



© Copyright Reserved

Serial No.....

Society of Certified Management Accountants of Sri Lanka

Intermediate Stage March 2007 Examination

Examination Date : 24th March 2007

Number of Pages : 07

Examination Time: 9.30a.m.-12.30p.m.

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)

Section A

Answer **all** questions

Question No: 1 (40 Marks)

Mushroom Manufacturing Ltd is a fast growing small manufacturing company. However, in anticipation of this growth the directors built up their finished goods stocks at an even faster rate to make sure that they meet customer demand and did not cut orders. The managing director was worried about the pressure on the cash flow because of this growth and proposed implementation of an action plan that included a reduction in stock levels and pressure customers to pay within the required 30 days.

The sales manager has reported on the two months actual sales for July-06 and August-06 and estimated sales for the next six months:

	Rs.		Rs.
July	2, 250,000	November	3, 250,000
August	2, 700,000	December	3, 500,000
September	2, 900,000	January	3, 650,000
October	3, 050,000	February	3, 800,000

In August 2006, accounts receivable were 60 days sales. The credit controller has targeted debtor days to reduce from 60 days at 31 August 2006, to 45 days at 30 September 2006 and 30 days on 31 October 2006. He has also targeted 30 days to be maintained thereafter.

The plant manager has provided a production plan to give required level of production as follows:

- September 2006 to February 2006 raw material purchases- Rs.860,000 per month.
- July 2006 and August 2006 were Rs.1, 000,000 and Rs.900, 000 respectively.
- Materials are bought with supplier payment terms of net 45 days.
- Salaries and wages are Rs.290,000 per month and paid in each month
- Overheads and utilities are Rs.560, 000 per month and paid in each month.

The commercial manager has estimated that selling and administrative cost to be as follows:

- September and October 15% of sales
- November and December 14% of sales
- January and February 13% of sales

All these expenses will be paid in the month that they are incurred.

The balance sheet of Mushroom Manufacturing Ltd as at 31 August 2006 was as follows:

	Rs.000	Rs.000	Rs.000
Fixed assets			
Fixed assets at cost			16,480
Depreciation provision			<u>6,980</u>
			9,500
Current assets			
Stocks - Raw materials	3,840		
Finished goods	<u>8,520</u>	12,360	
Accounts receivable		5,250	
Other assets		2,560	
Bank and cash		<u>1,050</u>	
		<u>21,220</u>	
Current liabilities			
Accounts payable	1,400		
Short-term loans	1,500		
Accruals	1,480		
Corporation tax payable	<u>500</u>		
		<u>4,880</u>	
Net current assets			16,340
Total assets less current liabilities			25,840
Long-term loans			<u>13,060</u>
Net assets			<u>12,780</u>
Capital and reserves			
Share capital			9,000
Profit and loss account			<u>3,780</u>
			<u>12,780</u>

Interest payable on long and short-term loans is accrued at 10% p.a.

Short-term loan repayments to be made are Rs.250,000 at the end of October 2006 and Rs.250,000 at the end of January 2007. Half year interest of Rs.800,000 is payable in January.

Depreciation (a manufacturing cost) runs at Rs.70,000 a month and cost of sales is 70% of sales.

Materials used during September 2006 and October 2006 are expected to be Rs.1,100,000 for each month. Corporation tax on profits can be calculated at 50%. Corporation tax of Rs.500,000 is expected to be paid in December.

You are required to:

- (a) Prepare a forecast profit and loss account for the two months of September and October and a forecasted balance sheet as at 31 October 2006. **(12 Marks)**
- (b) Prepare a cash budget for the managing director for September to February to determine the phasing of the cash flows that would result from his action plan. **(14 Marks)**
- (c) Prepare for the managing director, the forecasted cash flows and month-end cash balances for September to February if the credit controller does not meet his target and debtors remain at 60 days of sales, as compared with the results following successful implementation of the action plan. **(08 Marks)**
- (d) Draft a report for the managing director that makes use of the analyses that you have carried out to consider arguments both for and against customer terms of 30 days or 60 days. Your report should also consider some of the wider financial and non-financial factors in addition to the cash flow impact of both scenarios. **(06 Marks)**

(Total 40 Marks)

End of Section A

Section B

Answer two questions only

Question No: 2 (20 Marks)

RMF Ltd operates a chain of fast-food restaurants in and around Colombo. The company uses a standard marginal costing system to monitor and control the costs incurred in the outlets.

The standard cost of one of its popular meal's is as follows:

		Rs. Per meal
Ingredients	(1.08 units)	118
Labour	(1.5 minutes)	15
Variable conversion costs	(1.5 minutes)	6
The standard selling price of this meal		199

In one of its outlets' the budgeted sales and production activity level is 50,000, of such meals. The actual number of such meals that were produced and sold during January 2007 was 49,700. The actual cost data are as follows:

		Rs. Per meal
Ingredients	(55,000 units)	58,450
Labour	(1,200 hours)	6,800
Variable conversion costs	(1,200 hours)	3,250
The actual revenue from the sales of the meals was		96,480

You are required to:

- (a) Calculate
- (i) the budgeted contribution for January-2007
 - (ii) the total actual contribution for January 2007 **(02 Marks)**
- (b) Prepare a statement that reconciles the budgeted contribution and the actual contribution for January 2007. Show all variance to the nearest rupee. **(14 Marks)**
- (c) Explain why a marginal costing approach to variance analysis is more appropriate for an organization such as RMF, where there are a number of different items being produced and sold. **(04 Marks)**
- (Total 20 Marks)**

Question No: 3 (20 Marks)

HT foods, a food manufacturer, produce a range of processed foods including a range of high-quality soups which it sells to hotels and caterers.

