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Students' Department

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AMERICAN INSTITUTE EXAMINATIONS

(Note.—The fact that these solutions appear in The Journal of Accountancy should not cause the reader to assume that they are the official solutions of the board of examiners. They represent merely the opinions of the editors of the *Students' Department.*)

Examination in Accounting Theory and Practice—Part I

May 19, 1927, 1 p. m. to 6 p. m.

The candidate must answer questions 1 or 2, 3 or 4 and 5 or 6

No. 1 (47 points):

The Arlington Silk Mills incorporated a selling company in France, as of January 1, 1926, to take over the assets and liabilities of their Paris office at that date, which were as follows:

Assets

Cash	Fcs. 134,000
Accounts receivable	680,000
Merchandise at invoice price, plus freight charges, etc.	1,050,000
Furniture and fixtures	40,000
	Fcs. 1,904,000

Liabilities

Accounts payable	Fcs. 23,800
Arlington Silk Mills—current account	1,780,200
Capital stock	100,000
	Fcs. 1,904,000

The exchange rate at January 1, 1926, was 3.70 cents to the franc. During the year, merchandise costing $160,000 was shipped by the Arlington Silk Mills and billed at 10% above cost, and remittances amounting to 5,000,000 francs were made by the French company, the details being as follows:

Merchandise invoiced				*Remittances*			
1/16	$30,000	@	.0373	2/20	Fcs. 500,000	@	.0356
3/27	20,000	"	.0342	6/12	1,000,000	"	.0287
5/6	50,000	"	.0324	7/10	800,000	"	.0254
8/14	40,000	"	.0275	8/28	1,000,000	"	.0284
10/16	36,000	"	.0286	11/27	700,000	"	.0360
				12/12	1,000,000	"	.0379
	$176,000				Fcs. 5,000,000		

The trial balance of the French company at December 31, 1926, forwarded to the American company, was as follows:

Sales		Fcs. 7,730,000.00
Merchandise purchased	Fcs. 5,645,581.46	
Merchandise inventory	1,050,000.00	
Freight charges	580,000.00	
Warehouse charges	213,000.00	
Salaries	474,000.00	
General expenses	306,000.00	
Selling expenses	117,000.00	
Accounts receivable	1,610,000.00	
Cash	284,000.00	
Furniture and fixtures	50,000.00	
Accounts payable		73,800.00
Arlington Silk Mills		2,425,781.46
Capital stock		100,000.00
	Fcs. 10,329,581.46	Fcs. 10,329,581.46

The inventory at the end of the year amounted to 1,412,000 francs, which included freight charges, etc., of 140,000 francs, the exchange rate at that date being 3.90 cents to the franc.

Prepare a balance-sheet and profit-and-loss account, in dollars, for consolidation with the accounts of the American company and submit the journal entries necessary for the purpose on the books of the company.

Solution:

Three different rates are used in converting the trial balance of the French company, expressed in francs, into dollars. An average rate, obtained by using the known rates prevailing during the year, is used for sales, expenses and additions to furniture and fixtures made during the year. Inventory, furniture and fixtures, capital stock and the balance due the Arlington Silk Mills at January 1, 1926, are converted at the rate of that date, and the rate at December 31, 1926, is applied to the current assets and the accounts payable at the end of the year. Merchandise purchased from and remittances to the Arlington Silk Mills are converted at the dollar balances of the accounts as they would appear on that company's books.

Computation of average rate of exchange

Date	Rate
Jan. 16	.0373
Feb. 20	.0356
Mar. 27	.0342
May 6	.0324
June 12	.0287
July 10	.0254
Aug. 14	.0275
Aug. 28	.0284
Oct. 16	.0286
Nov. 27	.0360
Dec. 12	.0379
	.3520 ÷ 11 = .0320 the average rate

Conversion of remittances into dollars

	Francs	Rate	Dollars
Feb. 20	Fcs. 500,000	.0356	$17,800.00
June 12	1,000,000	.0287	28,700.00
July 10	800,000	.0254	20,320.00
Aug. 28	1,000,000	.0284	28,400.00
Nov. 27	700,000	.0360	25,200.00
Dec. 12	1,000,000	.0379	37,900.00
	Fcs. 5,000,000		$158,320.00

