

**THE ASSOCIATION OF ACCOUNTING TECHNICIANS OF SRI LANKA**

**FINAL EXAMINATION – JANUARY 2014**

**(59) MANAGEMENT ACCOUNTING & BUSINESS FINANCE**

**Time: 03 hours**

18-01-2014  
Afternoon  
[2.00-5.00]

• **Instructions to candidates:**

- (1) *This paper consists of two (02) Sections A & B.*
- (2) **All questions should be answered.**
- (3) **Answers should be in one language, in the medium applied for, in the booklets provided.**
- (4) *Use of calculators is permitted.*
- (5) *Submit all workings and calculations. State clearly assumptions made by you, if any.*
- (6) *100 Marks.*

No. of Pages : 06  
No. of questions : 07

**SECTION A**

**Management Accounting (75 marks)**

**01.** (A) List four(04) differences between Management Accounting and Financial Accounting. (02 marks)

(B) **Sinta Ltd.** has 3 production departments **A, B** and **C** and 2 service departments **X** and **Y**. The following data relates to the month of December 2013.

	Production Departments			Service Departments	
	A	B	C	X	Y
Indirect material (Rs.'000)	190	240	40	300	800
Indirect wages (Rs.'000)	180	220	60	200	130
Floor area (square feet)	800	800	600	400	200
Cost of Property, Plant and Equipment (Rs.'000)	1,000	1,200	800	600	400
Usage of electricity (kilo watt)	400	440	160	150	50
Number of employees	180	240	60	80	40
Apportioning costs of service departments, <b>X</b>	50%	30%	20%		
<b>Y</b>	30%	40%	30%		

Other overhead costs for the month were as follows:

Electricity	(Rs.)	120,000/-
Insurance on Property Plant & Equipment	(Rs.)	20,000/-
Rent	(Rs.)	56,000/-
Meal Expenses	(Rs.)	60,000/-
Depreciation on cost of Property Plant & Equipment		12% per annum

**You are required to prepare,** a statement showing how the production overheads are allocated and apportioned to each of the production department.

(06 marks)

- (C) The profit as per cost accounts of **J-Net & Co.**, for the quarter ended 31<sup>st</sup> December 2013 was Rs.165,300/-. The following information is extracted from the books of **J-Net & Co.**, for the quarter ended 31<sup>st</sup> December 2013:

(1)

<b>Stocks</b>	<b>As per Cost Accounts (Rs.)</b>	<b>As per Financial Accounts (Rs.)</b>
Opening stocks:		
Raw Material	32,600	33,000
Work in Progress	20,000	21,000
Closing stocks:		
Raw Material	36,000	34,400
Work in Progress	16,000	15,200
Finished Goods	8,000	9,000

- (2) Directors' fees Rs.10,000/-, Interest expenses Rs.8,000/-, provision for doubtful debts Rs.500/- and dividends received Rs.2,000/- have been considered in the financial accounts only.
- (3) Notional rent of Rs.6,000/- was charged only in the cost accounts.
- (4) Research expenses written-off of Rs.13,000/- has not been charged in the cost accounts.
- (5) Other overheads for the quarter as per the financial accounts were Rs.121,200/- and as per the cost accounts, it was Rs.126,200/-.

**You are required to prepare,** Profit Reconciliation Statement between the cost accounts and the financial accounts and determine the profit as per the financial accounts for the quarter ended 31<sup>st</sup> December 2013. (07 marks)  
(Total 15 marks)

- 02. (A) Chathu Ltd.** manufactures high quality modern mobile phones. The following data relates to **Chathu Ltd.** for the year ended 31<sup>st</sup> December 2013:

Opening stock as at 01 <sup>st</sup> January 2013	85,000 Units
Closing stock as at 31 <sup>st</sup> December 2013	34,500 Units
Sales	345,400 Units
Selling price per unit (Rs.)	200/-
Variable production cost per unit (Rs.)	51/-
Variable administration & selling cost (Rs.)	3,799,400/-
Estimated / actual fixed production cost (Rs.)	14,400,000/-
Machine hours	6,000
Standard production per machine hour	50 Units
Fixed administration & selling cost (Rs.)	10,800,000/-

Assume that production cost per unit is the same for units in opening inventory and units produced during the year.

