Expert-level candidates for the Microsoft Excel 2016 exam have an advanced understanding of the Excel environment, and the ability to guide others to the proper use of the program’s features.

They will create, manage, and distribute professional spreadsheets for a variety of specialized purposes and situations. They will customize their Excel environments to meet project needs and to enhance productivity. Expert workbook examples include custom business templates, multiple-axis financial charts, amortization tables, and inventory schedules. Candidate roles may include accountants, financial analysts, data analysts, commercial bankers, and others.

MOS 2016 certification exams introduce a new performance-based format for improved testing of a candidate’s knowledge, skills and abilities using the MOS 2016 programs:

- MOS 2016 exam task instructions generally do not include the command name as in previous versions. For example, function names are avoided, and are replaced with descriptors. This means candidates must understand the purpose and common usage of the program functionality in order to successfully complete the tasks in each of the projects.
- The MOS 2016 exam format incorporates multiple projects.

Objective Domains

1.1 Manage Workbooks
   1.1.1 Save a workbook as a template
   1.1.2 Copy macros between workbooks
   1.1.3 Reference data in another workbook
   1.1.4 Reference data by using structured references
   1.1.5 Enable macros in a workbook
   1.1.6 Display hidden ribbon tabs

1.2 Manage Workbook Review
   1.2.1 Restrict editing
   1.2.2 Protect a worksheet
   1.2.3 Configure formula calculation options
   1.2.4 Protect workbook structure
   1.2.5 Manage workbook versions
   1.2.6 Encrypt a workbook with a password
2.1 Apply Custom Data Formats and Validation
   2.1.1 Create custom number formats
   2.1.2 Populate cells by using advanced Fill Series options
   2.1.3 Configure data validation

2.2 Apply Advanced Conditional Formatting and Filtering
   2.2.1 Create custom conditional formatting rules
   2.2.2 Create conditional formatting rules that use formulas
   2.2.3 Manage conditional formatting rules

2.3 Create and Modify Custom Workbook Elements
   2.3.1 Create custom color formats
   2.3.2 Create and modify cell styles
   2.3.3 Create and modify custom themes
   2.3.4 Create and modify simple macros
   2.3.5 Insert and configure form controls

2.4 Prepare a Workbook for Internationalization
   2.4.1 Display data in multiple international formats
   2.4.2 Apply international currency formats
   2.4.3 Manage multiple options for +Body and +Heading fonts

3.1 Apply Functions in Formulas
   3.1.1 Perform logical operations by using AND, OR, and NOT functions
   3.1.2 Perform logical operations by using nested functions
   3.1.3 Perform statistical operations by using SUMIFS, AVERAGEIFS, and COUNTIFS functions

3.2 Look up data by using Functions
   3.2.1 Look up data by using the VLOOKUP function
   3.2.2 Look up data by using the HLOOKUP function
   3.2.3 Look up data by using the MATCH function
   3.2.4 Look up data by using the INDEX function

3.3 Apply Advanced Date and Time Functions
   3.3.1 Reference the date and time by using the NOW and TODAY functions
   3.3.2 Serialize numbers by using date and time functions

3.4 Perform Data Analysis and Business Intelligence
   3.4.1 Import, transform, combine, display, and connect to data
   3.4.2 Consolidate data
   3.4.3 Perform what-if analysis by using Goal Seek and Scenario Manager
   3.4.4 Use cube functions to get data out of the Excel data model
   3.4.5 Calculate data by using financial functions

3.5 Troubleshoot Formulas
   3.5.1 Trace precedence and dependence
   3.5.2 Monitor cells and formulas by using the Watch Window
   3.5.3 Validate formulas by using error checking rules
   3.5.4 Evaluate formulas

3.6 Define Named Ranges and Objects
   3.6.1 Name cells
   3.6.2 Name data ranges
   3.6.3 Name tables
   3.6.4 Manage named ranges and objects
Create Advanced Charts

4.1.1 Add trendlines to charts
4.1.2 Create dual-axis charts
4.1.3 Save a chart as a template

Create and Manage PivotTables

4.2.1 Create PivotTables
4.2.2 Modify field selections and options
4.2.3 Create slicers
4.2.4 Group PivotTable data
4.2.5 Reference data in a PivotTable by using the GETPIVOTDATA function
4.2.6 Add calculated fields
4.2.7 Format data

Create and Manage Pivot Charts

4.3.1 Create PivotCharts
4.3.2 Manipulate options in existing PivotCharts
4.3.3 Apply styles to PivotCharts
4.3.4 Drill down into PivotChart details
Objective Domain

1.0 Manage and Share Workbooks

1.3 Manage Workbook Changes
   This objective may include but is not limited to: tracking changes, managing comments, identifying errors, troubleshooting with tracing, displaying all changes, retaining all changes