Conversion of merchandise invoiced into francs

	Dollars	Rate	Francs
Jan. 16	$30,000.00	.0373	Fcs. 804,289.55
Mar. 27	20,000.00	.0342	584,795.32
May 6	50,000.00	.0324	1,543,209.88
Aug. 14	40,000.00	.0275	1,454,545.45
Oct. 16	36,000.00	.0286	1,258,741.26
	$176,000.00		Fcs. 5,645,581.46

The statement on page 65 shows the conversion into dollars of the trial balance of the French company at December 31, 1926.

Inventory—December 31, 1926:

Merchandise	Fcs. 1,272,000.00 @ .039 =	$49,608.00
Freight	Fcs. 140,000.00 @ .039 =	5,460.00
Total		$55,068.00

Note:

Furniture and fixtures—	Francs	Rate	Dollars
Balance, January 1, 1926	Fcs. 40,000.00	.037	$1,480.00
Additions during year	10,000.00	.032	320.00
Balance, December 31, 1926	Fcs. 50,000.00		$1,800.00

Arlington Silk Mills—	Francs	Rate	Dollars
Balance, January 1, 1926	Fcs. 1,780,200.00	.037	$65,867.40
Merchandise shipments	5,645,581.46	R	176,000.00
	Fcs. 7,425,781.46		$241,867.40
Less—Remittances	5,000,000.00	R	158,320.00
Balance, December 31, 1926	Fcs. 2,425,781.46		$83,547.40

The French Company

Trial Balance—December 31, 1926

	Francs		Rate	Dollars	
Sales		Fcs. 7,730,000.00	.032		$247,360.00
Merchandise purchased	Fcs. 5,645,581.46		R*	$176,000.00	
Merchandise inventory	1,050,000.00		.037	38,850.00	
Freight charges	580,000.00		.032	18,560.00	
Warehouse charges	213,000.00		.032	6,816.00	
Salaries	474,000.00		.032	15,168.00	
General expense	306,000.00		.032	9,792.00	
Selling expense	117,000.00		.032	3,744.00	
Accounts receivable	1,610,000.00		.039	62,790.00	
Cash	284,000.00		.039	11,076.00	
Furniture and fixtures	50,000.00		Note	1,800.00	
Accounts payable		73,800.00	.039		2,878.20
Arlington Silk Mills		2,425,781.46	Note		83,547.40
Capital stock		100,000.00	.037		3,700.00
	Fcs. 10,329,581.46	Fcs. 10,329,581.46		$344,596.00	$337,485.60
Exchange adjustment					7,110.40
				$344,596.00	$344,596.00

* R= Balances of reciprocal accounts on books of the Arlington Silk Mills.

THE FRENCH COMPANY

Statement of profit and loss for the year ended December 31, 1926

Sales		$247,360.00
Less—Cost of goods sold:		
Inventory, January 1, 1926	$38,850.00	
Purchases	176,000.00	
Freight charges	18,560.00	
Total	$233,410.00	
Less—Inventory, December 31, 1926	55,068.00	178,342.00
Gross profit		$69,018.00
Less—Expenses:		
Warehouse expenses	$6,816.00	
Salaries	15,168.00	
General expense	9,792.00	
Selling expense	3,744.00	35,520.00
Net profit		$33,498.00

THE FRENCH COMPANY

Balance-Sheet—December 31, 1926

Assets

Cash	$11,076.00
Accounts receivable	62,790.00
Merchandise inventory at invoice price plus freight, etc.	55,068.00
Furniture and fixtures	1,800.00
	$130,734.00

Liabilities

Accounts payable	$2,878.20
Arlington Silk Mills	83,547.40
Capital stock	3,700.00
Net profit for year ended December 31, 1926	33,498.00
Reserve for exchange fluctuation	7,110.40
	$130,734.00

In order to take up the profits of the French company the following journal entries would be made on the books of the Arlington Silk Mills:

Investment in French company	$33,498.00	
French company—Profit and loss		$33,498.00
To take up the net profit for the year ended December 31, 1926, as shown by the statement of profit and loss of the French company.		
Investment in French company	7,110.40	
Reserve for exchange fluctuation		7,110.40
To set up unrealized profit on exchange.		

