

**ASSOCIATION OF ACCOUNTING TECHNICIANS OF SRI LANKA**

**LEVEL III EXAMINATION - JULY 2024**

**(302) MANAGEMENT ACCOUNTING AND FINANCE**

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

11-08-2024
Morning
[08.45 – 12.00]
No. of Pages : 09
No. of Questions : 10
- (1) **Time Allowed:** Reading : 15 minutes  
Writing : 03 hours
- (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 only permitted.**
- (6) **Action Verb Check List with definitions is attached. Each question will begin with an action verb. Candidates should answer the questions based on the definition of the verb given in the Action Verb Check List.**
- (7) **Mathematical Tables will be provided.**
- (8) **100 Marks.**

**SECTION A**

(Total 20 marks)

**Question 01**

**WOT Ltd.** carries out a trading business and the following information has been extracted from the financial statements of **WOT Ltd.** :

	2023/24	2022/23
Closing Inventory (Rs.)	315,000	364,000
Cost of Sales (Rs.)	1,239,175	1,628,000
Trade Receivable Turnover Ratio (Times)	2.50	2.62
Trade Payables' Settlement Period (in days)	110	150

**You are required to:**

- (a) **Calculate** the Working Capital Cycle (in days) for the year ended 31<sup>st</sup> March 2024. (03 marks)
  - (b) **Identify** two(02) strategies to be used for improvement of Trade Payables' settlement period of the company. (02 marks)
- (Total 05 marks)

## Question 02

ED Ltd. Manufactures and sells **Product X** and uses the Marginal Costing Method in preparing its management accounts. The following information has been extracted from the standard cost card of the company for the month of May 2024:

	Rs. (Per Unit)
Direct Material	940
Direct Labour (0.75 hours at Rs.800/- per hour)	600
Variable Production Overheads	130

The following information also relates to the month of May 2024:

Fixed Overheads	Budgeted (Rs.)	Actual (Rs.)
Production	7,920,000	8,150,000
Non Production	3,000,000	3,652,000
	<b>10,920,000</b>	<b>11,802,000</b>

	Budgeted (in units)	Actual (in units)
Production	12,000	12,600
Sales	12,000	11,800
Opening Inventory		1,500
Closing Inventory		2,300

Actual / budgeted selling price per unit is Rs.3,200/-.

**You are required to:**

**Prepare** the Income Statement for the month ended 31<sup>st</sup> May 2024 using the Marginal Costing Method. (05 marks)

## Question 03

**Lots Ltd.**, manufactures **Product A2X** and is starting the process of preparing its budgets for the next calendar year, 2025.

Sales during the first 6 months of 2024 was 218,500 units and it was forecasted that 245,000 units will be sold during the last 6 months of 2024. The sales volume is expected to grow by 12% in 2025.

The opening inventory as at beginning of 2025 is forecasted to be 22,000 units and the company maintains closing inventory equivalent to 2 months sales of the year 2025. It is expected that equal number of units are sold throughout the year 2025.

**You are required to:**

- (a) **Prepare** the production budget for the year 2025 in units. (03 marks)
- (b) **Identify** two(02) objectives of the budgetary process. (02 marks)
- (Total 05 marks)

## Question 04

**Able Ltd.**, provides project management services to its clients. **Perera**, a new client has approached **Able Ltd.** to obtain project management services for an overseas project in Maldives for a fee of Rs.3,500,000/-. **Able Ltd.** has not carried out works in Maldives before and would need to obtain a work permit for the staff which is estimated to cost Rs.450,000/-.

Apart from the above, the following information is also applicable:

(1) **Project Management Staff:**

Given the size of the project, 2 managers and 5 non-management staff are required for the project. A Manager is paid a fixed salary of Rs.200,000/- per month and an additional Rs.50,000/- per week is paid if it is an overseas project.

A Non-Management staff member is paid a fixed salary of Rs.75,000/- per month and an additional amount of Rs.12,500/- per week is paid in the case of an overseas project.

The fixed salary is paid irrespective of whether the project is accepted or not.

There is only one manager who is free to be allocated to this project and the other manager role would need to be covered with the hiring of a freelance project manager at a cost of Rs.120,000/- per week for an overseas project. This amount excludes the accommodation.

