CERTIFIED ACCOUNTING TECHNICIAN (CAT)

STAGE 3 EXAMINATION

S3.1 FINANCIAL ACCOUNTING

PILOT PAPER

ANSWERS

Section A – Answer Grid

1. C
2. D
3. B
4. A
5. C
6. E
7. C
8. B
9. A
10. D

Section A – Suggested solutions

Marking

	Marks
2 marks for each correct answer	2
Total marks for this section	20

1. C Segregation of duties requires that more than one person is involved in the process, to minimise the risk of fraud. Options (i) and (iii) have the cashier performing a control activity (physical control) and a reconciliation but there is no other party involved in the control. Option (ii) is the manager checking an authorising a payment that has been prepared by a clerk, so this is an example of segregation of duties.

(LO C2.3)

2. D Control is gained when an investor is exposed, or has rights, to variable returns and has the ability to affect those returns though its power over the investee. Power is determined by having the ability to direct the investee's activities, which in this case arises from December 2019 when Blue Co places two directors on the board of Green Co. This is irrespective of whether more or less than 50% of the share are held. Therefore, Mr Yellow does not have control at 31 December 2019 (option C).

Green Co should be classified as a subsidiary rather than an associate on 31 December 2019 (option A).

Power was only obtained after Mr Yellow retired in December 2019 (option B).

(LO A3.1)

3. B Option A uses the sales proceeds, rather than the carrying amount of disposed assets.

Option C ignores the land revaluation.

Option D omits the leased machine.

	RWF million	RWF million	RWF million	RWF million
Opening carrying amount	260	260	260	260
Leased machine	20		20	20
Assets disposed	(42)	(42)	(35)	(42)
Depreciation	(95)	(95)	(95)	(95)
Land revaluation	5	5	5	
	148	128	155	143
Closing carrying amount	310	310	310	310
Assets purchased for	162	182	155	167

cash

B D A C

(LO A2.3)

4. A

Son Co	RWF million
Retained earnings at 31 March 2020	286
Less: retained earnings at 1 April 2019	(202)
Profit for the year	84
Profit earnings since 1 Jan acq (3/12)	21

	RWF million	RWF million	RWF million	RWF million
Parent retained earnings at 31 March 2020	1,540	1,540	1,540	1,540
80% of profit since acquisition (21 × 80%), (84 × 80%)	17	(17)	67	(67)
	1,557	1,523	1,607	1,473
	A	B	C	D

Option B subtracts the subsidiary earnings since acquisition.

Options C and D use 80% of the full profit for the year of the subsidiary, not just the profit since acquisition.

(LO B2.3)

5. C Option C is a responsibility of the IFRS Interpretations Committee.

(LO C2.1)

6. E None of the options are correct.

Option (i) – the return to the equity shareholder is any dividend paid, which would not be recorded in the SPL.

Option (ii) – net cashflow is shown in the statement of cashflows

Option (iii) – some gains and losses are recorded in reserves. These would be included in the statement of other comprehensive income, but not in the SPL.

(LO C1.2)

7. C Option A – only one director is required.

Option B – only large companies require an audit.

Option D – there is no requirement for directors to be shareholders.

(LO A1.1)

8. B Option A – no, there are options and judgements involved.

Option C – accounting standards should be followed, they are more than a guide.

Option D – a company will only follow one set of accounting standard, but many countries use both national GAAP and IFRS.

(LO A1.3)

9. A There are 100,000 shares in issue (100 million / 1,000 nominal value) prior to the bonus issue so an additional 20,000 bonus shares were created. This decreases retained earnings by 20 million (20,000 × 1,000).

Retained earnings	RWF million	RWF million	RWF million	RWF million
Opening retained earnings	248	248	264	248
Less: bonus issue	(20)	(26)	(20)	20
Add: profit for the year	560	560	560	560
	788	782	804	828
Closing retained earnings	264	264	248	264
Dividend paid	524	518	556	564
	A	B	C	D

Option B uses the closing share capital to calculate the bonus shares.

Option C swaps opening and closing retained earnings.

Option D adds the bonus shares to retained earnings rather than subtracting.

(LO B1.5)

10. D Stockpiling inventory at the period end to fulfil an order early in the next financial year will result in an increase in inventory turnover period.