No journal entries on the books of the Arlington Silk Mills are necessary for the purpose of consolidating the accounts of the two companies. However, adjustments would be made in the working papers for the unrealized inter-company profit in the opening and closing inventories of the French company. The effect of the adjustment of the opening inventory would be to reduce the charge to cost of sales in the consolidated working papers while the adjustment of the closing inventory would reduce the amount credited to cost of sales.

The problem does not state the exact method followed in determining the amount of the inventory at December 31, 1926, so that it is not possible to state positively what rate should be used in converting this inventory into dollars. There are at least two possibilities which may be considered, as follows:

(1) It is assumed that shipments were billed to the French company in dollars and that each invoice was converted into francs, at the then prevailing rate, for entry of the cost of the goods in the accounts of the French company. Now, if the closing inventory were priced in francs at the cost in francs determined as just stated, and if we follow the "first in—first out" assumption, it would represent the following:

	Francs	Dollars	Rate
(a) The entire shipment of October 16, 1926	Fcs. 1,258,741.26	$36,000.00	.0286
(b) A portion of the shipment of August 14, 1926	13,258.74	364.62	.0275
Total	Fcs. 1,272,000.00	$36,364.62	.02859
(c) Freight charges, etc., converted at the rate of .02859	140,000.00	4,002.60	.02859
Total inventory	Fcs. 1,412,000.00	$40,367.22	

(2) The inventory may have been priced, first, at cost in dollars as shown by the original invoices, the amount of the inventory in dollars then being converted into francs at the rate of .039 prevailing at the date of the inventory.

If the amount, in francs, of the inventory were determined as described in (1), the conversion at the rate of .039, the current rate at the date of the balance-sheet, would result in the statement of the inventory at an amount $14,700.78 in excess of the cost thereof in dollars, thus:

Inventory if converted at .039	$55,068.00
Actual cost in dollars	40,367.22
Overstatement	$14,700.78

On the other hand, if the amount, in francs, of the inventory were determined as described in (2), conversion at .039 would result in a correct statement of the cost in dollars and the use of any other rate would result in an overstatement or understatement of the inventory. For example, if the closing inventory represents goods costing, in dollars, $55,068 the use of the rate at the date of the balance-sheet (.039) will result in the showing of that amount, thus:

Fcs. 1,412,000.00 @ .039 = $55,068.00

In this solution, the rate of .039 is used in converting the closing inventory for the following reasons:

(1) The opening inventory was converted at the current rate at the date thereof.

(2) The use of the current rate in converting current assets is in accord with standard accounting practice.

(3) The method whereby the closing inventory was determined as 1,412,000 francs is not known.

No. 2 (47 points):

The Kroy Manufacturing Company acquired all the assets of the Pioneer Development Company as set forth in the accompanying balance-sheet, as at December 31, 1925, and thereafter operated the plant as a branch.

VENDOR COMPANY

Balance-sheet—as at December 31, 1925

Assets

Current assets:		
Cash		$79,592.81
Customers' notes and accounts receivable—		
Notes	$153,460.23	
Accounts receivable	495,816.44	
		649,276.67
Inventories at cost or market (the lower)—		
Raw materials and supplies	$173,651.83	
Manufactured goods and goods in process	393,598.17	
		567,250.00
Total current assets		$1,296,119.48
Prepaid expenses:		
Insurance, interest and taxes		$15,876.29
Fixed assets:		
Land	$123,978.15	
Buildings	571,836.32	
Machinery and equipment	929,117.19	
Office furniture and fixtures	17,824.01	
		1,642,755.67
Patents (amortized value)		500,000.00
Goodwill		750,000.00
		$4,204,751.44

