

Table of Contents

Introduction to CMA Part 1	1
Section A – External Financial Reporting Decisions.....	2
A.1. Financial Statements	2
Users of Financial Information	2
The Financial Statements	3
Differences Between IFRS and U.S. GAAP	3
1) The Balance Sheet (Statement of Financial Position)	4
2) The Income Statement	11
3) Introduction to the Statement of Cash Flows (SCF)	17
4) Statement of Comprehensive Income	20
5) Statement of Changes in Stockholders' Equity	24
Notes to the Financial Statements	25
Specific Elements of the Financial Statements	26
Preparation of the Statement of Cash Flows	27
A.2. Recognition, Measurement, Valuation, and Disclosure.....	40
1) Asset Valuation	40
1a) Cash and Cash Equivalents	40
Cash	40
Cash Equivalents	41
1b) Accounts Receivable	42
Valuing Accounts Receivable	42
The Two Allowance Methods	42
Factoring: Using Receivables as an Immediate Source of Cash	51
1c) Inventory	55
Valuing the Inventory When It Is Purchased	55
Which Goods Are Included in Inventory	56
Costs Included in Inventory	57
Determining Which Item Is Sold: Cost Flow Assumptions	58
Effect of the Different Methods	61
The Frequency of Determining Inventory Balances	62
The Physical Inventory Count	68
Errors in Inventory	68
Recognizing Permanent Declines in Inventory Values	70
1d) Investments	75
1e) Fixed Assets	81
Initial Recording of the Fixed Asset	81
Depreciation	82

Net Book Value of Fixed Assets	82
Calculation of Depreciation	83
Depreciation Methods	83
Which Method of Depreciation is Best?	86
Impairment of Long-Lived Assets to be Held and Used	87
1f) Intangible Assets	88
Initial Recording of Intangible Assets	89
Amortization of Intangibles	89
Impairment of Limited-Life Intangible Assets	90
Impairment of Indefinite-Lived Intangible Assets Other Than Goodwill	90
Goodwill and the Impairment of Goodwill	91
2) Valuation of Liabilities	93
2a) Reclassification of Short-term Debt	93
2b) Warranties	93
1) Expense Warranties	93
2) Sales Warranties	95
2c) Off-Balance Sheet Financing	95
2d) Accounting for Income Taxes	97
Book Income, Taxable Income, and Deferred Taxes	98
Temporary Timing Differences	99
Presentation on the Income Statement	101
Calculating the Deferred Tax Asset (DTA) or Deferred Tax Liability (DTL)	102
Presentation of Deferred Tax Assets and Liabilities on the Balance Sheet	106
Permanent Timing Differences	107
Treatment of Net Operating Losses	107
2e) Accounting for Leases	109
The Two Categories of Leases	109
Determining If the Lease Is Capital or Operating by the Lessee	110
3) Equity Transactions	111
Corporate Shareholders' Equity	112
Retained Earnings	118
Treasury Stock	119
Classification of Shares	119
4) Revenue Recognition and Income Measurement	120
4a) Revenue Recognized at the Completion of Production	121
4b) Installment Method of Profit Recognition	121
4c) Cost Recovery Method of Profit Recognition	124
4d) Revenue Recognition When the Right of Return Exists	125
4e) Sales with Buyback Agreements	125
4f) Channel Stuffing and Trade Loading	126

4g) Deposit Method	126
4h) Long-Term Contracts	127
Section B – Planning, Budgeting and Forecasting.....	132
B.1. Strategic Planning	133
Planning in Order to Achieve Superior Performance	133
Types of Plans and General Principles	135
The Strategic Planning Process	138
Other Planning Tools and Techniques	157
Characteristics of Successful Strategic Plans	161
B.2. Budgeting Concepts	163
The Relationship Among Planning, Budgeting, and Performance Evaluation	163
Advantages of Budgets	164
Time Frames for Budgets	166
Methods of Developing the Budget	167
Who Should Participate in the Budgeting Process?	169
The Budget Development Process	169
Best Practice Guidelines for the Budget Process	171
Budgetary Slack and Its Impact on Goal Congruence	172
Responsibility Centers and Controllable Costs	172
Standard Costs Used in Budgeting	173
B.3. Forecasting Techniques	182
Using Regression Analysis in Forecasting	182
Using Probability Concepts in Forecasting	192
Using Learning Curves in Forecasting	197
B.4. Budget Methodologies	205
The Annual/Master Budget	205
Static Budgets and Flexible Budgets	206
Project Budgeting	209
Activity-Based Budgeting (ABB)	210
Zero-Based Budgeting versus Incremental Budgeting	211
Continuous (Rolling) Budgets	212
B.5. Annual Profit Plan and Supporting Schedules.....	213
The Budgeting Cycle	213
Development of the Annual/Master Budget or Profit Plan	214
Development of the Master Budget	214
The Master Budget Financial Statements	226
Ongoing Budget Reports	228
Answering Budgeting Exam Questions	229
Flexible Budgeting Questions	231
Units to Produce / Purchase Questions	233

