

CPA Professional Program Exams – Sample Case and Illustrative Response

CPA Core - Common

Quartz Construction Ltd.

The sample examination questions provided in this package are intended to offer a general indication of the format, structure, and nature of questions that candidates may encounter. While these materials have been developed with careful consideration and are intended to be broadly representative, they are not exhaustive and cannot capture the full range of possible question variations. These samples should therefore be used as a guide rather than a definitive representation.

Quartz Construction Ltd.

(Suggested Time: 60 minutes)

Quartz Construction Ltd. (Quartz) is a Canadian controlled private corporation (CCPC) owned equally by two sisters, Jane and Jacqui Bullen. It rents heavy equipment to residential and commercial construction sites. Quartz was founded in 1948 and has been a long-standing leader in the heavy equipment market. It reports under International Financial Reporting Standards (IFRS) because the owners have always considered the option to go public.

It is January 14, 2026, and you, CPA, have recently joined Quartz as the new senior accountant, arriving in time to help prepare for the December 31, 2025, year-end audit. You report to the controller, Cynthia Legault, who has also just been hired. Both positions have been vacant for a couple of months, but the bookkeeper, Sarah, is experienced. You and Cynthia meet with Jane and Jacqui in your first week at Quartz.

Jane: “Macroeconomic conditions have caused a decline in new housing starts, resulting in decreased demand for tower cranes, while demand for other equipment has remained steady. In addition, safety is a key principle in the industry and a major factor in determining success. And our close competitors have made recent proprietary advancements in the precision, efficiency, and safety of tower cranes. For these reasons, we’re considering an exit from this product line in the near future.” Cynthia cautions the owners that this may result in an accounting adjustment to the tower cranes but assures them you will look into this (Appendix I).

Jane: “Hoping to offset the decrease in operating income and to create a natural integration with our fleet of concrete pumps, we acquired Granite Cement Co. (Granite), which manufactures and rents cement trucks (Appendix II).”

Sarah: “I wasn’t sure what to do, so I simply recorded the purchase as ‘Investment in Granite.’” Cynthia assures Sarah that you will determine the appropriate accounting treatment for Granite as at the acquisition date.

Jacqui: “I’m concerned about Quartz’s safety metrics, especially since our insurance coverage has a rider. Quartz’s director of health and safety recently took a personal leave. I’ll send you the safety metrics from our internal dashboard and the clause from our insurance policy regarding the rider (Appendix III). CPA, can you analyze the data and determine if the rider has been triggered? Would there be any financial reporting impact?”

Cynthia also asks you to explain the audit procedures that will likely be performed by the auditors on the financial reporting issues identified as a way for Quartz to prepare for the audit.

Jacqui: “Lastly, please help us decide whether we should continue to pay ourselves a salary or switch to dividends. I will email you some information (Appendix IV).”

After the meeting, Cynthia asks you to prepare a report that addresses all the issues identified.

Appendix I

Tower Cranes Information

Our fleet consists of 15 tower cranes, recorded at a total historical cost of \$12 million, with accumulated depreciation of \$8 million. The expected value in use for the fleet, using the appropriate analysis required under IFRS, is \$2.75 million. The revenues for each individual crane are not tracked.

A recent sale of similar cranes in Vancouver suggests the fair market value of Quartz's fleet to be \$3 million. Selling costs of approximately \$500,000 would be expected if Quartz were to sell them.

Appendix II

Valuation Report on Granite

Quartz engaged a Chartered Business Valuation (CBV) firm to perform a valuation of Granite's assets and liabilities:

	Carrying Amount	Fair Market Value
Cash	\$ 600,000	\$ 600,000
Accounts receivable	450,000	450,000
Land	700,000	1,090,000
Building	800,000	1,100,000
Rental fleet	7,500,000	5,000,000
	<u>\$ 10,050,000</u>	<u>\$ 8,240,000</u>
Accounts payable	240,000	240,000
Long-term debt	1,500,000	1,500,000
	<u>\$ 1,740,000</u>	<u>\$ 1,740,000</u>

- In addition to the recognized assets above, Granite has a customer list that CBV firm has determined its fair value to be \$2,300,000.
- The share purchase agreement outlined that Quartz acquired 100% of the issued and outstanding shares of Granite for cash consideration of \$11 million. The transaction closed on October 31, 2025.
- There are no significant temporary differences or deferred tax amounts. Cynthia indicated that the tax group will deal with any deferred tax implications.
- Although the fair market value of the fleet is less than the carrying value, an analysis has confirmed there is no impairment.

