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H P. Baumann

STUDENTS' DEPARTMENT

EDITED BY H. P. BAUMANN

[NOTE.—The answers to Institute examination questions which appear in this department are in no sense official. They have not been reviewed by the board of examiners and represent merely the opinions of the editor of the Students' Department.]

AMERICAN INSTITUTE OF ACCOUNTANTS EXAMINATIONS

ACCOUNTING THEORY AND PRACTICE—PART II

May 13, 1938, 1:30 P.M. to 6:30 P.M.

No. 3 (20 points):

The American Investment Trust, a Delaware corporation, was organized June 30, 1929, with an authorized capital of 10,000 shares of no-par-value stock, all of which was sold at $110 a share. The directors assigned a value of $100 a share to the capital stock.

The annual reports to the stockholders for the calendar years 1932, 1933, and 1934 were prepared by the company's bookkeeper and included the following statements of surplus:

SURPLUS ACCOUNT, 1932

Earned surplus, January 1, 1932		$250,000
Deduct: Net loss for 1932		200,000
		$ 50,000
Capital surplus, January 1, 1932, representing excess of amount realized over assigned value of capital stock	$100,000	
Add: Surplus resulting from reduction of assigned value of capital stock to $50 a share	500,000	600,000
		$650,000
Deduct: Write-down of the cost of investments to market prices at December 31, 1932		579,000
Surplus, December 31, 1932		$ 71,000

SURPLUS ACCOUNT, 1933

Balance, January 1, 1933		$ 71,000
Add:		
Excess of assigned value over cost of 1,000 shares of capital stock retired		10,000
Net income for 1933		40,000
Surplus, December 31, 1933		$121,000

SURPLUS ACCOUNT, 1934

Earned surplus, January 1, 1934, representing net income for 1933		$ 40,000
Add: Net income for 1934:		
Six months ended June 30	$ 40,000	
Six months ended December 31	35,000	75,000
		$115,000

Deduct: Dividend paid December 31, 1934, $6 a share		$ 48,000
		67,000
Capital surplus, after deducting $5,000 representing the net excess of cost over assigned value of 2,000 shares of capital stock retired		66,000
Surplus, December 31, 1934		$133,000

The balance-sheet at December 31, 1934, as prepared by the bookkeeper, was as follows:

Assets		
Cash in bank		$ 38,000
Marketable securities (as per books)		493,550
Prepaid expenses		750
Treasury stock, 500 shares at cost		7,500
		$539,800
Liabilities		
Management fee		$ 2,600
Taxes payable, including federal income taxes		4,200
		$ 6,800
Capital		
Capital stock, 8,000 shares	$400,000	
Surplus	133,000	533,000
		$539,800

As a result of your audit of the company's accounts you ascertain further: (a) that no investment securities had been purchased or sold since December 31, 1932; (b) that on December 31, 1932, the stockholders approved (1) the reduction of the assigned value of the company's capital stock to $50 a share, (2) the write-down of the marketable investments to market quotations, and (3) the transfer of any deficit to capital surplus; (c) that the securities at December 31, 1934, market prices amounted to $723,400; (d) that the treasury stock represents the 500 shares acquired at low cost June 30, 1934, namely, for $7,500; (e) that 1,000 of the company's shares were acquired in 1934 and were retired September 30, 1934; and (f) that the authorized capital stock had been legally reduced by the 2,000 shares retired.

Prepare (1) a columnar statement of the annual surplus accounts in which capital and earned surplus are set forth in separate columns with a column for the total surplus; and (2) a balance-sheet at December 31, 1934, which you would be willing to certify.

Solution:

THE AMERICAN INVESTMENT TRUST

BALANCE-SHEET

December 31, 1934

Assets		
Current assets:		
Cash in bank	$ 38,000	
Marketable securities—at cost of $1,072,550 less write-down of $579,000 to market value at December 31, 1932 (Market value at December 31, 1934—$723,400)	493,550	$531,550
Prepaid expenses		750
		$532,300

Liabilities and Net Worth

Current liabilities:			
Management fee		$ 2,600	
Taxes payable, including federal income taxes		4,200	$ 6,800
Net worth:			
Capital stock of no par value—authorized and issued, 8,000 shares at an assigned value of $50 per share		$400,000	
Capital surplus, after the transfer of the deficit in earned-surplus account at December 31, 1932, amounting to $529,000		66,000	
Earned surplus (restricted in the amount of $7,500, the cost of 500 shares of treasury stock):			
Net income for 1933 and 1934	$115,000		
Less—dividend of $6 per share paid during the year 1934	48,000	67,000	
Total		$533,000	
Less—cost of 500 shares of treasury stock		7,500	525,500
			$532,300

Statement of surplus—page 334.

