# 5.07 Analysis of Long-Term Assets

# **Question 1**

Which of the following statements *best describes* the revaluation model and cost model for valuing long-lived tangible assets?

- A. Both models compare historical costs to fair value.
- B. Only the revaluation model uses the lower of historical cost or fair value.
- C. Under the cost model, carrying values are always less than or equal to historical costs.

# Question 2

At the beginning of 20X7, a company purchased production equipment for EUR 50 million with a 10-year useful life. At the end of 20X7, management estimates that the equipment is worth EUR 60 million. The company reports under IFRS and uses the revaluation model for valuing its production equipment. If the company has no previous revaluations, the impact on net income due to the increase in the equipment's value (in EUR) is *closest* to:

A. 0

B. 1,000,000

C. 10,000,000

# **Question 3**

If the value of a patent has been impaired, the impairment is most appropriately accounted for:

A. only on the balance sheet.

B. only in the footnotes to the financials.

C. on both the balance sheet and income statement.

# **Question 4**

A company capitalized a ¥120 million equipment purchase at the beginning of this year and will use straight-line depreciation with zero salvage value and a three-year useful life. The company generates ¥200 million in revenue every year, and the tax rate is 25%. If depreciation and taxes are the only expenses, and based only on this information, the second year's ending financial results *most likely* show:

- A. ¥40 million in taxes.
- B. ¥80 million in net PPE.
- C. ¥120 million in cash from operations.

#### Question 5

An analyst has collected the following information on a technology company that reports financial results using US GAAP:

20X7	\$ thousands
Gross profit	25,000
Research and development expenses	(5,000)
Depreciation and amortization expenses	(4,000)
Total equity (beginning of year)	100,000
Total equity (end of year)	120,000
Tax rate	25%

The company amortizes intangible assets over a five-year period using straight-line depreciation. Assume that the company can elect to either expense or capitalize its research and development costs. If it had capitalized all research and development costs in 20X7, its return on equity for 20X7 would be *closest* to:

A. 10.9%

B. 13.4 %

C. 14.1%

#### Question 6

A manufacturer purchases equipment at the beginning of 20X2 for AUD 17 million. At the end of 20X4, the accumulated depreciation is AUD 9 million, including the 20X4 depreciation expense of AUD 2 million. At the beginning of 20X5, management sells the equipment and receives AUD 3 million on the sale. The reported loss (in AUD millions) from the equipment's derecognition is *closest* to:

A. 3

B. 5

C. 8

# **Question 7**

At the beginning of 20X3, a company purchases a patent for CHF 100 million and expenses it over its 10-year useful life. The patent has an estimated residual value of CHF 10 million. At the end of 20X7, the company sells and derecognizes the patent, recording a loss of CHF 40 million. If the company uses the straight-line amortization method, the patent's sales price (in CHF millions) is *closest* to:

A. 5

B. 10

C. 15

#### **Question 8**

A company buys a patent from a technology firm. If the patent purchase is not a part of a business combination, then the total cost of acquiring the patent is *most likely*:

- A. recorded at fair value on the balance sheet.
- B. expensed immediately on the income statement.
- C. allocated to fair value and goodwill on the balance sheet.

A company decides to revalue a noncurrent asset upward to reflect its current fair value. The company had issued a bond to pay for this asset. If the asset has not been previously revalued, either upward or downward, the *most likely* impact of the company's decision is a:

- A. lower leverage ratio and lower return on equity.
- B. higher leverage ratio and lower return on assets.
- C. higher leverage ratio and higher return on assets.

# **Question 10**

All else being equal, which of the following patent acquisition methods will *most likely* result in a company reporting the smallest amortization expense during the initial year of the patent?

- A. Purchase a patent
- B. Develop a patent internally
- C. Obtain a patent through a merger

# **Question 11**

Which of the following actions creates costs that are *most likely* expensed as incurred?

- A. A company develops a patent internally.
- B. A firm purchases a trademark with cash.
- C. A corporation acquires copyrights through a merger.