Appendix III

Safety Performance and Insurance Rider

Safety

The following two key metrics are used industry-wide to track safety performance:

- 1) Total Recordable Incident Rate
= Recordable cases x 200,000 / total hours worked
- 2) Severity Rate
= Total workdays lost x 200,000 / total hours worked

Excerpt from Safety Dashboard

	2025	
<u>Incidents</u>	<u>Quartz</u>	<u>Industry Avg</u>
- Superficial	15	24
- Minor	8	17
- Moderate	6	5
- Critical	4	2
- Catastrophic	1	0.3
	34	48.3
Labour hours worked	807,858	1,400,000
Labour hours lost	2,142	3,150
	810,000	1,403,150

Superficial incidents relate to small cuts and bruises requiring only basic first aid. Minor, moderate, critical, and catastrophic incidents result in medical attention and potential restricted or modified job duties, and they require a formal report to be logged. It is industry practice for recordable cases to exclude superficial incidents.

Insurance Rider Clause

An additional \$150,000 insurance payment will be required if both the Total Recordable Incident Rate and Severity Rate metrics exceed the industry average in a given year.

Appendix IV

Email from Jacqui Bullen

To: CPA@quartz.ca
From: Jacqui@quartz.ca
Subject: Salary vs. Dividends

Hi CPA,

Jane and I usually pay ourselves each a salary of \$150,000 annually, with appropriate withholdings. Now that we are getting older and our children have graduated from university, we are actively saving for retirement.

We are wondering if we would be better off paying eligible dividends. What would the quantitative impact be on Quartz's corporate taxes and our own personal taxes? Are there other things we should be concerned about?

Various info:

- Quartz has a \$50,000 eligible RDTOH balance.
- There is sufficient GRIP to pay the \$150,000 to each of us as eligible dividends since Quartz's income surpasses the small business deduction limit each year.
- Neither of us has other sources of income.
- We both have some, but not significant, deduction room in our RRSPs.

Thank you,
Jacqui Bullen

Quartz Construction Ltd. (Quartz)**Illustrative Response**

This illustrative response does not represent a sample response completed under exam conditions but rather illustrates the main points relevant to a complete response.

DRAFT

To: Cynthia Legault, Controller, Quartz Construction Ltd.
From: CPA
Re: Accounting Matters, Audit Procedures, Safety Metrics, and Compensation

As requested, here is a discussion of the financial reporting issues identified, as well as the procedures the auditor is likely to perform on these.

Impairment of Tower Cranes*Indicators of impairment*

IAS 36, *Impairment of Assets* indicates that “at each reporting period, Quartz is required to assess whether there are any indications that an asset may be impaired, and if so, estimate the recoverable amount of the asset” (IAS 36.9).

The tower cranes and the related product line have been identified as possibly being rendered technically obsolete as a result of advancements in recent years that have enhanced the safety, precision, and efficiency of competitor products. This is indicative of a change in the technological landscape in which Quartz operates and suggests that its tower cranes are no longer positioned to meet client expectations. Further, the owners have shared that there has been a decrease in demand for Quartz’s tower cranes. In fact, Quartz is considering a complete exit from this product line in the near future. These facts indicate that the economic performance of the tower cranes has declined. Based on these indicators, Quartz is required to determine the recoverable amount for the tower cranes.

Cash-generating unit

IAS 36 indicates:

.66 If there is any indication that an asset may be impaired, recoverable amount shall be estimated for the individual asset. If it is not possible to estimate the recoverable amount of the individual asset, an entity shall determine the recoverable amount of the cash-generating unit to which the asset belongs (the asset's cash-generating unit).