(2) **Accommodation:**

The accommodation needs to be provided for all staff of the overseas project at a cost of Rs.400,000/- per month. The accommodation is available on a monthly basis and needs to be paid at the beginning of each month.

(3) **Preliminary Site Visit:**

Before accepting this project, **Able Ltd.** sent a manager to Maldives to assess the site as a preliminary step in order to obtain an understanding of the project and the duration. The feedback from the visit was positive and Rs.300,000/- was spent on this.

(4) **Project Duration:**

The project is expected to last 6 weeks.

**You are required to:**

**Assess** whether **Able Ltd.** should accept **Perera's** project (*Support your answer with calculations*). (05 marks)

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End of Section A

## **SECTION B**

(Total 30 marks)

### **Question 05**

**Furniture Ltd.** manufactures and sells customised furniture. The following information is available with regard to the operations:

- (1) The clients pay 50% in advance when the orders are placed and the balance upon completion. An order normally takes 3 months to complete (i.e an order placed in July 2024 will be completed in October 2024). The full value of the orders received over the last few months and next few months based on the orders received dates are given below:

	<b>May-24</b>	<b>Jun-24</b>	<b>Jul-24</b>	<b>Aug-24</b>	<b>Sep-24</b>	<b>Oct-24</b>
<b>Full Value of Orders received (Rs.)</b>	14,000,000	8,000,000	5,500,000	3,200,000	10,000,000	7,500,000

- (2) The raw material cost is 35% of the order value and is purchased immediately after the orders are placed by customers. A full payment is made when the raw materials are purchased.
- (3) The staff cost is Rs.1,800,000/- per month, payable at the end of each month.
- (4) Other variable expenses are estimated to be 10% of the order values and are normally required in the 2<sup>nd</sup> month from the confirmation of the sales order. It is settled when orders are completed.
- (5) The monthly fixed expenses are estimated to be Rs.1,200,000/- per month. This excludes depreciation of the machinery which amounts to Rs.450,000/- per month. The fixed expenses are settled in the same month.
- (6) The company is planning to purchase a machinery in September 2024 and its estimated cost would be Rs.8,000,000/-.
- (7) The opening cash balance as at 01<sup>st</sup> August 2024 was Rs.8,400,000/-.
- (8) Any excess cash will be held in a savings account earning an interest of 9% per annum. Interest is computed based on the opening balance as at the beginning of the month.

**You are required to:**

**Prepare** cash budget for the months of August, September and October 2024. (10 marks)

### **Question 06**

**New PLC** is a company listed on the Colombo Stock Exchange and the following information was extracted from the financial statements of **New PLC**.

- (1) The capital structure of **New PLC** is given below:

	<b>No. of Shares/Debentures</b>	<b>Issued Price per Share/Debenture (Rs.)</b>	<b>Book Value (Rs.)</b>
Ordinary Shares	2,500,000	100	250,000,000
Listed Irredeemable Preference Shares	4,000,000	50	200,000,000
5 year 16% listed Redeemable Debentures	2,100,000	100	210,000,000

- (2) **New PLC** paid dividend of Rs.20/- per ordinary share for the last year. The dividends are expected to grow by 12% per annum. The current market price of an ordinary share is Rs.122/-.
- (3) The current market price of preference shares is Rs.46/- per share and annual dividend per share is Rs.7/-.
- (4) The debentures are currently trading at Rs.103/- per debenture and redemption will happen in 5 years.

(Assume the income tax rate as 30%.)

**You are required to:**

**Calculate** the following:

- (a) Cost of Ordinary Shares. (02 marks)
- (b) Cost of Irredeemable Preference Shares. (02 marks)
- (c) Cost of Redeemable Debentures. (03 marks)
- (d) Weighted Average Cost of Capital (WACC) using the market value. (03 marks)

(Total 10 marks)

## Question 07

- (a) **Tight Ltd.**, manufactures and sells specialized pillows in three different sizes. The below details are extracted from the standard cost card of the products.

	Rs. (Per Unit)		
	Mini	Ordinary	Mega
Selling Price	4,600	8,500	18,000
<b>Material A</b> (at Rs.1,100/- per kg)	2,200	4,400	8,800
<b>Material B</b> (At Rs.1,500/- per Meter)	1,500	3,000	6,000
Direct Labour (at Rs.600/- per hour)	50	80	120
Variable Production Overheads	334	435	1,300

The demand for pillows during the last quarter of 2024 is estimated to be, 4,000 units of **Mini**, 6,000 units of **Ordinary** and 1,500 units of **Mega**.

