

ASSOCIATION OF ACCOUNTING TECHNICIANS OF SRI LANKA

AA2 EXAMINATION - JULY 2016

(AA22) COST ACCOUNTING AND REPORTING

Instructions to candidates (Please Read Carefully):

17-07-2016 Morning

Morning [8.45 – 12.00]

(1) **Time Allowed:** Reading: 15 minutes

Writing: 03 hours.

No. of Pages : 10 No. of Questions : 10

- (2) All questions should be answered.
- (3) **Answers** should be in **one language**, in the **medium** applied for, in the **booklets** provided.
- (4) Submit all workings and calculations. State clearly assumptions made by you, if any.
- (5) Use of Non-programmable calculators is permitted.
- (6) **Action Verb Check List** with definitions is attached. Each question begins with an **action verb** excluding OTQ's. Candidates should answer the questions based on the **definition** of the verb given in the Action Verb Check List.
- (7) 100 Marks.

SECTION A

Objective Test Questions (OTQs)

Eight (08) compulsory questions

(Total 20 marks)

Question 01

Select the most correct answer for question No. **1.1** to **1.5**. Write the number of the selected answer in your answer booklet with the number assigned to the question.

- **1.1** Classification of costs as fixed and variable is based on:
 - (1) The behavior of the cost.

(2) The nature of the cost.

(3) The function of the cost.

(4) The purpose of the cost.

(02 marks)

- **1.2** Which one of the following statements is correct?
 - (1) An objective of cost accounting is maximization of profit.
 - (2) Overhead cost is an element of prime cost.
 - (3) Cost accounting is more concerned with ascertainment and control of costs.
 - (4) All of the above. (02 marks)

	(1)	Depreciation on machinery used in the factory.
	(2)	Wages of machine operators.
	(3)	Rent of factory premises.
	(4)	Salaries of office staff. (02 marks)
1.4	The f	following information was extracted from a manufacturing company for the year 2015:
		Actual overheads : Rs.100,000/-
		Budgeted overheads : Rs.120,000/-
		Actual machine hours : 18,000 hours
		Budgeted machine hours : 20,000 hours
	Base	ed on the above information, overheads cost would be:
	(1)	Over absorbed by Rs.8,000/ (2) Under absorbed by Rs.8,000/
	(3)	Over absorbed by Rs.30,000/ (4) Under absorbed by Rs.30,000/ (02 marks)
1.5	The f	following data relates to an inventory item:
		Maximum usage : 400 kg
		Minimum usage : 200 kg
		Lead time : 4 - 6 months
	Using	g the above data, the re-order level would be:
	(1)	2,400 kg. (2) 800 kg. (3) 1,500 kg. (4) 1,600 kg. (02 marks)
Write ques		vers for question No. 1.6 to 1.8 in your answer booklet, with the number assigned to the
1.6	Seled brack	ct the most suitable word/words to fill in the blanks using word/words given within kets:
	(1)	
	(2)	
	(3)	(Non-integrated / Integrated) Accounting System is one where all financial and cost transactions are recorded in one ledger. (03 marks)

1.3 Which one of the following items is **not** considered as a part of the production cost?

- 1.7 State whether each of the following statements is TRUE or FALSE. Write True or False in your answer booklet with the number assigned to the question.
 - (1) Standard costing system is widely used to fulfill the statutory reporting requirements of companies.
 - Zero based budgeting requires each budget to be started from zero or from scratch. (2)
 - (3) All different costing methods used by manufacturing companies can be grouped into "specific order costing" and "continuous operation costing".
 - (4) Only variable cost items are taken into account in Marginal Costing. (04 marks)
- 1.8 Match each of the terms mentioned in column A with the correct formulae given in column B and write in your answer booklet:

Column A		Column B	
(1)	Profit volume ratio (contribution to sales ratio)	(a) (Expected Profit / contribution Per unit)	
(2)	Margin of safety (in units)	(b) (Expected Profit / profit volume ratio)	
(3)	Margin of safety (in value)	(c) (Contribution per unit / Selling price per unit) $ imes$ 100	0

(03 marks)

End of Section A —

SECTION B

Five (05) compulsory questions (Total 25 marks)

Question 02

BMS Ltd. manufactures shirts for the local market and pays wages for its workers on a weekly basis. An amount of 125% on normal hourly wage rate is paid for saved hours as a bonus.

The following information was extracted from the company's payroll system:

Normal working week	8 hours x 5 days
Standard time allocated to complete a shirt	30 minutes
Normal wage rate	Rs.150/- per hour

Two workers of the company, A and B have completed 80 and 100 shirts respectively during the 1st week of July 2016.

You are required to:

Calculate the total earnings of each worker, separately for the 1st week of July 2016. (05 marks)

Question 03

M & M Ltd. uses material "UT12" for its production process.

