UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

Cambridge International Diploma in IT Skills Foundation Level

Scheme of Work

5273 Spreadsheets Core Module





Introduction

This application is designed to familiarise candidates with the spreadsheet application. The candidate should possess the skills and knowledge required to understand and perform everyday uses of a spreadsheet package to create a spreadsheet, arrange data and make simple calculations.

Candidates should know how to initialise and close the application **and** possess competent computer keyboard and mouse skills.

What is Assessed in this Module?

Candidates will demonstrate the ability to:

- open a spreadsheet file
- amend a spreadsheet
- enter and edit data
- format cells
- sort data
- enter and apply simple formulae
- · save and print a spreadsheet

Underpinning Knowledge

Awareness of how to:

- open an existing spreadsheet
- manipulate data to include enter, edit, sort and delete
- manipulate cells to change the appearance
- enter and apply simple formulae
- save and print a document

Tutor Preparation Required to Deliver this Module

Below is a checklist of what you will need to set up before you run the course. Some of the items, such as an overhead projector, are optional.

You will need:

- ideally, one computer (PC) per candidate with MS Windows 95/98/NT/2000/XP and MS Excel 97 / 2000 / 2002 (and optionally Word 97/2000/2002) preloaded, but candidates can also share PCs
- to ensure that the candidates have access to a printer local or networked that all candidates can print to
- to load the following workbook files from the Trainer disk onto the tutors PC: Costs, Cake, Flags, Cars, Round, Household
- to create a folder on each PC containing the exercise data from the floppy disc (C:\My Documents) and a folder for candidates to save their work to (C:\My Documents\Candidate)
- overhead projector and screen OR PC with LCD projector/large monitor
- flip chart, pens and whiteboard
- CIE Support Guides
- name cards, paper and pens for the candidates

General Principles and Procedures

If using a network to deliver this course you may prepare documents showing candidates how to log on.

Important Note

This application module is only available for assessment using Microsoft Excel 97, Excel 2000 or Excel 2002.

Scheme of Work

Learning Objectives	Performance Criteria	Classroom Ideas	Resources	Notes			
Session Plan One (1.25hrs)							
introduction and course objectives		introduction of trainer, course and candidates	CIE Tutor Support Guide	It is important to let the candidates know what will be assessed at the end of			
			CIE Candidate Support Guide	the module. Tutors could provide a checklist with objectives that can be ticked off after each session so that candidates can			
Getting Started with		launch Excel 97 / 2000 / 2002 from the	OHTs	track their progress.			
MS Excel		Office toolbar, desktop icon or Start menu to demonstrate, open the Costs workbook	additional exercises for each Performance	Use the additional exercises to reinforce the skills the			
open a spreadsheet file	3.1	 explain the components of the opening screen to include: title bar 	Criterion	candidates have learned for each Performance Criterion.			
		 menu bar toolbars menus formula bar use of shortcut keys dialogue boxes 		Advise candidates that Excel will prompt them to save any unsaved data before closing. Remind them it is advisable to do so!			
		 explain the purpose of the green tick, red cross and = sign buttons briefly explain worksheets and sheet tabs 		The formula bar displays entries as they are being typed in.			
		 explain the meaning of a cell and identify how to tell which is the active cell point out columns and rows demonstrate exiting from Excel 		It is possible to have 255 worksheets in 1 workbook. There are 256 columns in each worksheet and the alphabet repeats with the last repeat being IV. It is possible to have 65,536 rows in each worksheet			

Learning Objectives	Performance Criteria	Classroom Ideas	Resources	Notes
Session Plan One (1.5hrs) Conti	nued			
Amend a spreadsheet	3.2	 explain that the Office Assistant is an easy way to get help show how to display the Office Assistant demonstrate how to run a search for help demonstrate Tool Tips Explain that Excel saves work with a document extension of .xls open Excel and Costs.xls point out that columns and rows can be inserted and deleted at any time cell references in all formulas used in the workbook/sheet will adjust automatically demonstrate how to insert a column / row demonstrate how to delete a column / row 		Files can be saved using: Save icon, File menu CTRL + S

Learning Objectives	Performance Criteria	Classroom Ideas	Resources	Notes
Session Plan Two (1.25hrs)			1	
enter and edit data	• 3.3	 explain there are 4 data entry types that can be used in Excel demonstrate how to enter data demonstrate how to confirm the entry onto the worksheet demonstrate how to cancel an entry demonstrate how to replace a data entry demonstrate how to edit a data entry demonstrate how to delete a data entry. demonstrate how to select data entries using the mouse and the keyboard demonstrate the undo facility demonstrate the redo facility 	 CIE Tutor Support Guide CIE Candidate Support Guide OHTs additional exercises for each Performance Criterion 	Data entry types are: Text, Values, Dates and Formulas Excel will allow the last 16 actions to be undone

