Contents

Preface xi

OVERVIEW CHAPTER 1
Introducing Microsoft Office and Using Common Features 1

Introduction to Microsoft Office 2
    What Devices Will Microsoft Office Work With? 2
    What Storage Does Microsoft Office Provide? 2
    Which Microsoft Office Should I Use? 2
    What Are the Microsoft Office Apps? 3
    Microsoft Accounts 4
Common Features in Microsoft Office Apps 4
    The Ribbon 4
    The Quick Access Toolbar 4
    Undo/Redo 4
    Common Features on the File Tab 5
    Common Features on the Home Tab 9
    Common Features on the Review Tab 15
    Other Common Features 17

CHAPTER 1
Tracking Customer Data 19

Introducing Excel 20
    What Is a Worksheet? 20
    Cell Ranges 21
    Cell Selection and the Mouse Pointer 21
Entering and Editing Data 22
    Completing Cell Entries 22
    Navigating Around a Worksheet 23
    Using AutoComplete to Enter Data 24
    Rearranging Data in Excel 24
Adjusting Column Width and Row Height 27
Formatting Cells 28
    Borders and Fill 28
    Cell Alignment 30
    Clear Formatting and Clear All 31
Working with Numbers and Dates 31
    Negative Numbers 32
    Date Entries 32
Entering a Series Using AutoFill 34
Printing Worksheets 36
Zoom Tools 37
Other Navigation Methods 38
    Find 38
    Go To or the Name Box 40
Reinforce Your Skills 42
Apply Your Skills 45
Project Grader 48
Extend Your Skills 50

CHAPTER 2
Calculating Student Grades Using Formulas 51

Creating Formulas 52
    Mathematical Operators 52
    Cell References 52
    Order of Operations 53
Rearranging Data 54
    Insert and Delete Rows, Columns, and Cells 54
    Hide and Unhide Rows and Columns 56
    Sort Data by Column 56
Managing Multiple Worksheets 57
    Insert and Delete Worksheets 57
    Rename Worksheets 58
    Move Worksheets 59
    Change Worksheet Tab Colors 59
    Hide Worksheets 59
    Create Cell References to Other Worksheets 60
    Create a Copy of a Worksheet 62
    Edit Multiple Sheets at One Time 62
Reinforce Your Skills 65
Apply Your Skills 68
Project Grader 70
Extend Your Skills 73

CHAPTER 3
Performing Calculations Using Functions 75

Using Functions in Formulas 76
  The AutoSum Feature 77
  SUM, AVERAGE, COUNT, MAX, and MIN 77
  Insert Function 78
Using Relative and Absolute Cell References 79
  Absolute Cell References 80
  Mixed Cell References 80
  Display and Print Formulas 80
Creating Names for Cells and Ranges 82
  Using Cell Names in Formulas 83
Reinforce Your Skills 86
Apply Your Skills 89
Project Grader 91
Extend Your Skills 94

CHAPTER 4
Data Visualization and Images 95

Create Charts to Compare Data 96
  Chart Types 96
  Selecting Chart Data 98
  Chart Elements 99
Chart Tools 100
  Chart Design 101
  Chart Format 103
Move and Size Charts 105
Edit Chart Data 107
Adding Images 108
Conditional Formatting 110
Reinforce Your Skills 113
Apply Your Skills 116
Project Grader 118
Extend Your Skills 120

CHAPTER 5
Organizing Large Worksheets 121

Starting with a Template 122
Adjusting View Options 124
  Freeze Panes 124
  Split a Window 125
  Change the Workbook View 125
Organizing Data with Sorts and Filters 126
  Custom Sorts 127
  Filters 127
The IF Function 130
  Example: IF Function in Practice 130
Controlling Data Entry with Data Validation 133
Printing Options 136
  Headers and Footers 136
Excel Tables 139
Reinforce Your Skills 141
Apply Your Skills 144
Project Grader 146
Extend Your Skills 148

CHAPTER 6
Advanced Workbook Formatting 149

Formatting with Themes 150
  Customizing Themes 151
Cell Styles 153
Using the Format Cells Dialog Box 155
  Cell Borders and Fill 156
Creating Custom Number Formats 157
  International Formatting 158
Customizing the Page Setup 160
  Adding a Worksheet Background Image 160
Editing Document Properties 161
Reinforce Your Skills 163
Apply Your Skills 166
Project Grader 168
Extend Your Skills 170

CHAPTER 7
Date Functions and Conditional Formatting 171

- Date Serial Numbers 172
- Applying Custom Date Formatting 172
- Entering Time Information 175
- Using Date Functions 176
- Calculations Using Date and Time 178
- Conditional Formatting Using Graphics and Custom Rules 179
  - Conditional Formatting with Graphics 180
  - The Conditional Formatting Rules Manager 180
  - Conditional Formatting Using Formulas 180
- Reinforce Your Skills 184
- Apply Your Skills 187
- Project Grader 189
- Extend Your Skills 191

