SRI LANKA

ASSOCIATION OF ACCOUNTING TECHNICIANS OF SRI LANKA

LEVEL III EXAMINATION - JANUARY 2025

(302) MANAGEMENT ACCOUNTING AND FINANCE

02-02-2025
Morning
[08.45 – 12.00]

No. of Pages : 09
No. of Questions : 10

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

Wonder Ltd. produces **Product V** and sells at Rs.1,500/- per unit in the local market. The below information has been extracted from the standard cost card of the company:

	Per Unit (Rs.)
Direct Material **A**	460
Direct Material **B**	315
Direct Labour	125
Variable Overheads	80

The budgeted sales for the year 2025 is 45,000 units and budgeted fixed cost is Rs.5,616,000/- for the year 2025.

You are required to:

(a) **Calculate** the Break Even Point (BEP) in units. (03 marks)

The marketing team projected that if the selling price is reduced to Rs.1,300/- in the year 2025 the sales volume can be increased to 60,000 units.

(b) **Calculate** the expected profit under the reduced selling price. (02 marks)

(Total 05 marks)

Question 02

The management accounting team of **Rits Ltd.** has been requested to look into the working capital cycle of the company. The below information was extracted from the financial statements of **Rits Ltd.**:

For the year ended 31st March	**2024**	**2023**
Sales	14,812,500	11,250,000
Cost of Sales	3,912,500	8,437,500
As at 31st March:	**2024**	**2023**
Inventory	825,000	740,000
Trade Receivables	533,000	415,000
Trade Payables	762,000	646,500

In 2024, 40% of total sales and all purchases were made on credit basis.

You are required to:

(a) **Calculate** the Working Capital Cycle *(in days)* for the year ended 31st March 2024.
(03 marks)

(b) **Identify** two(02) strategies for managing trade receivables. (02 marks)
(Total 05 marks)

Question 03

EFG Ltd. is engaged in manufacturing and selling toys. Though the company has budgeted 18,000 units for the year ended 31st December 2024, achieved only 14,000 units due to current economic conditions. The following information was extracted for the year ended 31st December 2024:

	Actual (Rs.) (14,000 units)	**Budgeted (Rs.) (18,000 units)**
Sales	5,880,000	7,650,000
Direct Materials	(1,696,000)	(2,052,000)
Direct Labour	(1,480,000)	(1,710,000)
Variable Production overheads	(250,000)	(360,000)
Fixed Production Overheads	(1,402,000)	(1,440,000)
Fixed Administration and Distribution Expenses	(796,000)	(796,000)
Profit	**256,000**	**1,292,000**

There were no inventories at the beginning of the year and at the end of the year.

You are required to:

Prepare the flexible budget (operating statement) for the year ended 31st December 2024.
(05 marks)

Question 04

Lean Ltd., manufactures **Product Q1** for which all components are also made internally. Recently, **S Ltd.** a supplier has approached **Lean Ltd.** with a proposal of manufacturing and supplying component **AX3** at a price of Rs.800/- per unit, which is required by **Lean Ltd.** for the production of **Product Q1**.

Currently, component **AX3** is manufactured internally and the below information is related to that operation:

(1) The material requirement for a unit of **AX3** is 300g of direct material and the market price of that is Rs.600/- per kg. There are 5,000 kg of these direct material in stock, which was purchased at a cost of Rs.550/- per kg recently. This direct material is not used in the manufacturing of any other components other than Component **AX3** and any stocks left over can either be sold at a price of Rs.300/- per kg or else sell to **S Ltd.** at the same price.

(2) The direct labour cost per unit of **AX3** is Rs.250/-. If manufacturing **AX3** is outsourced, the staff used to manufacture **AX3** will have to be laid off, with a compensation of Rs.4,000,000/-.

(3) The variable production cost per unit of **AX3** is Rs.200/- per unit.

(4) Annual requirement of component **AX3** is 168,000 units.

You are required to:

Assess whether **Lean Ltd.** should accept manufacturing **AX3** component internally by considering the annual production requirement *(Support your answer with calculations).*

(05 marks)

End of Section A

SECTION B

(Total 30 marks)

Question 05

Poppy Ltd. manufactures and sells traditional sweets and distributes to supermarkets as well as directly to customers. The following information is available with regard to operations of the company:

(1) Sales are made with a 60 days credit period for super markets while the direct sales are made on cash basis. The budgeted sales values from October 2024 to April 2025 are as follows:

	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25
Supermarkets' Sales (Rs.'000)	15,600	16,500	25,000	22,000	11,500	16,500	32,000
Cash Sales (Rs.'000)	1,350	1,600	4,200	4,000	800	1,900	10,500

(2) A contribution ratio on sales of 70% is maintained at any given time.

