Learning Module 7: Analysis of Long Term Assets

Q.531 Arithma Co. exchanged a spare forklift purchased one year ago in return for an ambulance to be used in its factory. The company reports under US GAAP and does not have any idea of the fair value of the ambulance. Arithma Co. should *most likely* record the value of the ambulance in its financial statements as:

A. The fair value of the forklift.

B. The historical cost of the forklift.

C. The carrying value of the forklift.

The correct answer is **A.**

When Arithma Co. This approach is based on the principle that in an exchange transaction where the fair value of the acquired asset is not readily determinable, the asset received should be recorded at the fair value of the asset given up. This method ensures that the transaction reflects the most accurate and current valuation of the exchanged assets in the financial statements, providing a clear and fair representation of the company's financial position.

B is incorrect. Suggesting that the ambulance should be recorded at the historical cost of the forklift overlooks the fundamental accounting principle of fair value measurement in asset exchanges. The historical cost of the forklift may not represent its current market value, leading to a misrepresentation of the value of the ambulance in the financial statements. Historical cost is the original monetary value of an asset at the time of its acquisition and does not reflect any subsequent changes in market value. Therefore, using the historical cost of the forklift would not provide an accurate valuation of the ambulance received in the exchange.

C is incorrect. Recording the ambulance at the carrying value of the forklift also fails to adhere to the fair value measurement principle. The carrying value, or book value, of an asset is its historical cost adjusted for any accumulated depreciation or impairment losses. While closer to a current value than historical cost, the carrying value may still not accurately reflect the market value of the forklift at the time of the exchange. Consequently, using the carrying value to record the ambulance could result in a valuation that does not truly represent the economic realities of the transaction. The fair value approach, on the other hand, ensures that the assets involved in the exchange are recorded at values that are reflective of current market conditions, thereby providing a more accurate and relevant depiction of the company's financial status.

CFA Level I, Volume 2, Topic 5—Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets, LOS 6b: explain and evaluate how impairment and derecognition of property, plant, and equipment, and intangible assets affect the financial statements and ratios.

Q.2251 The capitalization of interests accruing during the construction of an asset is allowed in which of the following?

A. IFRS.

B. US GAAP.

C. IFRS & US GAAP.

The correct answer is **C.**

When a firm constructs an asset for personal use or a resale, the interest accruing from the construction cost during the construction period is capitalized under IFRS and US GAAP. The treatment of capitalized interests is the same under both IFRS and US GAAP.

A is incorrect. IFRS allows capitalization of interest accruing during the construction of an asset.

B is incorrect. US GAAP allows the capitalization of interest accruing during the construction of an asset.

CFA Level I, Volume 2, Topic 5—Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets,LOS 6a: compare the financial reporting of the following types of intangible assets: purchased, internally developed, and acquired in a business combination

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Q.2253 Which of the following is *most likely* an unidentifiable intangible asset?

A. Patent.

B. Goodwill.

C. Copyrights.

The correct answer is **B.**

Not all intangible assets are identifiable. Some intangible assets are unidentifiable because they can not be acquired separately. An example of an unidentifiable intangible asset is goodwill, which is the excess of the purchase price over the fair value of the identifiable assets (net of liabilities).

A is incorrect. Identifiable intangible assets are those that can be separated from other assets and can even be sold by the company, e.g., patents.

C is incorrect. Identifiable intangible assets include intellectual property, copyrights, trademarks, and trade names.

CFA Level I, Volume 2, Topic 5—Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets,LOS 6a: compare the financial reporting of the following types of intangible assets: purchased, internally developed, and acquired in a business combination

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Q.2254 A German tech firm reporting under IFRS has incurred the following expenditures during the year 2016:

SG&A	$1,200
Research Cost	$400
Depreciation	$300
Interest Expense	$600
Development Cost	$800

Given the information presented and all IFRS criteria are met, the total operating expenses of the firm is *closest to*:

A. $1,900.

B. $2,700.

C. $3,300.

The correct answer is **A.**

Under International Financial Reporting Standards (IFRS), the treatment of research and development costs is distinct. Research costs are expensed in the period they are incurred, reflecting the uncertainty of future economic benefits. Conversely, development costs can be capitalized if certain criteria are met, indicating that the expenditure will likely result in future economic benefits. This distinction is crucial for accurately calculating a firm's total operating expenses.

Given the information for the German tech firm, the total operating expenses can be calculated by summing the Selling, General, and Administrative (SG&A) expenses, Research costs, and Depreciation expenses. The Interest Expense and Development Cost are not included in the operating expenses calculation under IFRS. The Interest Expense is considered a financing activity, and the Development Cost, under the provided conditions, is capitalized and not expensed in the period incurred.

$$\begin{aligned}\text{Total Operating Expenses} &= \text{SG\&A} + \text{Research Cost} + \text{Depreciation}\\ &= \$1,200 + \$400 + \$300\\ &= \$1,900\end{aligned}$$

B is incorrect. Under IFRS, development costs are capitalized if they meet certain criteria, indicating that the expenditure is expected to generate future economic benefits and is not expensed in the period incurred.