No. 4 (20 points):

The Green Valley Cattle Company is a corporation operating a large ranch. It has been in business a number of years and has built up a large surplus, all of which has been kept in the business either in livestock or land investments.

At the beginning of the year 1937 there were on the books the following accounts: inventory of stock cattle, $186,000; inventory of steers, $69,000; inventory of calves and yearlings, $43,500; land, $250,000; buildings, $60,500; farm machinery and equipment, $18,000; farm work animals, $15,000; saddle horses, $7,000; cash in bank, $16,800; accounts payable, $6,200; notes payable, $3,000; bonds payable, $50,000 (interest payable semiannually, July 1st and January 1st); capital stock, $50,000; and surplus.

During the year all liabilities were paid except the bonds, and additional expenditures were made for labor, $14,000; feed, $30,000; seed, $4,000; insurance, $2,500; taxes, $11,500; freight, $3,500; purchases of steers, $32,000; of land, $12,500; equipment for farm, $2,500; and bond interest coupons, $3,000. Receipts were for sales of steers, $68,500; sales of yearlings and calves, $32,000; sales of stock cattle, $16,500; sales of junk machinery, $100; sale of mineral rights on five-year contract, $25,000. The inventories at the end of the period were: stock cattle, $165,000, yearlings and calves, $45,000, and steers $71,000.

All products from the farm were being used to feed the cattle. There were no unpaid bills at the end of the year, and the feed inventory need not be considered. There were losses by death during the year as follows: saddle horses, $350; stock cattle, $1,800; steers, $1,650; and yearlings and calves, $900.

No depreciation had ever been taken in the past and in the solution of this problem it may be disregarded. It will be unnecessary to consider federal or any other taxes.

Immediately following the end of the year 1937, and before any business had been done in 1938, except the declaration and payment of a cash dividend of $30,000, the cattle and the title to the land and all other farm properties were sold for a flat sum of $600,000 cash and the assumption by the buyer of the bonded liability and of the obligations under the mineral-rights contract.

Prepare a columnar work sheet showing the trial balances at the beginning and the end of the year, as well as the subsequent sale of the property.

THE AMERICAN INVESTMENT TRUST

STATEMENT OF SURPLUS

January 1, 1932 to December 31, 1934

	Year 1932			Year 1933			Year 1934		
	Earned	Capital	Total	Earned	Capital	Total	Earned	Capital	Total
Balances, January 1, 1932	$250,000	$100,000	$350,000						
Net loss for year ended December 31, 1932	200,000*	....	200,000*						
Reduction of assigned value of capital stock to $50 a share	....	500,000	500,000						
Write-down of cost of investments to market prices at December 31, 1932	579,000*	....	579,000*						
Totals	$529,000*	$600,000	$ 71,000						
Transfer of deficit to capital surplus	529,000	529,000*	....						
Balances, December 31, 1932	$......	$ 71,000	$ 71,000	$.....	$71,000	$ 71,000			
Excess of assigned value ($50,000) over cost ($40,000) of 1,000 shares of capital stock retired				......	10,000	10,000			
Net income for year ended December 31, 1933				40,000	......	40,000			
Balances, December 31, 1933				$40,000	$81,000	$121,000	$40,000	$81,000	$121,000
Net income for six months ended June 30, 1934							40,000	......	40,000
Net income for six months ended December 31, 1934, including dividend on treasury stock of $3,000							35,000	......	35,000
Dividend paid December 31, 1934, $6 per share							48,000*	......	48,000*
Excess of cost ($65,000) over assigned value ($50,000) of 1,000 shares of capital stock retired							......	15,000*	15,000*
Balances, December 31, 1934							$67,000	$66,000	$133,000

* Red.