One of its fast moving products, H & S soup, has the following ingredients list for 100 litres of soup:

Ingredient	Volume(Litres)	Standard cost / Litre Rs.	Standard cost Rs.
A	30	142	4,260
B	25	125	3,125
C	5	350	1,750
D	<u>45</u>	245	<u>11,025</u>
	<u>105</u>		<u>20,160</u>

During October 2006, HT foods produced 5,400 litres of its H & S soup using the following ingredients:

Ingredient	Volume(Litres)	Actual cost / Litre Rs.
A	1,740	150
B	1,800	120
C	540	400
D	1,200	230

You are required to:

- (a) Calculate, using the weighted average valuation method, the individual ingredient price variance, mix variance and the total ingredient yield variance **(10 Marks)**
- (b) HT foods use a semi-automated processing unit to convert the ingredient of H & S soup into the finished product. The standard variable processing costs for each 100 litres of H & S soup are as follows:

0.8 processing hours at Rs.2, 400 per processing hour

During October 2006, the actual processing time was 37 hours at a total cost of Rs.92,500.

It has now been realized that if a new, faster machine was operated in October 2006, the processing time required would have reduced by 20%.

The fixed costs of the semi-automated processing unit are not considered to be a product-related cost.

You are required to:

- (a) Calculate the **planning** variable processing cost efficiency variance for October-2006 **(04 Marks)**
- (b) Calculate the **operating** variable processing cost expenditure and efficiency variances for October-2006. **(06 Marks)**
(Total 20 Marks)

Question No: 4 (20 Marks)

ST Ltd produces and sells two types of products to a number of customers. The company is currently preparing its budget for the year ending 31st December 2007 which it divides into twelve equal periods.

The cost and resource details for each type of the products are as follows:

	<u>S</u> Rs.	<u>T</u> Rs.
Selling price per unit	20,000	21,000
Direct material P (Rs.250 per litre)	2,000	2,500
Direct material Q (Rs.400 per litre)	4,000	2,000
Direct labour (Rs.700 per hour)	2,800	3,500
Variable overhead (Rs.400 per hour)	1,600	2,000
Fixed production cost per unit	4,000	5,000
Maximum sales demand in period 1	1,000 units	3,000 units

The fixed production cost per unit is based upon an absorption rate of Rs.1,000 per direct labour hour and a total annual production activity of 180,000 direct labour hours. One twelfth of the annual fixed production costs will be incurred in period 1.

In addition to the above costs, non-production overhead costs are expected to be 5,775,000 in period 1.

During period 1, the availability of material P is expected to be limited to 31,250 litres. Other materials and sufficient direct labour are expected to be available to meet the demand.

It is the policy of the company not to hold stocks of finished goods.

You are required to:

- (a) Calculate the number of units of type S and type T that should be produced and sold in period 1 in order to maximize profit. **(05 Marks)**
- (b) Using your answer to (a) above, prepare a columnar budgeted profit statement for the period 1, in a marginal costing format. **(05 Marks)**

After presenting your statement to the budget committee, the production manager has advised you that in period 1 the other resources will also be limited. The maximum resources available will be as follows:

Material P	31,250 litres
Material Q	20,000 litres
Direct labour	17,500 hours

It has been agreed that these factors should be incorporated into a revised plan and that the objective should be to maximize profits with the available resources.

You are required to:

- (c) Using graphical linear programming, determine the revised production plan for period 1 clearly stating the units of type S & type T to be produced. **(07 Marks)**
- (d) Calculate the revised profit as per part (c). **(03 Marks)**
- (Total 20 Marks)**
End of Section B
-

Section C

Answer only one question

Question No: 5 (20 Marks)

- (a) (i) State why organizations prepare budgets **(03 Marks)**
(ii) Explain the arguments for and against the involvement of managers in the preparation of their budgets **(07 Marks)**
(10 Marks)

While attending a course on Total Quality Management, the managing director of your company overheard someone mention how the performance of their company had improved after they introduced “Benchmarking”

- (b) Explain “Benchmarking” and how it could be used to improve performance of a company. **(10 Marks)**
(Total 20 Marks)

Question No: 6 (20 Marks)

B Ltd is a member of ABC group. B Ltd manufactures a cleaning liquid using a chemical that it buys from a number of different suppliers. In the past, B Ltd has used a periodic review of stock control systems with maximum, minimum and re-order levels to control the purchase of the chemical and the economic order quantity model to minimize its costs.

The Managing Director of B Ltd is thinking of changing over to the use of the Just-in-Time (JIT) system.

You are required to:

- (a) As the management accountant, prepare a report to the managing director that explains how a JIT system differs from the present system and the extent to which its introduction would require a review of B Ltd’s quality control procedures. **(12 Marks)**
- (b) Explain how the following techniques that are used in order to improve an organizations performance may be used by the organization as part of its planning activities.
- ◆ Cost reduction
 - ◆ Value analysis

(08 Marks)
(Total 20 Marks)

End of Section C
End of Question Paper