C is incorrect. Interest Expense is related to financing activities and should not be included in operating expenses. Including both the Development Cost and Interest Expense results in a significantly overstated total operating expenses figure, which does not accurately reflect the firm's operational costs as per IFRS guidelines.

Q.2255 Smart-Sun Corp. purchased a solar panel plant from Solar World Inc. in a business transaction of $700 million. Assuming that the fair value of the identifiable assets related to the solar panel plant of Solar World is $1,500 million with liabilities of $830 million, the goodwill to be reported on Smart Sun's balance sheet is *closest to*:

A. $30 million.

B. $130 million.

C. $800 million.

The correct answer is **A.**

First, we need to find the Net value of assets related to the solar panel plant.

$$\begin{aligned}\text{Net Value of Assets} &= \text{Assets} - \text{Liabilities}\\ &= \$1,500 \text{ million} - \$830 \text{ million}\\ &= \$670 \text{ million}\end{aligned}$$

Goodwill is calculated as the excess of the purchase price over the fair value of the identifiable assets.

$$\begin{aligned}\text{Goodwill to be reported on Smart Sun's balance sheet} &= \text{Purchase Price} - \text{Fair value of net assets}\\ &= \$700 \text{ million} - \$670 \text{ million}\\ &= \$30 \text{ million}\end{aligned}$$

CFA Level I, Volume 2, Topic 5—Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets,LOS 6a: compare the financial reporting of the following types of intangible assets: purchased, internally developed, and acquired in a business combination

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Q.2256 If a hypothetical firm capitalizes its expenditures rather than expensing them, then determine the *most likely* impact on its net income in subsequent years compared to a firm that expenses out its expenditures.

A. The capitalizing firm will have a lower net income in subsequent years.

B. The capitalizing firm will have a higher net income in subsequent years.

C. The capitalizing firm will have an equal net income as the expensing firm in subsequent years.

The correct answer is **A.**

Compared to an expensing firm, a firm that capitalizes its expenditures will have a higher net income in the first years. The capitalizing firm will have a lower net income in the subsequent years since it will have higher depreciation expenses.

B is incorrect. Capitalizing will affect net income after the first year once the firm begins recognizing depreciation expense.

C is incorrect. Capitalizing and expensing will have different net incomes as expensing will reduce net income in the first year, and capitalizing will reduce net income in the subsequent years.

CFA Level I, Volume 2, Topic 5—Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets,LOS 6a: compare the financial reporting of the following types of intangible assets: purchased, internally developed, and acquired in a business combination

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Q.2263 Identify the *most likely* effects on ratios of a firm that capitalizes the cost of assets.

A. Higher Interest coverage, higher Equity and lower Income variability

B. Lower Interest coverage, higher Equity and lower Income variability

C. Higher Interest coverage, lower Equity and lower Income variability

The correct answer is **A.**

Since the net income is higher undercapitalized costs, the interest coverage ratio and equity (retained earnings) are also higher. Also, when the costs are capitalized, they flow through the income statement over the asset's useful life as depreciation. Therefore, the Income variability is lower.

B is incorrect Interest coverage ratio calculated as (EBIT/Interest expense) will be lower under expensing as EBIT will be lower because of the deduction of the asset’s costs when computing EBIT.

C is incorrect. Income variability will be higher under expensing as there will be a large expense deducted from gross income, while undercapitalization will have a lower variability as the asset's cost (depreciation) will be spread over the asset’s life.

CFA Level I, Volume 2, Topic 5—Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets,LOS 6a: compare the financial reporting of the following types of intangible assets: purchased, internally developed, and acquired in a business combination

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Q.2264 Which of the following is *least likely* a criterion of identifiable intangible assets under IFRS?

A. The assets should provide future economic benefits.

B. The firm should have control and legal rights over the asset.

C. The assets should be capable of being inseparable from the firm.

The correct answer is **C.**

For an intangible asset to be considered identifiable, it must be capable of being separated from the firm or arise from contractual or other legal rights, regardless of whether those rights are separable. This means that if an intangible asset can be sold, transferred, licensed, rented, or exchanged independently of the firm, it meets the separability criterion, making it an identifiable intangible asset. This criterion distinguishes identifiable intangible assets from goodwill, which is an unidentifiable intangible asset because it cannot be separated from the firm. The separability criterion ensures that identifiable intangible assets are distinct enough to be recognized separately on the balance sheet, providing more accurate and detailed information about the firm's resources.

A is incorrect. The requirement that assets should provide future economic benefits is a fundamental criterion for the recognition of identifiable intangible assets under IFRS. This criterion ensures that only assets expected to contribute to future cash flows are recognized on the balance sheet. It reflects the economic reality of the asset's value to the firm, ensuring that the financial statements provide useful information to investors and other stakeholders about the resources controlled by the firm that will generate future economic benefits.

