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Serial No.....

Institute of Certified Management Accountants of Sri Lanka

Intermediate Stage March 2010 Examination

Examination Date : 27th March 2010
Examination Time: 9.30 a.m. 12.30 p.m.

Number of Pages : 05
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)

You have been recently appointed as the management accountant of LankaSiri Ltd which manufactures and sells product X. The balance sheet of LankaSiri Ltd is as follows.

Balance Sheet as at 1st March 2010

	Cost (Rs.)	Accumulated Depreciation (Rs.)	Net Book Value (Rs.)
Non-Current Assets			
Land and Buildings	500,000	-	500,000
Machinery and Equipment	124,000	84,500	39,500
Motor Vehicles	42,000	16,400	25,600
	<u>666,000</u>	<u>100,900</u>	565,100
Current Assets			
Stock of Raw Materials (100 units)		4,320	
Stock of Finished Goods (110 units)*		10,450	
Debtors (January Rs.7,680/-, February Rs. 10,400/-)		18,080	
Cash and Bank		6,790	39,640
			<u>604,740</u>
Stated capital			
Ordinary Share Capital			560,000
Reserves			
Profit and Loss account			40,840
Current Liabilities			
Creditors (raw materials)			<u>3,900</u>
			<u>604,740</u>

* The stock of finished goods is valued at marginal cost

The estimates for the next four – month period are as follows:

	March	April	May	June
Sales (units)	80	84	96	94
Production (units)	70	75	90	90
Purchases of raw materials (units)	80	80	85	85
Wages and variable overheads at Rs.65/- per unit	Rs.4,550	Rs.4,875	Rs.5,850	Rs.5,850
Fixed Overheads	Rs.1,200	Rs.1,200	Rs.1,200	Rs.1,200

The company intends to sell each unit for Rs.219/- and has estimated that it will have to pay Rs.45/- per unit for raw materials. One unit of raw material is needed for each unit of finished product.

All sales and purchases of raw materials are on credit. Debtors are allowed two months' credit and suppliers of raw materials are paid after one month's credit. The wages, variable overheads and fixed overheads are paid in the month in which they are incurred.

Cash from a loan secured on the land and buildings of Rs.120,000/- at an interest rate of 7.5% is due to be received on 1st of May. Machinery costing Rs.112,000/- will be received in May and paid for in June.

The loan interest is payable half yearly from September onwards. An interim dividend declared on 31st March of Rs.12,500/- will be paid in June.

Depreciation for the four months, including that on the new machinery is:

Machinery and Equipment	Rs.15,733
Motor Vehicles	Rs. 3,500

The company uses the FIFO method of stock valuation. Ignore taxation in your calculations.

You are required to:

- Calculate and present the raw materials budget and finished goods budget in terms of units (highlight the closing stock values), for each month from March to June inclusive. (5 Marks)
- Calculate the corresponding sales budgets, the production cost budgets and the budgeted closing debtors, creditors and stocks in terms of value. (5 Marks)
- Prepare and present a cash budget for each of the four months. (6 Marks)
- Prepare a master budget, i.e. a budgeted trading and profit and loss account, for the four months to 30th of June, and budgeted balance sheet as at 30th of June. (10 Marks)
- Explain how LankaSiri Ltd can use the cash budget prepared as a feed-forward and a feedback control technique to better manage its cash. (7 Marks)
- “It is argued that the annual budgeting has a number of inherent weaknesses and act as a barrier for strategic change and flexibility”. Discuss the limitations of annual budgets in relation to the above statement. (7 Marks)

(Total 40 Marks)
End of Section A

Section B

Answer two questions only

Question No:2 (20 Marks)

A chemical company has established the following standards for manufacturing 10 liters of an industrial paint.

5 liters	Material A at Rs.350/- per liter
6 liters	Material B at Rs.450/- per liter

As the company follows a JIT purchasing policy of raw materials, no stocks of raw material are held. During the period 10,000 liters of industrial paint were produced.

You are given the following information regarding the actual material purchases and usage.

Actual quantity purchased and used	Type of material	Actual cost
4,600 liters	Material A	Rs. 1,656,000
5,900 liters	Material B	Rs. 2,625,500

You are required to:

- (a) Calculate the total material variance and analyze it into its price, usage, mix & yield variances and explain the relationship of the material mix and material yield variance you have calculated. **(10 Marks)**
- (b) Explain the circumstances under which a material mix and yield variance is relevant to managerial control. **(6 Marks)**
- (c) Explain the following terms with regard to standard costing:
- (i) Attainable standards.
 - (ii) Exception reporting.
- (4 Marks)**

(Total 20 Marks)

Question No:3 (20 Marks)

The sales and marketing department of Lanka Toys Limited has recently done a marketing campaign and prepared their sales budget for 10,000 toys at Rs. 500 per toy. However, the production manager informed you that his normal production capacity is 8,000 toys and he has submitted you the operating budget as follows.

