Solutions Manual for FINANCIAL ACCOUNTING

An Introduction

Third Edition

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TO THE INSTRUCTOR

This Solutions Manual contains the following material:

- Descriptions of each of the chapter problems, including the Business Decision Problems, together with ratings of relative difficulty (light, moderate, or heavy) and estimated preparation time for solving.
- Complete answers to all questions, exercises, and problems, including the Business Decision Problems, for each of the 16 chapters in the textbook.
- Complete answers to the problems for each of the four appendixes--A (Special Journals), B (Partnership Accounting), C (Payroll Accounting), and D (Present Values and Effective Interest Amortization).
- A Checklist of Key Figures for the problems. Some instructors may wish to reproduce the checklist and furnish copies to their students.
- Solution to the Practice Set, Jordan Sporting Goods.

Each of the 16 chapters of Financial Accounting: An Introduction, Third Edition, concludes with Questions, Exercises, Problems, and a Business Decision Problem. Each chapter contains an average of 17 questions, eight exercises, and eight problems. Each of the four appendixes--A, B, C, and D--concludes with a comprehensive set of problems.

Although the text emphasizes corporate accounting, the accounting process for sole proprietorships (for example, investments in the firm, withdrawals, and closing entries) is also explained and illustrated. Where appropriate, certain problems and exercises deal with sole proprietorships.

The text and the ancillary materials provide a complete teaching program for beginning financial accounting courses of varying lengths and emphasis. For example, should time not permit coverage of the entire text, Chapters 15 and 16 and the appendixes can be omitted; the remaining material will provide a basic course in financial accounting. Of course, coverage of the entire text provides a more comprehensive course. The ancillary materials, which include Working Papers, a Study Guide, a set of Transparencies for problem solutions, a Practice Set, a Checklist of Key Figures for problem solutions,and a Test Booklet, are described below.

Questions

The questions following each chapter provide a basis for class discussion of the main ideas presented in the chapter. They also permit the student to test his or her comprehension of the text material. Some of the questions deal with concepts and procedures; others require quantitative answers that can usually be easily calculated. Complete answers are given in this manual.

Exercises

The exercises for each chapter consist of short problems designed to test the basic concepts of the chapter. They involve minimal computation and may be used either in classroom demonstrations or as assignment material. Because of the short preparation time required for their solution, the exercises are well suited for quizzes or short examinations in which a number of concepts are to be tested.

Problems

An extensive variety of problems have been provided for each chapter; these include a Business Decision Problem, which presents information in an unstructured fashion and requires the student to apply one or more of the general concepts learned in the chapter. Each chapter in this manual begins with a brief description of each problem and an estimate of the average time needed for its solution. We have also graded each problem by degree of difficulty (light, moderate, or heavy).

Practice Set

The Practice Set, prepared by Gary Waters, Auburn University, deals with a corporation engaged in merchandising sporting goods (Jordan Sporting Goods). It may be assigned at any time after the text material through Chapter 7 has been completed. Since the Practice Set includes special journals, Appendix A (following Chapter 5) should also be assigned. Students should be able to complete the set in approximately 12 hours. The Practice Set contains forms printed with headings, names, and much of the preliminary data to minimize busywork and permit the student to concentrate on concepts and procedures.

Test Booklet

A Test Booklet containing multiple choice questions for each chapter and appendix is available to users. A key to all questions is also furnished to instructors.

Study Guide

The Study Guide, prepared by Imogene Posey of the University of Tennessee, has been a very successful teaching aid with the first two editions of the textbook. It provides a comprehensive chapter review, a Test Your Knowledge section with true-false and completion questions, and a set of exercises for each chapter and appendix. Answers to all questions and exercises are provided at the end of each chapter of the Study Guide.

Working Papers

Working Papers are available for all chapter and appendix problems. A great deal of thought has been given to useful and time-saving working papers for the students. Wherever possible, we have provided preliminary data and headings along with other necessary aids for students in organizing their work.

Checklist of Key Figures

A Checklist of Key Figures for all chapter and appendix problems is included in this manual. Some instructors may wish to reproduce the checklist and furnish students with copies so that they may verify answers to assignments.

Transparencies of Problem Solutions

Transparencies to solutions to problems are available. Each transparency carries the problem number and heading as it appears in the Instructor's Manual.

Other Comments

This Solutions Manual and the other ancillary materials have been carefully prepared and reviewed with the objective of providing aids that are comprehensive and error free. Comments and suggestions from users of the text and related materials will be welcomed by the authors. Letters may be sent to Professor Paul H. Walgenbach or Professor Ernest I. Hanson, School of Business, 1155 Observatory Drive, University of Wisconsin--Madison, Madison, Wisconsin 53706, or to Professor Norman E. Dittrich, College of Business Administration, The University of Tennessee, Knoxville, Tennessee 37916.