B is incorrect. Having control and legal rights over an asset is crucial for its recognition as an identifiable intangible asset under IFRS. Control over an asset implies that the firm can direct the use of the asset and obtain the economic benefits that flow from it. Legal rights, which can be enforceable by law, provide evidence of control. This criterion ensures that the firm can prevent others from benefiting from the asset, thereby securing the future economic benefits that the asset is expected to generate. The emphasis on control and legal rights ensures that the assets recognized on the balance sheet are those over which the firm has both the ability and the right to derive economic benefits.

CFA Level I, Volume 2, Topic 5—Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets,LOS 6a: compare the financial reporting of the following types of intangible assets: purchased, internally developed, and acquired in a business combination

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Q.2275 York Corp. purchased a plant for $45 million with a useful life of 8 years and a salvage value of $5 million. At the beginning of the 4th year, York decided to decrease the salvage value to $3.2 million. The depreciation expense for the 4th year if York uses the Straight-line method of depreciation is *closest to*:

A. $4.36 million.

B. $5.00 million.

C. $5.36 million.

The correct answer is **C.**

For the first three years,

$$\begin{aligned}\text{Depreciation expense} &= \frac{\text{Cost} - \text{Salvage value}}{\text{Useful Life}}\\ &= \frac{(\$45\text{ million} - \$5\text{ million})}{8\text{ years}}\\ &= \$5\text{ million}\end{aligned}$$

At the beginning of the 4th year,

$$\begin{aligned}\text{Depreciation expense} &= \frac{\text{Book value} - \text{Salvage cost}}{\text{Remaining useful life}}\\ &= \frac{45 - (3 \times 5) - 3.2}{8 - 3} = \$5.36\text{ million}\end{aligned}$$

CFA Level I, Volume 2, Topic 5—Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets,LOS 6a: compare the financial reporting of the following types of intangible assets: purchased, internally developed, and acquired in a business combination

Q.2276 Intangible assets with finite useful lives mostly differ from intangible assets with infinite useful lives with respect to the accounting treatment of:

A. Costs.

B. Revaluation.

C. Amortization.

The correct answer is **C.**

Whereas an intangible asset with a finite useful life is amortized, an intangible asset with an indefinite useful life is not.

CFA Level I, Volume 2, Topic 5—Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets,LOS 6a: compare the financial reporting of the following types of intangible assets: purchased, internally developed, and acquired in a business combination

Q.2279 An accountant is analyzing the accounts of a Belgian chocolate firm. The information regarding the cost of its ice cream plant is given in the following table. Calculate the amount of impairment loss if the Belgian firm reports under IFRS.

Book Value of Plant	$400,000
Acc. Depreciation	$25,000
Fair Value	$370,000
Selling Cost	$15,000
Value in Use	$360,000
Expected Future Cash Flow	$350,000

A. $15,000

B. $25,000

C. $40,000

The correct answer is **A.**

The question is about determining the impairment loss for a Belgian chocolate firm under IFRS. Here's how you can work it out:

1. **Carrying Amount**: This is calculated as the Book Value of the Plant minus Accumulated Depreciation. So, $400,000 - $25,000 = $375,000.
2. **Fair Value Less Costs to Sell**: This is calculated as the Fair Value minus Selling Cost. So, $370,000 - $15,000 = $355,000.
3. **Recoverable Amount**: Under IFRS, the recoverable amount is the higher of an asset's fair value, less costs to sell, and its value in use. In this case, the value in use ($360,000) is higher than the fair value less costs to sell ($355,000), so we use the value in use as the recoverable amount.
4. **Impairment Loss**: This is calculated as the Carrying Amount minus the Recoverable Amount. So, $375,000 - $360,000 = $15,000.

Therefore, the impairment loss would be **$15,000**.

CFA Level I, Volume 2, Topic 5—Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets,LOS 7b: explain and evaluate how impairment and derecognition of property, plant, and equipment, and intangible assets affect the financial statements and ratios.

Q.2280 An accountant is analyzing the financial reports of an American chocolate firm. The information regarding the cost of its ice cream plant is given in the following table:

Book Value of Plant	$400,000
Acc. Depreciation	$25,000
Fair Value	$370,000
Selling Cost	$15,000
Value in Use	$360,000
Expected Future Cash Flow	$350,000

If the American firm reports under US GAAP, the new balance sheet value of the asset is *closest to*:

A. $350,000.

B. $360,000.

C. $370,000.

The correct answer is **C.**

The question is about determining the new balance sheet value of an asset under US GAAP. Here's how you can work it out:

1. **Carrying Amount**: This is calculated as the Book Value of the Plant minus Accumulated Depreciation. So, $400,000 - $25,000 = $375,000.
2. **Undiscounted Expected Future Cash Flows**: This is given as $350,000.

   Under US GAAP, an impairment loss is recognized when the carrying amount exceeds the undiscounted expected future cash flows. In this case, the carrying amount ($375,000) is greater than the expected future cash flows ($350,000), so there is an impairment.

3. **Impairment Loss**: This is calculated as the Carrying Amount minus Fair Value. So, $375,000 - $370,000 = $5,000.

