



**Association of Accounting Technicians of Sri Lanka**

**Level III Examination - July 2024**

**Suggested Answers**

**(302) MANAGEMENT ACCOUNTING AND FINANCE (MAF)**

**Association of Accounting Technicians of Sri Lanka**

No.540, Ven. Muruththettuve Ananda Nahimi Mawatha,

Narahenpita, Colombo 05.

Tel : 011-2-559 669

**A publication of the Education and Training Division**

**THE ASSOCIATION OF ACCOUNTING TECHNICIANS OF SRI LANKA**  
**Level III Examination - July 2024**  
**(302) MANAGEMENT ACCOUNTING AND FINANCE**  
**SUGGESTED ANSWERS**

Four (04) compulsory questions  
 (20 Marks)

**SECTION - A**

*Suggested Answers to Question One:*

*Chapter 7 - Working Capital Management*

(a)

		2023/24
Inventory residence period	$(364+315)/2/1,239*365$	100
Trade receivables residence period	$365/2.5$	146
		246
(-) Trade payables residence period		(110)
Length of working capital cycle (In Days)		136

*(03 marks)*

(b)

*Improving trade payables settlement period*

- Negotiating for a longer credit period than 110 days
- Maintain good relationships with suppliers in terms of operational matters
- Maintain a prompt communication system with the suppliers
- Centralized the payable function.
- Regular reviews of the payable function.

*(02 marks)*

*(Total 05 marks)*

## Suggested Answers to Question Two:

**Chapter 01 – Introduction to the Management Accounting, Relevant Cost and Decision Making under risk and uncertainty**

### Income Statement under Marginal Costing

			Rs.000
Sales	11,800*	Rs.3,200	37,760
<b>(-) Cost of sales</b>	<b>Qty</b>	<b>Cost</b>	
Opening stock	1,500	1,670	2,505
Production variable cost	12,600	1,670	21,042
	14,100		23,547
Closing stock	2,300	1,670	(3,841)
Cost of sales			(19,706)
			18,054
Other variable cost			-
<b>Contribution</b>			<b>18,054</b>
<b>Fixed cost</b>			
Production OH			8,150
Non-production OH			3,652
<b>Profit</b>			<b>6,252</b>



### W 01 - Unit variable production cost

	Rs.
Direct Material	940.00
Direct Labour	600.00
Variable Overhead	130.00
	<b>1,670.00</b>

*(Total 05 marks)*

***Suggested Answers to Question Three:***

**Chapter 3 - Different Types of Budgets and Planning & Controlling Vs Budgeting**

(a)

<b>Production Budget</b>		<u>2025- Units</u>
Budgeted sales	$(218,500+245,000)*1.12$	519,120.00
(+) Closing stock	$519,120/12*2$	86,520.00
(-) Opening stock		(22,000.00)
Budgeted production		<u>583,640.00</u>

**(03 marks)**

(b)

- Compel planning
- Co-ordinate activities
- Communicate activities
- Motivate managers to perform well
- Establish a system of control
- Evaluate performance
- Delegate authority to budget holders



**(02 marks)**  
**(Total 05 marks)**

***Suggested Answers to Question Four:***

***Chapter 1- Introduction to the Management Accounting, Relevant Cost and Decision Making under risk and uncertainty***

		Rs.
Project fees		3,500,000
Work permit cost	450,000	
<b>Manager Salary</b>		
Local	Committed cost	
Overseas	Rs.50,000*6weeks	300,000
<b>Non-manager Salary</b>		
Local	Committed cost	
Overseas	Rs.12,500*6weeks*5Nos	375,000
Freelance manager	Rs.120,000*6weeks	720,000
		1,395,000
Accommodation	Rs.400,000*2Months	800,000
Preliminary site-visit	Sunk cost	-
		(2,195,000)
<b>Incremental profit</b>		<b>855,000</b>

It is recommended to accept the project as it generated an incremental profit of **Rs.855,000**.