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CONTENTS

CHAPTER 1

ACCOUNTING: AN INFORMATION SYSTEM

The relative difficulty (light, moderate, or heavy), estimated preparation time, and a brief description of each problem are given below.

1-33. Gardens, Inc.
MODERATE (40 minutes)
Preparing an income statement and balance sheet from a list of financial statement data.

1-34. Trident Corporation
MODERATE (30 minutes)
Calculating from comparative financial statement data total assets and equities, net income, working capital, change in working capital, and financial statement ratios. (This problem is similar to the chapter's demonstration problem.)

1-35. Stallard Corporation
MODERATE (30 minutes)
Preparing statement of changes in financial position from selected financial statement data.

1-36. Apex Company
LIGHT (20 minutes)
Identifying accounting concepts or principles violated by various described accounting procedures and justifying the accepted principles or concepts involved.

1-37. Gordon's Employment Agency
LIGHT (30 minutes)
Matching two lists of accounting-related terms and concepts.

1-38. Action Realty Company
HEAVY (60 minutes)
Preparing an income statement and a balance sheet from a list of financial statement data and other related information requiring revision of the primary data.

Business Decision Problem
Reliable Answering Service, Inc.
HEAVY (60 minutes)
Calculating financial statement ratios, determining the effects of new information on expected future net income, and evaluating the general favorableness of the investment.

QUESTIONS

1-1. Accounting is defined as the process of (1) recording, (2) classifying, and (3) reporting and interpreting the financial data of an organization. The accounting process constitutes an information system because the most capable managers cannot through direct observation alone remain adequately informed about the complexities of even a relatively small business activity. Systematic accounting reports disclosing revenues, expenses, assets, liabilities, owners' equity, and funding activities are the essence of an information system about an accounting entity.

1-2. The major goal of financial accounting is the preparation of a financial position statement (balance sheet), an operating statement (income statement), and a statement of changes in financial position. These statements must be prepared in accordance with a fairly well-defined set of conventions and rules described as "generally accepted accounting principles." Managerial accounting is designed to provide the data necessary for management to plan and control the operations of a business and to make decisions. No rigid conventions or rules govern managerial accounting; any useful analytical approach or mode of accounting may be employed in this area.

1-3. In addition to the stockholders and creditors, the following outside groups may be interested in a company's financial data: prospective investors and creditors, taxing agencies, regulatory agencies, labor unions, and the general public. Prospective investors desire to evaluate the relative attractiveness of various investments, while creditors are primarily interested in the financial strength of the firm. Taxing and regulatory agencies are concerned with whether a firm has met its reporting requirements or other legal requirements. Other users, such as labor unions and the general public, may be interested in the firm's relations with employees and consumers, especially with regard to wages and prices.

1-4. "Generally accepted accounting principles" are standards or guides accountants have developed in theory and practice to provide concepts and methods for imparting economic data to outsiders. Many principles have evolved over time and have become entrenched through general acceptance. The only nongovernmental body whose pronouncements are authoritative concerning such principles is the Financial Accounting Standards Board. Before the creation of the FASB, the Accounting Principles Board of the American Institute of Certified Public Accountants fulfilled the function of formulating accounting principles. The Securities and Exchange Commission has the power to set forth principles, but it has generally preferred to have the accounting profession establish them.

1-5. Various regulatory and taxing authorities may require reports prepared on a basis that differs from the principles or methods appropriate for general financial reporting. To satisfy various reporting needs, a business may find it convenient to maintain several sets of records pertaining to certain aspects of its financial activities. There is nothing illicit about the procedure if the records are kept honestly and are available for inspection by the appropriate parties.

1-6. Although public accountants perform services related to taxation and provide a variety of management services, their most distinctive service is their attest function, that is, performing independent audits of companies and reporting the results to investors, creditors, and other interested parties. Private accountants are employed by various firms and governmental units in a variety of accounting positions; they are not independent, and any auditing work they do normally is for the benefit of the employer. In a business, their function is to assist management in planning and controlling operations.

1-7. The purpose of a balance sheet is to depict the financial position--the firm's assets, liabilities, and owners' equity--at a particular point in time. The income statement is designed to portray the results of operations--revenues less expenses--for a certain period of time. The statement of changes in financial position explains the firm's change in financial position during a period of time by portraying the firm's sources of funds, uses of funds, and the changes in the various items making up the fund.