	Rs. '000	Rs. '000
Sales		4,000
Costs		
Raw materials	640	
Direct wages	2,240	
Production overheads	320	
Administration costs	150	
Selling and distribution costs	<u>240</u>	<u>3590</u>
Profit		<u><u>410</u></u>

Note:

The production manager has also informed you that 50% of production overheads are fixed and 20% of selling and distribution overheads vary with the sales volume.

In order to increase the production capacity to 10,000 toys which enables the company to meet the full market demand, the production manager has suggested three possible options.

1. Subcontracting the production of 2,000 toys to another toy maker whose prices would be Rs.410/- per toy.
2. Introduction of an additional shift providing 10,000 extra direct labour hours at an estimated cost of Rs.80/- per hour without any increase in fixed production overhead cost.
3. The provision of a additional plant to increase normal working capacity, which would involve an increase of Rs. 40,000 in fixed production overheads costs for the year but no alteration to the variable expense rate per toy.

Irrespective of the alternative to increase the production, there would be additional administration fixed costs of Rs.15,000/- and selling and distribution fixed cost of Rs.25,000/- in each situation.

You are required to:

- (a) Prepare a statement highlighting the additional costs and revenues arising from the above three alternatives and identify the financially, best option. **(12 Marks)**
- (b) Prepare a revised operating budget following marginal costing principles to the management based on your recommended choice of action. **(5 Marks)**
- (c) Explain the following terms with reference to decision making:
 - (i) Differential Costs.
 - (ii) Committed Costs.
 - (iii) Out-of-pocket costs.

(3 Marks)
(Total 20 Marks)

Question No:4 (20 Marks)

- (a) Global Limited makes three main products viz Acia, Afrika and Amerika. The production methods are broadly the same across the three products.

Details pertaining to the three products are given below:

Product	Labour hours per unit	Machine hours per unit	Materials cost per unit (Rs.)	Volumes (Units)
Acia	1	3	4,000	1,500
Afrika	3	2	2,400	2,500
Amerika	2	6	5,000	14,000

At present the company is absorbing overheads based on machine hours and the overhead absorption rate is Rs.56/- per machine hour. The direct labour hour rate is Rs.600/- per hour.

You are required to calculate the cost per unit for the above three products using traditional absorption costing. **(3 Marks)**

The managing director of the company has attended a workshop on Activity Based Costing (ABC) and is keen to apply ABC for product costing due to the benefits it derives. In this regard you have collected the following information:

	(%) of the total overheads cost
Costs relating to set-ups	35
Costs relating to machinery	20
Costs relating to materials handling	15
Costs relating to inspection	30
Total production overhead	100%

The following activity volumes are associated with the product line for the period as a whole.

Product	Number of set-ups	Number of movements of materials	Number of inspections
Product X	150	24	300
Product Y	230	42	360
Product Z	<u>960</u>	<u>174</u>	<u>1,340</u>
	<u>1,340</u>	<u>240</u>	<u>2,000</u>

You are required to:

- (b) Calculate the cost per unit for the above three products using ABC principles. **(10 Marks)**
 - (c) Comment on the reasons for any differences in the costs in your answers to (a) and (b). **(3 Marks)**
 - (d) Explain two problems when trying to implement an ABC system at Global Limited. **(4 Marks)**
- (Total 20 Marks)**
End of Section B

Section C

Answer one question only

Question No: 5 (20 Marks)

Budgets preparation is a lengthy process which involves various functional managers and the budget committee. This process requires great care if the ultimate master budget is to be useful for the purposes of management control within an organization.

- (a) Explain briefly the stages involved in the preparation of budgets identifying separately the roles of functional managers and the budget committee. **(10 Marks)**
 - (b) Explain zero-base budgeting and how it differs from other more traditional forms of budgeting. Discuss the benefits of zero-base budgeting to profit orientated organizations. **(10 Marks)**
- (Total 20 Marks)**

Question No: 6 (20 Marks)

In the modern manufacturing environment which places high emphasis on quality while using robotic manufacturing processes, the usefulness and applicability of standard costing is being questioned.

- (a) Describe the problems associated with standard costing in applying in the modern manufacturing environment. **(10 Marks)**
 - (b) Explain the factors to be considered in determining whether to investigate a variance or not which has been routinely reported as part of a standard costing system. **(10 Marks)**
- (Total 20 Marks)**

End of Section C
End of Question Paper