ASSOCIATION OF ACCOUNTING TECHNICIANS OF SRI LANKA
AA2 EXAMINATION - JANUARY 2017
(AA22) COST ACCOUNTING AND REPORTING

- Instructions to candidates (Please Read Carefully):
(1) Time Allowed: Reading : 15 minutes Writing : 03 hours.

Morning
[8.45-12.00]
No. of Pages : 09
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 Which one of the following is a purpose of Management Accounting?
(1) Formulation of policies / strategies.
(2) Planning and controlling the activities.
(3) Safeguarding assets.
(4) All of the above.
(02 marks)
1.2 Which one of the following is not an example for a cost centre?
(1) Bakery.
(2) Car.
(3) Garment factory.
(4) Hotel.
(02 marks)
1.3 Which one of the following is an advantage of time rate system of remuneration?
(1) It provides incentive to efficient workers to increase the output.
(2) The cost of supervision is low.
(3) It ensures each worker a minimum amount of wage.
(4) Labour cost per unit is easy to estimate.
1.4 The following information relates to an item of stock:

| Maximum usage | 400 kg |
| :--- | ---: |
| Minimum usage | 200 kg |
| Lead time | $2-6$ months |
| Re-order quantity | 800 kg |
| Re-order level | $2,400 \mathrm{~kg}$ |

Based on the above information, the maximum stock level for this item would be:
(1) $2,800 \mathrm{~kg}$.
(2) $2,400 \mathrm{~kg}$.
(3) $1,500 \mathrm{~kg}$.
(4) $1,600 \mathrm{~kg}$.
(02 marks)
1.5 Which one of the following statements is incorrect with respect to Integrated Accounting System?
(1) Two separate sets of books are maintained.
(2) Accounting functions are controlled more effectively and efficiently.
(3) There is no duplication of work.
(4) Accounting information is readily available.
(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) Cost Accounting covers transactions of the whole business.
(2) Ideal standards can be attained under the most favourable conditions.
(3) Sunk cost is a relevant cost for making a decision.
(4) When calculating Economic Order Quantity (EOQ) it is assumed that holding cost per unit is not constant.
1.7 Match each of the terms mentioned in column $\mathbf{A}$ with the correct statement given in column $\mathbf{B}$ and write in your answer booklet with the number assigned to the question:

| Column A | Column B |
| :---: | :---: |
| (1) Bin Card | (a) Used to record the receipt of goods. |
| (2) Purchase Order (PO) | (b) Used to trace physical stock quantity at any time. |
| (3) Goods Received Note (GRN) | (c) Used to place an order with a supplier. |

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) $\qquad$ (Controllable costs / Production costs) are the costs which can be directly influenced by the action of a manager.
(2) $\qquad$ (ABC system / Just in time system) is an inventory system in which materials are obtained at the time they are required.
(3) $\qquad$ (Normal loss / Abnormal loss) is the loss expected by the management within a process, because that is inherent and unavoidable.
(03 marks)

## End of Section A

## SECTION B

Five (05) compulsory questions
(Total 25 marks)

## Question 02

The following relates to a manufacturing company for the month of December 2016:

|  | Budgeted | Actual |
| :--- | ---: | ---: |
| Production overheads (Rs.) | 160,000 | 180,000 |
| Direct wages (Rs.) | 90,000 | 80,000 |
| Direct labour (hours) | 160 | 170 |

## You are required to:

Compute the following:
(a) Overhead absorption rate based on direct labour hours.
(b) Over / under absorption of overheads for the month of December 2016.

## Question 03

Sun Ltd. is a luxury furniture manufacturing company and has accepted a job to manufacture a luxury sofa for a customer. The company expects to use services of cutting, assembling and finishing departments to complete the order and estimated costs are as follows:

| Direct material | Rs.75,800/- |
| :--- | :--- |
| Indirect material | Rs.12,750/- |
| Direct Labour - Cutting Department | 10 hours at Rs. $750 /-$ per labour hour |
| - Assembling Department | 15 hours at Rs.500/- per labour hour |
| - Finishing Department | 20 hours at Rs.800/- per labour hour |

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

| Department | Overhead absorption <br> rate per hour (Rs.) |
| :--- | :---: |
| Cutting | 1,500 |
| Assembling | 2,000 |
| Finishing | 1,750 |

The company's policy is to keep $15 \%$ profit margin on the selling price.