.67 The recoverable amount of an individual asset cannot be determined if:

(a) the asset's value in use cannot be estimated to be close to its fair value less costs of disposal (for example, when the future cash flows from continuing use of the asset cannot be estimated to be negligible); and

Since the revenue for individual cranes is not tracked, an individual crane's value in use cannot be determined. Met.

(b) the asset does not generate cash inflows that are largely independent of those from other assets.

Given Quartz rents cranes individually, the cash flows are largely independent of other assets (even other cranes). Not met.

Therefore, the impairment test will have to be performed at the aggregate level.

Recoverable amount

The recoverable amount is defined in IAS 36, paragraph 18, as the greater of fair value less costs to dispose and its value in use, calculated as follows:

Fair value = \$3,000,000

Costs to dispose = \$500,000

FV less costs to dispose = \$2,500,000

Value in use = \$2,750,000

Therefore, the recoverable amount of the tower cranes is \$2,750,000, which is the value in use, since it is greater than the fair value less costs to sell.

Impairment loss

The carrying value of the tower cranes is \$4,000,000. As a result, an impairment loss should be recognized in accordance with IAS 36, paragraph 59, since the carrying value exceeds the recoverable amount determined above. The impairment loss is measured as the excess of the carrying value over the recoverable amount:

$$\$4,000,000 - \$2,750,000 = \$1,250,000$$

Because the tower cranes are measured at cost under *IAS 16, Property, Plant and Equipment*, this loss will be recognized in Quartz's profit or loss in the December 31, 2025, year-end, measured as follows:

Dr.	Impairment loss	\$1,250,000	
	Cr.	Tower cranes (NBV)	(\$1,250,000)

In addition, Quartz must disclose the amount of the impairment loss and identify which financial statement line item the loss is included within (IAS 36.126). In addition, it should disclose the events and circumstances that led to the recognition of the impairment loss and should provide a description of the cash-generating unit, the recoverable amount of the cash-generating unit, and the discount rate used (IAS 36.130).

Risk of Material Misstatement at the Assertion Level	Assertion	Procedure
There is an indicator of impairment.	Accuracy, Valuation & Allocation	Review rental revenue from crane tower rentals over the last few years to see if there really is a decline in sales. In addition, perform market research to verify that there has been a decline in new housing starts (leading to decreased demand for tower cranes). Obtain and read the board of directors' meeting minutes to see if the board has discussed the declining performance of the cranes or the sub-standard safety performance of Quartz's cranes, leading to a potential closure decision.
The cash-generating unit identified by management does not include all tower cranes that may show indicators of impairment.	Completeness	Obtain a listing of all assets and agree the total to the fixed asset subledger. Sample a selection of these assets to ensure they are appropriately included or excluded in the tower crane CGU.
The value-in-use estimate determined by management for the impairment test of the tower cranes may not be reasonable.	Accuracy, Valuation & Allocation	Obtain the calculation from management and assess the reasonableness of the assumptions and inputs that management used in their value-in-use calculation, including the estimate process and inputs/assumptions, such as comparing the interest rate used to other similar transactions to estimate the rate implicit in the current market for similar assets, or a risk-adjusted discount rate determined by independent valuers.

Risk of Material Misstatement at the Assertion Level	Assertion	Procedure
The fair value less disposal costs may not be reasonable.	Accuracy, Valuation & Allocation	Obtain and read the valuation report to assess for the methodology/process and assumptions. For example, if available, note the model number, age, and number of cranes in the Vancouver valuation to ascertain whether they are sufficiently similar to the Quartz cranes to use as a proxy. Verify the professional credentials of the appraiser to ensure their competence in the construction industry and objectivity with respect to Quartz.

Acquisition of Granite Cement Co. – Business Combination

Business combination

Quartz acquired 100% of the shares of Granite Cement Co. (Granite) and, therefore, must assess *IFRS 3, Business Combinations*, which applies when assets acquired and liabilities assumed constitute a business. IFRS 3.B5 defines a business combination as

“...a transaction or other event in which an acquirer obtains control of one or more businesses. An acquirer might obtain control of an acquiree in a variety of ways, for example:

(a) by transferring cash, cash equivalents or other assets (including net assets that constitute a business);”

As Quartz has acquired 100% of the voting shares of Granite for cash consideration, it is evident that Quartz has acquired control of Granite in a business combination.