**You are required to prepare,** Income Statement under absorption costing method for the year ended 31<sup>st</sup> December 2013. (08 marks)

- (B) **G Ltd.** manufactures soft drink through several consecutive processes. The following information related to Process **B** for the month of December 2013:

Input material transferred from process <b>A</b>	4,000 units, cost Rs.11,600/-
<b>Other costs incurred during the process:</b>	
Material introduced (Rs.)	2,856/-
Labour (Rs.)	6,680/-
Overheads (Rs.)	3,340/-
Normal loss	5% of input and scrap items can be sold for Rs.1/- each
Output transferred to next process	2,800 units

There was no opening work-in-progress. Closing work-in-progress at the end of the month was 920 units and the degree of completion was as follows:

Material transferred from Process <b>A</b>	-	100%
Material introduced	-	75%
Labour & overheads	-	50%

**You are required to prepare,**

- (a) Production cost evaluation statement by using FIFO method.  
 (b) Process **B** account. (12 marks)  
 (Total 20 marks)

- 03.** (A) List two(02) advantages of "Zero Based Budgeting". (02 marks)

- (B) State the difference between a fixed budget and a flexible budget. (02 marks)

- (C) The following information relates to **Meena Traders** which is engaged in buying and selling fruits:

- (1) Forecast of sales (2014) - February: Rs.250,000/-, March: Rs.200,000/-, April to June: Rs.300,000/- per month. Half the sales will be on cash. 90% of credit sales will be collected in the following month and the balance will be collected in the subsequent month.
- (2) Fruits are generally bought on cash to avail a cash discount of 5%. The plan for the second quarter (April to June) is to purchase 1,500 boxes per month at Rs.100/- per box.
- (3) Salaries and wages for the second quarter are budgeted at Rs.50,000/- per month and it will be paid on the last date of every month.
- (4) Other expenses per quarter have been estimated as follows:

	<b>Rs.</b>
Depreciation	75,000
Selling expenses	30,000
Administration expenses	45,000

All these expenses are to be incurred evenly throughout the quarter.

- (5) Cash balance as at 31<sup>st</sup> March 2014 will be Rs.15,000/-.

**You are required to prepare,** the cash budget for the second quarter (April to June) of 2014, on monthly basis. (06 marks)  
 (Total 10 marks)

04. (A) List two(02) advantages of Standard Costing. (02 marks)

(B) The following information is extracted from the books of **X Ltd.**:

Material	Standard cost	Actual cost
<b>A</b>	40 units at Rs.50/- per unit	50 units at Rs.50/- per unit
<b>B</b>	60 units at Rs.40/- per unit	60 units at Rs.45/- per unit

**You are required to calculate,** the material price variance, the material usage variance and the material mix variance: (06 marks)

(C) The following data relates to the actual performance of a company for the last month, which produces product **CJ**.

Actual production of product <b>CJ</b>	18,000 units
Actual costs incurred:	
Direct material purchased and used (150,000 kg)(Rs.)	210,000/-
Direct wages for 32,000 hours (Rs.)	136,000/-
Variable production overheads (Rs.)	38,000/-
Variances:	
Direct material price (Rs.)	15,000/- (F)
Direct material usage (Rs.)	9,000/- (A)
Direct labour rate (Rs.)	8,000/- (A)
Direct labour efficiency (Rs.)	16,000/- (F)
Variable production overhead expenditure (Rs.)	6,000/- (A)
Variable production overhead efficiency (Rs.)	4,000/- (F)
Variable production overhead varies with labour hours worked.	

(F = Favourable, A = Adverse)

Standard Fixed Cost per unit is Rs.3/-.

**You are required to prepare,** the standard cost sheet per unit of product **CJ**.

(06 marks)

(Total 14 marks)

05. (A) **KP Ltd.** produces a product called "**Y**", and the cost structure of product **Y** is as follows:

	Rs. (per unit)
Direct Material	850
Direct Labour	425
Variable Overhead	275
<b>Total Variable Cost</b>	<b>1,550</b>

Selling price of **Y** is Rs.2,050/- per unit and quantity of sales is 100,000 units per annum. Total fixed cost per annum is Rs.20 million.

