

FA Module 13 Depreciation and deferred taxes practice exam questions

(The attached PDF file has better formatting.)

A firm uses straight line depreciation for fixed assets with an estimated useful life of 12 years for its financial statements and 8 years for taxable income.

- Equipment is bought for 500 on December 31, 20X0.
- The firm's corporate income tax payments are 65 in 20X1, 69 in 20X2, and 57 in 20X3.
- In 20X1 and 20X2, the corporate tax rate is expected to be 19% for all years.
- On January 1, 20X3, legislation is enacted that reduces the tax rate to 10% for 20X4 and later years.

Depreciation on the equipment causes the only deferred tax assets or liabilities for the firm.

Question 13.1: Carrying value

What is the carrying value of the equipment on December 31, 20X1?

Answer 13.1: $500 - 500 / 12 = 458.33$

(carrying value = purchase price – financial depreciation)

Question 13.2: Tax basis

What is the tax basis of the equipment on December 31, 20X1?

Answer 13.2: $500 - 500 / 8 = 437.50$

(tax basis = purchase price – tax depreciation)

Question 13.3: Deferred tax asset or liability

What is the deferred tax asset (liability) at December 31, 20X1?

Answer 13.3: $(437.50 - 458.33) \times 19\% = (3.96)$

(deferred tax asset = (tax basis – carrying value) \times tax rate)

Question 13.4: Tax expense

What is the tax expense in 20X1?

Answer 13.4: $65 - -3.96 = 68.96$

(tax expense = taxes paid – Δ (deferred tax asset) + Δ (deferred tax liability))

Question 13.5: Carrying value

What is the carrying value of the equipment on December 31, 20X2?

Answer 13.5: $500 - (2 \times 500 / 12) = 416.67$

(carrying value = purchase price – accumulated financial depreciation)

Question 13.6: Tax basis

What is the tax basis of the equipment on December 31, 20X2?

Answer 13.6: $500 - (2 \times 500 / 8) = 375.00$

(tax basis = purchase price – accumulated tax depreciation)

Question 13.7: Deferred tax asset or liability

What is the deferred tax asset (liability) at December 31, 20X2?

Answer 13.7: $(375.00 - 416.67) \times 19\% = (7.92)$

(deferred tax asset = (tax basis – carrying value) \times tax rate)

Question 13.8: Tax expense

What is the tax expense in 20X2?

Answer 13.8: $69 - (-7.92 - -3.96) = 72.96$

(tax expense = taxes paid – Δ (deferred tax asset) + Δ (deferred tax liability))