## You are required to:

Calculate the price to be charged for the above Job.
(05 marks)

## Question 04

"The budget is a quantitative statement for a defined period of time which may include planned revenue, expenses, assets, liabilities and cash flows."

## You are required to:

Explain three(03) main objectives of budgeting.

## Question 05

Rose Ltd., a manufacturing company operates an Integrated Accounting System. The following transactions were extracted from the books of the company during the month of December 2016.

|  | Rs. |
| :--- | ---: |
| Material issued to production | 450,000 |
| Direct wages on production | 175,000 |
| Production overheads | 225,000 |
| Cost of production transferred to finished goods | 625,000 |
| Production cost of goods sold | 705,000 |

Stock balances as at $01^{\text {st }}$ December 2016 were as follows:

|  | Rs. |
| :--- | ---: |
| Raw material | 475,000 |
| Work-in-progress | 150,000 |
| Finished goods | 250,000 |

## You are required to:

Prepare the following accounts to record the above transactions:
(a) Raw Material Stock Control Account.
(b) Work-in-Progress Control Account.
(c) Finished Goods Control Account.

## Question 06

Heritage (Pvt) Ltd. produces handmade products to international market. Perera is an employee of Heritage (Pvt) Ltd.

Normally 16 hours is required to complete one unit and the rate per labour hour is Rs.400/-.
The following information is also available:
(1) If employees report to work all working days of the month, each employee is entitled for an attendance allowance of Rs.10,000/-.
(2) Employees are paid an incentive of three times of the hourly rate for the number of hours saved. Number of working days per month is 20 days and employees have to work 8 hours a day.
(3) Perera saved 5 hours during the month of December 2016 and was able to report to work for all the 20 days of that month.

You are required to,
Calculate the total earnings of Perera for the month of December 2016.

## End of Section B

## SECTION C

Three (03) compulsory questions
(Total 30 marks)

## Question 07

$\mathbf{Z}$ (Pvt) Ltd. is a manufacturing company and the following information was extracted from the books of the company for the quarter ended $31^{\text {st }}$ December 2016:
(1)

|  | Per unit (Rs.) |
| :--- | ---: |
| Direct Material Cost | 325 |
| Direct Labour Cost | 275 |
| Variable Overheads | 50 |
| Selling Price | 1,000 |

(2) Actual and budgeted fixed production overheads for the quarter were Rs.3,000,000/- and Rs.3,300,000/- respectively. Fixed overheads are absorbed on per unit basis and budgeted production for the quarter ended $31^{\text {st }}$ December 2016 was 110,000 units.
(3) Details of other overheads for the quarter ended $31^{\text {st }}$ December 2016 were as follows:

|  | Variable costs <br> (Rs.'000) | Total costs <br> (Rs.'000) |
| :--- | ---: | ---: |
| Administration Expenses | 3,600 | 6,400 |
| Distribution Expenses | 1,350 | 3,000 |

(4) 90,000 units have been manufactured and 70,000 units were sold during the quarter. There was no opening stock as at $01^{\text {st }}$ October 2016.

## You are required to,

Prepare Income Statement under absorption costing method for the quarter ended $31^{\text {st }}$ December 2016.
(10 marks)

## Question 08

The following information is extracted from $\mathbf{X}$ Ltd. :
(1) Forcasted sales and purchases for the quarter ended $31^{\text {st }}$ March 2017 are as follows:

|  | January 2017 | February 2017 | March 2017 |
| :--- | ---: | ---: | ---: |
| Sales (in units) | 12,000 | 8,000 | 15,000 |
| Purchases (in units) | 9,000 | 5,000 | 8,000 |

(2) Selling price per unit is Rs.120/-. 40\% of the sales are on credit basis and should be settled in the following month.
(3) Purchase price per unit is Rs.60/- and all the purchases are made on credit basis. Suppliers have given two months credit period to settle their invoices.
(4) Purchase price per unit and selling price per unit remained same during the quarter ending $31^{\text {st }}$ March 2017.
(5) During the quarter, salaries and wages per month is expected to be Rs.180,000/- and are paid in the following month.
(6) Forcasted other expenses for the quarter are as follows:

|  | January 2017 | February 2017 | March 2017 |
| :--- | ---: | ---: | ---: |
| Distribution Expenses (Rs.) | 200,000 | 180,000 | 240,000 |
| Depreciation (Rs.) | 30,000 | 30,000 | 30,000 |
| Other Administration Expenses (Rs.) | 120,000 | 140,000 | 180,000 |

(7) Distribution expenses and other administration expenses are paid in the same month.
(8) Purchases and sales for the quarter ended $31^{\text {st }}$ December 2016 were as follows:

|  | October 2016 | November 2016 | December 2016 |
| :--- | ---: | ---: | ---: |
| Sales (in units) | 10,000 | 9,000 | 11,000 |
| Purchases (in units) | 8,000 | 7,000 | 9,000 |

(9) Cash balance as at $01^{\text {st }}$ January 2017 is Rs.175,000/-.