Solution:

THE GREEN VALLEY CATTLE COMPANY

WORK SHEET

Year Ended December 31, 1937

	Balance-sheet January 1, 1937		Transactions for the Year Ended December 31, 1937		Profit and Loss for the Year Ended December 31, 1937		Balance-sheet December 31, 1937		Subsequent Sale of Property and Payment of Dividend		Balance-sheet after Sale of Property and Payment of Dividend	
Inventory of stock cattle......	$186,000				$186,000	$165,000	$165,000			$165,000 (5)		
Inventory of steers...........	69,000		$ 32,000 (2)		101,000	71,000	71,000			71,000 (5)		
Inventory of calves and yearlings	43,500				43,500	45,000	45,000			45,000 (5)		
Land........................	250,000		12,500 (2)				262,500			262,500 (5)		
Buildings....................	60,500						60,500			60,500 (5)		
Farm machinery and equipment	18,000		2,500 (2)	$ 100 (3)			20,400			20,400 (5)		
Farm-work animals...........	15,000						15,000			15,000 (5)		
Saddle horses................	7,000				350		6,650			6,650 (5)		
Cash in bank.................	16,800		142,100 (3)	9,200 (1)			34,200		$600,000 (5)	30,000 (6)	$604,200	
				115,500 (2)								
Accounts payable............		$ 6,200	6,200 (1)									
Notes payable...............		3,000	3,000 (1)									
Bonds payable...............		50,000						$ 50,000	50,000 (5)			
Capital stock................		50,000						50,000				$ 50,000
Surplus......................		555,100						555,100	30,000 (6)	23,950 (5)		552,700
								3,650 (4)				
Labor.......................			14,000 (2)		14,000							
Feed........................			30,000 (2)		30,000							
Seed........................			4,000 (2)		4,000							
Insurance....................			2,500 (2)		2,500							
Taxes.......................			11,500 (2)		11,500							
Freight......................			3,500 (2)		3,500							
Accrued interest on bond......		1,500	3,000 (2)	3,000 (2)				1,500				1,500
Bond interest coupons........			3,000 (2)		3,000							
Sales of steers...............				68,500 (3)		68,500						
Sales of yearlings and calves...				32,000 (3)		32,000						
Sales of stock cattle..........				16,500 (3)		16,500						
Sale of mineral rights.........				25,000 (3)		5,000		20,000	20,000 (5)			
Net profit..................					3,650		3,650 (4)	3,650				
Totals................	$665,800	$665,800	$269,800	$269,800	$403,000	$403,000	$683,900	$683,900	$700,000	$700,000	$604,200	$604,200

NOTES:
(1) Payment of all liabilities, except bonds.
(2) Additional expenditures and accrual of bond interest.
(3) Receipts for sales.
(4) Transfer of profit for year.
(5) Sale of property.
(6) Payment of dividend.

No. 5 (20 points):

The following is a trial balance of the Allegheny Manufacturing Company as at December 31, 1937, before closing:

	Dr.	Cr.
Cash	$ 50,000	
Accounts receivable	150,000	
Reserve for discounts		$ 9,000
Inventory raw materials 1-1-37	100,000	
Inventory work in process 1-1-37	9,700	
Inventory finished product 1-1-37	22,000	
Machinery and fixtures	60,000	
Reserve for depreciation		15,000
Prepaid expenses	2,000	
Accounts payable		30,000
Capital stock		200,000
Undivided profits		176,200
Sales		552,000
Discounts and allowances on sales	35,000	
Purchases raw material	194,400	
Labor	113,950	
Manufacturing expenses	151,950	
Depreciation	3,000	
Selling expenses	48,000	
General expenses	42,200	
	$982,200	$982,200

The company manufactures a specialty product from a variety of raw materials. Three different kinds—A, B, and C—are produced, and based on previous experience, the cost is estimated to be:

	A	B	C	Average
Material	$10	$ 8	$ 6	$ 8
Labor	6	6	6	6
Overhead	6	6	6	6
	$22	$20	$18	$20

The company used the average cost of $20 in valuing the opening inventory and fixed the sales price for the year at $30 per unit.