Option A – Cost of sales can be calculated as (inventory / inventory turnover period) × 365. Cost of sales was RWF 10 million in 2019 and RWF 12.8 million in 20X8. Therefore, cost of sales was **higher** in 2018 (not lower).

Option B – An increase in inventory turnover period will have a negative impact on cashflow as more money is tied up in inventory.

Option C – In 2019, the price per kg is RWF 1,047 and in 2018 it was RWF 1,199. This is a decrease in price per kg of 12.7% ([1,199 – 1,047]/1,199).

(LO A4.3)

Section B – Suggested solutions

11.

Marking scheme

	Marks
Flood – non adjusting	1
Branch closure – non adjusting	1
Inventory – adjusting	1
Inventory – write down calculations	2
Inventory – journal entry	1
Dividend – non adjusting	1
Irrecoverable debt – adjusting	1

Irrecoverable debt – explanation	1
Irrecoverable debt – journal entry	1
Total marks for this section	**10**

Detailed solution

(a) The flood in April 2020 is a **non-adjusting event** as it does not provide further evidence of conditions that existed at the reporting date.

(b) Although the branch closure was discussed before the reporting date, the final decision to close was not taken until after the reporting date, so this is also a **non-adjusting event** as it does not provide further evidence of conditions that existed at the reporting date.

(c) Selling inventory held at cost at the reporting date at a loss after the reporting date is an **adjusting event** as it gives information as to the net realisable value (NRV) of the inventory at the year end. The NRV of Products P and R is less than cost.

Inventory item	*Agreed sales price*	*NRV (less 8%)*	*Cost at 31 March 2020*	*Inventory write down*
	RWF million	RWF million	RWF million	RWF million
Product P	4	3.68	3.8	0.12
Product Q	5	4.60	4.50	–
Product R	2	1.84	2.15	0.31
				0.43

The adjustment required at 31 March 2020 (in RWF million) is:

DEBIT	Cost of sales	0.43	
CREDIT	Inventories		0.43

Being the write down in inventories to net realisable value.

(d) Dividends that are declared after the end of the reporting period are **non-adjusting events** that would only be disclosed in the notes to the financial statements.

(e) Although Mutura Ltd went into liquidation after the reporting date, the liquidation gives evidence of a condition that existed at the reporting date, and so this is an **adjusting event**.

The receivables balance at 31 March 2020 should be written off. However, no adjustment would be made in the financial statements to 31 March 2020 for the sales made to Mutara Ltd after that date.

The adjustment required at 31 March 2020 (in RWF million) is:

DEBIT	Irrecoverable debt expense	0.77	
CREDIT	Trade receivables		0.77

Being the irrecoverable debt written off.

(LO A2.5)

12.

Marking scheme

	Marks
Associate	1
Significant influence – definition and explanation	3
Equity accounting	1
Consolidated SPL	3
Consolidated SFP	2
Total marks for this section	**10**

Detailed solution

Note for the directors of Vista Ltd regarding the acquisition of Umutima Ltd

Umutima Ltd will be an associate of Vista Ltd as they will have significant influence.

Significant influence is the power to participate in the financial and operational policies of a company but not to control the company. Vista Ltd holds 25% (100,000/400,000) of the equity share capital of Umutima Ltd so they do not have outright control but, as they have a representative on the board of directors, they do have the ability to participate in strategic matters relating to Umutima Ltd.

IAS 28 *Investments in Associates and Joint Ventures* requires an associate to be included in the consolidated financial statements of the Vista Group using the equity accounting method.

Consolidated statement of profit or loss

In the financial statements for the year ended 30 June 2020, equity accounting will be used to reflect the group share of any profit or loss arising since the acquisition on 15 May 2020. A single figure will appear in the consolidated statement of profit or loss 'share of profit or loss of associate'.

Based on the forecast figures, the estimated increase in retained earnings between acquisition and the year end is RWF 90 million (540 million – 450 million). The group share of this profit is RWF 22.5 million (90 million × 25%).

Consolidated statement of financial position

Under equity accounting, a single 'investment in associates' figure would be presentedunder non-current assets. On acquisition, the RWF 120 million cost of the investment would be recognised. This amount would then be increased (or decreased) by the group share of the increase (or decrease) in post-acquisition retained reserves. For Umutima Ltd, this is forecasted to be RWF 22.5 million, so the closing balance for 'investment in associates' would be RWF 142.5 million (120 million + 22.5 million).