2.0 Apply Custom Formats and Layouts

2.2 Apply Advanced Conditional Formatting and Filtering
   This objective may include but is not limited to: writing custom conditional formats, using functions to format cells, creating advanced filters, managing conditional formatting rules

2.4 Prepare a Workbook for Internationalization and Accessibility
   This objective may include but is not limited to: modifying Tab order among workbook elements and objects, displaying data in multiple international formats, modifying worksheets for use with accessibility tools, utilizing international symbols, managing multiple options for +Body and +Heading fonts

3.0 Create Advanced Formulas

3.2 Look Up Data with Functions
   This objective may include but is not limited to: utilizing the LOOKUP function, utilizing the VLOOKUP function, utilizing the HLOOKUP function, utilizing the TRANSPOSE function
3.3 **Apply Advanced Date and Time Functions**  
This objective may include but is not limited to: utilizing the NOW and TODAY functions, using functions to serialize dates and times

4.0 **Create Advanced Charts and Tables**

4.1 **Create Advanced Chart Elements**  
This objective may include but is not limited to: adding trendlines to charts, creating dual axis charts, creating custom chart templates, viewing chart animations

4.2 **Create and Manage PivotTables**  
This objective may include but is not limited to: creating new PivotTables, modifying field selections and options, creating a slicer, grouping records, utilizing calculated fields, formatting data, utilizing PowerPivot, managing relationships
Objective Domain

1.0 Manage and Share Workbooks

1.1 Manage Multiple Workbooks
This objective may include but is not limited to: modifying existing templates, merging multiple workbooks, managing versions of a workbook, copying styles from template to template, copying macros from workbook to workbook, linking to external data

1.2 Prepare a Workbook for Review
This objective may include but is not limited to: setting tracking options, limiting editors, opening workspaces, restricting editing, controlling recalculation, protecting worksheet structure, marking as final, removing workbook metadata, encrypting workbooks with a password

2.0 Apply Custom Formats and Layouts

2.1 Apply Custom Data Formats
This objective may include but is not limited to: creating custom formats (Number, Time, Date), creating custom accounting formats, using advanced Fill Series options

2.3 Apply Custom Styles and Templates
This objective may include but is not limited to: creating custom color formats, creating and modifying cell styles, creating and modifying custom templates, creating form fields
3.0 Create Advanced Formulas

3.1 Apply Functions in Formulas
This objective may include but is not limited to: utilizing the IF function in conjunction with other functions, utilizing AND/OR functions, utilizing nested functions, utilizing SUMIFS, AVERAGEIFS, and COUNTIFS functions

3.4 Create Scenarios
This objective may include but is not limited to: utilizing the watch window, consolidating data, enabling iterative calculations, utilizing What If analysis tools including Goal Seek, utilizing the Scenario Manager, using financial functions

4.0 Create Advanced Charts and Tables

4.3 Create and Manage Pivot Charts
This objective may include but is not limited to: creating new PivotCharts, manipulating options in existing PivotCharts, applying styles to PivotCharts
Microsoft Excel Expert 2010, Objective Domain

Exam Design

The Basics
This is a Technical Specialist exam designed to assess candidates’ hands-on skills using Microsoft Office Excel 2010 at the Expert level. We are specifying an item pool of 75 unique performance-based tasks. Items should be written to the Application cognitive level. For more information about cognitive levels, refer to the Cognitive Domain in Bloom’s Taxonomy.

Categories in the cognitive domain of Bloom's Taxonomy (Anderson & Krathwohl, 2001)
Target Audience
The audience profile for the Expert Exam is a skilled office worker or student with at least 6 – 9 months use of the particular Office software.

- Conditional formatting (creating, editing, and managing rules, multiple conditions)
- Charts and graphs (customized)
- Formulas and functions (complex)
- Time/date functions, time/date math
- Converting data types
- Linking data across multiple workbooks
- Consolidated data
- Pivot charts and tables (creating and manipulating)
- Dynamic charts
- Trend line
- Error tracing
- Named ranges and cells
- Hyperlinks
- Recording and running macros
- Locking cells
- Protecting worksheets

Objective Domain

1. Sharing and Maintaining Workbooks
   1.1. Apply workbook settings, Properties, and data options
   1.2. Apply protection and sharing properties to workbooks and worksheets
   1.3. Maintain shared workbooks

2. Applying Formulas and Functions
   2.1. Audit Formulas
   2.2. Manipulate formula options
   2.3. Perform Data Summary Tasks
   2.4. Apply functions in formulas
3. Presenting Data Visually

3.1. Apply advanced chart features
3.2. Apply data analysis
3.3. Create and manipulate PivotTables
3.4. Create and manipulate PivotCharts

4. Working with Macros and Forms

4.1. Create and manipulate macros
4.2. Insert and manipulate form controls