*(05 marks)*

***End of Section A***

*Suggested Answers to Question Five:*

**Chapter 3 - Chapter 3 - Different Types of Budgets and Planning & Controlling Vs Budgeting**

<b>Cash Budget</b>	<b>Aug-24</b>	<b>Sep-24</b>	<b>Oct-24</b>
<b>Receipts</b>			
Advance receipt -W1	8,600,000	9,000,000	6,500,000
Interest income @ 9%pa	63,000	87,000	40,000
<b>Total receipt</b>	<b>8,663,000</b>	<b>9,087,000</b>	<b>6,540,000</b>
<b>Payments</b>			
Raw materials - W2	1,120,000	3,500,000	2,625,000
Variable expenses - W3	1,400,000	800,000	550,000
Salaries	1,800,000	1,800,000	1,800,000
Purchase of machine	-	8,000,000	-
Fixed expenses net of dep*n	1,200,000	1,200,000	1,200,000
<b>Total payments</b>	<b>5,520,000</b>	<b>15,300,000</b>	<b>6,175,000</b>
Net cash flows	3,143,000	(6,213,000)	365,000
Balance at the beginning of the month	8,400,000	11,543,000	5,330,000
Balance at the end of the month	11,543,000	5,330,000	5,695,000

<b>W1 - Receipt from orders</b>	<b>May-24</b>	<b>Jun-24</b>	<b>Jul-24</b>	<b>Aug-24</b>	<b>Sep-24</b>	<b>Oct-24</b>
Full value of the order Rs.	<b>14,000,000</b>	<b>8,000,000</b>	<b>5,500,000</b>	<b>3,200,000</b>	<b>10,000,000</b>	<b>7,500,000</b>
Advance 50%	7,000,000	4,000,000	2,750,000	1,600,000	5,000,000	3,750,000
Balance 50%	-	-	-	7,000,000	4,000,000	2,750,000
	<b>7,000,000</b>	<b>4,000,000</b>	<b>2,750,000</b>	<b>8,600,000</b>	<b>9,000,000</b>	<b>6,500,000</b>

**W2 - Payment for raw**

<b>material</b>	<b>Aug-24</b>	<b>Sep-24</b>	<b>Oct-24</b>
Full value of the order Rs.	3,200,000	10,000,000	7,500,000
Payment @ 35% of order value	<b>1,120,000</b>	<b>3,500,000</b>	<b>2,625,000</b>

**W3 - Variable**

<b>expenses</b>	<b>May-24</b>	<b>Jun-24</b>	<b>Jul-24</b>	<b>Aug-24</b>	<b>Sep-24</b>	<b>Oct-24</b>
Full value of the order Rs.	<b>14,000,000</b>	<b>8,000,000</b>	<b>5,500,000</b>	<b>3,200,000</b>	<b>10,000,000</b>	<b>7,500,000</b>
Variable OH @ 10%				1,400,000	800,000	550,000
				(14,000,000*10%)	(8,000,000*10%)	(5,500,000*10%)
Variable OH settlement	-	-	-	<b>320,000</b>	<b>1,000,000</b>	<b>750,000</b>

**(10 marks)**

**Suggested Answers to Question Six:**

**Chapter 5 - Sources of Capital and Cost of Capital**

(a)

$$K_e = \frac{D_0 (1+g)}{P_0} + g \quad * 100$$

$$K_e = \frac{20*(1+0.12)}{122} + 0.12 \quad * 100$$

$$K_e = \underline{\underline{30.36\%}}$$

(02 marks)

(b)

$$K_p = \frac{D_0}{P_0} * 100$$

$$K_p = \frac{7}{46} * 100$$

$$K_p = \underline{\underline{15.22\%}}$$

(02 marks)

(c)

$$\begin{aligned} IRR &= A + \frac{NPV_a (B-A)}{NPV_a - NPV_b} \\ &= 8\% + \frac{9.78 (12\% - 8\%)}{9.78 - (5.88)} \\ &= 0.08 + 0.6243 \times 0.04 \\ &= \underline{\underline{10.50\%}} \end{aligned}$$