Therefore, the new balance sheet value after recognizing the impairment loss would be the Fair Value, which is **$370,000**.

CFA Level I, Volume 2, Topic 5—Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets, LOS 7b: explain and evaluate how impairment and derecognition of property, plant, and equipment, and intangible assets affect the financial statements and ratios.

Q.2281 An accountant is analyzing the accounts of a Belgian chocolate firm. The information regarding the cost of its ice cream plant is given in the following table. Assuming that the firm abandoned the plant, calculate the value of the loss recognized in the Income statement.

Book Value of Plant	$400,000
Acc. Depreciation	$25,000
Fair Value	$370,000
Selling Cost	$15,000
Value in Use	$360,000
Expected Future Cash Flow	$350,000

A. $370,000

B. $375,000

C. $400,000

The correct answer is **B.**

When a Belgian chocolate firm decides to abandon its ice cream plant, the financial implications of this decision must be accurately reflected in the company's income statement. The loss recognized in the income statement is a critical figure that represents the financial impact of this abandonment. To calculate this loss, it is essential to understand the components involved in the calculation, which include the book value of the plant, accumulated depreciation, fair value, selling cost, value in use, and expected future cash flows.

Since the plant is abandoned, the company will not recover any value through sale or continued use, meaning the recovered value is $0. The formula to calculate the loss is as follows:

$$\text{Loss} = (\text{Book Value} - \text{Accumulated Depreciation}) - \text{Recovered Value}$$

Substituting the given values:

$$\text{Loss} = (\$400,000 - \$25,000) - \$0 = \$375,000$$

A is incorrect. The plant is abandoned, and no recovery through sale is expected.

C is incorrect. It indicates a loss of $400,000, which ignores the effect of accumulated depreciation on the carrying amount of the plant. The book value of the plant before considering depreciation is \$400,000, but the accumulated depreciation reduces the carrying amount that should be considered in calculating the loss.

CFA Level I, Volume 2, Topic 5—Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets,LOS 7b: explain and evaluate how impairment and derecognition of property, plant, and equipment, and intangible assets affect the financial statements and ratios.

Q.2282 Which of the following is *most likely* an impact of impairment? If an asset is impaired the:

A. return on asset, return on equity, and profit margins decrease.

B. return on asset and return on equity increase, but the profit margins decrease.

C. return on asset ratio and profit margins decrease, but the return on equity increases.

The correct answer is **A.**

When an asset is impaired, it means its carrying amount exceeds its recoverable amount. This results in the recognition of impairment losses, which directly affects the income statement. As a consequence, The return on asset (ROA) decreases because the impaired asset's carrying amount is reduced, leading to a lower net income in the denominator. Return on equity (RoE) decreases because net income, which is the numerator in the RoE calculation, decreases due to impairment losses. Profit margins decrease because impaired assets result in lower net income, leading to a lower numerator in the profit margin formula.

CFA Level I, Volume 2, Topic 5—Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets, LOS 7b: explain and evaluate how impairment and derecognition of property, plant, and equipment, and intangible assets affect the financial statements and ratios.

Q.2283 Which of the following is the *most likely* impact of an impairment loss on a firm's cash flow statement?

A. Total cash flow increases.

B. Total cash flow decreases.

C. Total cash flow remains unchanged.

The correct answer is **C.**

An impairment loss is an accounting adjustment that reflects a decrease in the recoverable value of an asset, bringing its book value in line with its current fair market value when the latter is lower. This adjustment is recognized in the income statement as an expense, which reduces the net income for the period. However, it is crucial to understand that an impairment loss is a non-cash expense. It does not involve any actual outflow of cash at the time it is recognized.

A is incorrect. Suggesting that total cash flow increases due to an impairment loss misunderstands the nature of cash flow and impairment losses. Since impairment losses are non-cash charges, they do not result in any cash inflow or increase in cash flow. The cash flow statement is primarily concerned with actual cash inflows and outflows, and since an impairment loss does not involve a cash transaction, it does not increase the total cash flow.

B is incorrect. While an impairment loss does reduce net income on the income statement, it is important to differentiate between cash-based transactions and non-cash adjustments. The cash flow statement adjusts for non-cash expenses, such as depreciation and impairment losses, by adding them back to net income in the operating activities section. Therefore, an impairment loss does not decrease the total cash flow, as it does not represent a cash outflow.

CFA Level I, Volume 2, Topic 5—Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets, LOS 7b: explain and evaluate how impairment and derecognition of property, plant, and equipment, and intangible assets affect the financial statements and ratios.

Q.2284 An asset has a gross book value of $60 million and accumulated depreciation of $22 million. Calculate the approximate remaining life of the asset if the depreciation expense is $3.8 million.