What is the acquisition date?

The date of the acquisition (i.e., when Quartz obtains control) is quite clear in this case since the transaction was settled in cash and closed on October 31, 2025, and there is no indication that control did not pass. Therefore, the acquisition date is October 31, 2025.

Is it a business?

IFRS 3 only applies to the acquisition of a “business.” IFRS 3 defines a business as

“An integrated set of activities and assets that is capable of being conducted and managed for the purpose of providing goods or services to customers, generating investment income (such as dividends or interest) or generating other income from ordinary activities.”

By acquiring the shares of Granite, Quartz has acquired a business, since Granite was operating as a manufacturer and lessor of equipment to customers. Given that Quartz acquired all the common shares, it now owns and controls all assets and liabilities and will manage the operations to carry on the manufacturing and rental business of Granite.

Recognition and measurement

Quartz must recognize and measure the identifiable assets, liabilities, and goodwill acquired at the acquisition date. The identifiable assets and liabilities should be measured at their fair market values as described in IFRS 3.18: *“The acquirer shall measure the identifiable assets acquired and the liabilities assumed at their acquisition-date fair values,”* and goodwill as the excess of the consideration paid and amount of non-controlling interest over the value of those identifiable assets and liabilities pursuant to IFRS 3.32. IFRS 3.13 outlines that *“The acquirer’s application of the recognition principle and conditions may result in recognising some assets and liabilities that the acquiree had not previously recognised as assets and liabilities in its financial statements...”*

Under IFRS 3 and IAS 38, acquired customer lists are recognized as identifiable intangible assets with finite lives and are amortized accordingly. The customer list is a separately identifiable asset because it is capable of being separated and sold by the entity (IAS 38.12(a) notes that *“An asset is identifiable if it either: (a) is separable, ie is capable of being separated or divided from the entity and sold, transferred, licensed, rented or exchanged, either individually or together with a related contract, identifiable asset or liability, regardless of whether the entity intends to do so...”*; also see IFRS 3.B33), and it is measurable based on the valuation report, so it is an intangible asset that has not been previously recognized. This intangible asset should now be recognized on the consolidated financial statements when they are prepared.

At October 31, 2025, the measurement of the identifiable assets, liabilities, and goodwill has been determined as follows:

Purchase price		\$ 11,000,000
Carrying amount of net assets		
- Assets	10,050,000	
- Liabilities	<u>1,740,000</u>	<u>8,310,000</u>
Acquisition differential		2,690,000
Allocated as follows:		
- Land	390,000	
- Building	300,000	
- Rental fleet	(2,500,000)	
- Customer (list) relationships	<u>2,300,000</u>	<u>490,000</u>
Goodwill		<u>\$ 2,200,000</u>

Note: For this preliminary discussion, deferred income tax amounts have been excluded.

Risk of Material Misstatement at the Assertion Level	Assertion	Procedure
Granite may not have recognized all of its liabilities on its balance sheet as of the closing date.	Completeness	Select a sample of payments subsequent to the acquisition, obtain the related invoice or other documentation, and note the date to validate that all liabilities that existed at the closing date were included in the valuation. Send a legal letter to Granite's lawyers to ensure no undisclosed litigations. Obtain a copy of their most recent Notice of Assessments/Notice of Reassessments and GST Assessments to determine if there are any outstanding income and excise tax liabilities. Review the bank statement for the first payroll transaction in November 2025. Obtain the related payroll register and recalculate the portion of the pay that related to the working period before October 2025.

