

ASSOCIATION OF ACCOUNTING TECHNICIANS OF SRI LANKA

LEVEL III EXAMINATION - JULY 2020

(302) MANAGEMENT ACCOUNTING AND FINANCE

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

	04-10-2020
	Morning
	[08.45 – 12.00]
(1) Time Allowed: Reading : 15 minutes	No. of Pages : 08
Writing : 03 hours	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 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

- (a) Management Accounting and Financial Accounting serve different purposes within an organisation. While Financial Accounting provides information to internal and external stakeholders, Management Accounting provides mostly to internal stakeholders of the organization.

You are required to:

State two(02) advantages of Management Accounting for an organisation. (02 marks)

- (b) The following information has been extracted from the standard cost card of **Product W** of **ABC Ltd.:**

	Rs. (Per Unit)
Direct Material	24
Direct Labour	16
Variable Overheads	8
Selling Price	62

The fixed overhead for a month is Rs.185,360/- and the production / sales for the month of September 2020 was 15,460 units.

You are required to:

Calculate the following:

- (i) Break Even Point (BEP) in units.
- (ii) Margin of Safety in units.

(03 marks)
(Total 05 marks)

Question 02

Budgeting is considered as an important process by many organizations, since it is carried out in order to meet multiple objectives of the organization.

You are required to:

- (a) **Explain** two(02) objectives of the budgetary process of an organization. (03 marks)
- (b) **State** two(02) strategies that an organization can adopt when there is a situation of cash surplus. (02 marks)
- (Total 05 marks)

Question 03

The following information has been extracted from the financial statements of **Trade Ltd.**, for the year ended / as at 31st March 2020 and 31st March 2019: (Rs.)

	2019/20	2018/19
Sales	5,671,500	4,500,000
Cost of Sales	5,000,000	4,150,000
Closing Inventory	1,120,000	880,000
Trade Receivables	455,500	321,500

Trade payables settlement period for the year 2019/20 is 35 days.

All sales are made on credit basis.

You are required to:

- (a) **Calculate** the length of the working capital cycle for the year 2019/20 of **Trade Ltd.** (03 marks)
- (b) **State** two(02) strategies that **Trade Ltd.** can use to improve its trade payables settlement period. (02 marks)
- (Total 05 marks)

Question 04

Gains Ltd. is considering an investment in a new project, with an initial capital investment of Rs.16,500,000/-. The following net cash inflows are expected from the project for the next 5 years:

Year	Net Cash Inflow (Rs.)
1	3,580,000
2	4,900,000
3	5,395,000
4	5,745,000
5	6,250,000

You are required to:

- (a) **Calculate** the payback period for the project. (03 marks)
- (b) **State** with reasons whether the project should be accepted based on the payback period. (02 marks)
- (Total 05 marks)

End of Section A

SECTION B

(Total 30 marks)

Question 05

Champ Ltd. has prepared monthly budgets for the year 2020.

The following information has been extracted from the monthly budgeted income statements for the periods from October to December 2020: (Rs.)

	October	November	December
Sales	700,000	800,000	900,000
Cost of Sales:			
Opening Inventory	145,000	166,000	195,000
Purchases	480,000	560,000	587,000
Closing Inventory	(166,000)	(195,000)	(198,000)
Cost of Sales	(459,000)	(531,000)	(584,000)
Gross Profit	241,000	269,000	316,000
Distribution Expenses	(32,000)	(35,000)	(41,000)
Administration Expenses	(56,000)	(66,000)	(76,000)
	153,000	168,000	199,000
Finance Expenses	(20,500)	(21,800)	(21,400)
Profit Before Tax	132,500	146,200	177,600
Income Tax	(19,000)	(20,000)	(25,000)
Net Profit	113,500	126,200	152,600

The following additional information is provided:

- (1) Sales receipts – 60% of the sales is received in cash during the month of sale, while 30% is received in the next month and 8% in the following month. 2% is considered as bad debts and it was not adjusted in the above expenses.
- (2) Payments for purchases – 20% is settled in the same month in which the purchase is made and balance is settled in the following month.
- (3) Payments for distribution expenses – 15% is paid in the same month and the balance is paid in the following month.
- (4) Payments for administration expenses – Administration expenses which include depreciation of Rs.16,000/- per month, should be paid in the same month.
- (5) Tax provided in the monthly accounts is paid at the end of each quarter.
- (6) Repayments of the loan obtained are paid on a quarterly basis in March, June, September and December. The quarterly loan installment with interest is Rs.250,000/-. Finance expenses represent interest on loan obtained and are accrued in the every month.
- (7) A dividend of Rs.400,000/- to be paid to shareholders has been approved by the Board of Directors and it has to be paid in December.

- (8) The company is also planning to purchase a new machine at a cost of Rs. 2.4 million for which payment will be made in 6 equal monthly installments, first installment will be made in December 2020.
- (9) Estimated cash balance as at 30th November 2020 would be Rs.1,474,000/-.

You are required to:

Prepare the cash budget for the month of December 2020.