(3) The material cost per month is 55% of the total variable cost and is paid for 30 days in advance to ensure steady supply.

(4) The variable staff cost per month amounts to 30% of the total variable cost and is paid in the following month. Apart from the variable staff cost, the staff is paid a fixed monthly salary amounting to Rs.2,500,000/- per month.

(5) Other variable expenses per month amount to 15% of the total variable cost and are paid in the same month.

(6) The fixed expenses are estimated to be Rs.4,100,000/- per month and are paid in the subsequent month.

(7) The cash balance as at 01st January 2025 was Rs.8,000,000/-.

(8) Any excess cash will be held in a savings account earning an interest of 3% per annum. Interest is computed based on the opening balance as at the beginning of the respective month.

You are required to:

Prepare the cash budget for the months of January, February and March 2025. (10 marks)

Question 06

Pot Ltd., manufactures and sells handmade pottery items, such as Tea Sets and Dinner Sets. There are 4 main designs and the below details are extracted from the standard cost card of the products:

	Rs. (per unit)			
	TP 1	**TP 2**	**DS 1**	**DS 2**
Selling Price	25,000	30,000	70,000	90,000
Clay (At Rs.6,000/- per kg)	6,000	6,000	18,000	15,000
Paint (At Rs.15,000/- per litre)	3,000	4,500	11,250	12,750
Direct Labour (at Rs.800/- per hour)	3,200	4,800	8,000	12,000
Cost for the Oven (Rs.400/- per hour)	800	1,000	1,800	2,200
Other Variable Production Overheads	1,000	1,500	2,500	3,750
Budgeted Sales Units per Month (in units)	500	300	250	150

For the next month, the clay availability is estimated to be 1,950 kilograms while the direct labour availability is estimated to be 8,000 hours.

You are required to:

(a) **Identify** the limiting factor/s with supporting calculations. (04 marks)

(b) **Calculate** the optimal production mix based on the identified limiting factor/s. (06 marks)

(Total 10 marks)

Question 07

Quixy PLC is a company listed in the Colombo Stock Exchange and the following information was extracted from the books of **Quixy PLC**.

(1) **Quixy PLC** has 65 million ordinary voting shares in issue, which were initially issued at Rs.20/- per share. The shares are currently trading at Rs.7.50 per share. The company pays a dividend of Rs.1.35 per share.

(2) The company issued 4 million redeemable debentures with a coupon rate of 19% per annum, at Rs.100/- per debenture. The current market price of a debenture is Rs.110/- and the redemption will happen in 5 years.

(3) **Quixy PLC** is planning an expansion project costing Rs. 500 million to increase their production capacity.

(Assume the income tax rate at 30%)

You are required to:

Calculate the following:

(a) Cost of Ordinary Shares. (02 marks)

(b) Cost of Redeemable Debentures. (03 marks)

(c) Weighted Average Cost of Capital (WACC) using the market value. (03 marks)

(d) **State** two(02) factors to be considered choosing a long term funding source by **Quixy PLC**. (02 marks)

(Total 10 marks)

End of Section B

SECTION C

(Total 50 marks)

Question 08

Nova Electronic Ltd. is engaged in the business of manufacturing and selling a range of electronic parts. **Nova Electronic Ltd.** is considering the production of a new "Electronic Meter" for solar panel installation using a new machine.

The new machinery is expected to cost of Rs.80 million with a 5 year useful lifetime and the working capital investment is expected to be Rs. 12 million.

The following information is available with regard to the new product:

(1) The sales over the next 5 years are to be as follows:

Year	Sales (Units)
1	200,000
2	250,000
3	350,000
4	300,000
5	270,000

(2) An electronic meter is sold at Rs.600/- while the variable cost is Rs.430/- per unit in the first year. Thereafter the selling price and variable cost are to be increased in line with the estimated inflation rate of 10% per annum.

(3) The annual fixed costs are estimated to be Rs.18,000,000/- which includes depreciation of the machinery charged on the straight-line basis.

(4) The machinery is depreciated on the straight-line basis at cost over useful lifetime and capital allowance can be claimed at 25% per annum for tax purpose.

(5) The company pays income tax at the rate of 30% per annum and it should be paid in the same year.