Cash Budget Questions	237
B.6. Top-Level Planning and Analysis	239
Pro Forma Financial Statements	239
Analysis of Pro Forma Financial Statements	250
Other Uses of Pro Forma Financial Statements	252
Section C – Performance Management	253
C.1. Cost and Variance Measures	254
Determining the Level of Activity for Standard Costs	255
Sources of Standards	256
Variance Analysis Concepts	258
“Levels” in Variance Analysis	258
Static Budget Variances vs. Flexible Budget Variances	258
Manufacturing Input Variances	265
The Difference Between Sales Variances and Production Variances	265
What Causes Manufacturing Input Variances?	266
Direct Materials Variances	267
Direct Labor Variances	273
More Than One Material Input or One Labor Class	276
Factory Overhead Variances	289
Sales Variances	313
Sales Variances for a Single-Product Company	314
Sales Variances When More than One Product is Sold	320
Variances Example for a Multiple-Product Company Using Contribution Margin	328
Variance Analysis for a Service Company	332
Market Variances	338
C.2. Responsibility Centers and Reporting Segments	340
Evaluating the Manager vs. Evaluating the Business Unit	341
Allocation of Common Costs	342
The Contribution Income Statement Approach to Evaluation	344
Transfer Pricing	348
C.3. Performance Measures	357
Strategic Issues in Performance Measurement	357
Performance Measurement	358
Balanced Scorecard	369
Customer and Product Profitability Analysis	376
Appendix A: Variance Report for a Company Selling Two Products	379
Answers to Questions	383

Table of Contents

Section D – Cost Management	1
D.1. Measurement Concepts	2
Why Cost Management?	2
Classifications of Costs	3
Product Costs vs. Period Costs	3
Costs Based on Level of Activity (Fixed, Variable and Mixed Costs)	5
Introduction to Costing Systems	11
Introduction to Cost Accumulation Methods	12
Introduction to Cost Measurement Systems	12
Cost of Goods Sold (COGS) and Cost of Goods Manufactured (COGM)	20
Variable and Absorption Costing	22
Fixed Factory Overheads Under Absorption Costing	22
Fixed Factory Overheads Under Variable Costing	23
Effects of Changing Inventory Levels	23
Income Statement Presentation	25
Joint Products and Byproducts	33
Methods of Allocating Costs to Joint Products	33
Accounting for Byproducts	41
D.2. Costing Systems	44
Review of Introduction to Costing Systems	44
Process Costing	44
Steps in Process Costing	46
Process Costing Diagram – FIFO	59
Process Costing Diagram – Weighted Average	60
Process Costing Summary	61
Process Costing Examples	62
Spoilage in Process Costing	67
Job-Order Costing	72
Operation Costing	74
Life-Cycle Costing	74
Customer Life-Cycle Costing	76
D.3. Overhead Costs	77
Introduction to Accounting for Overhead Costs	77
Traditional (Standard) Allocation Method	79
Activity-Based Costing	91
Shared Services Cost Allocation	98
Allocating Costs of a <i>Single (One)</i> Service or Support Department to Multiple Users	99
Allocating Costs of <i>Multiple</i> Shared Service Departments	102

Estimating Fixed and Variable Costs.....	109
High-Low Points Method	109
D.4. Supply Chain Management	112
What is Supply Chain Management?	112
Lean Manufacturing	112
Just-in-Time (JIT) Inventory Management Systems	115
<i>Kanban</i>	117
Introduction to MRP, MRPII, and ERP	118
Outsourcing	122
Theory of Constraints (TOC)	122
Capacity Level and Management Decisions	133
D.5. Business Process Improvement.....	136
The Value Chain and Competitive Advantage	136
Process Analysis	140
Business Process Reengineering	141
Benchmarking Process Performance	142
Activity-Based Management (ABM)	143
The Concept of Kaizen	144
The Costs of Quality	144
ISO 9000	155
Quality Management and Productivity	155
Other Quality Related Issues	155
Accounting Process Redesign	158
Section E – Internal Controls.....	163
E.1. Governance, Risk, and Compliance	164
Corporate Governance	164
Responsibilities of the Board of Directors	170
Audit Committee Requirements, Responsibilities and Authority	170
Responsibilities of the Chief Executive Officer (CEO)	173
Election of Directors	173
Internal Control.....	174
Internal Control Definition	174
The Importance of Objectives	176
Who Is Responsible for Internal Control?	176
Components of Internal Control	177
What is Effective Internal Control?	187
Transaction Control Objectives	187
Types of Transaction Control Activities	187
Safeguarding Controls	188
Legislative Initiatives About Internal Control.....	192

