FA Module 19 Foreign currency translation practice exam questions

(The attached PDF file has better formatting.)

On December 31, 20XX-1 (one year before December 31, 20XX), ABC, a U.S. based firm, forms XYZ, a subsidiary in Europe. On that day, XYZ issues shares of stock, borrows long-term debt, and buys fixed assets.

- XYZ's local currency is the euro.
- ABC's presentation currency is the U.S. dollar.
- The corporate tax rate for XYZ is 20%.

XYZ's 20XX entries on its statement of profit or loss (in euros) [revenue is positive; expenses are negative]:

- Net revenue: 399
- Cost of goods sold: -112
- Depreciation expense: -70
- Interest expense: -60

XYZ's December 31, 20XX, entries for its statement of financial position (in euros) are

- Cash + net receivables: 318 (= cash + accounts receivable – accounts payable)
- Inventory: 49
- Fixed assets (gross): 729
- Accumulated depreciation: -72.9 (contra-asset shown as a negative entry)
- Long-term debt: 528
- Common stock: 437

XYZ declared and paid dividends to shareholders of -79 in 20XX (shown as a negative entry).

ABC's presentation currency is the U.S. dollar ($), and XYZ's local currency is the European euro (€). The U.S. dollar to European euro exchange rate at key dates is

- Date of stock issue and purchase of fixed assets: $1.01 = €1.00
- Average date of purchase for goods sold: $1.12 = €1.00
- 20XX average: $1.23 = €1.00
- Date shareholder dividends declared: $1.34 = €1.00
- Average date of purchase 12/31/20XX inventory: $1.45 = €1.00
- December 31, 20XX: $1.56 = €1.00

(The translation adjustment and the remeasurement gain or loss are not naturally positive or negative; the practice exam questions below emphasize the sign of each entry.)

Question 19.1: Translated net revenue

What is translated net revenue for 20XX?

Answer 19.1: 399 × 1.23 = 490.77

(translated net revenue = net revenue in local currency × average exchange rate for the year)

Question 19.2: Translated cost of goods sold

What is the translated cost of goods sold for 20XX for the current rate method?

Answer 19.2: -112 × 1.23 = (137.76)

(translated cost of goods sold for the current rate method = cost of goods sold in local currency × average exchange rate for the year)

(Shown here as negative because cost of goods sold is an expense)

Question 19.3: Translated cost of goods sold

What is the translated cost of goods sold for 20XX for the temporal method?

Answer 19.3: -112 × 1.12 = (125.44)

(translated cost of goods sold for the temporal method = cost of goods sold in local currency × average date of purchase for goods sold)

(Shown here as negative because cost of goods sold is an expense)

Question 19.4: Translated inventory

What is the translated inventory at December 31, 20XX, for the current rate method?

Answer 19.4: 49 × 1.56 = 76.44

(translated inventory for the current rate method = inventory in local currency × current exchange rate)

Question 19.5: Translated inventory

What is the translated inventory at December 31, 20XX, for the temporal method?

Answer 19.5: 49 × 1.45 = 71.05

(translated inventory for the temporal method = inventory in local currency × average date of purchase of the December 31, 20XX inventory)

Question 19.6: Translated depreciation expense

What is translated depreciation expense for 20XX for the current rate method?

Answer 19.6: -70 × 1.23 = (86.10)

(translated depreciation expense for the current rate method = depreciation expense in local currency × average exchange rate for the year)

(Shown here as negative because depreciation is an expense)

Question 19.7: Translated depreciation expense

What is translated depreciation expense for 20XX for the temporal method?

Answer 19.7: -70 × 1.01 = (70.70)

(translated depreciation expense for the temporal method = depreciation expense in local currency × exchange rate at date of purchase of fixed assets)

(Shown here as negative because depreciation is an expense)

Question 19.8: Translated interest expense

What is translated interest expense for 20XX?