Year	Cash Flows	DF @ 8%	PV	DF @ 12%	PV
0	(103.00)	1.000	(103.00)	1.000	(103.00)
1-5	11.20	3.993	44.72	3.605	40.37
5	100.00	0.681	68.06	0.567	56.74
		<b>NPV</b>	<b>9.78</b>		<b>(5.88)</b>

(03 marks)

(d)

Source	Market Value Rs. Mn	COC %	COC Rs.
Ordinary shares	305.00	30.36%	92.60
Preference shares	184.00	15.22%	28.00
Debentures	216.30	10.50%	22.71
	705.30		143.31

$$\text{WACC} = \frac{143.31}{705.30} \times 100 = \underline{20.32\%}$$

(03 marks)  
(Total 10 marks)

### Suggested Answers to Question Seven:

*Chapter 1 - Introduction to the Management Accounting, Relevant Cost and Decision Making under risk and uncertainty*

(a)

	<u>Mini</u>	<u>Ordinary</u>	<u>Mega</u>
Selling Price	4,600.00	8,500.00	18,000.00
<b>(-) Variable cost</b>			
Material A	2,200.00	4,400.00	8,800.00
Material B	1,500.00	3,000.00	6,000.00
Labour	50.00	80.00	120.00
Variable OH	334.00	435.00	1,300.00
Total variable cost	(4,084.00)	(7,915.00)	(16,220.00)
<b>Contribution</b>	<b>516.00</b>	<b>585.00</b>	<b>1,780.00</b>

Material A	2.00	4.00	8.00
	2,200/1,100	4,400/1,100	8,800/1,100
Contribution- Material A -Kg	258.00	146.25	222.50
Ranking	<b>1</b>	<b>3</b>	<b>2</b>

Product	Production Plan	Material A per Unit	Total
Mini	4,000.00	2.00	8,000.00
Mega	1,500.00	8.00	12,000.00
Ordinary	4,750.00	4.00	19,000.00
			39,000.00

**(07 marks)**

**(b)**

	Rs.
Purchase price of Material-A per Kg	1,100.00
Contribution per Kg - Ordinary product	<u>146.25</u>
	<u>1,246.25</u>

**Tight Ltd.** should pay an extra amount to the maximum price of Rs.146.25 per kilogram of Material A to purchase extra quantity since this is the additional contribution that the company will generate with one extra kilogram of limiting factor material A.

**(03 marks)**  
**(Total 10 marks)**

**End of Section B**

*Suggested Answers to Question Eight:*

*Chapter 2 - Process Costing and Digital Costing*

(a)

	Raw Material	Labour	Overhead	Total
Finished Goods	81,400	81,400	81,400	-
WIP - Closing	23,000	11,500	5,750	-
Abnormal Loss	2,200	2,200	2,200	-
	<b>106,600</b>	<b>95,100</b>	<b>89,350</b>	
<b>Cost:</b>				
Input	42,200,000	15,400,000	12,700,000	70,300,000
Opening WIP	5,783,800	1,337,600	523,800	7,645,200
Scrap Value	(760,000)	-	-	(760,000)
	<b>47,223,800</b>	<b>16,737,600</b>	<b>13,223,800</b>	<b>77,185,200</b>
	443	176	148	767
Closing WIP	10,189,000	2,024,000	851,000	13,064,000

(06 marks)

(b)

**Process 3 Account**

Description	Units	Value	Description	Units	Value
Opening inventory	14,600	7,645,200	Output to FG	81,400	62,433,800
D. Material - P 2	100,000	42,200,000	Normal loss	8,000	760,000
D. Labour	-	15,400,000	Abnormal loss	2,200	1,687,400
Variable OH	-	12,700,000	WIP B/F	23,000	13,064,000
	114,600	77,945,200		114,600	77,945,200
WIP C/F	23,000	13,064,000			

(09 marks)

(Total 15 marks)

## Suggested Answers to Question Nine:

### Chapter 6 - Capital Investments Appraisal

(a)

(Rs. '000)