A. 6 years.

B. 10 years.

C. 16 years.

The correct answer is **B.**

$$
\begin{aligned}
\text{The remaining life of the asset} &= \frac{(\text{Gross book value} - \text{Acc. Dep})}{\text{Depreciation Exp.}} \\
&= \frac{(\$60\text{ million} - \$22\text{ million})}{\$3.8\text{ million}} \\
&= 10\text{ years}
\end{aligned}
$$

CFA Level I, Volume 2, Topic 5—Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets, LOS 7c: analyze and interpret financial statement disclosures regarding property, plant, and equipment and intangible assets

Q.3842 A local investor has recently acquired a franchise of an online ticketing website, whose components and useful lives are given in the following table:

Assets	Value	Useful life
Patent	$25,000	20
Copyrights	$12,000	12
Trademark	$8,800	5
Goodwill	$7,000	–
Physical servers	$15,000	15

Assuming that the salvage value of the patent is $3,000 and that the trademark can be renewed every 5th year for $1,500, the total amortization expense for the first year using the straight-line method is *closest to:*

A. 2100

B. 3860

C. 4860

The correct answer is **A.**

Amortization is identical to depreciation, but it only amortizes intangible assets with finite lives. Since the question only asks for amortization expenses, we will ignore the tangible assets (physical servers) and intangible assets with indefinite lives, such as goodwill and trademark, that can be renewed every 5th year for nominal fees.

$$\text{Amortization expense for Patent} = \frac{(\$25,000 - \$3,000)}{20} = \$1,100$$

$$\text{Amortization expense for Copyrights} = \frac{(\$12,000 - \$0)}{12 \text{ years}} = \$1,000$$

$$\text{Total amortization expense} = \$1,100 + \$1,000 = \$2,100$$

CFA Level I, Volume 2, Topic 5—Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets,LOS 7a: compare the financial reporting of the following types of intangible assets: purchased, internally developed, and acquired in a business combination

Q.3845 A firm's financial statements show that the value of plant, property & equipment is $4.5 million, land is $2.5 million, and accumulated depreciation is $1.8 million. If the depreciation expense for the year is $0.15 million, then the average age of the firm's PPE is *closest to:*

A. 12 years.

B. 18 years.

C. 34.67 years.

The correct answer is **A.**

Since land is not a depreciable asset, we can only calculate the average age of plant, property & equipment.

$$\begin{aligned}\text{Average age of PPE} &= \frac{\text{Accumulated depreciation}}{\text{Depreciation expense}}\\ &= \frac{\$1.8\text{ million}}{\$0.15\text{ million}}\\ &= 12\text{ years}\end{aligned}$$

CFA Level I, Volume 2, Topic 5—Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets,LOS 7c: analyze and interpret financial statement disclosures regarding property, plant, and equipment and intangible assets

Q.4815 Which of the following is *least likely* a criterion for an identifiable intangible asset under IFRS? The asset must:

A. be separable from the company.

B. arise from contractual or legal rights.

C. be developed through internal research and development.

The correct answer is **C.**

For an intangible asset to be considered identifiable under IFRS, it must be separable (capable of being separated from the company) or arise from contractual or legal rights. The development of the asset through internal research and development is not a requirement for it to be considered identifiable.

A is incorrect. The requirement that the asset must be separable is a fundamental criterion for recognizing identifiable intangible assets under IFRS.
B is incorrect. The requirement that the asset must arise from contractual or legal rights is also a fundamental criterion for recognizing identifiable intangible assets under IFRS.

CFA Level I, Volume 2, Topic 5—Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets, LOS 7a: compare the financial reporting of the following types of intangible assets: purchased, internally developed, and acquired in a business combination

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Q.4816 Which of the following is *least likely* a criterion for recognizing an internally developed intangible asset under IFRS?

A. The asset must demonstrate technical feasibility.

B. The asset must have a cost that cannot be reliably measured.

C. The asset must be expected to provide future economic benefits.

The correct answer is **B.**

For an internally developed intangible asset to be recognized under IFRS, it must demonstrate technical feasibility and be expected to provide future economic benefits. The cost of the asset must also be reliably measurable. If the cost cannot be reliably measured, it cannot be recognized.

A is incorrect. Demonstrating technical feasibility is a criterion for recognizing internally developed intangible assets under IFRS.
C is incorrect. The expectation of future economic benefits is a criterion for recognizing internally developed intangible assets under IFRS.

CFA Level I, Volume 2, Topic 5—Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets, LOS 7a: compare the financial reporting of the following types of intangible assets: purchased, internally developed, and acquired in a business combination

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Q.4817 Which of the following is *least likely* considered an identifiable intangible asset under IFRS?

A. A trademark acquired from another company

B. Goodwill arising from the acquisition of a company.

C. A patent developed internally and meeting capitalization criteria.

The correct answer is **B.**

Goodwill is not considered an identifiable intangible asset under IFRS because it cannot be separated from the business itself and does not arise from contractual or legal rights. It is recognized as an intangible asset only in the context of a business combination.

A is incorrect. A trademark acquired from another company is considered an identifiable intangible asset under IFRS.

C is incorrect. A patent developed internally and meeting capitalization criteria is considered an identifiable intangible asset under IFRS.

CFA Level I, Volume 2, Topic 5—Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets, LOS 7a: compare the financial reporting of the following types of intangible assets: purchased, internally developed, and acquired in a business combination.

