

## Module 4 – Spreadsheets

The following is the Syllabus for Module 4, *Spreadsheets*, which provides the basis for the practice-based test in this module.

### Module Goals

**Module 4** *Spreadsheets* requires the candidate to understand the concept of spreadsheets and to demonstrate an ability to use a spreadsheet to produce accurate work outputs.

The candidate shall be able to:

- Work with spreadsheets and save them in different file formats.
- Choose built-in options such as the Help function within the application to enhance productivity.
- Enter data into cells and use good practice in creating lists. Select, sort and copy, move and delete data.
- Edit rows and columns in a worksheet. Copy, move, delete and appropriately rename worksheets.
- Create mathematical and logical formulas using standard spreadsheet functions. Use good practice in formula creation and recognize error values in formulas.
- Format numbers and text content in a spreadsheet.
- Choose, create and format charts to communicate information meaningfully.
- Adjust spreadsheet page settings and check and correct spreadsheet content before finally printing spreadsheets.

CATEGORY	SKILL SET	REF.	TASK ITEM
4.1 Using the Application	4.1.1 Working with Spreadsheets	4.1.1.1	Open, close a spreadsheet application. Open, close spreadsheets.
		4.1.1.2	Create a new spreadsheet based on default template.
		4.1.1.3	Save a spreadsheet to a location on a drive. Save a spreadsheet under another name to a location on a drive.
		4.1.1.4	Save a spreadsheet as another file type like: template, text file, software specific file extension, version number.
		4.1.1.5	Switch between open spreadsheets.

CATEGORY	SKILL SET	REF.	TASK ITEM
	<i>4.1.2 Enhancing Productivity</i>	4.1.2.1	Set basic options/preferences in the application: user name, default folder to open, save spreadsheets.
		4.1.2.2	Use available Help functions.
		4.1.2.3	Use magnification/zoom tools.
		4.1.2.4	Display, hide built-in toolbars. Restore, minimize the ribbon.
<b>4.2 Cells</b>	<i>4.2.1 Insert, Select</i>	4.2.1.1	Understand that a cell in a worksheet should contain only one element of data, (for example, first name detail in one cell, surname detail in adjacent cell).
		4.2.1.2	Recognize good practice in creating lists: avoid blank rows and columns in the main body of list, insert blank row before Total row, ensure cells bordering list are blank.
		4.2.1.3	Enter a number, date, text in a cell.
		4.2.1.4	Select a cell, range of adjacent cells, range of non-adjacent cells, entire worksheet.
	<i>4.2.2 Edit, Sort</i>	4.2.2.1	Edit cell content, modify existing cell content.
		4.2.2.2	Use the undo, redo command.
		4.2.2.3	Use the search command for specific content in a worksheet.
		4.2.2.4	Use the replace command for specific content in a worksheet.
		4.2.2.5	Sort a cell range by one criterion in ascending, descending numeric order, ascending, descending alphabetic order.
	<i>4.2.3 Copy, Move, Delete</i>	4.2.3.1	Copy the content of a cell, cell range within a worksheet, between worksheets, between open spreadsheets.
		4.2.3.2	Use the autofill tool/copy handle tool to copy, increment data entries.
		4.2.3.3	Move the content of a cell, cell range within a worksheet, between worksheets, between open spreadsheets.

CATEGORY	SKILL SET	REF.	TASK ITEM
<b>4.3 Managing Worksheets</b>	<i>4.3.1 Rows and Columns</i>	4.2.3.4	Delete cell contents.
		4.3.1.1	Select a row, range of adjacent rows, range of non-adjacent rows.
		4.3.1.2	Select a column, range of adjacent columns, range of non-adjacent columns.
		4.3.1.3	Insert, delete rows and columns.
		4.3.1.4	Modify column widths, row heights to a specified value, to optimal width or height.
	4.3.1.5	Freeze, unfreeze row and/or column titles.	
	<i>4.3.2 Worksheets</i>	4.3.2.1	Switch between worksheets.
		4.3.2.2	Insert a new worksheet, delete a worksheet.
		4.3.2.3	Recognize good practice in naming worksheets: use meaningful worksheet names rather than accept default names.
		4.3.2.4	Copy, move, rename a worksheet within a spreadsheet.
<b>4.4 Formulas and Functions</b>		<i>4.4.1 Arithmetic Formulas</i>	4.4.1.1
	4.4.1.2		Create formulas using cell references and arithmetic operators (addition, subtraction, multiplication, division).
	4.4.1.3		Identify and understand standard error values associated with using formulas: #NAME?, #DIV/0!, #REF!.
	4.4.1.4		Understand and use relative, absolute cell referencing in formulas.
	<i>4.4.2 Functions</i>	4.4.2.1	Use sum, average, minimum, maximum, count, counta, round functions.
		4.4.2.2	Use the logical function if (yielding one of two specific values) with comparison operator: =, >, <.

CATEGORY	SKILL SET	REF.	TASK ITEM		
4.5 Formatting	4.5.1 Numbers/Dates	4.5.1.1	Format cells to display numbers to a specific number of decimal places, to display numbers with, without a separator to indicate thousands.		
		4.5.1.2	Format cells to display a date style, to display a currency symbol.		
		4.5.1.3	Format cells to display numbers as percentages.		
	4.5.2 Contents	4.5.2.1	Change cell content appearance: font sizes, font types.		
		4.5.2.2	Apply formatting to cell contents: bold, italic, underline, double underline.		
		4.5.2.3	Apply different colours to cell content, cell background.		
		4.5.2.4	Copy the formatting from a cell, cell range to another cell, cell range.		
	4.5.3 Alignment, Border Effects	4.5.3.1	Apply text wrapping to contents within a cell, cell range.		
		4.5.3.2	Align cell contents: horizontally, vertically. Adjust cell content orientation.		
		4.5.3.3	Merge cells and centre a title in a merged cell.		
		4.5.3.4	Add border effects to a cell, cell range: lines, colours.		
		4.6 Charts	4.6.1 Create	4.6.1.1	Create different types of charts from spreadsheet data: column chart, bar chart, line chart, pie chart.
				4.6.1.2	Select a chart.
	4.6.1.3			Change the chart type.	
4.6.2 Edit	4.6.1.4		Move, resize, delete a chart.		
	4.6.2.1		Add, remove, edit a chart title.		
	4.6.2.2		Add data labels to a chart: values/numbers, percentages.		
	4.6.2.3		Change chart area background colour, legend fill colour.		
	4.6.2.4	Change the column, bar, line, pie slice colours in the chart.			

CATEGORY	SKILL SET	REF.	TASK ITEM
4.7 Prepare Outputs	4.7.1 Setup	4.6.2.5	Change font size and colour of chart title, chart axes, chart legend text.
		4.7.1.1	Change worksheet margins: top, bottom, left, right.
		4.7.1.2	Change worksheet orientation: portrait, landscape. Change paper size.
		4.7.1.3	Adjust page setup to fit worksheet contents on a specified number of pages.
		4.7.1.4	Add, edit, delete text in headers, footers in a worksheet.
	4.7.1.5	Insert and delete fields: page numbering information, date, time, file name, worksheet name into headers, footers.	
	4.7.2 Check and Print	4.7.2.1	Check and correct spreadsheet calculations and text.
		4.7.2.2	Turn on, off display of gridlines, display of row and column headings for printing purposes.
		4.7.2.3	Apply automatic title row(s) printing on every page of a printed worksheet.
		4.7.2.4	Preview a worksheet.
		4.7.2.5	Print a selected cell range from a worksheet, an entire worksheet, number of copies of a worksheet, the entire spreadsheet, a selected chart.