Risk of Material Misstatement at the Assertion Level	Assertion	Procedure
The assets do not exist or are overstated.	Existence Accuracy, Valuation & Allocation	Send a bank confirmation to Granite's banks to determine if the cash balance is correct. Select a sample of accounts receivable outstanding on October 31, 2025, and trace to subsequent receipts in the bank statement. Obtain a copy of the land and building purchase agreement to ensure Granite has title to the land/building and determine its location, size, etc., and obtain a recent property appraisal report or details of sales of similar land in the area. Select a sample of cement truck assets from the capital asset subledger and trace to original purchase document. Recalculate accumulated depreciation and agree to schedule. Obtain documentation from CBV regarding FMV analysis of trucks, since it is unusual that they are higher than cost. Alternatively, engage valuation specialists to determine the FV of assets acquired (and liabilities assumed).
The terms of the share purchase agreement may not have been accurately incorporated into the financial statements and notes.	Accuracy, Valuation & Allocation	Obtain and review the share purchase agreement to ensure Quartz did acquire 100% of the issued and outstanding shares on October 31, 2025, for a purchase price of \$11,000,000.

Safety Metrics

Safety is critical in the construction industry, and Quartz strives to minimize the frequency and severity of incidents to both enhance success and reduce its insurance costs.

Based on the information on the dashboard, it appears at first glance that the industry average of incidents exceeds that of Quartz's, which would indicate a strength for Quartz's safety record.

However, this should be normalized by labour hours worked for the purpose of accurate benchmarking and also the types of incidents (superficial – catastrophic). We can determine the Severity Rate and Total Recordable Incident Rate for the tower cranes as follows:

Severity Rate = total lost workdays x 200,000 hrs / total hours worked

- Quartz: $(2,142 \text{ hours lost} / 8 \text{ hour work day}) \times 200,000 / 807,858 = 66.29$
- Industry: $(3,150 \text{ hours lost} / 8 \text{ hour work day}) \times 200,000 / 1,400,000 = 56.25$

Total Recordable Incident Rate = recordable cases x 200,000 / total hours worked

Assuming the insurance rider uses the industry practice of excluding superficial incidents:

- Quartz: $(34 \text{ total} - 15 \text{ superficial}) \times 200,000 / 807,858 = 4.70$
- Industry: $(48.3 \text{ total} - 24 \text{ superficial}) \times 200,000 / 1,400,000 = 3.47$

If the insurance rider includes ALL incidents:

- Quartz: $34 \text{ total} \times 200,000 / 807,858 = 8.42$
- Industry: $48.3 \text{ total} \times 200,000 / 1,400,000 = 6.90$

Based on the adjusted metrics, it is evident that Quartz has a safety record that is worse than the industry average in both the Severity Rate metric and the Total Recordable Incident Rate. As a result, the insurance rider is in effect.

IAS 37.14 states:

A provision shall be recognised when:

- (a) an entity has a present obligation (legal or constructive) as a result of a past event;*
- (b) it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and*
- (c) a reliable estimate can be made of the amount of the obligation.*

This is the case since the insurance rider has been triggered. Because there is a legal obligation, an outflow of resources (cash) will be required, and the estimate of the amount is clear. Therefore, a liability of \$150,000 should be accrued in the accounting records for the amount owing to the insurance provider:

Dr. Insurance Expense	\$150,000
Cr. Insurance Payable	\$150,000

These results are connected to the decline in Quartz's tower crane business, since clients have shifted to competitors that are perceived to be more technologically capable, and, critically, safer. It may also be a result of the director of health and safety being on personal leave.

Quartz should undertake a full review of its safety program to ensure it is up to date with the latest requirements and best practices to protect the safety of its employees and business and to avoid owing the insurance rider in the future.

Risk of Material Misstatement at the Assertion Level	Assertion	Procedure
The insurance rider may or may not be instigated.	Existence/ Completeness	Obtain a copy of the insurance policy directly from the insurer and review the terms that cause the rider to be charged. Review definition, if available, of “recordable cases” to see if it follows industry practice of omitting superficial incidents. Research industry average metrics for 2026 to ensure comparative figures are correct. Obtain Quartz’s incident reports filed and recalculate amount of minor, moderate, critical, and catastrophic incidents to ensure completeness of recordable incidents. Use these reports to recalculate total labour hours lost and determine if they have been fully reported. Review reports for labour hours worked and sample inputs, comparing them to timesheets, etc., to ensure total labour hours worked all actually occurred (since overstatement here would reduce metrics). Obtain copy of employee contracts and read terms to understand number of hours in a workday (e.g., 8 or 7.5 hours, etc.). Recalculate the Severity Rate and Total Recordable Incident Rate metrics compare them to the industry average.