During the last quarter of 2024, **Material A** is expected to be scarce and the total quantity is expected to be only 39,000 kg.

**You are required to:**

**Calculate** the Optimal Production Mix.

(07 marks)

- (b) **Tight Ltd.** has the possibility of procuring **Material A** shortage from another supplier at a higher cost.

**You are required to:**

**Calculate** the maximum price to be paid for a kilogram of **Material A**, with justification.

(03 marks)

(Total 10 marks)

## SECTION C

(Total 50 marks)

### Question 08

**Fox Ltd.** manufactures and sells **Product Fx**, by using several consecutive processes. The inputs to **Process 3** during the month of June 2024 were as follows:

	<b>Rs.</b>
Input transferred from <b>Process 2</b> (100,000 meters)	42,200,000
Direct Labour	15,400,000
Variable Production Overheads	12,700,000

At the beginning of June 2024, there were 14,600 meters of opening work in progress in stock with the following levels of completion:

Raw Material	:	100% complete, valued at Rs.5,783,800/-
Direct Labour	:	50% complete, valued at Rs.1,337,600/-
Variable Production Overheads	:	30% complete, valued at Rs.523,800/-

At the end of the June 2024, there were 23,000 meters of closing work in progress, which had the following levels of completion:

Raw Material	:	100%
Direct Labour	:	50%
Variable Production Overheads	:	25%

At the end of June 2024, 81,400 meters were transferred as finished goods.

The normal loss is 8% from the input materials from Process 2 and it can be sold Rs.95/- per meter.

**You are required to:**

**Prepare** the following:

- (a) Statement of Equivalent Units and Cost. (06 marks)
- (b) **Process 3** Account. (09 marks)
- (Total 15 marks)

### Question 09

**Row Ltd.** manufactures highly specialized spare parts for large ships. The effective life time of the main machine used for the production of these parts has expired and the existing machine which is fully depreciated both for accounting and tax purposes. However, the management has decided to modify the existing machine.

The modification of the machine is expected to cost Rs.65,000,000/- and is expected to prolong the useful life of the machine by another 5 years with an estimated residual value of Rs.5,000,000/- at the end of the 5<sup>th</sup> year. For tax purposes, the modification cost can be considered for capital allowance at the rate of 25% per annum, while the company uses the straight-line method for depreciation of accounting purpose.

The working capital investment for this is Rs.6,000,000/-, assumed to be recoverable at the end of the project period.

If the spare parts production for ships using this machine is commenced, the sales are expected to be as follows:

Year	Sales (Units)
1	4,000
2	6,000
3	8,000
4	5,000
5	4,000

During the first year, the sales price is expected to be Rs.20,000/- per unit. The variable production cost during the first year would be Rs.10,000/- per unit. Thereafter the variable production cost, as well as the selling price are expected to increase at the rate of inflation which is estimated to be 8% per annum. Fixed overheads per year is estimated to be Rs.9,500,000/- excluding depreciation.

In order to increase sales, the company plans to spend Rs.8,000,000/- at the end of first year as marketing expenses. In addition to that, sales commission of 6% on sales value has to be paid from 1<sup>st</sup> year to 5<sup>th</sup> year at the end of each year.

The company pays income tax at the rate of 30% per annum and it should be paid in the same year. The cost of capital of the company is 15% per annum.

**You are required to:**

- (a) **Compute** the Net Present Value (NPV) of the modification of machine. (13 marks)
- (b) **Identify** whether the company should modify the existing machine. (02 marks)
- (Total 15 marks)

## Question 10

(A) **Pixy Ltd.**, manufactures kids safe paint for use by schools. The following information has been extracted from the standard cost card:

	Rs. (Per Unit)
Direct Material:	
<b>Material A</b> (3 litres at Rs.400/- per litre)	1,200
<b>Material B</b> (0.25 litres at Rs.2,000/- per litre)	500
Direct Labour (45 minutes at Rs.1,400/- per hour)	1,050
Variable Overheads (at Rs.1,100/- per hour)	825
<b>Total Variable Cost</b>	<b>3,575</b>
Selling Price	3,800
<b>Contribution</b>	<b>225</b>

For the month of June 2024, the company had estimated to sell 40,000 units and estimated budgeted fixed cost for the month is Rs.6,425,000/-.

