ASSOCIATION OF ACCOUNTING TECHNICIANS OF SRI LANKA

# AA2 EXAMINATION - JULY 2017 <br> (AA22) COST ACCOUNTING AND REPORTING 

- Instructions to candidates (Please Read Carefully):
(1) Time Allowed: Reading : 15 minutes

Writing : 03 hours.
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 Which one of the following statements is correct regarding the Management Accounting?
(1) It covers transactions of the whole business.
(2) It prepares reports mainly to external stakeholders.
(3) It prepares reports according to the stipulated legal requirements.
(4) It uses present, past and future data.
(02 marks)
1.2 Classification of costs as direct costs and indirect costs is based on:
(1) The behaviour of the cost.
(2) The nature of the cost.
(3) The purpose of the cost.
(4) The function of the cost.
(02 marks)
1.3 Which one of the following is correct regarding the Activity Based Costing (ABC) method?
(1) It is a method of charging overheads to cost units on the basis of activities performed for the cost unit.
(2) It is used to calculate the departmental overhead absorption rate.
(3) It is a method in which materials are obtained at the time they are required.
(4) It considers only the variable overheads.
(02 marks)
1.4 Which one of the following is not an example for controllable overheads?
(1) Idle time.
(2) Depreciation.
(3) Overtime.
(4) All of the above.
(02 marks)
1.5 Select from the following, the correct statement regarding the Integrated Accounting System:
(1) Two separate sets of books are maintained.
(2) A separate ledger is maintained for cost accounts.
(3) Profit reconciliation is required.
(4) All financial and cost transactions are recorded in one set of books.
(02 marks)
1.6 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) Performance of employees is not considered under the time rate system of labour remuneration.
(2) There is a statutory requirement for a manufacturing company to maintain cost records.
(3) Overheads consist of indirect material cost, indirect labour cost and indirect expenses.
(4) An objective of the cost accounting is ascertainment of cost per unit.
(04 marks)
1.7 Match each of the overhead costs mentioned in column A with the most appropriate basis for apportionment given in column B, and write the answer in your answer booklet with the number assigned to the question:

| A - Overhead Cost | B - Basis of Apportionment |
| :--- | :--- |
| (1) Rent. | (a) Value of machinery. |
| (2) Insurance on Machinery. | (b) Floor area. |
| (3) Meal expenses. | (c) Number of employees. |

1.8 Select the most suitable word/words to fill in the blanks using word/words given within brackets. Write the selected word/words in your answer booklet with the number assigned to the question:
(1) When the amount absorbed is less than the actual overhead incurred, there is an ..................... (over absorption / under absorption) of overheads.
(2) $\qquad$ (Allocation / Apportionment) of overhead is the process of charging the full amount of overhead costs to a particular cost centre.
(3) The difference between the actual sales and the break-even sales is $\qquad$ (margin of safety / expected profit).
(03 marks)

## End of Section A

## SECTION B

Five (05) compulsory questions
(Total 25 marks)

## Question 02

Happy Manufacturer purchases product PQ from an outside supplier. The following data relates to product PQ:

| Annual demand | 56,250 units |
| :--- | :--- |
| Cost of ordering | Rs.100/- per order |
| Holding cost | Rs.5/- per unit per annum |
| Purchase price | Rs.625/- per unit |

You may use the following formula, Economic Order Quantity:

$$
\sqrt{\frac{2 D C_{0}}{C_{h}}}
$$

## You are required to:

(a) Compute the Economic Order Quantity (EOQ).
(b) State two(02) objectives of Material Control.
(02 marks)
(Total 05 marks)

## Question 03

Abee ( $\mathbf{P v t )}$ Ltd. has two production divisions ( $\mathbf{P}_{\mathbf{1}}$ and $\mathbf{P}_{\mathbf{2}}$ ) and two service divisions ( $\mathbf{S}_{\mathbf{1}}$ and $\mathbf{S}_{\mathbf{2}}$ ). Budgeted overhead cost and budgeted machine hours are as follows:

|  | Overhead <br> Cost (Rs.'000) | Machine Hours |
| :--- | ---: | ---: |
| Production Division $\left(\mathbf{P}_{\mathbf{1}}\right)$ | 33,500 | 35,000 |
| Production Division $\left(\mathbf{P}_{\mathbf{2}}\right)$ | 27,300 | 27,000 |
| Service Division $\left(\mathbf{S}_{\mathbf{1}}\right)$ | 15,000 | - |
| Service Division $\left(\mathbf{S}_{\mathbf{2}}\right)$ | 7,500 | - |

Service Division cost is apportioned between two Production Divisions as follows:

| Service | Production Divisions |  |
| :---: | :---: | :---: |
| Divisions | P1 | P2 |
| S1 | $55 \%$ | $45 \%$ |
| S2 | $50 \%$ | $50 \%$ |

## You are required to:

(a) Calculate the total overhead cost of Production Departments P1 and P2.
(03 marks)
(b) Calculate the overhead absorption rate for each of the two production departments based on the machine hours.