Salary Versus Dividend

If a salary is paid to each of you in 2026, the following personal federal tax liability will be incurred:

Salary per sister					150,000
Employee contributions to CPP					-1,127
NIFTP and taxable income					<u>148,873</u>
Federal tax on taxable income					
Base			20,190		
Excess	148,873				
	<u>- 117,045</u>				
	31,828	26%		8,275	28,466
Relevant non-refundable credits					
Employment amount				1,501	
CPP				3,519	
EI				1,123	
				<u>6,143</u>	
				14%	-860
Federal tax payable					<u>27,606</u>

If you choose to pay yourselves eligible dividends of \$150,000 instead of a salary, the corporation loses the salary deduction for each of you as follows:

Basic rate		38%
Less: federal tax abatement		-10%
Less: general rate reduction		-13%
Salary	150,000	<u>15%</u>
CPP	4,646	
EI	1,572	156,219
Corporate tax savings lost	<u> </u>	<u><u>23,433</u></u>

But – given there is a balance in the Eligible RDTOH account, a dividend refund would occur as follows:

Dividend refund = lesser of:

1. $38.33\% \times \text{dividends paid}$

300,000	38.33%	114,990
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2. Balance in Eligible RDTOH account **50,000**

Note: This dividend refund would reduce the eligible RDTOH account to \$0. As a result, this would only happen with a 2026 dividend. An analysis of the benefits of paying a salary versus a dividend would need to be revisited every year.

Then, from a personal perspective, you would each owe the following federal tax:

Eligible dividend income per sister

150,000	1.38		207,000
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Net income/taxable income

207,000

Federal tax on taxable income

Base		36,933
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Excess	207,000
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-	181,440
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25,560	29%	7,412	44,345
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Relevant non-refundable credits

Federal dividend tax credit

207,000

-	150,000
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57,000	6/11	-	31,091
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Federal tax payable

13,254

Therefore, the overall benefit of paying an eligible dividend over a salary in 2026 is as follows:

Benefit of paying dividend (personal)

Federal tax payable (salary - scenario 1)				27,606
Federal tax payable (dividend - scenario 2)				13,254
				14,352
				x2
				28,704
<u>Corporate tax impact of paying dividends</u>				
Less: lost corporate tax savings	23,433	x2	-	46,866
Plus: dividend refund				50,000
				31,838

It is quantitatively favourable to pay an eligible dividend in 2026, however, there are other things to consider:

1. When you report dividend income in your personal tax return instead of employment income, you do not create earned income for RRSP or childcare purposes. Given your children have graduated university, the earned income for childcare deduction purposes is irrelevant; however, you have both mentioned interest in saving for retirement. In order to contribute more to your RRSPs, you will need to create room by having earned income. Therefore, it would be beneficial for at least some of your compensation to be in the form of salary.
2. Similarly, when paying yourselves dividends, you do not contribute to the Canada Pension Plan (CPP). If you would like to maximize your CPP benefits in your retirement, paying yourselves a salary of up to the CPP maximum (currently around \$85,000) would be advisable.
3. Given the dividend refund available maxes out at \$50,000 (the RDTOH balance), the corporation is not receiving all the potential benefits of paying eligible dividends. The eligible RDTOH balance is brought to \$0 at total eligible dividends of approximately 130,000 (\$50,000 / 38.33%). This is approximately \$65,000 each.

Given the quantitative and qualitative considerations mentioned, it would be advisable to pay yourselves eligible dividends of \$65,000 each, to maximize the use of the eligible RDTOH account and its related dividend refund, and pay yourselves a salary of \$85,000 each, to create some RRSP room and maximize the CPP benefits obtainable in retirement.