(LO A3.4)

Section C – Suggested solutions

13.

Marking scheme

			Marks
(a)	Explanations and journal entries for R&D and provisions		
	R&D – prior costs and technical feasibility	3	
	R&D – capitalisation, advertising and journal entry	3	
	Legal provision – adjustment	2	
	Warranty provision – adjustment	2	
			10
(b)	SFP format	½	
	Non-current assets	1½	
	Current assets	½	
	Equity	2	
	Liabilities	1½	
			6
(c)	Disclosure note – provisions		
	Opening and closing balances	1	
	Used during the year	1	
	Released during the year	1	
	Increase for the year	1	
			4
	Total marks for this section		**20**

Detailed solution

(a) R&D

The criteria for capitalisation were met on 15 June 2019 when the technical feasibility studies were completed, and Season Ltd intended to complete and market the asset. Any costs incurred in the previous year, or before the criteria for capitalisation are met in June 2019, must be expensed. Therefore, no adjustment is required for these costs.

Development of the asset is not complete at 31 March 2020 so relevant costs incurred between 15 June 2019 and 31 March 2020 can be capitalised and no amortisation is required yet.

The costs that can be capitalised are therefore:

Date	*Description*	RWF'000
July 2019 to February 2020	Design and construction costs	65,000
February 2020	Testing of pre-production	10,000

model

75,000

The advertising and marketing costs cannot be capitalised as prohibited by IAS 38.

The adjustment required (in RWF'000) is:

JE1	DEBIT	Development costs	75,000	
	CREDIT	Profit for the year		75,000

Being capitalisation of permitted development costs.

Legal provision

The legal claim was settled during the year for RWF 4,500,000. As the claim has been settled, the provision is no longer required and should be released.

JE2	DEBIT	Provisions	5,000	
	CREDIT	Profit for the year		5,000

Being the release of the legal provision (in RWF'000).

Warranty provision

The warranty provision at the start of the year was RWF 4,000,000.

The provision required at 31 March 2020 should be calculated based on the expected cost to the company:

= (RWF 0 × 85%) + (RWF 20 million × 8%) + (RWF 60 million × 7%)

= 0 + 1,600,000 + 4,200,000

= 5,800,000

An increase of RWF 1,800,000 is required and the adjustment (in RWF'000) is:

JE3	DEBIT	Profit for the year	1,800	
	CREDIT	Provisions		1,800

Being adjustment of warranty provision for the year.

(LO B1.1)

(b)

Season Ltd
Statement of financial position as at 31 March 2020

	RWF'000
Non-current assets	
Property, plant and equipment (W1)	345,560
Intangible assets (50,000 + 75,000 JE1)	125,000
	470,560
Current assets	
Inventories	35,600
Trade and other receivables	24,680
Cash and cash equivalents	1,050
	61,330

Total assets	531,890
Equity	
Share capital	50,000
Share premium	125,000
Retained earnings (W2)	169,380
	344,380
Non-current liabilities	
Bank loan	150,000
Deferred tax	8,660
	158,660
Current liabilities	
Trade and other payables	23,050
Provisions (W3)	5,800
	28,850
Total liabilities	187,510
Total equity and liabilities	531,890

Workings

1 PPE = 120,000 + 230,000 – 65,000 + 156,400 – 95,840

2 Retained earnings = opening retained earnings + adjusted profit – dividends paid)

= 45,950 + (85,230 + 75,000 (JE1) + 5,000 (JE2) – 1,800 (JE3)) – 40,000

= 169,380

3 Provisions: 9,000 – 5,000 (JE2) + 1,800 (JE3) = 5,800

(LO B1.3)

(c) Note X: Provisions

	Legal provision RWF'000	Warranty Provision RWF'000	Total RWF'000
At 1 April 2019	5,000	4,000	9,000
Used during the year	(4,500)	(4,000)	(8,500)
Released during the year	(500)	–	(500)
Increase in provision for year		5,800	5,800
At 31 March 2020	–	5,800	5,800

(LO B1.4)

14.