## Question 04

A manufacturing company pays Rs.150/- per hour for a worker and the expected output per hour is 120 units. An incentive is payable for additional unit produced at Rs.6/- per unit.

Two employees, A and B produced 5,000 units and 4,800 units respectively for the first week of month and both employees had worked 40 hours each for the week.

## You are required to:

Calculate the total earnings of $\mathbf{A}$ and $\mathbf{B}$ separately for the first week of the month.
(05 marks)

## Question 05

A budget is a plan for coordinating various options of the business expressed in financial terms. Zero based budget is a type of budget.

## You are required to:

(a) Explain what is meant by zero based budgeting.
(02 marks)
(b) State three(03) advantages of zero based budgeting.
(03 marks)
(Total 05 marks)

## Question 06

The profit as per cost accounts of Anne (Pvt) Ltd. for the quarter ended 31 ${ }^{\text {st }}$ March 2017 was Rs.293,000/-. The company recorded a profit of Rs.306,000/- as per financial statements.

The following information was extracted from the books of the company for the quarter ended $31^{\text {st }}$ March 2017:
(1) Stock valuation:

|  | As per Cost <br> Accounts (Rs.) | As per Financial <br> Accounts (Rs.) |
| :--- | ---: | ---: |
| Opening stocks | 65,000 | 45,000 |
| Closing stocks | 85,000 | 90,000 |

(2) Overheads as per cost accounts were Rs.125,000/- and it was Rs.100,000/- as per financial accounts.
(3) Excess depreciation of Rs.5,000/- was charged in financial accounts when compared to cost accounts.
(4) Provision for income tax for the quarter was Rs.32,000/- as per financial accounts.

## You are required to:

Prepare a profit reconciliation statement between Cost Accounting and Financial Accounting for the quarter ended $31^{\text {st }}$ March 2017.
(05 marks)

## End of Section B

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## SECTION C

Three (03) compulsory questions
(Total 30 marks)

## Question 07

Peacock, an umbrella manufacturing company uses a standard costing system. The budgeted production for the month of June 2017 was 5,000 units and standard selling price is Rs.400/- per unit.

The standard cost card for an umbrella is as follows:

|  |  | Per unit (Rs.) |
| :--- | :--- | :---: |
| Direct material | 1.5 meters @ Rs.100/- per meter | 150 |
| Direct labour | 2 hours @ Rs.30/- per hour | 60 |
| Variable production overheads | 2 hours @ Rs.15/- per hour | 30 |
| Fixed production overheads | 2 hours @ Rs.40/- per hour | 80 |
| Total Standard Cost |  | $\mathbf{3 2 0}$ |

Actual information for the month of June 2017 was as follows:
The company produced 4,500 units and breakup of actual costs for the month are as follows:

|  | Rs. |
| :--- | :---: |
| Direct materials (6,000 meters @ Rs.94/- per meter) | 564,000 |
| Direct labour (9,000 hours @ Rs.32/-per hour) | 288,000 |
| Variable production overheads | 140,000 |
| Fixed production overheads | 395,000 |

## You are required to:

Calculate the following variances for the month of June 2017:
(a) Direct Material Price Variance.
(b) Direct Material Usage Variance.
(c) Direct Material Cost Variance.
(d) Direct Labour Cost Variance.
(e) Variable Production Overhead Cost Variance.

## Question 08

Leather PLC manufactures product A and the following information relates to Leather PLC for the month of June 2017:
(1)

|  | No. of Units |
| :--- | ---: |
| Production during the month | 2,000 |
| Sales made during the month | 1,800 |
| Opening stock as at 01 | 300 |
| Budgeted production for the month | 1,800 |

(2) Variable production cost per unit is as follows:

|  | Rs. |
| :--- | ---: |
| Direct material | 70 |
| Direct labour | 40 |
| Variable production overheads | 20 |
|  | 130 |

(3) Selling price per unit is Rs.300/- and variable selling and distribution expenses are Rs.36,000/-.
(4) Fixed overhead for the month is as follows:

|  | Budgeted <br> (Rs.) | Actual <br> (Rs.) |
| :--- | ---: | ---: |
| Production overhead | 50,400 | 60,000 |
| Administration overhead | 40,000 | 40,000 |
| Selling and distribution overhead | 50,000 | 50,000 |

(5) Fixed overheads are absorbed on the production unit basis.
(Assume that production cost per unit is same for the units of opening stocks and units produced during the year).