No record is available of the quantities put in process or produced of each product, but the $552,000 sales were found to be made up as follows:

Grade A	10,400 units	
Grade B	3,900 units	
Grade C	4,100 units	
	18,400 units at $30....	$552,000

The opening inventory of work in process was comprised of: 700 units (mixed grades) with material cost, $5,600; labor cost, $3,050; and overhead expenses, $1,050—together $9,700.

The opening inventory of finished goods consisted of 1100 units (mixed grades) at the average cost of $20 each or $22,000.

The inventory of work in process at the end of the year is 1,000 units (600 of A, 300 of B, and 100 of C). Each is completed to the extent of one-half cost as to labor and overhead expense, but contains all of the material cost.

The inventory of the finished product at the end of the year is 1700 units (200 of A, 500 of B, and 1,000 of C).

The inventory of raw material at the end of the year is $80,000. From the foregoing data:

1. Determine the cost of the finished goods and of the work in process at the end of the year and show fully how these costs were computed.
2. Prepare the annual accounts.

Also show the defects of cost system and budgeting methods.

Solution:

(1) Computation of the work of finished goods and work in process inventories at December 31, 1937.

ALLEGHENY MANUFACTURING COMPANY

		Material	Labor	Overhead	Total
Schedule of manufacturing costs:					
Work in process, January 1, 1937		$ 5,600	$ 3,050	$ 1,050	$ 9,700
Materials used in manufacture:					
Inventory, Jan. 1, 1937	$100,000				
Purchases	194,400				
Total	$294,400				
Inventory, Dec. 31, 1937	80,000	214,400			214,400
Labor, overhead and depreciation			113,950	154,950	268,900
Totals		$220,000	$117,000	$156,000	$493,000
Equivalent units produced		20,000	19,500	19,500	
Average per unit		$ 11.00	$ 6.00	$ 8.00	$ 25.00

Computation of units produced:	
Units sold	18,400
Inventory, December 31, 1937	1,700
Total	20,100
Inventory, January 1, 1937	1,100
Units produced	19,000

The inventory of work in process at December 31, 1937, contained 1,000 units 100% complete as to materials, and 50% complete as to labor and overhead. The equivalent units of the component parts of cost are, therefore:

	Units Produced	Work in Process	Total
Material	19,000	1,000	20,000
Labor	19,000	500	19,500
Overhead	19,000	500	19,500

Cost of 1,000 units in process at December 31, 1937:

	Per Cent Complete	Unit Cost	Amount
Material	100%	$11.00	$11,000
Labor	50%	6.00	3,000
Overhead	50%	8.00	4,000
Total			$18,000

Cost of 1,700 units of finished goods on hand December 31, 1937:

	Unit Cost	Amount
Material	$11.00	$18,700
Labor	6.00	10,200
Overhead	8.00	13,600
Total		$42,500

(2) Annual Accounts

ALLEGHENY MANUFACTURING COMPANY

BALANCE-SHEET

December 31, 1937

Assets

Current assets			
Cash		$ 50,000	
Accounts receivable	$150,000		
Less—Reserve for discounts	9,000	141,000	
Inventories:			
Raw materials	$ 80,000		
Work in process	18,000		
Finished goods	42,500	140,500	$331,500
Prepaid expenses			2,000
Machinery and fixtures		$ 60,000	
Less—Reserve for depreciation		15,000	45,000
			$378,500

Liabilities and Net Worth

Current liabilities			
Accounts payable			$ 30,000
Net worth			
Capital stock		$200,000	
Surplus, January 1, 1937	$176,200		
Less—Loss for the year ended December 31, 1937	27,700	148,500	348,500
			$378,500

ALLEGHENY MANUFACTURING COMPANY

STATEMENT OF PROFIT AND LOSS

For the Year Ended December 31, 1937

Sales		$552,000	
Less—Discounts and allowances		35,000	
Net sales			$517,000
Deduct—Cost of sales:			
Raw materials:			
Inventory, January 1, 1937	$100,000		
Purchases	194,400		
Total	$294,400		
Less—Inventory, December 31, 1937	80,000	$214,400	
Labor		113,950	
Manufacturing expenses		151,950	
Depreciation		3,000	
Total		$483,300	
Inventory variation—Work in process:			
December 31, 1937	$ 18,000		
January 1, 1937	9,700	8,300	
Cost of manufacturing		$475,000	
Inventory variation—Finished goods:			
December 31, 1937	$ 42,500		
January 1, 1937	22,000	20,500	

Cost of sales		$454,500
Gross profit on sales		62,500
Deduct—		
Selling expenses	$ 48,000	
General expenses	42,200	90,200
Net loss for the year ended December 31, 1937		$ 27,700

Defects in the cost system and budgeting methods:

Average costs should never be used unless the number of units sold of each class is very nearly the same. Because of the better material used in grade A (which sold at the same price as the other grades), more than half of the total sales were of this class. As a result, profits were reduced for every sale made in this class.