Foreign Corrupt Practices Act (FCPA)	192
Sarbanes-Oxley Act and the PCAOB	193
External Auditors' Responsibilities and Reports	198
Financial Statement Opinion	199
Internal Control Opinion	201
Reviews and Compilations	201
Reports to the Audit Committee of the Board of Directors	202
E.2. Internal Auditing	202
Definition of Internal Auditing	202
The Internal Audit Charter: Establishing the Internal Audit Function	202
Organizational Independence	203
Scope of Activities and Responsibilities	203
Testing and Evaluating the Effectiveness of the Internal Control System	205
Determining Which Engagements to Conduct	205
Types of Engagements	207
Quality Auditing	208
Reporting to the Board	209
Inherent Risk, Control Risk, and Detection Risk	210
E.3. Systems Controls and Security Measures	212
Introduction to Systems Controls	212
Threats to Information Systems	213
The Classification of Controls	214
General Controls	216
Application Controls	223
Controls Classified as Preventive, Detective and Corrective	231
Controls Classified as Feedback, Feedforward and Preventive	232
System and Program Development and Change Controls	233
Internet Security	238
Viruses, Trojan Horses and Worms	239
Cybercrime	240
Business Continuity Planning	244
System Auditing	246
Assessing Controls by Means of Flowcharts	246
Computerized Audit Techniques	247
Answers to Questions	250

Table of Contents

Introduction to CMA Part 2	1
Section A – Financial Statement Analysis.....	2
Introduction to the Financial Statement Analysis Section	2
Basic Financial Statement Analysis	3
Earnings Before Interest and Taxes and Earnings Before Taxes Defined	3
Comparative Financial Statement Analysis	4
Vertical Common-Size Financial Statements	5
Horizontal Index-Number Trend Series Analysis	7
Financial Ratio Analysis	11
Liquidity Ratios.....	13
Net Working Capital	13
Liquidity Ratios	14
Leverage, Capital Structure, Solvency, and Earnings Coverage Ratios	19
Financial Leverage	20
Operating Leverage	26
Capital Structure and Solvency Ratios	31
Earnings Coverage Ratios	32
Activity Ratios.....	36
Accounts Receivable Activity Ratios	37
Inventory Activity Ratios	40
Accounts Payable Activity Ratios	42
The Operating Cycle and the Cash Cycle	43
Total Asset Turnover Ratio	45
Fixed Asset Turnover Ratio	45
Market Ratios	45
Book Value Per Share	46
Market-to-Book Ratio	47
Earnings Per Share (EPS)	48
EPS Disclosure Requirements	68
Price/Earnings (P/E) Ratio	71
Price/EBITDA Ratio	72
Earnings Yield	72
Dividend Yield	72
Dividend Payout Ratio	73
Shareholder Return	73
Profitability Ratios	74
Gross Profit Margin Percentage	74
Operating Profit Margin Percentage	75

Net Profit Margin Percentage	76
EBITDA Margin Percentage	76
Return on Invested Capital	77
Profitability Analysis	80
Factors That Contribute to Inconsistent Definitions in ROA and ROE	80
Factors to be Considered in Measuring Income	82
Sustainable Growth Rate	85
Ratios Summary and Example	87
Example Financial Statements	87
Ratios	91
Interpretation of Ratios in the Example	94
Benefits and Limitations of Ratio Analysis	98
Special Issues.....	101
The Impact of Foreign Exchange Fluctuations	101
The Impact of Inflation on Financial Statements and Financial Ratios	119
Off-Balance Sheet Financing	123
Adjusting Financial Statements for Accounting Changes and Corrections	126
The Difference Between Book Value and Market Value	133
Economic and Accounting Profit	134
Earnings Quality	137
Section B – Corporate Finance	142
Introduction to the Corporate Finance Section	142
Risk and Return	143
Return	143
Risk	144
Types of Risk	145
The Relationship Between Risk and Return	148
Capital Asset Pricing Model (CAPM)	149
Portfolio Risk and Return	158
Long-Term Financial Management	161
Capital Structure	161
Bonds (Debt Securities)	163
The Term Structure of Interest Rates and the Yield Curve	167
The Bond Instrument	175
Stock (Equity Securities)	188
The Fair Value or Intrinsic Value (Appropriate Price) of a Share of Stock	191
Derivatives	208
Cost of Capital	232
Overall Cost of Capital and the Weighted Average Cost of Capital	233