Q.4818 Which of the following statements is *least likely* true regarding the treatment of intangible assets under IFRS and US GAAP?

A. Both IFRS and US GAAP expense research costs when incurred.

B. Under IFRS, development costs can be capitalized if certain criteria are met, whereas under US GAAP, all development costs are expensed.

C. Under US GAAP, software development costs for internal use can be capitalized once feasibility is established, while under IFRS, they are expensed.

The correct answer is **B.**

Under both IFRS and US GAAP, research costs are expensed when incurred. Under IFRS, development costs can be capitalized if certain criteria are met. Under US GAAP, certain software development costs can be capitalized once technological feasibility is established, and similar criteria apply to all internally developed intangible assets.

A is incorrect. Both IFRS and US GAAP require research costs to be expensed when incurred.

C is incorrect. Under US GAAP, software development costs for internal use can indeed be capitalized once feasibility is established, aligning with similar criteria under IFRS.

CFA Level I, Volume 2, Topic 5—Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets, LOS 7a: compare the financial reporting of the following types of intangible assets: purchased, internally developed, and acquired in a business combination

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Q.4819 Which of the following is *least likely* a factor that impacts the financial statement presentation of intangible assets?

A. The physical substance of the intangible asset.

B. The expected useful life of the intangible asset.

C. The method of acquisition of the intangible asset.

The correct answer is **A.**

By definition, intangible assets lack physical substance. The method of acquisition (e.g., purchase, internal development) and the expected useful life impact how intangible assets are recognized and amortized in the financial statements.

B is incorrect. The expected useful life of the intangible asset impacts its amortization and financial statement presentation.

C is incorrect. The method of acquisition impacts the financial statement presentation of intangible assets.

CFA Level I, Volume 2, Topic 5—Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets, LOS 7a: compare the financial reporting of the following types of intangible assets: purchased, internally developed, and acquired in a business combination

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Q.4820 Which of the following is *least likely* to be a correct statement about the accounting treatment for intangible assets acquired in a business combination under IFRS?

A. Any excess amount over the identifiable net assets' value is recorded as goodwill.

B. All intangible assets acquired in a business combination are expensed immediately.

C. The acquiring company must allocate the purchase price to the acquired assets and assumed liabilities at their fair values.

The correct answer is **B.**

Under IFRS, intangible assets acquired in a business combination are recognized at their fair values and not expensed immediately. Any excess of the purchase price over the identifiable net assets is recorded as goodwill.

A is incorrect. Any excess amount over the identifiable net assets' value is recorded as goodwill.

C is incorrect. The acquiring company must allocate the purchase price to the acquired assets and assumed liabilities at their fair values.

CFA Level I, Volume 2, Topic 5—Financial Statements Analysis, Learning Module 7: Analysis of Long-Term Assets, LOS 7a: compare the financial reporting of the following types of intangible assets: purchased, internally developed, and acquired in a business combination

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Q.4821 Which of the following is *most likely* a criterion for recognizing internally developed software costs as intangible assets under US GAAP?

A. The software must be intended for internal use.

B. The costs must be incurred during the research phase of the project.

C. The costs must be incurred after the project reaches technological feasibility.

The correct answer is **C.**

Under US GAAP, research costs are expensed when incurred, including those related to software development. Costs incurred after technological feasibility is established and intended for internal use can be capitalized.

A is incorrect. Software intended for internal use can have its development costs capitalized after technological feasibility is reached.

B is incorrect. Costs incurred during the research phase of the project are expensed when incurred.

Q.4822 Which of the following is *least likely* a criterion for recognizing an impairment loss under IFRS?

A. The carrying amount of the asset exceeds its recoverable amount.

B. The asset must be classified as held for sale to recognize an impairment loss.

C. The recoverable amount is the higher of fair value, less costs to sell, and value in use.

The correct answer is **B.**

Under IFRS, an impairment loss is recognized when the carrying amount of an asset exceeds its recoverable amount, which is the higher of its fair value, less costs to sell, and its value in use. This can apply to any long-lived asset, not just those held for sale. Classifying the asset as held for sale is not required to recognize an impairment loss.

A is incorrect. This is a correct criterion for recognizing an impairment loss under IFRS.

C is incorrect. The recoverable amount being the higher of fair value, less costs to sell, and value in use is a fundamental concept in IFRS impairment testing.

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Q.4824 Which of the following is *least likely* a reason for the derecognition of a long-lived asset? The asset is:

A. sold.

B. abandoned.

C. fully depreciated.

The correct answer is **C.**

Derecognition occurs when an asset is sold, abandoned, exchanged, or otherwise disposed of. Being fully depreciated does not in itself lead to derecognition. An asset can be fully depreciated but still in use.

A is incorrect. Selling an asset leads to its derecognition.

B is incorrect. Abandoning an asset leads to its derecognition.

