

Accountant's Guide to Computers and Information Technology

6th Edition

Table of Contents

Chapter 1 – Accounting Information Systems and Packages	1
Learning Objectives	1
Introduction.....	1
Accounting Information Systems.....	1
Online Accounting Systems.....	2
Accounting Software.....	2
Module Descriptions	3
Market Leaders.....	4
Selecting Accounting Software.....	4
Write-Up Software	5
Compliance Software.....	6
Compliance Software Products	6
Tax Preparation Software	7
Market Leaders.....	7
Audit Software	8
Auditing Audit Software.....	9
Spreadsheets	9
Web-Based Accounting Systems	9
Implementing Web-Based Accounting Systems	9
eXtensible Business Reporting Language (XBRL).....	11
How Companies Create XBRL Statements	11
Applications of XBRL	12
Review Questions.....	13
Review Answers	14
Chapter 2 – Computer Software in Managerial Accounting	15
Learning Objectives	15
Introduction.....	15
Activity-Based Costing (ABC) Software	15
Cash Flow Forecasting Software.....	15
Forecasting and Statistical Software	16
Templates.....	16
Add-Ins.....	16
Stand-Alone Programs.....	16
Budgeting and Planning Software	16
Project Planning and Management.....	17
Linear Programming	17
A Caveat.....	17
Selecting a Software Package	18
Checklist.....	19
Review Questions.....	21
Review Answers	22
Chapter 3 – Information Security and Data Protection	23
Learning Objectives	23
Introduction.....	23
System Failures	24
The Security Administrator.....	24
Establishing a Security Policy	24
Physical Security and Data Security	27
Destroying Data.....	28
Environmental Considerations	28
Maintenance and Preventive Care	29
Water Alert Systems	29

Table of Contents

Static Electricity	29
Humidity Control	30
Fire Protection	30
Access Controls	31
Hardware Security	32
Software Development Security	33
Password Security	34
Audit Trail	34
Disaster Recovery	35
Contingency Planning	35
Legal Issues	35
Review Questions	38
Review Answers	39
Chapter 4 – The Accountant and the Networked Environment	41
Learning Objectives	41
Introduction	41
Client/Servers	41
Changing Technology	42
Cloud Computing	42
Things to Consider Before Moving to Cloud-Based Services	44
Specific Applications and Examples	44
Open-Source Software	46
Internet of Things	46
The Big Data Opportunity	47
Blockchain Technology	48
Virtual Private Networks (VPNs)	49
Future Trends	49
Network and Internet Security Concerns	49
Network Security	49
Advanced Authentication	52
Internet Security Threats	52
Different Types of Internet Threats	53
Security Challenges	56
Cybersecurity Basics	57
Review Questions	59
Review Answers	60
Chapter 5 – The Accountant and Database Management Systems	63
Learning Objectives	63
Introduction	63
Database Security	65
Database Types and Terminology	66
Classification	66
Object Databases	66
Distributed Database Management Systems	66
Relational Database	66
Hierarchical Databases	67
Multimedia Databases	67
Multi-Dimensional Databases	67
Data Warehousing	67
Data Marts	68
Data Modeling	69
Link Analysis	69
Knowledge Discovery	69
Market Based Analysis	69
Memory-Based Reasoning	70

Table of Contents

Data Mining	70
Analytical Processing.....	72
Online Transactions.....	73
Decision Trees.....	73
Review Questions.....	74
Review Answers	75
Chapter 6 – Information Systems and Financial Analysis.....	77
Learning Objectives	77
Introduction.....	77
Evaluating Technical Investments	77
What are the Types of Investment Projects?	77
What are the Features of Investment Projects?	77
Understanding the Concept of Time Value of Money.....	77
How Do You Measure Investments in Technology?.....	78
Payback Period	78
Net Present Value.....	78
Internal Rate of Return.....	78
How Do Income Taxes Affect Investment Decisions?.....	79
How to Calculate After-Tax Cash Flows	79
How Does MACRS Affect Investment Decisions?.....	80
What to Know About the Cost of Capital.....	82
Cost of Debt	82
Cost of Common Stock	83
Cost of Retained Earnings	83
Measuring the Overall Cost of Capital	83
Lease-Purchase-Rent Decisions	84
Economic Feasibility Study for a New Information System.....	85
Initial Cash Outlay and Operating Costs.....	85
Review Questions.....	89
Review Answers	90
Glossary.....	91
Index	97