CHAPTER 8
Financial Functions and What-If Analysis 193

- Creating Financial Functions 194
  - Financial Function Arguments 194
  - PMT Function 195
  - FV Function 197
  - NPER Function 198
- Using What-If Analysis Tools 199
  - Data Tables 199
- Scenario Manager 203
- Goal Seek 206
- Reinforce Your Skills 208
- Apply Your Skills 212
- Project Grader 215
- Extend Your Skills 218

CHAPTER 9
Text Functions, Conditional Functions, and Formula Auditing 219

- Using Functions to Modify Text 220
  - Changing Case 220
  - Extracting Text 221
  - Merge and Modify Text with Functions and Flash Fill 221
  - Other Text Functions 222
- Creating Conditional Functions Using IF Criteria 225
- Nested Functions 228
  - The IFS Function 228
  - The SWITCH Function 229
- Troubleshooting Formulas 232
  - Trace Precedents and Dependents 232
  - Checking for Errors 234
  - Evaluate a Formula 234
  - The Watch Window 235
- 3-D Cell References 238
- Reinforce Your Skills 240
- Apply Your Skills 244
- Project Grader 247
- Extend Your Skills 250

CHAPTER 10
Lookup Functions and Outlines 251

- Introducing Lookup Functions 252
  - VLOOKUP and HLOOKUP 252
- The Outline Feature 255
- Subtotals 257
  - The Subtotal Dialog Box 258
- The Quick Analysis Tool 260
- Reinforce Your Skills 263
- Apply Your Skills 267
- Project Grader 269
- Extend Your Skills 271

CHAPTER 11
Working with Tables 273

Working with Tables 274
- Insert and Delete Table Rows and Columns 274
- Calculated Columns 275
- Apply a Sort or Filter 275

Special Table Features 277
- Table Name 277
- Header Row 277
- Table Style Options 278

Structured References 280
- Formulas with Structured References 280

Creating Sparklines 282
Reinforce Your Skills 284
Apply Your Skills 287
Project Grader 289
Extend Your Skills 291

CHAPTER 12
PivotTables and PivotCharts 293

Creating PivotTables 294
- What Is a PivotTable? 294
- Arranging the Source Data 295
- Remove Duplicates 295
- Adding PivotTable Fields 296

Using PivotTables for Analysis 298
- Formatting PivotTables 299
- Changing Value Field Settings 300

Filtering a PivotTable 303
- Filtering with AutoFilter 303
- Filtering with a Filter Field 303
- Filtering with Slicers 304

Creating Calculated Fields 306
- Show Values As 307
- Refreshing PivotTable Data 307
- Referencing PivotTable Data 307

Creating PivotCharts 309
- Filtering PivotCharts 309

Reinforce Your Skills 311
Apply Your Skills 314
Project Grader 316
Extend Your Skills 319

CHAPTER 13
Working with Macros 321

Introducing Macros 322
- Changing Macro Security 322

Recording Macros 323
- Recording the Macro Steps 324
- Storing and Sharing Macros 325
- Saving a Workbook Containing Macros 325

Running and Assigning Macros 326
Reinforce Your Skills 330
Apply Your Skills 332
Project Grader 334
Extend Your Skills 337

CHAPTER 14
Data Management for Business 339

Importing and Exporting Data 340
- Importing 340
- Exporting 341
- Mail Merge with Microsoft Word 341
- Importing Tables from Microsoft Access 342
- External Workbook References 342

Summarizing Data 345
- Data Consolidation 345

Advanced Options for Filling a Data Series 347
Additional Charts and Chart Tools 349
- Adding Trendlines 350
- Saving a Chart as a Template 350

Additional Lookup and Logical Functions 351
- XLOOKUP 352
- Other Logical Functions 352

Reinforce Your Skills 354
Apply Your Skills 357
Extend Your Skills 360

CHAPTER 15

Workbook Completion 363

Inserting Hyperlinks for Navigation 364
Working with Notes and Comments 366
Adding Alternative Text to Objects for Accessibility 367
Inspecting Your Workbook 368
  Inspect a Workbook for Hidden Properties or Personal Information 369
  Inspect a Workbook for Accessibility 369
  Inspect a Workbook for Compatibility 370
  Configure Editing and Display Languages 372
Creating Forms 373
Protecting Workbooks 375
  Protect Workbook Structure 376
  Protect a Worksheet 376
  Lock Cells and Hide Formulas 377
  Configure Formula Calculation Options 377
  Manage Workbook Versions 377
  Mark as Final 378
  Encrypt with a Password 378
Reinforce Your Skills 381
Apply Your Skills 384
Extend Your Skills 386

The Microsoft Office Specialist Exam and This Text 387
Glossary 393
Index 399