Capital Structure Decisions	249
Inflation, Interest Rates, and Prices of Financial Instruments	257
Raising Capital	260
Commercial Bank or Finance Company Loans	261
Venture Capitalists	266
Initial Public Offering (IPO)	266
Primary, Subsequent, and Secondary Offerings	266
Investment Banks	267
Private Placements	270
Crowdfunding Under the Jumpstart Our Business Startups (JOBS) Act	271
Bonds	272
International Bonds	272
Bonds and Rating Agencies	273
Benefits and Limitations of the Various Financing Sources	277
Financial Markets	281
Market Efficiency and the Efficient Market Hypothesis	288
Insider Trading	291
Dividends, Dividend Policy, and Stock Splits	292
Treasury Stock	297
Working Capital Management	298
Working Capital Finance	298
The Operating Cycle	304
Cash Flow Management	308
Marketable Securities Management	314
Accounts Receivable Management	321
Inventory Management	325
Short-Term Financing	335
Maturity Matching Approach to Working Capital Management	349
Corporate Restructuring	351
Business Combinations	351
Takeover Strategies and Defenses	356
Divestitures	360
Bankruptcy	364
The Discounted Cash Flow Approach to Valuing a Business	367
International Finance	375
Multinational Corporations (MNCs)	375
Foreign Direct Investment	376
International Buying and Selling	379
Foreign Currency Cross Rates	399
Managing Exchange Rate Risk	402
Use of Foreign Financing to Reduce Costs	410

International Payments	413
Financing International Trade Transactions	415
Transfer Pricing and Taxes	418
Appendix A – Examples of Remeasurement and Translation	419
Appendix B – Present Value Factors	426
Appendix C – Amortization of Bond Discount.....	428
Answers to Questions.....	429

Table of Contents

Section C – Decision Analysis	1
Introduction to Decision Analysis	1
The Decision-Making Process.....	2
Cost-Volume-Profit (CVP) Analysis	3
Contribution Margin Income Statement	6
Breakeven Analysis	6
Profit Requirement	10
Using Breakeven Analysis in Decision-Making	18
Breakeven Analysis When More than One Product Is Sold	21
CVP and Conditions of Risk and Uncertainty	29
Other Decisions	33
1) Choosing Between Two Cost Options	33
2) Choosing Between Two Production Options	35
3) Using Fixed Versus Variable Inputs	38
4) Product-Mix Decisions Under Constraints	40
Marginal Analysis	42
The Importance of Marginal Analysis	42
Marginal Revenue and Marginal Cost	42
Relevant Information	42
Decision-Making About Production Using Economics Concepts	47
Costs and Cost Objects	52
Income Tax Effects in Decision Making	55
Marginal Analysis Applications	55
Pricing	73
Impact of Supply and Demand on Pricing	73
Demand	73
Impact of Market Structure on Pricing	85
Short-Run Equilibrium Pricing	85
Pricing Strategy	93
Factors Affecting Pricing Decisions	93
General Pricing Approaches	95
Short-Run and Long-Run Pricing Decisions	103
Product Life-Cycle (PLC) Pricing and Costing	108
Other Considerations in Price Setting	113
Section D – Risk Management.....	116
Introduction to Risk Management	116
Benefits of Risk Management	116
Types of Risk	117

Internal and External Risk	118
The Risk Management Process	120
Risk Appetite and Risk Tolerance	128
Managing Operations Risk	128
Managing Finance Risk	129
Enterprise Risk Management (ERM)	129
Cost-Benefit Analysis in Risk Assessment and Decision Making	137
Risk Measurement in Banks	138
Section E – Investment Decisions	140
Introduction to Investment Decisions	140
Capital Budgeting Process Overview	141
The Stages in Capital Budgeting	142
Terms Used in Capital Budgeting	143
Identifying and Calculating the Relevant Cash Flows	144
Depreciation for Tax Income Purposes	150
Other Tax Considerations	152
Irrelevant Cash Flows	153
Example of Calculation of After-Tax Relevant Cash Flows	153
Capital Budgeting Methods	157
Payback Period or Payback Method	157
Discounted Cash Flow Methods of Capital Budgeting	160
Discounted Payback Period or Method (Breakeven Time)	160
Net Present Value (NPV) Method	162
Internal Rate of Return (IRR)	174
The Accounting (or Average) Rate of Return	185
Advanced Capital Budgeting Topics	186
Summary and Review of Relevant Cash Flows	204
Risk in Capital Budgeting	206
Real Options in Capital Budgeting	222
The Qualitative Factor in Capital Budgeting Decisions	226
Section F – Professional Ethics	227
Ethical Considerations for Professionals	227
IMA’s Statement of Ethical Professional Practice	229
IMA Statement of Ethical Professional Practice	229
Ethical Considerations for the Organization	234
Appendix A – Time Value of Money Concepts (Present/Future Value)	249
Appendix B – Example of IRR	268
Appendix C – An Incremental Capital Budgeting Analysis	270
Answers to Questions.....	274