40
Direct Labour	20	15
Variable Overheads	10	05

Material units required for producing X and Y are 3 & 2 respectively. The labour hours required for production of one unit is 2 and 3 hours respectively.

Availability of material units and labour hours is 300 and 240 respectively. Maximum demand for the product X is 90 units.

You are required to:

- (a) Formulate a linear programming model for this problem. **(05 Marks)**
- (b) Use the graphical method to show feasible region. **(05 Marks)**
- (c) Find out the optimum products mix to maximize the contribution. **(03 Marks)**
- (d) Find, if the maximum demand of the product X is increased to 100 units, whether it will affect the optimum solution. **(02 Marks)**
- (Total 20 Marks)**

Question No:3 (20 Marks)

X Ltd is engaged in the manufacture of three products P, Q & R. The labour hours available for manufacture of the above products are 30000. According to the budget prepared by the company's management accountant for the next year, the variable costs of the products are given below.

Rs.

P – 30

Q – 40

R – 32

Number of hours required for production of one unit of P, Q and R are 2, 4 & 3 respectively. Number of items to be produced from each product is 5000. An outside suppliers has offered to supply items P, Q, R at prices of 36, 48 and 44 respectively.

You are required to:

- (a) Advise the management regarding the optimum make or buy quantities, with the cost. **(14 Marks)**
- (b) State the assumptions in limiting factor analysis. **(06 Marks)**
- (Total 20 Marks)**

Question No: 4 (20 Marks)

AB Ltd produces and sells two products X and Y. It is expected to produce and sell 12000 units of X and 10000 units of Y.

Estimated cost details are as follows.

	X	Y
	Rs.	Rs.
Direct Material	80	48
Direct Labour	50	40
Other Variable Overheads	30	22

Estimated production overhead is Rs.630,000/-.

Direct Labour Hour rate is Rs.10/- per hour.

The Production Overhead, Rs.630,000/- comprise of the following.

Activity	Estimated Overheads	Cost Driver	Expected Activity Cost Driver	
			(X)	(Y)
Milling	277,000	Machine Hours	12000	8000
Material Receipts	50,000	Number of Receipts	600	400
Quality	72,000	Number of Inspection	500	300
Machine Set Up	96,000	Number of Setups	6000	4000
Packing	90,000	Number of Delivery	40	20
Design	45,000	Number of Designs	03	02

- (a) If the company uses the basis of direct labour hours for absorption of overheads to productions.
- (i) Calculate predetermined overheads absorption rate per hour. **(13 Mark)**
 - (ii) Total product cost for unit, applying the above. **(03 Marks)**
- (b) Describe the advantages of activity based costing. **(04 Marks)**

(Total 20 Marks)
End of Section B

Section C

Answer one question only

Question No: 5 (20 Marks)

- (a) Control is the whole process by which management attempts to direct the efforts of the organization, towards the achievement of this common goals.

Explain briefly five main components of a control system.

(10 Marks)

- (b) Traditional approach to budgeting works from the premise that last years activities will continue at the same level or volume and the next year budget can be based on last years cost plus an extra amount to allow for expansion and inflation. The term incremental budgeting is used to describe this approach. The alternative approach to this is zero based budgeting.

What are the advantages of zero based budgeting to an organization as against incremental budgeting?

(10 Marks)

(Total 20 Marks)

Question No: 6 (20 Marks)

- (a) Setting standards and using them as a yard stick for cost control purposes is not simply an exercise in dealing with numbers, it also involves in dealing with people. Standard costing will only be effective only if it is designed with full understanding of its potential and behavioral effects. For example adverse variances reported when ideal standards are used can be demotivating for individuals who are working to achieve the standards.

Describe other behavioral implications to be considered in the design an operation of a standard costing system.

(08 Marks)

- (b) State possible problems in setting standards.

(12 Marks)

(Total 20 Marks)

End of Section C

End of Question Paper