Liabilities

Current liabilities:		
Notes payable—banks and brokers		$175,000.00
Accounts payable—trade creditors		214,014.32
Accrued liabilities:		
Interest, state and local taxes		25,648.19
Wages		3,519.26
Provision for federal taxes:		
Year 1925		47,829.56
Prior years		83,012.34
Total current liabilities		$549,023.67
Funded debt:		
First mortgage 6% bonds, maturing April 30, 1927		$600,000.00
Reserves:		
Depreciation	$221,834.65	
Bad debts	10,154.89	
Decline in market of manufactured product	35,000.00	
General reserve	75,000.00	
		341,989.54

Capital stock issued:	
Preferred—10,000 shares, 6% cumulative	1,000,000.00
Common—217,500 shares, no par value, declared value	1,087,500.00
Capital surplus	268,919.05
Earned surplus	357,319.18
	$4,204,751.44

The consideration agreed upon was as follows:

(1) Cash to retire the preferred stock at a premium of 10%;
(2) The assumption of all liabilities except federal taxes for the years prior to 1925;
(3) Payment in cash equal to $2.50 per share on the common stock;
(4) The issuance of one share of the Kroy Manufacturing Company's common stock, par value $100, for every fifteen shares of the vendor company.
(The market value of the Kroy Manufacturing Company's common stock was $125.)

The Development Company was liquidated forthwith and a complete distribution made to the stockholders. The expenses of liquidation amounted to $6,162.66 and the federal taxes for the period prior to 1925 were assessed and paid at the amount provided therefor in the balance-sheet.

Prepare journal entries to record the transactions on the books of both the vendor and purchasing companies and close the accounts of the former, showing particularly the account with the Kroy Company, the stockholders' and cash accounts.

Solution:

The consideration agreed upon in regard to the acquisition by the Kroy Manufacturing Company of all the assets of the Pioneer Development Company was as shown on page 70.

An important question of accounting principle is involved in the acquisition by the Kroy Manufacturing Company of the assets of the Pioneer Development Company. That is the question of the amount at which the 14,500 shares of the common stock of the Kroy Manufacturing Company, issued as part of the consideration agreed upon between the vendor and vendee, is to be recorded in the accounts of the two companies. If they had agreed upon a certain amount as the consideration, payable by the assumption of liabilities, the issue of a certain number of shares of stock and a certain amount of cash the question would not have arisen. In that case the amount for which the 14,500 shares were issued by the Kroy Manufacturing Company and the cost thereof to the Pioneer Development Company would have been the excess of the total consideration over the total of the cash payment and the liabilities assumed.

As the problem is stated, however, a choice must be made between three methods of treatment:

(a) The capital stock issued as part of the consideration may be recorded at par by both companies, and in that case the total consideration would be $4,159,761.33.

(b) Market value may be the basis of valuation by both companies. In that case the total consideration would be $4,522,261.33.

(c) Par value may be the basis of recording the stock in the accounts of the vendee, while market value may be used as a basis for recording the stock in the accounts of the vendor.

			Consideration if common stock is included (1) At par value	(2) At market value
Payable in cash:				
Cash to retire the preferred stock at a premium of 10%—				
Par value of preferred stock	$1,000,000.00			
Premium of 10%	100,000.00	$1,100,000.00		
Payment in cash equal to $2.50 per share on the common stock—				
217,500 share @ $2.50		543,750.00	$1,643,750.00	$1,643,750.00
Payable in common stock of the Kroy Manufacturing Company:				
One share common stock, par value $100 per share, for every fifteen shares of the vendor company—				
$\frac{217,500}{15}$ = 14,500 shares (Market value = $125 per share)			1,450,000.00	1,812,500.00
Liabilities assumed by the Kroy Manufacturing Company—				
Notes payable—banks and brokers		$175,000.00		
Accounts payable—trade creditors		214,014.32		
Accrued interest, state and local taxes		25,648.19		
Accrued wages		3,519.26		
Federal taxes for the year 1925		47,829.56		
First mortgage 6% bonds		600,000.00	1,066,011.33	1,066,011.33
Total			$4,159,761.33	$4,522,261.33

Arguments can be advanced in support of each of the above methods of treatment. From the standpoint of the Pioneer Development Company, it would seem that the market value at the date of acquisition of the stock received is the proper amount at which to record it. There is some question, however, as to the use of market value in the case of the Kroy Manufacturing Company which issued the stock. It would be more conservative, without doubt, to use par value, but, since information is given in the problem as to the market value of the stock it would seem to be more correct to use such value, inasmuch as it is the best evidence to be had as to the real value of the stock. The use of $125 per share results in a paid-in-surplus account of $362,500 and an increase in the goodwill account of like amount. Certainly, if the stock were sold for cash at market value and the proceeds paid to the vendor of the assets, there would be no question that the amount received by the Kroy Manufacturing Company for its stock resulted in such paid-in surplus and the cost of the assets of the Pioneer Development Company was $362,500 more than if the cost included only the par value of the stock.

