



ASSOCIATION OF ACCOUNTING TECHNICIANS OF SRI LANKA

AA2 EXAMINATION - JANUARY 2016

(AA22) COST ACCOUNTING AND REPORTING

• **Instructions to candidates** (Please Read Carefully):

- (1) **Time Allowed:** Reading : 15 minutes
Writing : 03 hours.

31-01-2016
Morning
[8.45 – 12.00]

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)

Seven (07) compulsory questions

(Total 20 marks)

Question 01

Select the most correct answer for question No. 1.1 to 1.4. Write the number of the selected answer in your answer booklet with the number assigned to the question.

1.1 Which one of the following statements is correct?

- (1) Ascertainment of cost is one of the objectives of Cost Accounting.
- (2) Costing is different from Cost Accounting.
- (3) Financial Accounting does not provide detailed cost information to the management.
- (4) All of the above.

(02 marks)

1.2 The budgeted fixed production overhead cost of a company for the year 2015 was Rs.450,000/- and the budgeted production of that year was 15,000 units. The actual fixed production overhead cost was Rs.350,000/- and the actual output for that year was 14,000 units.

If the company absorbs overheads based on the number of units produced, the over / under absorption of overhead cost would be:

- (1) Rs.70,000/- under absorbed.
 - (2) Rs.70,000/- over absorbed.
 - (3) Rs.100,000/- under absorbed.
 - (4) Rs.100,000/- over absorbed.
- (02 marks)

1.3 Which one of the following items is considered as a fixed cost of a garment factory?

- (1) Total salaries of sewing machine operators.
 - (2) Monthly rent of the factory building.
 - (3) Cost of fabric purchased.
 - (4) Carriage Inwards on fabric.
- (02 marks)

1.4 The following information was extracted from the books of a company for a particular product:

Annual demand - 3,125 units
 Cost of placing an order - Rs.10/-
 Holding cost per unit per annum - Rs.1/-

You may use the following formula,
 Economic Order Quantity:

$$\sqrt{\frac{2DC_o}{C_h}}$$

Based on the above information, the Economic Order Quantity (EOQ) is:

- (1) 250 units.
 - (2) 62,500 units.
 - (3) 2,500 units.
 - (4) 625 units.
- (02 marks)

Write answers for question No. 1.5 to 1.7 in your answer booklet, with the number assigned to the question.

1.5 Select the most suitable words to fill in the blanks using words given within brackets:

- (1) Aggregate of direct material cost, direct labour cost and direct other expenses is known as the (prime cost / total production cost).
- (2) Generally, standard costs are considered as (actual / pre-determined) costs.
- (3) The difference between the contribution and the profit of a particular product is the (fixed cost / variable cost).
- (4) (Financial Accounting / Cost Accounting) is more concerned with providing information mainly to external users.
- (5) [Material Requisition Note (MRN) / Goods Received Note (GRN)] is used to issue materials to the production process from the stores.

(05 marks)

1.6 State whether each of the following statements is **TRUE** or **FALSE**.

- (1) Indirect costs cannot be identified with a particular cost unit.
- (2) Fixed cost per unit is always fixed.
- (3) Normal loss is the loss expected by the management within a process.

(03 marks)

1.7 Match each of the overhead **Cost Pool** in a manufacturing company with appropriate **Cost Driver**.

Cost Pool	Cost Driver
(1) Material ordering cost.	(a) Number of machine hours.
(2) Maintenance cost.	(b) Number of orders.
(3) Machine running cost.	(c) Number of inspections.
(4) Quality control cost.	(d) Number of maintenance hours.

(04 marks)

End of Section A

SECTION B

Five (05) compulsory questions

(Total 25 marks)

Question 02

Dissanayake is an employee of **Viskam Ltd.** and the number of units produced by him during the 01st and 02nd week of December 2015 were 14 units and 21 units respectively. **Dissanayake** is entitled to receive wages on weekly basis:

The following information is also available.

Normal working week	8 hours x 5 days
Piece rate	Rs.650/- per unit
Standard time allowed per unit	150 minutes
Bonus for extra units produced	Additional 60% on piece rate per unit

You are required to:

Calculate the total earnings of **Dissanayake** for the first two weeks of December 2015. (05 marks)

Question 03

RPK Ltd. is a manufacturing company and uses material "V32" for their production process. The following information was extracted from its' cost records for the month of December 2015:

Date	Description	Quantity (Kg)	Purchase price per Kg (Rs.)
01.12.2015	Opening balance	450	10
05.12.2015	Purchases	550	13
11.12.2015	Issues	150	-
25.12.2015	Purchases	450	14
29.12.2015	Issues	200	-

You are required to:

Assess the value of the inventory as at 31st December 2015 using weighted average (AVCO) method. (05 marks)

Question 04

The following information has been forecasted for the year 2016 by a company:

Selling price per unit : Rs.1,200/-.