Marking scheme

		Marks
(a)	BrewPug Ltd ratios	
	Gross profit margin	1
	Net profit margin	1

	ROCE	1	
	Quick ratio	1	
	Inventory holding period	1	
	Gearing	1	
			6
(b)	Comparison with industry average ratios		
	Profitability – gross profit and operating profit	4	
	Profitability – ROCE	2	
	Inventory turnover	1	
	Quick ratio	1	
	Gearing	2	
			10
(c)	Future funding impact		
	Impact on gearing	1	
	Impact on gross profit margin	1	
	Impact on operating profit margin	1	
	Impact on ROCE	1	
			4
	Total marks for this section		**20**

Detailed solution

(a)

Gross profit margin	Gross profit / Revenue	=	321,460 / 654,000	=	49%
Operating profit margin	Profit before interest and tax / Revenue	=	65,966 / 654,000	=	10%
Return on capital employed	Profit before interest and tax / Capital employed (long-term debt + equity)	=	65,966 / (250,000 + 183,586)	=	15%
Quick ratio	Current assets – inventories / Current liabilities	=	40,286 / 19,500	=	2.1 times
Inventory turnover period	Inventories × 365 / Cost of sales	=	56,800 × 365 / 332,540	=	62 days
Gearing	Long-term debt / Long-term debt + equity	=	250,000 / 433,586	=	58%

(LO B3.1)

(b)

	BrewPug Ltd	*Industry averages*
Gross profit margin	49%	55%
Operating profit margin	10%	12%
Return on capital employed	15%	20%
Quick ratio	2.1 times	1.5 times
Inventory turnover period	62 days	90 days
Gearing	58%	55%

The profitability of BrewPug Ltd is worse than the industry average – gross profit margin, operating profit margin and return on capital employed are all lower.

The lower gross profit margin is likely due to BrewPug Ltd's products being priced at the lower end of the market. The revenue earned from these products will therefore be lower than others in the industry, which will result in lower gross margins unless costs can also be reduced.

The increase in fuel costs is likely to have impacted the industry as a whole, but the 3% pay rise that BrewPug Ltd gave to its staff will have reduced its operating profit compared to the rest of the industry. However, it should be noted that while BrewPug Ltd has a gross profit margin which is 6% lower than the industry average, the operating profit margin is only 2% lower. This does suggest that,

despite the staff pay rise, BrewPug Ltd has reduced its other operating costs as a proportion of revenue during 2019, which is positive.

There are two components to return on capital employed: operating profit and the capital employed in the business. We already know that the operating profit margin of BrewPug Ltd is lower than the industry average. During 2019, BrewPug Ltd increased the capital employed by increasing its debt by RWF 50 million to fund development into a new product. That increase in debt has not yet generated a return, as the new product has not yet been launched. So the lower ROCE is not unexpected.

BrewPug Ltd has seen a slight increase in the amount of inventory held from 2018 but the inventory turnover period is 62 days, which is considerably less than the 90 day industry average. BrewPug Ltd is selling its inventory around one month quicker than its competitors which will have a positive impact on its working capital.

This can also be seen by the healthy quick ratio of 2.07: 1, which again is above the industry average. Despite an increase in trade payables, BrewPug Ltd does not appear to have a liquidity issue, with RWF 11 million more in the bank than in 2018.

BrewPug Ltd has a gearing ratio of 58% which is just higher than the industry average. BrewPug Ltd has increased its debt by RWF 50 million in 2019 but there has also been an increase in retained earnings during the year, resulting in higher equity. A 58% gearing ratio is a moderate level of debt. Brewpug Ltd must ensure that it continues to be able to make interest payments and ultimately repay the debt.

(LO B3.2)

(c) BrewPug Ltd has current debt funding of RWF 250 million and is considering an additional RWF 200 million to purchase machinery and storage facilities for the new premium craft beer product.

This is likely to significantly increase the gearing ratio. Using the 2019 debt and equity figures plus the additional funding, gearing would rise to 71% (450 million / (450 million + 184 million), which is considered to be a high level of risk.

The new machinery is to be used to manufacture the new premium product. This will likely result in an increase in the gross profit margin as premium products are sold at higher price points and should therefore generate high margins, although the full impact may not be felt in 2020 depending on the timing of the launch.

This increase in gross profit will also boost the operating profit margin, but the new loan will result in increased finance costs which will reduce the overall net profit.

The significant increase in capital employed (the RWF 200 million loan) will likely result in a reduction in ROCE unless the operating profits can be increased by approximately RWF 29 million. (634 million × 15% less current operating profit of 66 million.)

(LO B3.3)

15.