As an argument against the use of $125 per share as the valuation at which the stock is to be recorded on the books of the issuer, it may be contended that the market price of the stock might decline as a result of the additional issue of 14,500 shares. It does not seem necessary, however, to speculate upon such possibilities and there appears no good reason why the statement as to the market value of the stock may not be taken at its face value. It might also be contended that, even if market value were used, with a paid-in surplus resulting therefrom, the amount of such paid-in surplus should be used to write off a portion of the goodwill account. That, however, would be a matter to be decided by the board of directors.

It is impossible to determine the amount actually paid for the goodwill of the vendor for the reason that no information is given as to the valuations, if any, placed upon the various assets by the vendees. In the absence of such information all the assets are taken up on the books of the Kroy Manufacturing Company at their book values on the books of the vendor, the excess of the consideration over total book value of the assets being treated as goodwill.

Journal entries on books of Kroy Manufacturing Company

(All dated December 31, 1925)

(1)

Cash	$79,592.81
Notes receivable	153,460.23
Accounts receivable	$495,816.44
Raw materials and supplies	173,651.83
Manufactured goods and goods in process	393,598.17
Prepaid expenses	15,876.29
Land	123,978.15
Buildings	571,836.32
Machinery and equipment	929,117.19
Office furniture and fixtures	17,824.01
Patents	500,000.00
Goodwill	1,299,499.43

Reserve for depreciation		$221,834.65
Reserve for bad debts		10,154.89
Pioneer Development Company, vendor		4,522,261.33

To record the purchase of all the assets of the Pioneer Development Company for a total consideration of $4,522,261.33 as follows:

Cash	$1,643,750.00
Common stock of this company (14,500 shares)	1,812,500.00
Liabilities assumed	1,066,011.33
	$4,522,261.33

(2)

Pioneer Development Company, vendor	$1,066,011.33	
Notes payable		$175,000.00
Accounts payable		214,014.32
Accrued interest, state and local taxes		25,648.19
Accrued wages		3,519.26
Federal taxes for 1925		47,829.56
First mortgage 6% bonds (Due April 30, 1927)		600,000.00

To record the assumption of liabilities of Pioneer Development Company, as part of consideration in the acquisition of the assets of that company.

(3)

Pioneer Development Company, vendor	$3,456,250.00	
Cash		$1,643,750.00
Capital stock, common		1,450,000.00
Premium on capital stock		362,500.00

To record payment of cash and issue of 14,500 shares of common stock as part of consideration in acquisition of the assets of the Pioneer Development Company.

(4)

Branch current account	$1,301,840.88	
Reserve for bad debts	10,154.89	
Raw materials and supplies		$173,651.83
Manufactured goods and goods in process		393,598.17
Accounts receivable		495,816.44
Notes receivable		153,460.23
Prepaid expenses		15,876.29
Cash		79,592.81

To open account with branch operating the plant acquired from Pioneer Development Company.

(Assuming that fixed assets are carried on home office books and that current assets acquired from Pioneer Development Company are carried on branch books.)

Journal entries on books of Pioneer Development Company December 31, 1925

(1)

Kroy Manufacturing Company	$4,522,261.33	
Reserve for depreciation	221,834.65	
Reserve for bad debts	10,154.89	
Cash		$79,592.81
Notes receivable		153,460.23
Accounts receivable		495,816.44
Raw materials and supplies		173,651.83
Manufactured goods and goods in process		393,598.17
Prepaid expenses		15,876.29
Land		123,978.15
Buildings		571,836.32
Machinery and equipment		929,117.19
Office furniture and fixtures		17,824.01
Patents		500,000.00
Goodwill		750,000.00
Capital surplus		549,499.43

To record sale to Kroy Manufacturing company, vendee, of all the assets of this company for a total consideration of $4,522,261.33 and to credit to capital surplus the excess of the consideration over the book value of the assets.