Selling prices should be different for each of the grades.

A closer check should be made of the changes in the cost of materials, and selling prices adjusted accordingly.

A record should be kept of the number of units put in process and finished in order to account for spoilage, shortages, etc.

Budget revisions should be made with each substantial change in the cost of materials, labor and overhead, and selling prices adjusted accordingly.

No. 6 (40 points):

From the following information prepare a work sheet showing the consolidation of the balance-sheets of Top Company and its subsidiaries as at June 30, 1937:

BALANCE-SHEETS—June 30, 1937

Assets	Top Company	Black Company	White Company	Red Company
Cash	$ 10,000	$ 80,000	$ 60,000	$ 25,000
Accounts receivable		100,000	200,000	80,000
Inventories		200,000	300,000	100,000
Fixed assets	1,000	900,000	1,000,000	500,000
Prepaid expenses	500	5,000	6,000	3,000
Investments:				
Black Co.—$300,000 bonds	275,000			
Black Co.— 10,000 shares	300,000			
White Co.— 6,000 shares	690,000			
Red Co.— 800 shares	80,000			
Intercompany accounts	300,000	12,000	15,000	
	$1,656,500	$1,297,000	$1,581,000	$708,000
Liabilities and Capital				
Accounts payable	$ 10,000	$ 95,000	$ 94,000	$150,000
Accrued taxes	5,000	10,000	18,000	4,000
Accrued interest		6,750		
Intercompany accounts		10,000		310,000
Notes payable to Top Company			200,000	
Reserve for depreciation	500	400,000	350,000	250,000
6% mortgage bonds, due October 1, 1946		450,000		
Capital stock—$100 par	1,500,000		800,000	100,000
Capital stock—10,000 shares, no par		300,000		
Earned surplus (deficit *)	141,000	25,250	119,000	106,000*
	$1,656,500	$1,297,000	$1,581,000	$708,000

An analysis of Top Company's investment in subsidiaries shows the following:

	Date of transaction	Shares or bonds acquired or sold *	Cost or Proceeds *	Surplus or deficit* of subsidiary at date of transaction
Black Company bonds (bought for the sinking fund)	Sept. 30, 1932	$ 80,000	$ 76,000	$ 25,000
	Nov. 30, 1934	$200,000	180,000	15,000*
	Dec. 29, 1936	$ 20,000	19,000	12,000
Black Company stock	July 1, 1928	10,000 shs.	300,000	
White Company bonds	July 1, 1932	$ 50,000	40,000	10,000*
	Oct. 1, 1935	$ 50,000*	50,000* (Redeemed)	
White Company stock	July 1, 1929	8,000 shs.	1,000,000	100,000
	Dec. 1, 1936	2,000 shs.*	300,000* (Sold)	100,000
Red Company stock	Sept. 1, 1928	600 shs.	70,000	20,000
	Sept. 1, 1932	200 shs.	10,000	5,000*

* Red.

The Top Company was incorporated in 1926. In the same year it incorporated a wholly owned subsidiary, the Green Company, with paid-in capital of $300,000. On July 1, 1928, the net assets of Green Company in the amount of $250,000 were transferred to Black Company in exchange for its capital stock, which has a stated value of $300,000. The difference between this stated value and the net assets taken over was added to the fixed assets of Black Company as representing goodwill. This goodwill amount has been amortized by Black Company by charges to operations at the rate of 5% per annum. Green Company was dissolved, the stock of Black Company being turned over to Top Company as a liquidating dividend. There has been no change in the share capital of the subsidiaries since their incorporaion.

On June 29, 1937, White Company drew a check to the order of Top Company for $2,000. This check was received and recorded by Top Company on July 1, 1937.