Marking scheme

			Marks
(a)	Effectiveness of current system		
	Cost effectiveness	1	
	Reliability	1	
	Timeliness	1	
	Recommendation	1	
			4
(b)	Comparison and recommendation		
	Functionality	1	
	Security of data	1	
	Cost	3	
		2	
	Data transfer, training		
	Recommendation	1	
			8
(c)	Internal controls in an accounting system		
	Purpose of internal controls	1	
	Prevent and detect fraud	1	
	Segregation of duties and continual review	2	
	Control examples	4	
			8
	Total marks for this section		**20**

Detailed solution

Note for the directors of Wildfire Ltd about the proposed new accounting system

(a) To be effective, an accounting systems should be cost effective, reliable and provide timely information.

The current system that Wildfire Ltd uses is very basic, as it is fairly manual system, which relies on spreadsheets. Cost effectiveness is not just about being the lowest cost, it is that the system represents good value to the company. Currently, the system is very labour intensive, so the finance staff spend a lot of time inputting data and checking that they have been transferred to each spreadsheet correctly. These staff could be used more effectively to do other tasks within the business.

The reliability of a manual, spreadsheet based system depends on how the spreadsheets have been set up. For Wildfire, there seems to often be issues with the spreadsheets and staff are having to fix errors or make correcting adjustments, which takes up more staff time and can lead to human error. It doesn't seem to be the most reliable system.

Preparing management accounts or reports from the current system can take several days, so the information is not available to management on a timely basis.

Therefore, it would not appear that the system currently used by Wildfire Ltd is an effective system.

(LO C3.2)

(b) **Functionality**

The proposed new system offers much greater functionality than the current system, with the inclusion of sales and purchase ledgers, a budgeting tool and the ability to create draft financial statements. The current staff would be able to spend far less time entering data, and would instead be able to analyse the data and respond to any issues that arise.

Security of data

The new system would encrypt the data and store it in a cloud. You would have to ensure that you, the provider, has sufficient online security in place as well as data backups in case the data is compromised in any way.

Cost

There would be some significant costs associated with the new system:

	Current system	RWF'000	*Proposed new system*	RWF'000
Initial cost			Initial set up	4,000
			Payroll set up	1,000
Annual cost	Software: (5 × 50,000)	250	Annual costs (no payroll)	2,500
		950		
	Accountant:	1,200		3,000
			Annual costs (with payroll)	

Even without the payroll module, annual costs would be more than doubled from RWF 1.2 million to RWF 2.5 million. However, this must be considered against the benefit of being able to use the finance staff for work other than data entry, such as reviewing reconciliations, credit control, setting up controls over purchasing etc.

The payroll module is relatively expensive, and you should review the current payroll system carefully to compare the cost to the potential benefit.

Data transfer, training etc

Data would need to be transferred from the old system to the new system. It is important that the 'opening' figures are correct.

There would be some additional costs associated with changing system, such as training the staff to use the new system, and potentially training them to perform some of the other finance tasks they could perform as there is less data entry required.

Although there would be a significant cost, initial analysis would suggest that the new system has considerable benefits and should be considered further.

(LO C3.4)

(c) It is important to have internal controls within an accounting system to protect the system from fraud and error, to ensure compliance with laws and regulations and to ensure the company is working to meet its objectives.

Within the accounting system, it is particularly important to ensure that there are controls in place to both prevent and detect any fraudulent activity.

One of the best ways to try to prevent fraud, it to make sure that there is adequate segregation of duty between the different parts of the accounting function. No one member of the finance team at Wildfire Ltd should be able to process a single transaction from start to finish, ie the purchases clerk should not be able to place a purchase order and ultimately pay the supplier.

Segregation controls that could be put in place by Wildfire Ltd include:

- The finance manager checking and authorising all payments prior to them being made
- Authorisation checks being made by a second clerk prior to any new supplier being set up

It is important that the finance manager reviews the segregation controls and ensures they are being followed on a regular basis.

It is also important to have detection controls in place to detect fraud. Some examples include:

- Spot checks on control activities, such as segregation of duty
- Performance reviews such as budget checks
- Reconciliations to external sources such as bank statements
- Sales and purchase control account reconciliations

Even with the new computerised system, there should still be application controls over the entry of data such as limits on the amount that can be entered by each user etc to ensure that the correct information is entered onto the system. There should also be controls over any manual adjustments to the financial statements such as journal entries or changes to standing data such as prices.

(LO C2.2)