	0	1	2	3	4	5
Investment	(65,000)	-	-	-	-	5,000
Working Capital	(6,000)	-	-	-	-	6,000
Sales (W-1)	-	80,000	129,600	186,624	125,970	108,836
Variable Cost (W-1)	-	(40,000)	(64,800)	(93,312)	(62,985)	(54,420)
Fixed Cost	-	(9,500)	(9,500)	(9,500)	(9,500)	(9,500)
Marketing Expenses	-	(8,000)	-	-	-	-
Sales Commission	-	(4,800)	(7,776)	(11,197)	(7,558)	(6,530)
		(80,000 x 6%)	(129,000 x 6%)	(186,624 x 6%)	(125,970 x 6%)	(108,836 x 6%)
Income Tax (W-2)	-	(435)	(9,382)	(16,909)	(8,903)	(13,016)
	(71,000)	17,265	38,142	55,706	37,024	36,370
DCF @ 15%	1	0.869	0.756	0.658	0.572	0.497
<b>Net Present Value</b>	<b>(71,000)</b>	<b>15,003</b>	<b>28,835</b>	<b>36,654</b>	<b>21,178</b>	<b>18,076</b>

**NPV = 48,746**

**Workings:**

**(W-1) Sales & Variable Cost**

Year	Sales	Variable Cost
1	80,000 (4,000 x 20)	40,000 (4,000 x 10)
2	129,600 (6,000 x 21.6)	64,800 (6,000 x 10.8)
3	186,624 (8,000 x 23.328)	93,312 (8,000 x 11.664)
4	125,970 (5,000 x 25.194)	62,985 (5,000 x 12.597)
5	108,836 (4,000 x 27.209)	54,420 (4,000 x 13.605)

**(W-2) Income Tax**

	1	2	3	4	5
Profit Before depreciation	17,700	47,524	72,615	45,927	38,386
Sales Proceeds	0	0	0	0	5,000
Capital Allowance	-16250	-16250	-16250	-16250	0
	1,450	31,274	56,365	29,677	43,386
<b>Tax @ 30%</b>	<b>435</b>	<b>9,382</b>	<b>16,909</b>	<b>8,903</b>	<b>13,016</b>

*(13 marks)*

**(b)** According to the above calculation it is recommended to accept the modification as it generates a positive NPV of **Rs.48,746,000**.

*(02 marks)*

*(Total 15 marks)*

## Suggested Answers to Question Ten:

(A)

<b>Chapter 4 - Standard Costing &amp; Variance Analysis</b>
---

(a)

DM Price Variance = Actual Quantity (Standard Price – Actual Price)

$$\begin{aligned}\text{Material A} &= 114,800 (400 - 365) \\ &= \underline{\underline{4,018,000 F}}\end{aligned}$$

$$\begin{aligned}\text{Material B} &= 8,648 (2,000 - 2,082) \\ &= \underline{\underline{709,136 A}} \\ &= 4,018,000 F - 709,136 A \\ &= \underline{\underline{3,308,864 F}}\end{aligned}$$

(02 marks)

(b)

Direct Material Mix Variance = Standard Price of DM x [(Total Actual Material Usage x Standard Mix) – (Total Actual Material Usage x Actual Mix)]

$$\begin{aligned}\text{A} &= 400 \left( 123,448 \times \frac{3}{3.25} - 123,448 \times \frac{114,800}{123,448} \right) \\ &= 400 (113,952 - 114,800) \\ &= \underline{\underline{339,200 A}}\end{aligned}$$

$$\begin{aligned}\text{B} &= 2,000 \left( 123,448 \times \frac{0.25}{3.25} - 123,448 \times \frac{8,648}{123,448} \right) \\ &= 2,000 (9,496 - 8,648) \\ &= \underline{\underline{1,696,000 F}} \\ &= 339,200 - 1,696,000 \\ &= \underline{\underline{1,356,800 F}}\end{aligned}$$

(03 marks)

(c)