On June 3, 1937, Black Company shipped White Company merchandise in the amount of $5,000. White Company's accounting department did not receive the invoice for these goods and did not record the liability therefor. However, on taking the physical inventory at June 30, 1937, this merchandise was included at the value of $5,000.

At June 30, 1934, Black Company sold Red Company certain machinery for $80,000. Red Company has provided depreciation on this amount for the years ended June 30, 1935, 1936, and 1937, at 10% per annum on the basis of an estimated useful life of ten years after the date of purchase. This machinery had cost Black Company $75,000, and that company had provided a depreciation reserve of $25,000 to June 30, 1934, on the basis of 6⅔% per annum. Black Company took the $30,000 book profit and eliminated from its accounts the cost of the machinery, as well as the accrued depreciation.

Inventories at June 30, 1937, included the following amounts purchased from affiliated companies:

Company	*Purchased from*	*June 30, 1937*
Red Company	White Company	$25,300
Red Company	Black Company	16,500
White Company	Black Company	86,000

White Company sold its products to affiliated companies at 15% and Black Company at 25% above cost.

At June 30, 1937, Top Company had discounted at the bank $200,000 notes receivable from White Company.

The Top Company has guaranteed the liabilities of the Red Company.

Solution:

EXPLANATORY ADJUSTING ENTRIES

The investment in White Company stock account shows a balance of $690,000. An analysis of the account would probably show:

Cost of 8,000 shares	$1,000,000
Less—Selling price of 2,000 shares	300,000
Remainder	$ 700,000
Less—Profit on the redemption of $50,000 par value of bonds which cost $40,000	10,000
Balance in the account, per books	$ 690,000

The following entry adjusts for the bond profit:

(1)

Investment—White Company stock	$ 10,000	
Surplus—Top Company		$ 10,000

To transfer the profit on the White Company bonds which were redeemed.

(2)

Goodwill	50,000	
Surplus—Black Company		22,500
Fixed assets		27,500

To separate the goodwill arising from the purchase of the net assets of Green Company by Black Company and to credit the surplus account of the latter company for the portion of the goodwill amortized and charged to operations at the rate of 5% per annum since July 1, 1928.

Stated value of stock issued by Black Company for the purchase	$300,000
Net assets acquired from Green Company	250,000
Goodwill purchased	$ 50,000
Charged to operations (9 years at 5%)	22,500
Remaining value in the fixed asset account	$ 27,500

The problem states that "this goodwill amount has been amortized by Black Company by charges to operations," etc. On this statement, it is assumed that the goodwill (fixed asset) account was credited with the amount written off during the nine years. However, the candidate might assume that the asset was not reduced, and that the reserve for depreciation account was credited with the $22,500. Further, the "goodwill" of $50,000 might be considered as a loss to Green Company. Under such an interpretation, the charge would be to surplus account rather than to goodwill in entry (2).

(3)

Cash—Top Company	$ 2,000	
Intercompany accounts (asset)		$ 2,000

To adjust the accounts for the check issued by White Company on June 29, 1937, but which was not received by the Top Company until July 1, 1937.

(4)

Surplus—White Company	5,000	
Intercompany accounts (liability)		5,000

To record the liability to Black Company for merchandise shipped to White Company. The merchandise was inventoried by the latter company, but the liability was not recorded.

(5)

Intercompany accounts (asset)	5,000	
Fixed assets—Red Company		5,000

To reduce the cost of the machinery bought from Black Company from $80,000 to $75,000 (the cost to Black Company).

(6)

Intercompany accounts (asset)	25,000	
Reserve for depreciation—Red Company		25,000

To set up the depreciation on the fixed assets sold to Red Company by Black Company accrued up to the date of sale.