The following Information was extracted from the books of the company for the month of June 2016:

Date	Description	Quantity (Kg)	Price per Kg (Rs.)
01.06.2016	Opening balance	800	25
03.06.2016	Purchases	650	28
08.06.2016	Issues	850	_
25.06.2016	Purchases	850	24
30.06.2016	Issues	750	_

You are required to:

Prepare the stores ledger for the month of June 2016 using First In First Out (FIFO) method.

(05 marks)

Question 04

Benrice Ltd. manufactures two products namely **A** and **B**. The following budgeted data for the quarter ended 30th September 2016 was extracted from the books of the company:

	A (in units)	B (in units)
Sales	12,000	16,000
Stock as at 01.07.2016	1,000	1,500
Stock as at 30.09.2016	1,400	1,700

You are required to:

Prepare the production budget for products **A** and **B** for the quarter ended 30th September 2016.

(05 marks)

Question 05

The following information has been given in relation to **Job No. 1198** of a furniture manufacturing company:

Direct material consumed	Rs.34,000/-
Direct labour:	
Assembly Department	12 hours at Rs.1,500/- per labour hour
Finishing Department	8 hours at Rs.2,500/- per labour hour

Overheads are absorbed to each job as follows:

Assembly Department : Rs.1,000/- per direct labour hour

Finishing Department : Rs.1,750/- per direct labour hour

The company's job pricing policy is to keep a 25% margin on the total cost of the Job.

You are required to,

Calculate the price to be charged for Job No: 1198.

(05 marks)

Question 06

A company intends to launch a new product to local market in order to increase its sales revenue. The following figures have been forecasted for the month of August 2016 in respect of this new product:

	Rs.
	(Per unit)
Selling price	200
Direct material cost	60
Direct labour cost	40
Other variable cost	20

Additional fixed cost for the production of this new product is budgeted at Rs.180,000/- per annum and 2,750 units will be sold during the month of August 2016.

You are required to,

Calculate, the following:

(a) Break-even point in units. (03 marks)

(b) Margin of safety in units. (02 marks)

End of Section B — (Total 05 marks)

SECTION C

Three (03) compulsory questions (Total 30 marks)

Question 07

The following information relates to **Moon Ltd.**, which is engaged in the business of buying and selling of **Product X**.

(1) Forecasted purchases and sales for the months of July, August and September 2016 are as follows:

	July	August	September
Purchases (in units)	15,000	16,000	17,000
Sales (in units)	14,000	16,000	18,000

- (2) Selling price per unit of **product X** was Rs.35/- for the month of June 2016 and it is expected that the price would be increased by Rs.2/- with effect from 01st July 2016. All sales are made on cash basis.
- (3) All purchases are made on credit basis and the company is given one month credit period to settle suppliers' invoices. Purchase price per unit of **Product X** is Rs.20/- and 14,000 units were purchased for the month of June.
- (4) Salaries and wages for each month is expected to be Rs.140,000/- and are paid in the following month.
- (5) Administration and distribution expenses (excluding depreciation charges, salaries and wages) for each month is estimated to be Rs.25,000/- from July 2016 and are paid in the same month.
- (6) A machinery costing Rs.250,000/- is expected to be acquired in August 2016.
- (7) As at 01st July 2016, the company had a cash balance of Rs.148,000/-.

You are required to,

Prepare the cash budget for the quarter ended 30th September 2016 on monthly basis. (10 marks)

Question 08

PFM Ltd. has two production departments **X** and **Y** and two service departments, packing and maintenance.

The following information relates to **PFM Ltd.** for the month of May 2016:

		Production Departments		Service Departments	
		X	Υ	Packing	Maintenance
Indirect material	(Rs.)	100,000	150,000	125,000	75,000
Indirect wages	(Rs.)	10,000	5,000	1,500	15,000
Cost of Machinery	(Rs.)	1,000,000	1,500,000	-	500,000
No. of Employees		50	30	50	10
Floor area	(square feet)	1,000	1,500	1,000	500

Other overhead costs for the month of May 2016 are as follows:

	Rs.
Depreciation on machinery	600,000
Insurance on machinery	150,000
Staff welfare cost	56,000
Building rent	160,000

Service department costs are apportioned to production departments as follows:

Service Departments	х	Υ
Packing	50%	50%
Maintenance	55%	45%

You are required to,

Prepare a statement showing how the overheads are allocated and apportioned to each of the production departments. (10 marks)

Question 09

Deep Product Ltd., a glouse manufacturing company, maintains its cost accounts using a non-integrated accounting system. The company recorded a profit of Rs.340,800/- as per financial accounts and a profit of Rs.398,200/- as per cost accounts for the quarter ended 30th June 2016.