1-8. Assets are those resources used by a business that can usefully be expressed in monetary terms. Liabilities are obligations that a firm must pay in money or services at some future date. Owners' equity is the excess of assets over liabilities represented by amounts contributed by the owners or stockholders or accumulated through operations. Revenues are those assets coming to the firm by virtue of its providing goods or services to its customers. Expenses are those measurable economic sacrifices such as wages, rent, and taxes incurred to operate the firm and earn revenues.

1-9. A "set" of financial statements comprises: (1) a balance sheet dated the last day of the accounting period and presenting assets, liabilities, and owners' equity amounts; (2) an income statement dated to indicate the operating period covered and presenting revenues, expenses, and net income; and (3) a statement of changes in financial position dated to indicate the operating period covered and presenting sources of funds, uses of funds, and changes in the various items making up the fund.

1-10. An accounting entity consists of the people, assets, and activities devoted to a specific purpose. Whether it is a single proprietorship, partnership, or corporation, it is an individual accounting unit separate and distinct from the personal affairs of the owners. A separate set of accounting records is maintained for each accounting entity.

1-11. The historical cost concept is one that requires assets to be recorded at acquisition price, and that permits reductions, but not upward adjustments, in amounts in conventional financial statements. The objectivity concept suggests that recorded amounts be based on objective, bias-free documents and evidence. The going concern concept presumes that a business will continue, and, therefore, liquidation or market values for assets are not appropriate. Because acquisition cost is objective and provides a basis for assets *in use*, rather than for sale, the three concepts are consistent with one another.

1-12. The accrual basis of accounting involves a *matching* of expenses incurred with revenues earned to determine periodic net income. Revenues are recognized when goods or services are provided rather than when payment is received. Likewise, expenses are recognized when goods or services are used rather than when payment is made.

Under the cash basis of accounting, revenues are recognized when money is received for goods and services provided; expenses are recognized when payments are made for goods and services acquired. A *pure* cash basis of accounting is rarely encountered in business firms. At the very least, cash basis firms usually record property and equipment as assets and reflect the outlay as expense over the period of use.

1-13. The balance sheet equation states that assets equal liabilities plus owners' equity. Therefore, after the accounting for any activity is complete, every asset on the balance sheet will be offset (or matched) by either a liability (nonowners' equity) or by owners' equity, thus making total assets equal total equities.

1-14. Assets: cash, accounts receivable, supplies on hand, prepaid expenses, equipment, buildings, and land. Liabilities: accounts payable, utilities payable, interest payable, income tax payable (corporations), and notes payable.

1-15. As explained in the chapter (for the simplest situations), the amount of capital stock is determined by the number of shares outstanding multiplied by the per share par value of the stock. This amount represents the contribution of capital by stockholders. Retained earnings reflects all income less all losses and dividends declared since the inception of the corporation.

1-16. In a corporate balance sheet, owners' (stockholders') equity appears with capital paid in by stockholders segregated from capital (principally retained earnings) accumulated through operations. The distinction is made because of certain restrictions on corporations relating to the amounts legally distributable to the stockholders. The owner's equity of a single proprietorship may be shown as a single amount with contributed capital and accumulated earnings combined.

1-17. Earnings per share is computed by dividing net income by the average number of shares of capital stock outstanding during the operating period. The earnings-per-share amount is widely used by investment analysts and individual investors because it permits them quickly to relate the earnings of a company to the price they have paid or might pay for a share of the company's stock.

1-18. Working capital equals current assets less current liabilities. The change in working capital is determined by subtracting the working capital at the beginning of the accounting period from the working capital at the end of the accounting period.

1-19. Sources of working capital: operating profits, sale of capital stock, sale of assets, and borrowing. Uses of working capital: operating losses, purchase of assets, repayment of debt, and payment of dividends.

1-20. Ratio analysis is based on the realization that key financial data are most meaningful when they are compared with other related data. Ratio analysis compares two related amounts by choosing one as the base and dividing it into the other amount. The resulting ratio is used to measure or interpret the financial condition or performance of the organization.

1-21. One cannot judge the favorableness of a $1 million profit without relating it to other relevant figures such as the sales revenues necessary and the assets employed to earn the $1 million profit.

1-22. Current ratio: Current assets divided by current liabilities.
Equity ratio: Stockholders' equity divided by total assets.
Return on sales: Net income divided by sales.
Return on assets: Net income divided by average total assets.

1-23.

Total assets.	$300,000
Less total liabilities.	120,000
Total stockholders' equity. . . .	$180,000
Less capital stock issued	100,000
Retained earnings	$ 80,000

1-24.