Actual production / Sales quantity for the month was 37,600 units and the actual performance for the month ended 30<sup>th</sup> June 2024 is given below:

	<b>Rs.</b>
Sales Revenue (37,600 units)	145,888,000
Direct Material:	
<b>Material A</b> (114,800 litres)	41,902,000
<b>Material B</b> (8,648 litres)	18,005,136
Direct Labour Cost (27,400 hours)	38,908,000
Variable Overheads	30,003,000
Fixed Overheads	6,516,800

**You are required to:**

**Calculate** the following for the month of June 2024:

- (a) Direct Material Price Variance. (02 marks)
- (b) Direct Material Mix Variance. (03 marks)
- (c) Direct Material Yield Variance. (03 marks)
- (d) Direct Labour Rate Variance. (02 marks)
- (e) Direct Labour Efficiency Variance. (02 marks)
- (f) Fixed Overhead Expenditure Variance. (02 marks)

(B) **Chatz Ltd.** manufactures and sells three products namely, **Products A, B & C**. These three products are produced in a standard mix due to the complementary nature of these products.

The following information is extracted from the standard cost card of **Chatz Ltd.:**

<b>Standard Cost per Unit</b>	<b>Product A (Rs.)</b>	<b>Product B (Rs.)</b>	<b>Product C (Rs.)</b>
Direct Material	65	84	100
Direct Labour	42	54	65
Variable Overheads	22	35	38
Absorbed Fixed Overheads	15	22	30
Selling Price Per Unit	180	240	260

The annual budgeted production / sales is 240,000 units of **A**, 180,000 units of **B** and 180,000 units of **C**.

**You are required to:**

**Calculate** the Break Even Point in units for products **A, B** and **C** separately. (06 marks)

(Total 20 marks)

*End of Section C*



## **ACTION VERBS CHECK LIST**

Level of Competency	Description	Action Verbs	Verb Definitions
<b>Knowledge (1)</b>	Recall Facts and Basic Concepts.	<b>Draw</b>	Produce a picture or diagram.
		<b>Relate</b>	Establish logical or causal connections.
		<b>State</b>	Express details definitely or clearly.
		<b>Identify</b>	Recognize, establish or select after consideration.
		<b>List</b>	Write the connected items.

Level of Competency	Description	Action Verbs	Verb Definitions
<b>Comprehension (2)</b>	Explain & Elucidates Ideas and Information.	<b>Recognize</b>	Show validity or otherwise, using knowledge or contextual experience.
		<b>Interpret</b>	Translate into understandable or familiar terms.
		<b>Describe</b>	Write and communicate the key features.
		<b>Explain</b>	Make a clear description in detail using relevant facts.
		<b>Define</b>	Give the exact nature, scope or meaning.

Level of Competency	Description	Action Verbs	Verb Definitions
<b>Application (3)</b>	Use and Adapt Knowledge in New Situations.	<b>Reconcile</b>	Make consistent / compatible with another.
		<b>Graph</b>	Represent by graphs.
		<b>Assess</b>	Determine the value, nature, ability or quality.
		<b>Solve</b>	Find solutions through calculations and/or explanation.
		<b>Prepare</b>	Make or get ready for a particular purpose.
		<b>Demonstrate</b>	Prove or exhibit with examples.
		<b>Calculate</b>	Ascertain or reckon with mathematical computation.
		<b>Apply</b>	Put to practical use.

Level of Competency	Description	Action Verbs	Verb Definitions
<b>Analysis (4)</b>	Draw Connections Among Ideas and Solve Problems.	<b>Communicate</b>	Share or exchange information.
		<b>Outline</b>	Make a summary of significant features.
		<b>Contrast</b>	Examine to show differences.
		<b>Compare</b>	Examine to discover similarities.
		<b>Discuss</b>	Examine in detail by arguments.
		<b>Differentiate</b>	Constitute a difference that distinguishes something.
		<b>Analyze</b>	Examine in details to find the solution or outcome.