Variable cost per unit : Rs.900/-.

Estimated fixed cost : Rs.600,000/- per annum.

You are required to:

Calculate the following:

- (a) Break-even point (BEP) in units and in value.
- (b) Number of units to be sold to achieve a target profit of Rs.900,000/-. (05 marks)

Question 05

A Ltd. manufactures product **P** and the following information is available for a unit of product **P**:

Direct Material: A	5 kg @ Rs.20/- per kg.
B	3 kg @ Rs.25/- per kg.
Direct labour	2 hours @ Rs.20/- per hour.
Variable overhead cost	Rs.25/- per unit.
Fixed overhead cost	150% on labour cost.

The company keeps a profit margin of 20% on selling price.

You are required to:

Calculate the selling price of Product **P**. (05 marks)

Question 06

The following information was extracted from the books of a company for the month of December 2015.

Standard labour cost (2 hours @ Rs.200/- per hour)	-	Rs.400/- per unit.
Actual labour cost (5,000 hours @ Rs.210/- per hour)	-	Rs.1,050,000/-.
Budgeted Production	-	3,000 units.
Actual production	-	2,600 units.

You are required to,

calculate, the following variances:

- (a) Direct labour rate variance.
- (b) Direct labour efficiency variance.
- (c) Direct labour cost variance. (05 marks)

End of Section B

SECTION C

Three (03) compulsory questions

(Total 30 marks)

Question 07

Jack PLC has three production departments P, Q, R and two service departments X and Y. The following information relates to Jack PLC for the month of December 2015:

	Total	Production Departments			Service Departments	
		P	Q	R	X	Y
Indirect material (Rs. '000)	1,450	450	470	370	120	40
Indirect wages (Rs.'000)	508	130	150	210	10	8
Cost of plant and equipment (Rs.'000)	150,700	35,000	46,500	68,000	600	600
Floor area (square feet)	7,000	1,600	2,400	2,200	400	400
Electricity usage (Kilowatt)	100	25	32	23	12	8
No. of Labour Hours	600	200	300	100		

Other overhead costs for the month of December 2015 were as follows.

Building insurance	Rs.350,000/-
Electricity	Rs.2,400,000/-
Maintenance cost of plant and equipment	Rs.1,507,000/-
Building rent	Rs.700,000/-
Depreciation of plant and equipment	12% per annum on cost

Service Department costs are apportioned to Production Departments as follows:

Department	P	Q	R
X	50%	20%	30%
Y	20%	40%	40%

You are required to:

- Prepare** a statement showing how the production overheads are allocated and apportioned to each of the Production Department.
- Calculate** the overhead absorption rate for each of the production department based on the number of labour hours.

(10 marks)

Question 08

H Ltd. manufactures a chemical through two consecutive processes. The following information relates to process 2 for the month of December 2015.

Input material transferred from process 1	Rs.129,740/- (5,200 litres)
Direct labour	Rs.52,140/-
Overheads	Rs.41,580/-
Normal loss	5% of input and scrap items can be sold for Rs.5/- per litre
Output	4,200 litres

There was no opening work-in-progress. Closing work-in-progress at the end of the month was 800 litres and the degree of completion was as follows:

Input material transferred from process 1	- 100%
Direct labour	- 75%
Overheads	- 60%

You are required to,

Prepare the following:

- Production cost evaluation statement using Weighted Average Cost (AVCO) Method.

- Process 2 account.

(10 marks)

Question 09

Cola Ltd., a manufacturing company operates a non-integrated accounting system to maintain their cost accounts. **Cola Ltd.** records a profit of Rs.35,700/- as per cost accounts and a net loss after tax of Rs.86,100/- as per financial accounts for the year ended 31st March 2015.

The following information is extracted from the books of **Cola Ltd.** for the year ended 31st March 2015:

(1) Stocks:

	As per Cost accounts		As per Financial accounts	
	01.04.2014	31.03.2015	01.04.2014	31.03.2015
Raw material (Rs.)	42,250	63,500	93,500	78,300
Work-in-progress (Rs.)	12,700	43,100	10,800	23,800
Finished goods (Rs.)	65,350	74,600	115,000	48,900

- (2) Notional rent of Rs.47,800/- has been charged only in cost accounts.
- (3) Depreciation for the year ended 31st March 2015 was Rs.24,700/- as per cost accounts while it was Rs.33,500/- as per financial accounts.
- (4) Overheads as per cost accounts was Rs.65,300/- and it was Rs.55,300/- as per financial accounts.
- (5) Provision for doubtful debt of Rs.4,600/- has been charged only in financial accounts.
- (6) Provision for income tax for the year ended 31st March 2015 was Rs.45,000/- as per financial accounts.
- (7) Interest income on fixed deposits received for the year was Rs.8,000/- and it is included only in the financial accounts.