Stockholders' equity:	
End of 19X1.	$58,000
Beginning of 19X1.	45,000
Increase during 19X1	$13,000
Add dividends paid	9,000
	$22,000
Less capital stock issued.	7,000
Apparent net income for 19X1 . . .	$15,000

1-25.

Current Ratio: $\dfrac{\text{Current Assets}}{\text{Current Liabilities}} = \dfrac{\$200,000}{\$80,000} = 2.5$

Equity Ratio: $\dfrac{\text{Stockholders' Equity}}{\text{Total Assets}} = \dfrac{\$400,000}{\$500,000} = 0.8$

Return on Sales: $\frac{\text{Net Income}}{\text{Sales}} = \frac{\$33,000}{\$600,000} = 5.5\%$

Return on Assets: $\frac{\text{Net Income}}{\text{Average Total Assets}} = \frac{\$33,000}{(\$300,000 + \$500,000)/2} = 8.25\%$

EXERCISES

1-26.

Enterprise, Inc.
Balance Sheet
January 31, 19XX

Assets			Liabilities and Stockholders' Equity		
Current Assets			Current Liabilities		
Cash.		$ 8,000	Accounts Payable		$ 6,000
Accounts Receivable . .		15,000	Income Tax Payable		4,000
Total Current Assets		$23,000	Total Current Liabilities.		$10,000
Long-term Assets			Long-term Liabilities		
Equipment	$40,000		Notes Payable.		12,000
Less: Accumulated			Total Liabilities.		$22,000
Depreciation . .	10,000	30,000	Stockholders' Equity		
			Capital Stock	$20,000	
			Retained Earnings . .	11,000	
			Total Stockholders' Equity.		31,000
Total Assets.		$53,000	Total Liabilities and Stockholders' Equity.		$53,000

1-27.

Moore Service Corporation
Income Statement
For the Year Ended December 31, 19X1

Revenues		
Service Fees Earned		$90,000
Operating Expenses		
Depreciation Expense	$15,000	
Interest Expense	2,000	
Office Expense	12,000	
Salaries Expense	30,000	
Supplies Expense	8,000	
Travel Expense	3,000	
Income Tax Expense*.	6,000	
Total Operating Expenses.		76,000
Net Income.		$14,000
Earnings per Share**.		$1.40

*[($90,000 - $70,000) x 30% = $6,000]
**($14,000/10,000 shares = $1.40 per share)

1-28. Ross, Inc.
Statement of Changes in Financial Position
For the Year Ended December 31, 19X4

Sources of Working Capital		
Operations:		
Net Income	$15,000	
Add: Expenses Not Decreasing Working Capital:		
Depreciation	3,000	
Total From Operations		$18,000
Proceeds of Bank Loan		10,000
Sale of Capital Stock		20,000
Total Sources of Working Capital		$48,000
Uses of Working Capital		
Payment of Dividends	$ 4,000	
Payment on Notes Payable	16,000	
Purchase of Equipment	20,000	
Total Uses of Working Capital		40,000
Increase in Working Capital		$ 8,000
Changes in Working Capital Components		
Increase in Current Assets (detail omitted)		$17,000
Increase in Current Liabilities (detail omitted)		9,000
Increase in Working Capital		$ 8,000

1-29.

(a)	Ending owners' equity ($9,000 - $3,000)	$6,000
	Beginning owners' equity ($7,000 - $2,500)	4,500
	Net increase in owners' equity	$1,500
	Add: Dividends declared	800
	Deduct: Capital stock issued	(500)
	Apparent net income	$1,800
	Add: Expenses	1,200
	Apparent revenues earned	$3,000
(b)	Beginning owners' equity ($6,000 - $2,000)	$ 4,000
	Add: Capital stock issued	1,000
	Net income ($8,000 - $5,000)	3,000
	Deduct: Dividends declared	(500)
	Ending owners' equity	$ 7,500
	Ending assets	$10,500
	Ending owners' equity	7,500
	Apparent ending liabilities	$ 3,000
(c)	Ending owners' equity ($12,000 - $2,800)	$9,200
	Beginning owners' equity ($10,000 - $2,000)	8,000
	Net increase in owners' equity	$1,200
	Add: Dividends declared	300
	Deduct: Net income ($7,000 - $5,500)	(1,500)
	Apparent capital stock issued	$ -0-
(d)	Ending owners' equity ($17,000 - $4,000)	$13,000
	Add: Dividends declared	1,000
	Net loss ($6,000 - $7,500)	1,500
	Deduct: Capital stock issued	(2,000)
	Apparent beginning owners' equity	$13,500
	Add: Beginning liabilities	1,500
	Apparent beginning assets	$15,000

1-30. (a)