Q.4825 Which of the following is *least likely* true about the treatment of intangible assets with finite lives? They are:

A. tested for impairment annually.

B. amortized over their useful lives.

C. tested for impairment when significant events indicate potential impairment.

The correct answer is **A.**

Intangible assets with finite lives are amortized over their useful lives and tested for impairment only when there are indicators of impairment, not annually.

B is incorrect. Intangible assets with finite lives are amortized over their useful lives.

C is incorrect. These assets are tested for impairment when significant events indicate potential impairment.

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Q.4826 Arbor Industries, a hypothetical company, is assessing the impairment of a finite-life intangible asset with the following details:

Parameter	Value
Carrying Amount	USD 500,000
Present Value of Expected Future Cash Flows	USD 400,000
Fair Value if Sold	USD 450,000
Undiscounted future cash flows	USD 440,000
Costs to Sell	USD 50,000

The impairment loss under IFRS and US GAAP is closest to:

A.

IFRS	US GAAP
USD 100,000	USD 100,000

B.

IFRS	US GAAP
USD 50,000	USD 100,000

C.

IFRS	US GAAP
USD 100,000	USD 50,000

The correct answer is **C.**

Under IFRS:

The recoverable amount is the higher of fair value less costs to sell and value in use.

$$
\begin{aligned}
\text{Fair Value less Costs to Sell} &= \text{USD } 450{,}000 - \text{USD } 50{,}000 = \text{USD } 400{,}000 \\
\text{Value in Use} &= \text{USD } 400{,}000 \\
\text{Recoverable Amount} &= \max(\text{USD } 400{,}000, \text{USD } 400{,}000) = \text{USD } 400{,}000 \\
\text{Impairment Loss} &= \text{Carrying Amount} - \text{Recoverable Amount} \\
&= \text{USD } 500{,}000 - \text{USD } 400{,}000 = \text{USD } 100{,}000
\end{aligned}
$$

Under US GAAP:

First, assess recoverability by comparing the carrying amount to the undiscounted expected future cash flows.

Since the carrying amount (USD 500,000) is greater than the undiscounted expected future cash flows (USD 440,000), the asset is impaired.

The impairment loss is the difference between the carrying amount and the fair value.

$$\text{Impairment Loss} = \text{Carrying Amount} - \text{Fair Value} = \text{USD } 500{,}000 - \text{USD } 450{,}000 = \text{USD } 50{,}000$$

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Q.4827 Which of the following is *most likely* a key disclosure requirement for intangible assets with indefinite useful lives under IFRS?

A. The amortization expense for the period.

B. The residual value of the intangible asset.

C. The rationale for classifying the useful life as indefinite.

The correct answer is **C.**

Under IFRS, for intangible assets with indefinite useful lives, companies must disclose the rationale for classifying the useful life as indefinite. This includes explaining why the asset is expected to generate cash flows indefinitely.

A is incorrect. Intangible assets with indefinite useful lives are not amortized hence there is no amortization expense.

B is incorrect. While the residual value might be relevant for finite-lived assets, it is not a key disclosure for indefinite-lived intangible assets.

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Q.4828 Assuming that the historical cost of PPE for companies ABC and XYZ are the same, and the companies use the same depreciation method, consider the following information on their PPE:

Estimates	Company ABC	Company XYZ
Estimated total useful life (years)	10.4	21.3
Estimated age (years)	5.7	11.0
Estimated remaining life (years)	4.7	9.4

Which of the following statements is the *least accurate*?

A. The estimates suggest over 50% of each company's useful life has passed.

B. The estimated age of the equipment suggests that company ABC has newer PPE than company XYZ.

C. The estimated total useful life suggests that company XYZ depreciates PPE over a much shorter period than company ABC.

The correct answer is **C.**

The estimated total useful life suggests that company ABC depreciates PPE over a much longer period than company XYZ, not shorter. The estimated total useful life is derived from the historical cost divided by the annual depreciation expense. Since both companies have the same historical cost and use the same depreciation method, a longer useful life indicates a lower annual depreciation expense, implying a longer depreciation period for company ABC.

A is incorrect. Over 50% of each company's useful life has passed (5.7/10.4 for ABC and 11.0/21.3 for XYZ).

B is incorrect. The estimated age of the equipment suggests that company ABC has newer PPE than company XYZ (5.7 years vs. 11.0 years).

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Q.4829 XYZ company follows a straight-line depreciation method and reports the information below for its production machines:

Parameter	Value
Annual depreciation expense	$\$50,000$
Accumulated depreciation expense	$\$200,000$
Carrying value	$\$650,000$

The machines' estimated remaining useful life, and the time the company held them are *closest to:*

A. The remaining useful life is five years, and the company has held the machines for three years.

B. The remaining useful life is eight years, and the company has held the machines for four years.

C. The remaining useful life is 13 years, and the company has held the machines for four years.

The correct answer is **C.**

The remaining useful life is calculated by dividing the carrying value by the annual depreciation expense.

$$\text{Remaining useful life} = \frac{\text{Carrying value}}{\text{Annual depreciation expense}} = \frac{\$650,000}{\$50,000} = 13 \text{ years}$$

The period the company has held the machines is calculated by dividing the accumulated depreciation expense by the annual depreciation expense.

$$\text{Asset's holding period} = \frac{\text{Accumulated depreciation expense}}{\text{Annual depreciation expense}} = \frac{\$200,000}{\$50,000} = 4 \text{ years}$$

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Q.4830 Under IFRS, which of the following disclosures is *least likely* required for each class of property, plant, and equipment?