Learning Objectives	Performance Criteria	Classroom Ideas	Resources	Notes			
Session Plan Three (1.5)	Session Plan Three (1.5hrs)						
 Format cells Sort data 	• 3.4	 explain that formatting a worksheet enables the data to be presented in an easy to understand form explain that the Formatting toolbar enables basic formats to be applied to the worksheet demonstrate how to resize cells by changing the width and the height demonstrate how data can be justified either by cell, row or column explain how numbers can be formatted using the Format cells dialogue box demonstrate the Format cells dialogue box and show candidates how to format cells in some of the main format options and how these can be customised (Number, Currency, Date and Time) demonstrate how to sort data using the ascending button on the Standard toolbar. explain how data can be sorted on more that 1 column using Data, Sort command or through the Sort dialogue box. explain the options available in the Sort dialogue box. 	 CIE Tutor Support Guide CIE Candidate Support Guide OHTs additional exercises for each performance criterion 	When data is entered into cells, Excel works out what type of data it is (Text, Dates, Values or Formulae) and applies the default format. Using number formatting the format of the cells can be changed to make cells more accurate e.g. applying a currency style. There are five formatting buttons on the toolbar to apply basic formatting. Data can be sorted alphabetically or in numeric order			

Learning Objectives	Performance Criteria	Classroom Ideas	Resources	Notes
Session Plan Four (1.25hrs)				
enter and apply simple formulae	• 3.6	 explain that performing calculations is one of the main uses of spreadsheets demonstrate how to use Autosum to create a single total demonstrate how to sum multiple columns explain that formulae are composed of a number of different elements combined and executed in a specific way describe the elements that can be used in a formulae. demonstrate how to add and subtract cells using the Function and Paste Function buttons. using the Paste Function button, demonstrate how to calculate the average of a range of cells demonstrate the use of basic functions such as Max and Min demonstrate how to get help on each function by clicking the Help button in the Paste Function dialogue box demonstrate formulae 	 CIE Tutor Support Guide CIE Candidate Support Guide OHTs additional exercises for each Performance Criterion 	Elements in formula can be found on OHTP21. The sequence of how calculations are executed can be found on OHTP23. How to enter a calculation can be found on OHTP22. The most common option for totalling columns and rows is to use the SUM function. This requires a range to work with which can be entered manually or by using the AutoSum button on the Standard Toolbar. If the wrong range is selected when the AutoSum button is clicked then the mouse can be used to select a different range. MAX defines the largest cell value in a range (blank cells and text are not included) MIN defines the smallest cell value in a range (blank cells and text are not included)

Learning Objectives	Performance Criteria	Classroom Ideas	Resources	Notes
Session Plan Four (1.25hrs)				
save and print a spreadsheet	• 3.7	 explain the importance of saving the data as a file and the difference between Save and Save As describe the options available in the Save As dialogue box explain how Save As can also be used to save an existing file to a different location or with a new name describe how Print Preview can be used to check before printing. demonstrate the ways that Print Preview can be used explain the options available in the Print dialogue box 		The Print Preview window is used to check the overall layout of a document before it is printed. It accurately reflects what will be printed on the paper. The print preview facility works on WYSIWYG: What You See Is What You Get. It is an example of good practice to save the data prior to printing

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Resources

Online Resources

There are many sites available which cover this topic. Useful sites include:

http://www.baycongroup.com/excel.htm

This site offers a very good tutorial package for Excel. The site has several tutorials that increase in difficulty. The site is clearly laid out.

http://www.microsoft.com/office/excel/default.asp

The official Microsoft site for Excel. There are plenty of hints and tips on this site with useful screen shots. This site can be accessed in different languages by visiting http://www.microsoft.com/worldwide and selecting the appropriate country.

http://www.tutorialbox.com/tutors/off2000/excel

A free site with tutorials on all Microsoft applications. Useful for all students from the beginner to the more experienced.

http://www.cie.org.uk/CIE/WebSite/UCLESData/Documents/Career%20%26%20Skills%20Awards/IT/Resources/glossarv.pdf

A Glossary of Terms is available on the CIE website, which is useful for this module.

Books

McBride, P K *Skills Award in Information Technology: Foundation Level* (Edition 2002) Cambridge University Press ISBN 0521525292

British Computer Society *A Glossary of Computing Terms* (Edition 1998) Longman ISBN 0582369673

Other Resources

The built-in Excel Help files have many hints and tips and include a search facility. Also available is the Windows demonstration presentation which can be used to give an introduction to the Windows operating system.