Answer 19.8: -60 × 1.23 = (73.80)

(translated interest expense = interest expense in local currency × average exchange rate for the year)

(Shown here as negative because interest is an expense)

Question 19.9: Tax expense

What is tax expense for 20XX in the local currency?

Answer 19.9: -20% × (399 – 112 – 70 – 60) = (31.40)

(tax expense = tax rate × (net revenue – cost of goods sold – depreciation expense – interest expense)

(shown here as negative because tax is an expense)

Question 19.10: Translated tax expense

What is translated tax expense for 20XX?

Answer 19.10: -31.40 × 1.23 = (38.62)

(translated tax expense = tax expense in local currency × average exchange rate for the year)

(Shown here as negative because interest is an expense)

Question 19.11: Translated net income

What is translated net income in 20XX for the current rate method?

Answer 19.11: 490.77 – 137.76 – 86.10 – 73.80 – 38.62 = 154.49

(net income = net revenue – cost of goods sold – depreciation expense – interest expense – tax expense)

Question 19.12: Translated net income

What is translated net income in 20XX for the temporal method?

Answer 19.12: 490.77 – 125.44 – 70.70 – 73.80 – 38.62 = 182.21

(net income = net revenue – cost of goods sold – depreciation expense – interest expense – tax expense)

Question 19.13: Translated shareholder dividends

What are translated shareholder dividends in 20XX?

Answer 19.13: -79 × 1.34 = (105.86)

(translated shareholder dividends = shareholder dividends in local currency × exchange rate at date that shareholder dividends are declared)

(Shown here as negative because shareholder dividends are a cash outflow)

Question 19.14: Translated retained earnings

What are translated retained earnings at December 31, 20XX, for the current rate method?

Answer 19.14: 154.49 – 105.86 = 48.63

(change in retained earnings = net income – shareholder dividends)

Question 19.15: Translated total assets

What are translated total assets at December 31, 20XX, at the current rate method?

Answer 19.15: (318 + 49 + 729 – 72.90) × 1.56 = 1,596.04

(translated total assets = (cash + inventory + fixed assets – accumulated depreciation) × current exchange rate)

Question 19.16: Translated long-term debt

What is translated long-term debt at December 31, 20XX?

Answer 19.16: 528 × 1.56 = 823.68

(translated long-term debt = long-term debt in local currency × current exchange rate)

Question 19.17: Translated common stock

What is translated common stock at December 31, 20XX?

Answer 19.17: 437 × 1.01 = 441.37

(translated common stock = common stock in local currency × exchange rate when stock was issued)

Question 19.18: Translation adjustment

If XYZ's functional currency is the European euro, what is the translation adjustment for December 31, 20XX, on ABC's financial statements?

Answer 19.18: 1,596.04 – 823.68 – 441.37 – 48.63 = 282.36

(translation adjustment = translated total assets – translated long-term debt – translated common stock – translated retained earnings, using current rate method)

Question 19.19: Translated total assets

What are translated total assets at December 31, 20XX, at the temporal method?

Answer 19.19: 318 × 1.56 + 49 × 1.45 + (729 – 72.90) × 1.01 = 1,229.79

(translated total assets at the temporal method = (cash × current exchange rate + inventory × inventory exchange rate + (fixed assets – accumulated depreciation) × fixed assets exchange rate)

Question 19.20: Translated retained earnings

What are translated retained earnings at December 31, 20XX, at the temporal method?

Answer 19.20: 1,229.79 – 823.68 – 441.37 = (35.26)

(translated retained earnings = translated total assets – translated long-term debt – translated common stock)

Question 19.21: Remeasurement gain or loss

If XYZ's functional currency is the U.S. dollar, what is remeasurement gain or loss for 20XX on ABC's financial statements?

Answer 19.21: -35.26 – 182.21 + 105.86 = (111.61)

(remeasurement gain or loss = translated retained earnings – translated net income + translated shareholder dividends (or – translated shareholder dividends if shareholder dividends are shown as a negative figure))