(6) The marketing expenses to be incurred at the end of first year of the production is expected to be Rs.8 million.

(7) The cost of capital of the company is 18%.

You are required to:

(a) **Calculate** the Net Present Value (NPV) of the new product. (13 marks)

(b) **Identify** whether the company should proceed with the new product. (02 marks)

(Total 15 marks)

Question 09

Fair Ltd., manufactures and sells **Product W**. The following information has been extracted from the standard cost card of **Product W**:

	Rs. (Per Unit)
Direct Material:	
Material A (2 kg at Rs.180/- per kg)	360
Material B (1 kg at Rs.500/- per kg)	500
Direct Labour (10 minutes at Rs.750/- per hour)	125
Variable Overheads (at Rs.300/- per hour)	50
Total Variable Cost	**1,035**
Selling Price	1,200
Contribution	**165**

The company had budgeted to sell 600,000 units for the last quarter of 2024. The budgeted fixed overhead per month was Rs.15,000,000/-.

Actual production / sales quantity for the last quarter of 2024 was 645,000 units and the actual performance is given below:

	Rs.
Sales Revenue (645,000 units)	761,100,000
Direct Material:	
Material A (1,235,000 kg)	239,590,000
Material B (687,000 kg)	329,760,000
Direct Labour Cost (108,400 hours)	78,048,000
Variable Overheads	32,132,800
Fixed Overheads	48,325,000

The following variances have been calculated by the management for the quarter ended 31st December 2024:

	Rs.	
Variable Overhead Expenditure Variance	212,800	Adverse
Variable Overhead Efficiency Variance	330,000	Favourable
Sales Margin Volume Variance	7,425,000	Favourable
Direct Labour Rate Variance	3,252,000	Favourable
Direct Labour Efficiency Variance	675,000	Adverse
Fixed Overhead Expenditure Variance	3,325,000	Adverse

You are required to:

(a) **Calculate** the following variances:

(i) Sales Price Variance. (02 marks)

(ii) Direct Material Price Variance. (02 marks)

(iii) Direct Material Mix Variance. (03 marks)

(iv) Direct Material Yield Variance. (03 marks)

(b) **Prepare** an operating statement to reconcile the budgeted contribution with actual contribution. (05 marks)

(Total 15 marks)

Question 10

(A) **TOT Ltd.** manufactures and sells **Product T2**, through several consecutive processes. The inputs to **Process 2** during the December 2024 were as follows:

	Rs.
Input Transferred from **Process 1** (40,000 meters)	4,460,000
Direct Labour	1,560,000
Variable Production Overheads	814,675

At beginning of the December 2024, there were 3,200 meters of opening work-in-progress in stock with the following levels of completion:

Raw Material	100% complete, valued at Rs.506,800/-
Direct Labour	80% complete, valued at Rs.87,984/-
Variable Production Overheads	60% complete, valued at Rs.14,021/-

At the end of the December 2024, there were 4,800 meters of closing work-in-progress, which had the following levels of completion:

Raw Material	100%
Direct Labour	65%
Variable Production Overheads	30%

At the end of December 2024, 35,200 meters were transferred to **Process 3**.

The normal loss is 5% from the input materials from **Process 1** and the scrap value of the normal loss is Rs.135/- per meter.

You are required to:

(a) **Prepare** the Statement of Equivalent Units. (06 marks)

(b) **Prepare** the **Process 2** account. (08 marks)

(B) **AQS Ltd.** is considering exporting its products to the United Kingdom. They have 2 options for this. They can utilise to sell their products in UK, either by using their own distribution network or by using an authorised distributor.

Under both methods, there can either be a high level or a low level of sales revenue with specific probabilities as given below:

(Rs.'000)

Own Distribution	Probability	Year 1	Year 2	Year 3
High	40%	15,000	80,000	150,000
Low	60%	20,000	50,000	80,000

(Rs.'000)

Authorized Distributor	Probability	Year 1	Year 2	Year 3
High	70%	30,000	100,000	200,000
Low	30%	20,000	60,000	110,000

Under both options, the cost of sales will be 70% of the sales value.

If own distribution is used, the distribution cost will amount to 15% of sales value while there will be a fixed cost of Rs.600,000/- per annum.

If an authorized distributor is used, the distributor's margin to be paid will be 21% of the sales value which will cover all costs.

You are required to:

Assess which option is to be considered by **AQS Ltd.**

(with supporting calculations) (06 marks)

(Total 20 marks)

End of Section C

ACTION VERBS CHECK LIST

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

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

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

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