ASSOCIATION OF ACCOUNTING TECHNICIANS OF SRI LANKA

# AA2 EXAMINATION - JULY 2016 <br> (AA22) COST ACCOUNTING AND REPORTING 

17-07-2016
(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.

## 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.
1.3 Which one of the following items is not considered as a part of the production cost?
(1) Depreciation on machinery used in the factory.
(2) Wages of machine operators.
(3) Rent of factory premises.
(4) Salaries of office staff.
1.4 The 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 |

Based 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 following data relates to an inventory item:

| Maximum usage | $: 400 \mathrm{~kg}$ |
| :--- | :--- |
| Minimum usage | $: 200 \mathrm{~kg}$ |
| Lead time | $: 4-6$ months |

Using the above data, the re-order level would be:
(1) $2,400 \mathrm{~kg}$.
(2) 800 kg .
(3) $1,500 \mathrm{~kg}$.
(4) $1,600 \mathrm{~kg}$.
(02 marks)

Write answers for question No. 1.6 to 1.8 in your answer booklet, with the number assigned to the question.
1.6 Select the most suitable word/words to fill in the blanks using word/words given within brackets:
$\qquad$ (Dissatisfaction / Satisfaction) of a job is one of the causes for labour turnover.
$\qquad$ (Marginal Costing / Activity Based Costing [ABC]) focuses on the activities performed to produce the product or service.
(3) $\qquad$ (Non-integrated / Integrated) Accounting System is one where all financial and cost transactions are recorded in one ledger.

> (03 marks)
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.
(2) Zero based budgeting requires each budget to be started from zero or from scratch.
(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 $\mathbf{A}$ with the correct formulae given in column $\mathbf{B}$ and write in your answer booklet:

| Column A |  | Column B |
| :---: | :---: | :---: |
| (1) | Profit volume ratio <br> (contribution to sales ratio) | (a) | (Expected Profit / contribution Per unit)

(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 $\times 5$ days |
| :--- | :--- |
| Standard time allocated to <br> complete a shirt | 30 minutes |
| Normal wage rate | Rs.150/- per hour |

Two workers of the company, A and $\mathbf{B}$ have completed 80 and 100 shirts respectively during the $1^{\text {st }}$ week of July 2016.

## You are required to:

Calculate the total earnings of each worker, separately for the $1^{\text {st }}$ week of July 2016.

## 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 <br> $\mathbf{( K g )}$ | Price per Kg <br> (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 $30^{\text {th }}$ September 2016 was extracted from the books of the company:

|  | A <br> (in units) | B <br> (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 $\mathbf{A}$ and $\mathbf{B}$ for the quarter ended $30^{\text {th }}$ 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.

## 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. <br> (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.

## 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 $01^{\text {st }}$ 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 $01^{\text {st }}$ July 2016 , the company had a cash balance of Rs.148,000/-.

You are required to,
Prepare the cash budget for the quarter ended $30^{\text {th }}$ September 2016 on monthly basis. (10 marks)

## Question 08

PFM Ltd. has two production departments $\mathbf{X}$ and $\mathbf{Y}$ 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 | Y | 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 | $\mathbf{X}$ | $\mathbf{Y}$ |
| :--- | :---: | :---: |
| 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.

## 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 $30^{\text {th }}$ June 2016.

The following information were extracted from the books of the company for the quarter ended $30^{\text {th }}$ June 2016:
(1) Stock valuation:

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

(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. (10 marks)

## End of Section C

## SECTION D

A compulsory question
(25 marks)

## Question 10

(A) Chemikal PLC, a manufacturing company, produces Product $\mathbf{Y}$ 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 <br> process I | Rs. $228,800 /-(22,000 \mathrm{~kg})$ |
| :--- | :--- |
| Closing work-in-progress | $4,000 \mathrm{~kg}$ |
| Direct labour and overheads | Rs. $186,000 /-$ |
| Losses of the process | Expected normal loss is $10 \%$ of material introduced <br> and scrap items can be sold at Rs.5/- per kg. |
| Output transferred to process II | $16,400 \mathrm{~kg}$ |

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

$$
\begin{array}{llr}
\text { Direct material } & : 100 \% \\
\text { Direct labour and overhead : } & 70 \%
\end{array}
$$

## You are required to,

Prepare Process I account.
(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 | $\mathbf{5 5 0}$ |

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

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


## You are required to,

(a) Based on the above information, Calculate the following variances:
(i) Direct Material Price Variance.
(ii) Direct Material Usage Variance.
(iii) Direct Labour Rate Variance. (02 marks)
(iv) Direct Labour Efficiency Variance.
(b) State four(04) advantages of standard costing.

## 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 | Praph |
|  | Prepare | Prove, especially with examples. |
|  | Reconcile | Represent by means of a graph. |
|  | Solve ready for a particular purpose. | Arrange or do in order of importance. |


| 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 | Examine in order to show unlikeness or differences. |
|  | Outline | Constitute a difference that distinguishes something. |