A. The basis of measurement.

B. The expected residual value.

C. The depreciation methods used.

The correct answer is **B.**

IFRS requires disclosures for each class of property, plant, and equipment including the basis of measurement, depreciation methods, useful lives or depreciation rates, gross carrying amounts, and accumulated depreciation at the start and end of the period. The expected residual value is not a required disclosure.

A is incorrect. The basis of measurement is required to be disclosed.

C is incorrect. The depreciation methods used are required to be disclosed.

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Q.4831 Which of the following is *least likely* to be disclosed under US GAAP for intangible assets?

A. The fair value of intangible assets with indefinite lives.

B. The expected amortization expense for the next five fiscal years.

C. The gross carrying amounts and accumulated amortization by major class.

The correct answer is **A.**

US GAAP requires the disclosure of gross carrying amounts and accumulated amortization by major class, as well as the expected amortization expense for the next five fiscal years. The fair value of intangible assets with indefinite lives is not typically required to be disclosed under US GAAP.

B is incorrect. The expected amortization expense for the next five fiscal years must be disclosed.

C is incorrect. The gross carrying amounts and accumulated amortization by major class are required disclosures.

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Q.4832 A company discloses the following information for its intangible assets:

Parameter	Value
Gross carrying amount	$\$1,000,000$
Accumulated amortization	$\$400,000$
Annual amortization expense	$\$100,000$

The average remaining useful life of the intangible assets is *closest to:*

A. 3 years.

B. 6 years.

C. 10 years.

The correct answer is **B.**

The average remaining useful life is calculated by dividing the net carrying amount by the annual amortization expense.

$$\begin{aligned}\text{Net Carrying Amount} &= \text{Gross Carrying Amount} - \text{Accumulated Amortization}\\ &= \$1,000,000 - \$400,000 = \$600,000\\ \text{Average Remaining Useful Life} &= \frac{\text{Net Carrying Amount}}{\text{Annual Amortization Expense}}\\ &= \frac{\$600,000}{\$100,000} = 6\text{ years}\end{aligned}$$

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Q.4833 A company follows a straight-line depreciation method and reports the following for its equipment:

Parameter	Value
Historical cost	$500,000
Annual depreciation expense	$50,000
Accumulated depreciation	$200,000

The total useful life, the age of the equipment, and the remaining useful life are *closest to*:

A.

Total useful life	Age of the equipment	Remaining useful life
10 years	4 years	6 years

B.

Total useful life	Age of the equipment	Remaining useful life
10 years	5 years	5 years

C.

Total useful life	Age of the equipment	Remaining useful life
12 years	4 years	8 years

The correct answer is **A.**

The total useful life is calculated by dividing the historical cost by the annual depreciation expense.

$$\text{Total Useful Life} = \frac{\text{Historical Cost}}{\text{Annual Depreciation Expense}} = \frac{\$500,000}{\$50,000} = 10 \text{ years}$$

The age of the equipment is calculated by dividing the accumulated depreciation by the annual depreciation expense.

$$\text{Age} = \frac{\text{Accumulated Depreciation}}{\text{Annual Depreciation Expense}} = \frac{\$200,000}{\$50,000} = 4 \text{ years}$$

The remaining useful life is the total useful life minus the age.

$$\text{Remaining Useful Life} = \text{Total Useful Life} - \text{Age} = 10 \text{ years} - 4 \text{ years} = 6 \text{ years}$$

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Q.4834 Which of the following is *most likely* to be disclosed for intangible assets with finite useful lives under IFRS?

A. The method used to estimate the residual value.

B. The expected increase in future revenue from the assets.

C. The carrying amount at the beginning and end of the period.

The correct answer is **C.**

For intangible assets with finite useful lives, IFRS requires disclosure of the carrying amount at the beginning and end of the period, along with other details such as amortization methods and rates.

A is incorrect. While the method to estimate residual value might be relevant, it is not specifically required for disclosure under IFRS.

B is incorrect. Expected increases in future revenue are not typically disclosed for intangible assets.

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Q.4835 Which of the following is *most likely* required to be disclosed for intangible assets with indefinite useful lives under IFRS, assuming the revaluation model is not used?

A. The estimated fair value of the assets.

B. The rationale for classifying the useful life as indefinite.

C. The estimated amortization expense over the next five years.

The correct answer is **B.**

For intangible assets with indefinite useful lives, IFRS requires disclosure of the rationale for classifying the useful life as indefinite.

A is incorrect. The estimated fair value is not typically required for disclosure unless the revaluation model is adopted.

C is incorrect. Intangible assets with indefinite useful lives are not amortized, so there would be no amortization expense to disclose.

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