**You are required to calculate,**

- Break-even sales in units.
- Margin of safety in units.
- If the total variable cost increased by 10% and fixed cost increased by Rs.5 million how many units should be sold in order to obtain the present profit while selling price per unit remains unchanged.

(06 marks)

(B) The following information have been extracted from the books of a company:

	Per Unit	
	Product A	Product B
Selling price (Rs.)	100/-	120/-
Direct Raw Material cost (1 kg @ Rs.5/-) (Rs.)	10/-	15/-
Direct wages (Rs.)	15/-	10/-
Overhead expenses:		
Fixed (Rs.)	5/-	10/-
Variable (Rs.)	25/-	26/-
Monthly Demand (units)	3,500	3,500

Raw material supply for the next month will be limited to 10,000 kg at Rs.5/- per kg.

**You are required to calculate**, the optimum product mix for the next month to maximize the profit of the company. (06 marks)

(C) Radio spare parts manufacturing company manufactures product **X** and cost per unit of product **X** is Rs.6.25. The same is available in the market at Rs.5.75, with an assurance of continued supply. The analysis of cost per unit of **X** is as follows:

	Rs.
Direct material	2.75
Direct labour	1.75
Other variable costs	0.50
Fixed cost	1.25
	<b>6.25</b>

**You are required to,**

- Advise whether to manufacture **X** or buy it from the market.
  - If an outside supplier offers a unit of **X** at Rs.4.85, advise whether the offer should be accepted or not by the company. (04 marks)
- (Total 16 marks)

## SECTION B

### Business Finance (25 marks)

06. (A) List three(03) ways in which a company facing temporary cash shortages could bridge such shortages. (03 marks)

(B) **Methul PLC** is a company listed in the Colombo Stock Exchange and the following information was extracted from the books of accounts for the year ended 31<sup>st</sup> March 2013:

	Value Rs.(million)
Stated capital-ordinary shares	600
Revenue reserves	300
Non-current borrowings	450

The following additional information is also available:

- Methul PLC** has 10 million issued ordinary shares and the current market price of a share is Rs.110/-. The dividend was paid at Rs.5/- per share and it is expected to grow by 10% per annum.

- (2) Non-current borrowings consist of 360,000 debentures which are currently trading at Rs.1,070/- per debenture and redeemable in 4 years at Rs.1,250/-. Interest for these debentures are payable on annual basis at the rate of 18% per annum.

**You are required to calculate,**

- (a) Cost of Equity capital.  
 (b) Cost of Debt.  
 (c) Weighted Average Cost of Capital Based on Market Value. (07 marks)  
 (Total 10 marks)

- 07. (A)** List two(02) drawbacks of pay back criterion as a project appraisal technique. (02 marks)

- (B) **Mega Tech Ltd.** is considering the selection of 1 of 2 mutually exclusive investment projects. Both projects will require purchase of machinery with a life of 5 years.

Project **A** would generate net (receipts less payments) annual cash in-flow of Rs.100 million for the next five years. The machinery would cost Rs.278 million and have a scrap value of Rs.28 million.

Project **B** would generate net annual cash in-flow of Rs.250 million for the next five years. The machinery would cost Rs.800 million and have a scrap value of Rs.150 million.

**Mega Tech Ltd.** uses the straight line method for providing depreciation.

Cost of capital of the company is 15% per annum.

*(Ignore tax & inflation)*

**You are required to,**

- (a) calculate:  
 (i) Net Present Value (NPV),  
 (ii) Internal Rate of Return (IRR), (11 marks)  
 for each project.
- (b) State which project you would recommend giving reasons for your choice of criterion to guide the decision. (02 marks)  
 (Total 15 marks)

Discounting factors (DF) are given below:

Year	Discounting Factor			
	10%	15%	20%	30%
1	.909	.870	.833	.769
2	.826	.756	.694	.592
3	.751	.658	.579	.455
4	.683	.572	.482	.350
5	.621	.497	.402	.269
6	.564	.432	.335	.207