## You are required to,

Prepare the cash budget for the quarter ending $31^{\text {st }}$ March 2017 on monthly basis.

## Question 09

Meda Engineering (Pvt) Ltd. is a construction company which has three Production Departments (Fabrication, Assembly and Finishing) and two Service Departments (Maintenance and Stores).

The following information was extracted from the budget for the quarter ending $31^{\text {st }}$ March 2017:

|  | Costs | Rs.'000 |
| :---: | :---: | :---: |
| Electricity |  | 1,100 |
| Staff welfare |  | 350 |
| Rent |  | 5,200 |
| Staff Insurance |  | 600 |
| Depreciation | - Plant | 7,200 |
|  | - Office Equipment | 300 |
| Other Overheads | - Fabrication | 2,950 |
|  | - Assembly | 3,050 |
|  | - Finishing | 2,380 |
|  | - Maintenance | 240 |
|  | - Stores | 930 |

Other available information are as follows:

|  | Production Departments |  |  | Service Departments |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fabrication | Assembly | Finishing | Maintenance | Stores |  |
| Usage of electricity (kilowatt) | 550 | 330 | 110 | 60 | 50 | 1,100 |
| Floor area (Square feet) | 1,200 | 2,400 | 1,200 | 600 | 600 | 6,000 |
| No. of staff | 5 | 6 | 6 | 2 | 1 | 20 |
| Cost of plant (Rs.'000) | 158,400 | 72,000 | 43,200 | 14,400 | - | 288,000 |
| Cost of office equipment (Rs.'000) | 2,800 | 5,600 | 2,200 | 700 | 700 | 12,000 |
| Apportioning cost of service departments: |  |  |  |  |  |  |
| Maintenance | 40\% | 30\% | 30\% | - | - | - |
| Stores | 30\% | 40\% | 30\% | - | - | - |

## You are required to,

Prepare a statement showing how the overheads are allocated and apportioned to each of the Production Departments.

## SECTION D

A compulsory question
(25 marks)

## Question 10

(A) United chemists is a chemical manufacturing company which uses two main processes to manufacture chemical A. Output of process 1 is transferred to process 2 and output of process $\mathbf{2}$ is sold as finished product A.
The following information were extracted for the month of December 2016:

|  | Process 1 |  | Process 2 |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Units (in liters) | Rs.'000 | Units (in liters) | Rs.'000 |
| Direct materials | 108,000 | 189,000 | - |  |
| Direct labour |  | 102,600 |  | - |
| Production overheads |  | 94,500 |  | 105,750 |
| Output transferred to process 2 | 95,000 | - | - | - |
| Finished output A | - | - | 91,000 | - |

Expected normal loss for both processes is 5\% from direct materials introduced and scrap items could be sold for Rs.5/- per liter.

There was no opening and closing work-in-progress in both processes.

## You are required to:

Prepare the following in respect of Chemical A for the month of December 2016:
(a) Process 01 account.
(b) Process 02 account.
(15 marks)
(B) United Ltd. have implemented a standard costing system and the following information is relevant for its manufacturing process for the month of December 2016:

Standard cost per unit is as follows:

|  | Rs. |
| :--- | ---: |
| Direct Material (10 kg at Rs.150/- per kg) | 1,500 |
| Direct Labour (2 hours at Rs.400/- per labour hour) | 800 |

Actual information for the month of December 2016 is as follows:

| Production | $-11,000$ units. |
| :--- | :--- |
| Direct Material | $-120,000 \mathrm{~kg}$ at Rs.140/- per kg. |
| Direct Labour | - Rs.10,000,000/- (Rs.500/- per hour). |

## You are required to,

Calculate the following variances:
(a) Direct material cost variance.
(b) Direct material price variance.
(c) Direct material usage variance.
(d) Direct labour rate variance.
(e) Direct labour efficiency variance.

## 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. |