## You are required to:

Prepare Income Statement under the absorption costing method for the month ended $30^{\text {th }}$ June 2017.

## Question 09

(a) Tools Engineering PLC manufactures industrial tools for own specifications of its customers. Job No. A111 was completed during the month of June 2017 and the following information was extracted from the Job Card of Job No. A111:

## Direct Material consumed:

- MRN number 11 - 2,000 kg @ Rs.20/- per kg.
- MRN number $22-5,000 \mathrm{~kg} @$ Rs.10/- per kg.


## Direct Labour:

- Production Department 1 - 200 labour hours @ Rs.100/- per hour.
- Production Department 2-500 labour hours @ Rs.50/- per hour.


## Overheads:

- Overheads are absorbed based on the direct labour hours and overhead absorption rate per labour hour for each of the department is as follows:

| Department | Overhead absorption rate per labour hour (Rs.) |
| :---: | :---: |
| Department 01 | 100 |
| Department 02 | 40 |

## You are required to:

Calculate the total cost of Job No. A111.
(06 marks)
(b) "The usefulness of standard costing in a modern business environment is questionable, according to the experts in the planning field"

You are required to:
State four(04) disadvantages / limitations of standard costing.

## End of Section C

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## SECTION D

A compulsory question
(25 marks)

## Question 10

(A) Super Ltd. manufactures Product $\mathbf{B}$ through two consecutive processes named Process $\mathbf{X}$ and Process Y. Output of Process $\mathbf{X}$ is immediately transferred to Process $\mathbf{Y}$ and completed units of Process $\mathbf{Y}$ is sold as finished Product B.

The following information of Process $\mathbf{Y}$ was extracted for the month of December 2016:

| Material transferred from Process X | Rs. $444,000 /-(18,500$ units) |
| :---: | :--- |
| Other costs incurred during the process: |  |
| Material introduced | Rs.173,250/- |
| Direct labour and overheads | Rs.329,175/- |
| Finished Product B | 16,000 units |
| Normal loss | $5 \%$ <br> items of output of Procen be sold for Rs.5/- per unit |

There was no opening work-in-progress at the beginning of the month and closing work-in-progress at the end of the month was 1,000 units and the degree of completion of closing work-in-progress was as follows:

| Input material transferred from Process X | $: 100 \%$ |
| :--- | :--- |
| Material introduced | $: 75 \%$ |
| Direct labour and overheads | $: 75 \%$ |

## You are required to:

Prepare the following:
(a) Production cost evaluation statement.
(b) Process Y account.
(15 marks)
(B) Leni Ltd. is specialized in the manufacturing of denims and jackets. The company uses budgetary control system and the forecasted data to be used to prepare the budget for the six months ending $3{ }^{\text {st }}$ December 2017 are as follows:

| Product | Selling price per <br> unit (Rs.) | Revenue <br> (Rs.000) | Opening Stock <br> (units) | Closing Stock <br> (units) |
| :--- | ---: | ---: | ---: | ---: |
| Denims | 3,500 | 17,500 | 200 | 1,500 |
| Jackets | 5,500 | 16,500 | 1,410 | 500 |

Direct material requirement for the production of each unit is as follows:

|  | Direct Material Requirement <br> (Meters) per unit |  |
| :--- | ---: | ---: |
|  | Denims | Jackets |

## You are required to:

Prepare the following for the six months ending $31^{\text {st }}$ December 2017:
(a) Sales Budget (in units).
(b) Production Budget (in units).
(c) Direct Material Usage Budget (in Meters).

## ACTION VERB CHECK LIST

| Knowledge Process | Verb List | Verb Definitions |
| :---: | :---: | :---: |
| Level 01 <br> Comprehension <br> 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 <br> Application | Apply | Put to practical use. |
|  | Assess | Determine the value, nature, ability, or quality. |
|  | Demonstrate | Prove, especially with examples. |
|  | Graph | Prepare |
|  | Prioritize | Represent by means of a graph. |
|  | Reconcile | Make ready for a particular purpose. |
|  | Solve | Take consistent with another. <br> Toxplanation. |


| Knowledge Process | Verb List | Verb Definitions |
| :--- | :--- | :--- |
| Level 03 <br> Analysis | Analyze | Examine in detail in order to determine the solution <br> or outcome. |
|  |  | Examine for the purpose of discovering similarities. |
|  | Contrast | Differentiate |
|  | Outline | Constitute a difference that distinguishes something. |