Direct Material Yield Variance = Standard Price of DM x [(Total Standard Material Usage x Standard Mix) – (Total Actual Material Usage x Standard Mix)]

$$\begin{aligned} \text{A} &= 400 \left( 122,200 \times \frac{3}{3.25} - 123,448 \times \frac{3}{3.25} \right) \\ &= 400 (112,800 - 113,952) \\ &= \underline{\underline{460,800 \text{ A}}} \end{aligned}$$

$$\begin{aligned} \text{B} &= 2,000 \left( 122,200 \times \frac{0.25}{3.25} - 123,448 \times \frac{0.25}{3.25} \right) \\ &= 2,000 (9,400 - 9,496) \\ &= \underline{\underline{192,000 \text{ A}}} \\ &= \underline{\underline{460,800 \text{ A} + 192,000 \text{ A}}} \\ &= \underline{\underline{652,800 \text{ A}}} \end{aligned}$$

(03 marks)

(d)

$$\begin{aligned} \text{DL Rate Variance} &= \text{Actual Hours (Standard Price – Actual Price)} \\ &= 27,400 (1,400 - 1,420) \\ &= \underline{\underline{548,000 \text{ A}}} \end{aligned}$$

(02 marks)

(e)

$$\begin{aligned} \text{DL Efficiency Variance} &= \text{Standard Rate (Standard Hours – Actual Hours)} \\ &= 1,400 (28,200 - 27,400) \\ &= \underline{\underline{1,120,000 \text{ F}}} \end{aligned}$$

(02 marks)

(f)

$$\begin{aligned} \text{Fixed OH Expenditure Variance} &= \text{Budget FOH – Actual FOH} \\ &= 6,425,000 - 6,516,800 \\ &= \underline{\underline{91,800 \text{ A}}} \end{aligned}$$

(02 marks)

(B)

**Chapter 1 - Introduction to the Management Accounting, Relevant Cost and Decision Making under risk and uncertainty**

	Product A	Product B	Product C
Selling Price	180	240	260
Variable Cost	(129)	(173)	(203)
<b>Contribution</b>	<b>51</b>	<b>67</b>	<b>57</b>

$$\text{PV Ratio} = \frac{(51 \times 240) + (67 \times 180) + (57 \times 180)}{(180 \times 240) + (240 \times 180) + (260 \times 180)} \times 100\%$$

$$= \frac{12,240 + 12,060 + 10,260}{43,200 + 43,200 + 46,800} \times 100\%$$

$$= \frac{34,560}{133,200} \times 100\%$$

$$= \underline{\underline{25.9\%}}$$

$$\text{BEP in Sales} = \frac{(15 \times 240) + (22 \times 180) + (30 \times 180)}{0.2596}$$

$$= \frac{3,600 + 3,960 + 5,400}{0.2596}$$

$$= \underline{\underline{12,960}}$$

$$= \frac{12,960}{0.2596}$$

$$= \underline{\underline{\text{Rs. 49,923,000}}}$$

$$\text{Product A} = \frac{49,923 \times \frac{43,200}{133,200}}{180}$$

$$= \underline{\underline{89,951 \text{ Units}}}$$



$$\text{Product B} = \frac{49,923 \times \frac{43,200}{133,200}}{240}$$

$$= \underline{\underline{67,464 \text{ Units}}}$$

$$\text{Product C} = \frac{49,923 \times \frac{46,800}{133,200}}{260}$$

$$= \underline{\underline{67,464 \text{ Units}}}$$

*(06 marks)*

*(Total 20 Marks)*



*End of Section C*

***Notice:***

These answers compiled and issued by the Education and Training Division of AAT Sri Lanka constitute part and parcel of study material for AAT students.

These should be understood as Suggested Answers to question set at AAT Examinations and should not be construed as the “Only” answers, or, for that matter even as “Model Answers”. The fundamental objective of this publication is to add completeness to its series of study texts, designed especially for the benefit of those students who are engaged in self-studies. These are intended to assist them with the exploration of the relevant subject matter and further enhance their understanding as well as stay relevant in the art of answering questions at examination level.



---

*© 2021 by the Association of Accounting Technicians of Sri Lanka (AAT Sri Lanka). All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior written permission of the Association of Accounting Technicians of Sri Lanka (AAT Sri Lanka)*