FA Module 16 Equity method Robinson downstream sale practice exam questions

(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 16.2: Inter-company sale

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

Answer 16.2: 200 – 155 = 45

(profit = net revenue – cost of goods sold)

Question 16.3: Unrealized profit percentage

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

Answer 16.3: 40% × (1 – 156 / 200) = 8.80%

(unrealized profit percentage = percentage ownership × (1 – resale percentage to outsiders) )

Question 16.4: Unrealized profit

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

Answer 16.4: 45 × 8.8% = 3.96

(unrealized profit = profit × unrealized profit percentage)

Question 16.5: Parent's share of net income

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

Answer 16.5: 621 × 40% = 248.40

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

Question 16.6: 20XX equity income

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

Answer 16.6: 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 16.7: Parent's share of net income

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

Answer 16.7: 588 × 40% = 235.20

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

Question 16.8: 20XX+1 equity income

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

Answer 16.8: 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)