(2)

Notes payable	$175,000.00	
Accounts payable	214,014.32	
Accrued interest, state and local taxes	25,648.19	
Accrued wages	3,519.26	
Federal income taxes payable for 1925	47,829.56	
First mortgage 6% bonds	600,000.00	
Kroy Manufacturing Company, vendee		$1,066,011.33

To record the assumption by the Kroy Manufacturing Company, vendee, of all liabilities of this company, except federal taxes for the years prior to 1925, as part of the agreed consideration in the sale of the assets as shown by the preceding entry.

(3)

Cash	$1,643,750.00	
Capital stock of Kroy Manufacturing Company	1,812,500.00	
Kroy Manufacturing Company, vendee		$3,456,250.00

To record the receipt of cash and 14,500 shares common stock of Kroy Manufacturing Company in accordance with terms of agreement for sale of the assets of this company.

(Date of following entries not stated)

(4)		
Federal taxes for years prior to 1925	$83,012.34	
Cash		$83,012.34
To record the payment of federal taxes assessed for years prior to 1925. (It is assumed that this payment includes interest, if any.)		
(5)		
Expenses of liquidation	$6,162.66	
Cash		$6,162.66
To record the payment of expenses of liquidation.		
(6)		
Earned surplus	$6,162.66	
Expenses of liquidation		$6,162.66
To charge to earned surplus the expenses of liquidation.		
(7)		
Reserve for decline in market of manufactured product	$35,000.00	
General reserve	75,000.00	
Earned surplus		$110,000.00
To restore to earned surplus the amount of reserves previously created by charges to (presumably) earned surplus.		
(8)		
Capital stock, preferred	$1,000,000.00	
Premium on preferred stock retired	100,000.00	
Cash		$1,100,000.00
To record retirement of entire amount of preferred stock outstanding at a premium of 10%. (It is assumed that there are no accumulated dividends which must be paid.)		
(9)		
Capital surplus	$100,000.00	
Premium on preferred stock retired		$100,000.00
To charge to capital surplus premium paid on preferred stock retired.		
(10)		
Cash	$1,812,500.00	
Capital stock of Kroy Manufacturing Company		$1,812,500.00
To record sale of capital stock of the Kroy Manufacturing Company.		
(11)		
Stockholders	$2,267,075.00	
Cash		$2,267,075.00
To record payment to stockholders as final and complete distribution of the remaining assets of the company.		

(12)

Capital stock, common	$1,087,500.00	
Capital surplus	718,418.48	
Earned surplus	461,156.52	
Stockholders		$2,267,075.00

To record closing of capital stock and surplus accounts as a result of the liquidation of the company and distribution to stockholders.

(If Kroy Manufacturing Company stock is to be distributed the following entry would replace entries (10) and (11) above)

Stockholders	$2,267,075.00	
Cash		$454,575.00
Capital stock of Kroy Manufacturing Company		1,812,500.00

To record distribution to stockholders of all remaining assets of the company consisting of common capital stock of the Kroy Manufacturing Company and cash.

Ledger Accounts

(References are to numbers of journal entries)

Kroy Manufacturing Company

1925			1925		
Dec. 31	(1)	$4,522,261.33	Dec. 31	(2)	$1,066,011.33
			31	(3)	3,456,250.00
		4,522,261.33			4,522,261.33

Stockholders

1926			1926		
?	(11)	$2,267,075.00	?	(12)	$2,267,075.00
		2,267,075.00			2,267,075.00

Cash

1925			1925		
Dec. 31 Balance		$79,592.81	Dec. 31	(1)	$79,592.81
31	(3)	1,643,750.00	?	(4)	83,012.34
?	(10)	1,812,500.00	?	(5)	6,162.66
			?	(8)	1,100,000.00
			?	(11)	2,267,075.00
		$3,535,842.81			$3,535,842.81