(10 marks)

Question 06

Star Ltd. manufactures and sells 3 different products, namely **X, Y** and **Z**. The following information is provided for these three products:

		Per unit		
		X	Y	Z
Direct Material (Rs.250/- per kg)	(kilogram)	1	1.6	2.2
Direct Labour:				
Skilled Labour (Rs.400/- per hour)	(hours)	0.5	1	0.8
Unskilled Labour (Rs.280/- per hour)	(hours)	1	1.25	1.5
Variable Overheads Per Unit (Rs.120/- per hour on skilled and unskilled labour hours)				
Selling Price	(Rs.)	1,100	1,500	1,850
Demand	(Units)	4,000	5,000	2,500

The maximum availability of skilled labour hours for the month of December 2020 is 8,400 hours.

You are required to:

Compute the optimal production mix of **Star Ltd.** for the month of December 2020 based on the resource availability.

(10 marks)

Question 07

Petro PLC is a listed company with the following capital structure:

	Number of Shares / Debentures	Issued Price per share / Debenture (Rs.)	Market Price per share / Debenture (Rs.)
Ordinary Shares	40,000,000	12	9
Irredeemable Preference Shares	5,000,000	8	6.40
11.5% Redeemable Debentures	2,800,000	100	95

- (1) The company paid an ordinary dividend of Rs.1.20 per share in 2019/20 and dividend is expected to grow at the rate of 5% per annum.
- (2) Annual dividend for preference shares is Rs.1.20 per share.
- (3) Debentures are redeemable in 6 years at Rs.100/- per debenture.
- (4) The company pays income tax at the rate of 14% per annum.

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 market values. (03 marks)
- (Total 10 marks)

End of Section B

SECTION C

(Total 50 marks)

Question 08

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

	Per Unit (Rs.)
Direct Material:	
Material A (1 litre at Rs.80/- per litre)	80
Material B (2.5 litres at Rs.120/- per litre)	300
Direct Labour (2 hours at Rs.180/- per hour)	360
Variable Overheads (2 hours at Rs.70/- per hour)	140
Total Variable Cost	880
Selling Price	1,090
Contribution	210

Budgeted sales / production for the year ended 31st March 2020 was 35,000 units.

The following actual results have been achieved for the year ended 31st March 2020:

Actual Sales / Production Quantity		22,340 units
Sales Value	(Rs.)	24,685,700
Direct Material:		
Material A (23,400 litres)	(Rs.)	1,825,200
Material B (51,500 litres)	(Rs.)	6,695,000
Direct Labour Cost (43,500 hours)	(Rs.)	8,526,000
Variable Overheads	(Rs.)	3,132,000

You are required to:

Calculate the following variances:

- (a) Direct Material Price. (03 marks)
 - (b) Direct Material Mix. (04 marks)
 - (c) Direct Material Yield. (04 marks)
 - (d) Direct Labour Rate. (02 marks)
 - (e) Direct Labour Efficiency. (02 marks)
- (Total 15 marks)

Question 09

Right Ltd., is currently evaluating a launch of a new product, at an initial investment of Rs. 32 million, of which Rs.23 million is to be spent on capital expenditure on machinery. Rs. 9 million is to be spent for working capital. Expected useful lifetime of the machinery is 5 years.

The following information is provided with regard to the new product for the next 5 years:

Year	Total Contribution per Annum (Rs. million)
1	8.4
2	8.3
3	10.2
4	12.0
5	12.5

The fixed cost per annum including depreciation on machinery is estimated at Rs.6,000,000/-. The company pays income tax at the rate of 14% per annum and it should be paid in the same year. Capital allowances on machinery for tax purpose can be claimed at 25% per annum. Working capital can be recovered at the end of 5th year.

The company's cost of capital is 12% per annum.

You are required to:

- (a) **Calculate** the Net Present Value (NPV) of the investment. (08 marks)
 - (b) **Assess** the viability of the above investment. (02 marks)
- (Total 10 marks)

Question 10

- (a) **P Ltd.** manufactures **Product A** through several processes. The following information has been provided for **Process I** for the month of June 2020:

Direct Material	2,800 kg @ Rs.80/- per kg
Direct Labour	Rs.118,350/-
Variable Overheads	Rs.70,200/-

The total output transferred from **Process I** to **Process II** at the end of June 2020 was 2,500 kg. Normal loss is 5% of direct material input and this can be sold for Rs.23/- per kg.

There were 150 kg of closing WIP with the following levels of completion:

Direct Material	100%
Direct Labour	80%
Variable Overheads	60%

You are required to:

Prepare the Statement of Equivalent Units & Cost and the **Process I** Account. (15 marks)

- (b) **Feather Ltd.**, manufactures and sells pillows. At present **Feather Ltd.** is evaluating the introduction of a new type of pillow and the marketing campaign for the launch of this new product.

The following options (low budget and high budget) are available for the company based on the information provided by the marketing consultant:

Demand	Marketing Campaign					
	Low Budget			High Budget		
	Probability of Demand	Expected Sales (Units)	Expected Selling Price per Unit (Rs.)	Probability of Demand	Expected Sales (Units)	Expected Selling Price per Unit (Rs.)
High	0.2	100,000	1,200	0.5	130,000	1,250
Medium	0.4	70,000	1,400	0.3	120,000	1,480
Low	0.4	40,000	1,500	0.2	75,000	1,540

Based on the marketing campaign used, the selling price will also vary for different demand levels as shown above.

The variable cost of the product is Rs.1,150/- per unit.

The low budget campaign will cost Rs. 5.8 million and the high budget campaign will cost Rs.14.5 million.

You are required to:

Assess which marketing campaign is to be used by **Feather Ltd.**

(Support your answer with computations.)

(10 marks)

(Total 25 marks)

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.