Dowling Printing Corporation
Comparative Balance Sheet

	December 31			
	(This Year)		(Last Year)	
Assets				
Current Assets				
Cash.		$20,000		$18,000
Accounts Receivable		18,000		12,000
Supplies on Hand.		3,000		4,000
Total Current Assets.		$41,000		$34,000
Long-term Assets				
Equipment	$25,000		$25,000	
Less: Accumulated Depreciation	11,000	14,000	9,000	16,000
Total Assets.		$55,000		$50,000
Liabilities and Stockholders' Equity				
Current Liabilities				
Accounts Payable.		$ 9,000		$ 7,000
Income Tax Payable.		3,000		6,000
Total Current Liabilities . .		$12,000		$13,000
Long-term Liabilities				
Notes Payable		11,000		12,000
Total Liabilities		$23,000		$25,000
Stockholders' Equity				
Capital Stock	$22,000		$20,000	
Retained Earnings	10,000		5,000	
Total Stockholders' Equity. .		32,000		25,000
Total Liabilities and Stockholders' Equity .		$55,000		$50,000

(b)

Increase in retained earnings ($10,000 - $5,000).	$5,000
Add: Dividends declared.	3,000
Apparent net income for the year.	$8,000

1-31. (a) (F) Computers have freed accountants from many routine tasks, enabling them to concentrate on the more analytical and interpretive aspects of accounting.

(b) (F) Management needs additional accounting information to make decisions and operate effectively; a key function of generally accepted accounting principles is that nonowners have access to objective accounting data prepared according to a known set of rules.

(c) (T) A sound understanding of what has happened is an important base for making decisions involving future consequences.

(d) (F) Generally accepted accounting principles tend to change or evolve and are formulated primarily by the Financial Accounting Standards Board.

(e) (F) The owners' equity section of the balance sheet (specifically retained earnings for corporations) reflects any income or loss reported on the related income statement for the organization.

(f) (T) The ending balance of owners' equity must include any income or loss reported on the related income statement; preparing an income statement facilitates preparation of the balance sheet.

(g) (T) Except for income tax payable, assets and liabilities tend to be similar for all forms of business organizations.

(h) (F) Generally accepted accounting principles require the use of historical cost and preclude the "write-up" of assets to their market values.
(i) (T) Definitions of funds range from cash to working capital.
(j) (F) Key financial statement amounts are most meaningful when related to other relevant amounts, such as net income to sales or net income to average total assets.

1-32. Current ratio: $\frac{\text{Current Assets}}{\text{Current Liabilities}} = \frac{\$90{,}000}{\$40{,}000} = 2.25$

Equity ratio: $\frac{\text{Stockholders' Equity}}{\text{Total Assets}} = \frac{\$180{,}000}{\$240{,}000} = 0.75$

Return on sales: $\frac{\text{Net Income}}{\text{Sales}} = \frac{\$27{,}000}{\$300{,}000} = 9\%$

Return on assets: $\frac{\text{Net Income}}{\text{Average Total Assets}} = \frac{\$27{,}000}{(\$200{,}000 + \$240{,}000)/2} = 12.3\%$

Ending working capital	$50,000
Beginning working capital	40,000
Increase in working capital	$10,000

PROBLEMS

1-33. (a) Gardens, Inc.

Gardens, Inc.
Income Statement
For the Year Ended December 31, 19XX

Revenues		
Service Fees Earned		$40,000
Operating Expenses		
Rent Expense	$ 6,000	
Supplies Expense	1,200	
Wages Expense	17,000	
Utilities Expense	1,400	
Depreciation Expense	2,000	
Interest Expense	400	
Income Tax Expense	3,000	
Total Operating Expenses		31,000
Net Income		$ 9,000
Earnings per Share		$1.50

1-33. (b) Gardens, Inc.

Gardens, Inc.
Balance Sheet
December 31, 19XX

Assets			Liabilities and Stockholders' Equity		
Current Assets			Current Liabilities		
Cash		$ 6,000	Accounts Payable		$ 9,000
Accounts Receivable		15,000	Salaries Payable		2,000
Supplies on Hand		4,000	Income Tax Payable		1,000
Prepaid Expenses		5,000	Total Current Liabilities		$12,000
Total Current Assets		$30,000	Long-term Liabilities		
Long-term Assets			Notes Payable		20,000
Equipment	$70,000		Total Liabilities		$32,000
Less: Accumulated Depreciation	8,000	62,000	Stockholders' Equity		
			Capital Stock	$40,000	
			Retained Earnings	20,000	
			Total Stockholders' Equity		60,000
Total Assets		$92,000	Total Liabilities and Stockholders' Equity		$92,000