# **Question 12**

A company purchases a piece of capital equipment at the beginning of the year. The equipment has a useful life of three years and zero salvage value. All else being equal, compared to capitalizing the expenditure, if the company expenses the purchase, it would *most appropriately* report:

- A. lower total cash after three years.
- B. the same cumulative net income over three years.
- C. lower cash flow from investing over the three years.

# **Question 13**

.An investment firm recently sold some old office furniture with a historical cost of €100,000. Upon completing the sale, the company recognized a gain of €5,000. If the accumulated depreciation on the furniture was €70,000, then the furniture was sold for a price (in €) *closest* to:

- A. 35,000
- B. 75,000
- C. 105,000

A company acquires manufacturing equipment for \$200,000. The equipment has 10 years of useful life left with an estimated salvage value of \$10,000. The company depreciates the equipment using straight-line depreciation. If the company sells the equipment for \$30,000 after 8 years, the loss recorded on the equipment sale is *closest* to:

A. -\$8,000

B. -\$10,000

C. -\$18,000

# **Question 15**

A company is currently developing a new software product for potential introduction to the market. If the company has demonstrated the technical feasibility of the software, then future development costs should *most appropriately*:

A. be expensed.

B. be capitalized as a long-term asset.

C. reduce cash flow from operating activities.

# **Question 16**

A company has equipment with a carrying value of USD 2 million. If the company reclassifies the equipment as held for use until disposal, the company *most likely*:

A. continues to report depreciation and impairment charges.

B. no longer reports impairment charges but continues reporting depreciation.

C. no longer reports depreciation but continues reporting impairment charges.

#### **Question 17**

A construction firm reports financial results under US GAAP. In 20X8, the firm borrowed \$10 million for five years at 6% interest to construct its new headquarters building, which will have a useful life of 50 years and will be depreciated using the straight-line method. Construction will take three years to complete, and during that period the firm will earn \$40,000 interest per year by temporarily investing the loan proceeds that it does not currently require for construction. If the firm has no other long-term assets and the loan requires only interest to be paid each year (ie, no amortization of principal), the amount of interest that the firm will capitalize is *closest* to:

A. \$1.68 million

B. \$1.80 million

C. \$3.00 million

# **Question 18**

A company reports its financial results under IFRS and provides the following information on a machine that it owns:

	£
Asset's historical cost	35,000
Accumulated depreciation	19,000
Undiscounted future cash flows from asset	20,000
Discounted future cash flows from asset	14,000
Fair value	17,500
Cost to sell asset	3,000

This year, the allowable impairment charge (£) that the company can take for the machine is *closest* to:

A. 0

B. 1,500

C. 2,000

#### **Question 19**

A company acquires the assets of another company in a business combination and records goodwill. Under US GAAP, which of the following is *most likely* included in goodwill?

- A. Separable patents
- B. The fair market value of PPE
- C. Nonidentifiable intangible assets

# **Question 20**

Under US GAAP, an impairment of property, plant, and equipment (PPE) *most likely* occurs when the carrying amount is:

A. more than the sum of the asset's discounted future cash flows.

- B. less than the sum of the asset's undiscounted future cash flows.
- C. more than the sum of the asset's undiscounted future cash flows.

#### **Question 21**

At the beginning of 20X2, a company reporting under US GAAP purchases a patent for USD 20 million with no residual value and a useful life of 10 years. At the end of 20X3, the company determines that the patent's expected cash generation is lower due to changes in the law. It estimates the following:

Selected Financial Data (USD millions)	
Fair market value	9
Cost to sell	1
Value in use	7
Undiscounted future cash flows	10

If the company uses straight-line amortization, the 20X3 impairment charge the company records is *closest* to:

A. USD 6 million.

B. USD 7 million.

C. USD 8 million.

# **Question 22**

A company reports under US GAAP and provides the following information on its equipment:

Metric	\$
Carrying amount	31,000
Expected future cash flows	
Undiscounted	28,000
Present value	26,500
Fair value if sold	22,000
Cost to sell	2,500

Due to an impairment charge, the carrying value of the machine is *closest* to:

A. 19,500

B. 22,000

C. 26,500

# **Question 23**

In 20X7, a firm reported earnings before interest and taxes (EBIT) of €32.2 million, interest expense of €3.5 million on its income statement, and interest paid of €3.1 million on its cash flow statement. The footnotes also revealed that if the firm had no capitalized interest in 20X7, depreciation expense would change by €450,000. After factoring in all effects of capitalized interest, the analyst recalculated the interest coverage ratio to be 7.5 times. The amount of capitalized interest reported by the firm in 20X7 is *closest* to:

A. €850,000

B. €1,133,000

C. €1,250,000

A company acquires an asset that has a cost of ¥90 million, a useful life of 3 years, and zero salvage value. The asset will be abandoned at the end of 3 years. The company does not pay dividends. All else being equal, expensing the cost of this asset, instead of capitalizing it, will most likely result in:

- A. higher return on equity at the end of the first year.
- B. lower cash from investing activities in the first year.
- C. the same retained earnings at the end of the asset's useful life.

# **Question 25**

At the beginning of this year, a company purchased electronic goods that cost €120,000 and chose to expense the purchase instead of capitalizing it. The electronics have a useful life of 3 years with zero salvage value, and the company uses straight-line depreciation. The company reports €300,000 in revenue each year and is taxed at 25%. There are no other expenses aside from the purchase cost and corporate tax. Based only on this information and compared to capitalizing the asset, expensing the asset *most likely* results in:

- A. net PPE that is €120,000 lower in the current year.
- B. net income that is €60,000 lower in the current year.
- C. cash from operations that is €100,000 higher in the current year.

# **Question 26**

A company purchased equipment at the beginning of 20X2. At the end of 20X2, the fair value of the equipment fell to €10,000 below its book value. Using the revaluation model and ignoring tax effects, on the 20X2 financial reports, this *most likely* results in a €10,000 reduction in:

- A. net income.
- B. accumulated depreciation.
- C. other comprehensive income.

#### Question 27

A company sells a noncurrent asset for \$3 million. It originally paid \$4 million for the asset and reported a loss of \$900,000 on the sale. At the time of the sale, the accumulated depreciation for the asset was *closest* to:

- A. \$100,000
- B. \$1,000,000
- C. \$1,900,000

# **Question 28**

A company reporting under IFRS elects to use the revaluation model for its equipment. The company purchases equipment for €10 million during 20X3. At the end of 20X3, the fair value of the equipment is €11 million. The company *most likely* records a €1 million:

- A. increase in equity.
- B. gain on the income statement.
- C. decrease in depreciation expense.

A decision to capitalize the purchase of a long-lived asset instead of expensing it will *most likely* result in a company reporting:

A. less net income in the first year.

- B. greater cash flow from investing activities in the first year.
- C. greater cash flow from operating activities in the first year.

# **Question 30**

Company A purchases a patent from Company B and acquires Company C along with its customer list. The *most appropriate* way for Company A to account for these purchases would be to:

- A. capitalize both the patent and the customer list.
- B. capitalize the patent and expense the customer list.
- C. expense the patent and capitalize the customer list.

# **Question 31**

At the beginning of 20X7, a company acquires a trademark for \$85 million; the trademark is considered held for use. At the end of 20X7, the company records an impairment charge of \$20 million due to a pending lawsuit. In 20X8, the company receives a favorable ruling, and the trademark is fairly valued at \$185 million at year end. If the company reports under US GAAP, the reported increase in the trademark's value for 20X8 is *closest* to:

- A. \$0
- B. \$20 million
- C. \$100 million

# **Question 32**

With respect to impairment losses, the recoverable amount under IFRS is *most likely* defined as the greater of the asset's value in use or:

- A. fair value minus selling cost.
- B. fair value.
- C. gross book value minus selling cost.