At this point, the machinery bought from Black Company is carried at $75,000 (the cost to Black Company), and the reserve for depreciation applicable to that machinery is carried at:

Depreciation to date of sale (entry number (6))	$ 25,000
Depreciation at 10% per annum for 3 years on $80,000, the value at which it is carried by Red Company	24,000
Total	$49,000

On June 30, 1934, when Red Company purchased this machinery, the carrying value on the books of Black Company was:

Cost	$ 75,000
Reserve for depreciation	25,000
Book value	$ 50,000

On that same date the "estimated useful life" was 10 years. Hence, only $5,000 per year for the three years should be provided. The excess depreciation of ($24,000 less $15,000) should be credited to surplus account, for consolidation purposes, which is done in entry number (7) following. After this entry has been posted, the net carrying value will be:

Cost		$ 75,000
Less—		
Reserve for depreciation	$49,000	
Deduct—adjustment number (7)	9,000	40,000
Balance to be written off over the next seven years at $5,000 per annum		$35,000

(7)

Reserve for depreciation—Red Company	$ 9,000	
Surplus—Top Company		$ 9,000

To adjust the depreciation provided since July 1, 1934.

(8)

Surplus—Top Company	2,475	
Reserve for intercompany profit in inventories		2,475

To reserve against the profit in the inventoried merchandise ($25,300) bought by Red Company from White Company, as shown below:

Selling price	$ 25,300
Cost (100/115 of $25,300)	22,000
Profit (15% above cost)	$ 3,300

As the Top Company owns 75% of White Company (the selling company who has taken into its surplus account the profit of $3,300) 75% of this profit, or $2,475, is in the consolidated surplus and should be eliminated. However, some accountants would eliminate the entire $3,300.

(9)

Surplus—Top Company	20,500	
Reserve for intercompany profit in inventories		20,500

To reserve gainst the profit in the inventoried merchandise, purchased from Black Company (wholly owned by Top Company), as shown below:

Purchased by Red Company	$ 16,500
Purchased by White Company	86,000
Total (at selling prices)	$102,500
Less cost (100/125 of $102,500)	82,000
Profit (25% above cost)	$ 20,500

In this case, the selling company is 100% owned by Top Company, and the entire profit of $20,500 should be eliminated from the consolidated surplus.

(10)

Notes payable to Top Company	$200,000	
Notes payable		$200,000

To transfer the amount of the notes receivable from White Company which were discounted at the bank by Top Company to notes payable account, as they are now payable to someone outside of the consolidation.

(11)

Investments—Black Company bonds	25,000	
Surplus—Top Company		25,000

To write up the cost of the investment in the bonds of Black Company to par value.

In this solution, the credit is considered as surplus arising through consolidation. Another method which may be followed is to credit the amount of the discount to "discount on treasury bonds" account, and to transfer the amount applicable up to the date of the balance-sheet to surplus account.

(12)

Sinking fund bonds—Black Company	300,000	
Investments—Black Company bonds		300,000

To transfer the investment in the bonds of Black Company.

(13)

Investment in White Company stock	50,000	
Surplus—Top Company		50,000

To transfer the profit on the sale of 2,000 shares of stock of the White Company, as shown below:

Cost of 8,000 shares	$1,000,000
Cost of 2,000 shares (¼ of $1,000,000)	$ 250,000
Selling price of 2,000 shares	300,000
Profit to surplus account	$ 50,000

A footnote to the consolidated balance-sheet should state that the liabilities of the Red Company are guaranteed by the Top Company.

ELIMINATIONS

(A)

Surplus—Top Company	$ 30,000	
Intercompany accounts		$ 30,000

To eliminate the profit on the sale of the fixed assets by Black Company to Red Company, as follows:

Selling price		$ 80,000
Book value:		
Cost	$75,000	
Accrued depreciation	25,000	50,000
Intercompany profit		$ 30,000

(B)

Accrued interest	4,500	
Surplus—Top Company		4,500

To eliminate the accrued interest payable to Top Company which company owns ⅔ of the outstanding bonds of Black Company (⅔ of $6,750 is $4,500).

(C)

Intercompany accounts	$325,000	
Intercompany accounts		$325,000

To eliminate the intercompany accounts.

(D)

Capital stock—Black Company	300,000	
Investment—Black Company stock		300,000

To eliminate the investment, at cost, of the wholly owned Black Company.

(E)

Capital stock—White Company	600,000	
Surplus—White Company	75,000	
Investment—White Company stock		675,000

To eliminate the 75% interest in the stock and surplus of White Company at the date of acquisition, as shown below:

	100%	75%
Capital stock	$800,000	$600,000
Surplus	100,000	75,000
Totals	$900,000	$675,000

It will be noted that the liabilities of Red Company, including the amount due on intercompany accounts are in excess of its assets. As the deficit is $6,000 in excess of the par value of the capital stock, the minority interests have been wiped out. Under the circumstances, the net deficit is charged against the consolidated surplus in the following elimination.