You are required to:

Prepare a profit / loss reconciliation statement between cost accounts and financial accounts.

(10 marks)

End of Section C

SECTION D

A compulsory question

(25 marks)

Question 10

- (A) **Teena Ltd.** manufactures a single product **M**, and operates a standard costing system. Generally, the entire production of the month is sold during the same month.

The following information is extracted for the month of December 2015:

- (1) The standard cost card for the product **M** is as follows:

	Rs.
Direct Material (2 kg @ Rs.9/- per kg)	18
Direct Wages (2 hours @ Rs.6/- per hour)	12
Variable Production Overhead (1 hour @ Rs.6/- per hour)	6
Fixed Production Overhead	7
Total Standard Cost	43

- (2) There were no opening and closing stocks of raw material and finished goods. Standard selling price per unit of product **M** is Rs.55/-.
- (3) Budgeted production and sales for the month of December 2015 was 10,000 units.
- (4) Budgeted and the actual administration and distribution cost for the month of December 2015 were Rs.23,000/- and Rs,25,000/- respectively.
- (5) At the end of the month, the following variances were identified when comparing with the actual information:

	Rs.
Direct Material Price Variance	2,000 (F)
Direct Material Usage Variance	3,000 (A)
Direct Labour Rate Variance	1,500 (A)
Direct Labour Efficiency Variance	4,000 (F)
Variable Production Overhead Expenditure Variance	1,200 (F)
Variable Production Overhead Efficiency Variance	1,800 (A)
Fixed Production Overhead Expenditure Variance	5,000 (A)
Fixed Production Overhead Volume Variance	1,000 (A)
Sales Margin Price Variance	2,000 (F)
Sales Margin Volume Variance	1,500 (F)

(F) - Favourable (A) - Adverse

Based on the above information,

You are required to,

- (a) **Prepare** an operating statement under Absorption Costing System.
- (b) **Calculate** the actual profit for the month of December 2015.

(10 marks)

- (B) **Teena Ltd.** has the following production and sales forecasts for the months of January, February and March 2016:

	January	February	March
Production (in units)	12,000	11,000	13,000
Sales (in units)	12,000	11,000	13,000

For the month of December 2015, **Teena Ltd.** has produced and sold 9,000 units of product **M**.

The following additional information is available for the first quarter of 2016:

- (1) Selling price per unit of product **M** will be Rs.60/- from 01st January 2016. (It was Rs.55/- per unit during the December 2015)
- (2) 60% of the sales are on credit basis and payments from customers will be collected in the following month.
- (3) All purchases are made on credit basis by **Teena Ltd.** and suppliers have given one month credit period to settle the dues. Direct material purchases during the first quarter of 2016 are estimated to be as follows:

	Rs.
January	216,000
February	198,000
March	234,000

The value of the direct material purchases for the month of December 2015 is Rs.179,000/-.

- (4) Direct wages, variable production overheads and fixed production overheads are paid as and when they are incurred. Standard costs for the product **M** are same as in December 2015.
- (5) Administration expenses and distribution expenses are to be incurred evenly throughout the quarter and those expenses for the first quarter will be as follows:

	Rs.
Administration expenses	60,000
Distribution expenses	45,000

- (6) Depreciation charges of Rs.10,000/- per month is included under Administration expenses.
- (7) Capital budget for the first quarter of 2016 is as follows:

	January	February	March
Acquisition of office equipment	-	60,000	-
Disposal of motor vehicle	-	-	250,000

- (8) Cash balance as at 01st January 2016 is Rs.189,000/-.

You are required to,

Prepare the cash budget for the first quarter of 2016 on monthly basis.

(15 marks)

(Total 25 marks)

ACTION VERB CHECK LIST

Knowledge Process	Verb List	Verb Definitions
Level 01 Comprehension Recall & explain important information	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.
	Calculate/Compute	Make a mathematical computation
	Discuss	Examine in detail by argument showing different aspects, for the purpose of arriving at a conclusion.
	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.
	Solve	To find a solution through calculations and/or explanation.

Knowledge Process	Verb List	Verb Definitions
Level 03 Analysis Draw relations among ideas and compare and contrast / Solve open-ended problems.	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.