FA Module 16 Equity method Robinson downstream sale practice exam questions

covering identifiable net assets, annual amortization of the excess purchase price, equity income from the investment in the subsidiary, parent's share of net income

(The attached PDF file has better formatting.)

ABC owns 40% of XYZ. The annual amortization of the excess purchase price of XYZ allocated to identifiable net assets is 11.

- ! In 20XX ABC sells inventory with a cost of 155 to XYZ for 200.
- ! XYZ resells 156 of the inventory to outsiders in 20XX and resells the rest in the next year (20XX+1).

XYZ reports net income of 621 in 20XX and of 588 in 20XX+1.

Question 16.1: Inter-company sale

What is the profit in ABC's 20XX income from the inter-company sale to XYZ?

Answer 16.1: 200 - 155 = 45

(profit = net revenue - cost of goods sold)

Question 16.2: Unrealized profit percentage

What is the percentage of ABC's 20XX inter-company sale to XYZ that is unrealized (deferred)?

Answer 16.2:  $40\% \times (1 - 156 / 200) = 8.80\%$ 

(unrealized profit percentage = percentage ownership  $\times$  (1 – resale percentage to outsiders))

Question 16.3: Unrealized profit

What is the unrealized profit in ABC's 20XX income from the inter-company sale to XYZ?

Answer 16.3:  $45 \times 8.8\% = 3.96$ 

(unrealized profit = profit × unrealized profit percentage)

Question 16.4: Parent's share of net income

What is ABC's share of XYZ's net income in 20XX?

Answer 16.4:  $621 \times 40\% = 248.40$ 

(parent's share of net income = subsidiary's net income x ownership percentage)

Question 16.5: 20XX equity income

What is the 20XX equity income from the investment in XYZ on ABC's income statement?

Answer 16.5: 248.40 - 3.96 - 11 = 233.44

(equity income from the investment in the subsidiary = parent's share of net income of subsidiary – unrealized profit – amortization of the excess purchase price)

Question 16.6: Parent's share of net income

What is ABC's share of XYZ's net income in 20XX+1?

Answer 16.6:  $588 \times 40\% = 235.20$ 

(parent's share of net income = subsidiary's net income x ownership percentage)

Question 16.7: 20XX+1 equity income

What is the 20XX+1 equity income from the investment in XYZ on ABC's income statement?

Answer 16.7: 235.20 + 3.96 - 11 = 228.16

(equity income from the investment in the subsidiary = parent's share of net income of subsidiary + unrealized profit from previous year and now realized – amortization of the excess purchase price)