(F)

Capital stock—Red Company	100,000	
Surplus—Top Company	86,000	
Investment—Red Company stock		80,000
Surplus (Deficit)—Red Company		106,000

To eliminate the investment in Red Company.

TOP COMPANY AND ITS SUBSIDIARIES
CONSOLIDATED BALANCE-SHEET WORKING PAPERS
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Accounts	Top Company	Black Company	White Company	Red Company	Adjustments Dr.	Adjustments Cr.	Eliminations Dr.	Eliminations Cr	Goodwill	Consolidated Balance-sheet
Cash	$ 10,000	$ 80,000	$ 60,000	$ 25,000	$ 2,000 (3)					$ 177,000
Accounts receivable		100,000	200,000	80,000						380,000
Inventories		200,000	300,000	100,000						600,000
						$ 27,500 (2)				2,368,500
Fixed assets	1,000	900,000	1,000,000	500,000		5,000 (5)				
Prepaid expenses	500	5,000	6,000	3,000						14,500
Investments:										
Black Company bonds										
Par value $300,000	275,000				25,000 (11)	300,000 (12)				
Black Company—100% (10,000 shares)	300,000							$ 300,000 (D)		
					10,000 (1)					
White Company—75% (6,000 shares)	690,000				50,000 (13)			675,000 (E)	$ 75,000	
Red Company—80% (800 shares)	80,000							80,000 (F)		
					5,000 (5)	2,000 (3)		30,000 (A)		
Intercompany accounts	300,000	12,000	15,000		25,000 (6)			325,000 (C)		
Goodwill					50,000 (2)				50.000	
Sinking fund bonds—Black Company					300,000 (12)					300,000
Total goodwill										125,000
	$1,656,500	$1,297,000	$1,581,000	$708,000	$467,000	$334,500		$1,410,000		$3,965,000

TOP COMPANY AND ITS SUBSIDIARIES

CONSOLIDATED BALANCE-SHEET WORKING PAPERS

June 30, 1937

Accounts	Top Company	Black Company	White Company	Red Company	Adjustments Dr.	Adjustments Cr.	Eliminations Dr.	Eliminations Cr.	Minority Interest	Consolidated Surplus	Consolidated Balance-sheet
Accounts payable	$ 10,000	$ 95,000	$ 94,000	$150,000							$ 349,000
Accrued taxes	5,000	10,000	18,000	4,000							37,000
Accrued interest		6,750					$ 4,500 (B)				2,250
Intercompany accounts		10,000		310,000		$ 5,000 (4)	325,000 (C)				
Reserve for depreciation	500	400,000	350,000	250,000	$ 9,000 (7)	25,000 (6)					1,016,500
Notes payable to Top Company			200,000		200,000 (10)						
6% mortgage bonds due October 1, 1946		450,000									450,000
Notes payable						200,000 (10)					200,000
Capital stock:											
Top Company—15,000 shares, $100 par	1,500,000										1,500,000
Black Company—10,000 shares, no par		300,000					300,000 (D)				
White Company—8,000 shares, $100 par			800,000				600,000 (E)				
White—minority interest—25%									$200,000		
Red Company—1,000 shares, $100 par				100,000			100,000 (F)				
Surplus (deficit *):											
Top Company	141,000				20,500 (9)	10,000 (1)					
					2,475 (8)	25,000 (11)	86,000 (F)			$100,525	
						50,000 (13)	30,000 (A)	$ 4,500 (B)			
						9,000 (7)					
Black Company		25,250				22,500 (2)				47,750	
White Company			119,000		5,000 (4)		75,000 (E)			10,500	
White—minority interest—25%									28,500		
Red Company				106,000*				106,000 (F)			
Reserve for intercompany profit in						2,475 (8)					
inventories						20,500 (9)					22,975
Total minority interest									$228,500		228,500
Total consolidated surplus										$158,775	158,775
	$1,656,500	$1,297,000	$1,581,000	$708,000	$703,975	$703,975	$1,520,500	$1,520,500			$3,965,000