The following information were extracted from the books of the company for the quarter ended 30th June 2016:

(1) Stock valuation:

	As per cost accounts (Rs.)	As per financial accounts (Rs.)
Opening Stocks:		
Raw materials	65,900	67,200
Work-in-progress	48,800	50,300
Finished goods	75,300	70,800
Closing Stocks:		
Raw materials	85,900	75,200
Work-in-progress	68,200	60,300
Finished goods	85,300	89,400

(2) During the quarter, an old machinery used in the factory was sold and the profit on disposal of Rs.27,600/- was recorded only in the financial accounts.

- (3) The company has rented out a small area of the factory for a bank to operate an ATM machine and the rent income thereon for the quarter is Rs.30,000/-. This has been recorded only in the financial accounts.
- (4) The provision for income tax made in the financial accounts for the quarter was Rs.51,000/-.
- (5) Depreciation for the quarter was Rs.175,000/- as per the cost accounts, while it was Rs.234,700/- as per the financial accounts.
- (6) Overheads as per the cost accounts was Rs.58,250/- and it was Rs.49,750/- as per the financial accounts.

You are required to,

Prepare a profit reconciliation statement between cost accounts and financial accounts.				
——————————————————————————————————————				

SECTION D

A compulsory question

(25 marks)

Question 10

(A) **Chemikal PLC,** a manufacturing company, produces **Product Y** using two consecutive processes.

Direct material is introduced at the start of process I and the completed output of process I is immediately transferred to process II.

The following data relates to process I:

Direct material introduced to process I	Rs.228,800/- (22,000 kg)
Closing work-in-progress	4,000 kg
Direct labour and overheads	Rs.186,000/-
Losses of the process	Expected normal loss is 10% of material introduced and scrap items can be sold at Rs.5/- per kg.
Output transferred to process II	16,400 kg

The degree of completion of closing work-in-progress was as follows:

Direct material : 100%

Direct labour and overhead: 70%

You are required to,

Prepare Process I account.

(13 marks)

(B) Chemikal PLC, produces a single product named PPM and uses the standard costing system.

Standard cost card of a product **PPM** is as follows:

	Rs.
Direct material A (2 kg @ Rs.100/-)	200
Direct labour (2 hours @ Rs.100/-)	200
Variable overhead (2 hours @ Rs.30/-)	60
Fixed production overhead	90
Standard Cost Per Unit	550

During the month of May 2016, company has produced 5,000 units of product **PPM.** Actual information for the month was as follows:

- Purchased 11,000 kg of direct material **A** at Rs.105/- per kg. The company does not maintain any stock of direct material **A**.
- Worked 9,500 direct labour hours and paid at the rate of Rs.110/- per hour.

You are required to,

((a)	Based on the a	bove information,	Calculate the fo	llowing variances:

- (i) Direct Material Price Variance. (02 marks)
- (ii) Direct Material Usage Variance. (02 marks)
- (iii) Direct Labour Rate Variance. (02 marks)
- (iv) Direct Labour Efficiency Variance. (02 marks)
- (b) **State** four(04) advantages of standard costing. (04 marks) (Total 25 marks)

End o	f Section D ———————————————————————————————————
Ena o	Section D —

ACTION VERB CHECK LIST

Knowledge Process	Verb List	Verb Definitions
	Define	Describe exactly the nature, scope, or meaning.
	Draw	Produce (a picture or diagram).
	Identify	Recognize, establish or select after consideration.
	List	Write the connected items one below the other.
	Relate	To establish logical or causal connections.
	State	Express something definitely or clearly.
Level 01	Calculate/Compute	Make a mathematical computation
Comprehension	Discuss	Examine in detail by argument showing different aspects, for the purpose of arriving at a conclusion.
Recall & explain important information	Explain	Make a clear description in detail revealing relevant facts.
	Interpret	Present in an understandable terms.
	Recognize	To show validity or otherwise, using knowledge or contextual experience.
	Record	Enter relevant entries in detail.
	Summarize	Give a brief statement of the main points (in facts or figures).

Knowledge Process	Verb List	Verb Definitions
Level 02 Application Use knowledge in a setting other than the one in which it was learned / Solve closed-ended problems	Apply	Put to practical use.
	Assess	Determine the value, nature, ability, or quality.
	Demonstrate	Prove, especially with examples.
	Graph	Represent by means of a graph.
	Prepare	Make ready for a particular purpose.
	Prioritize	Arrange or do in order of importance.
	Reconcile	Make consistent with another.
prosicino	Solve	To find a solution through calculations and/or explanation.

Knowledge Process	Verb List	Verb Definitions
Analysis Compa Draw relations among ideas and compare and contrast / Solve open- Difference Contra	Analyze	Examine in detail in order to determine the solution or outcome.
	Compare	Examine for the purpose of discovering similarities.
	Contrast	Examine in order to show unlikeness or differences.
	Differentiate	Constitute a difference that distinguishes something.
	Outline	Make a summary of significant features.