FA Module 16 Equity method basic practice exam questions

covering net income, shareholder dividends, investment in subsidiaries, net income from subsidiary

(The attached PDF file has better formatting.)

XYZ has 100 shares outstanding, with a share price on December 31, 20X1, 20X2, 20X3, and 20X4 of

December 31, 20X1: 20.90
December 31, 20X2: 22.40
December 31, 20X3: 25.40
December 31, 20X4: 26.10

XYZ's book value is 4,180 on December 31, 20X1.

In 20X2, 20X3, and 20X4, XYZ reports net income and pays shareholder dividends of

	20X2	20X3	20X4
Net Income	453	502	653
Shareholder Dividends	108	196	203

ABC buys 40% of XYZ's 200 outstanding shares on December 31, 20X1. ABC has no operations besides its investment in XYZ. The corporate tax rate on income from subsidiaries is zero.

Question 16.1: Investment in subsidiaries

What is ABC's investment in subsidiaries on December 31, 20X1?

Answer 16.1: $40\% \times 20.90 \times 200 = 1,672.00$

(investment in subsidiaries = shares bought x price per share)

Question 16.2: Net income from subsidiary

What is ABC's net income from its subsidiary in 20X2?

Answer 16.2: $453 \times 40\% = 181.20$

(parent's net income = subsidiary's net income x percentage owned)

Question 16.3: Investment in subsidiaries

What is ABC's investment in subsidiaries on December 31, 20X2?

Answer 16.3: $1,672.00 + 181.20 - 108 \times 40\% = 1,810.00$

(investment in subsidiaries = investment in subsidiaries at the beginning of the year + parent's share of subsidiary's net income – dividends received)

Question 16.4: Net income from subsidiary

What is ABC's net income from its subsidiary in 20X3?

Answer 16.4: $502 \times 40\% = 200.80$

(parent's net income = subsidiary's net income x percentage owned)

Question 16.5: Investment in subsidiaries

What is ABC's investment in subsidiaries on December 31, 20X3?

Answer 16.5: $1,810.00 + 200.80 - 196 \times 40\% = 1,932.40$

(investment in subsidiaries = investment in subsidiaries at the beginning of the year + parent's share of subsidiary's net income – dividends received)

Question 16.6: Net income from subsidiary

What is ABC's net income from its subsidiary in 20X4?

Answer 16.6: $653 \times 40\% = 261.20$

(parent's net income = subsidiary's net income x percentage owned)

Question 16.7: Investment in subsidiaries

What is ABC's investment in subsidiaries on December 31, 20X4?

Answer 16.7: $1,932.40 + 261.20 - 203 \times 40\% = 2,112.40$

(investment in subsidiaries = investment in subsidiaries at the beginning of the year + parent's share of subsidiary's net income – dividends received)