

Table of contents

SECTION 1

You and your computer	1
Module 1.1 Upgrading your computer	3
Main components inside computer case	4
Types of upgrades	7
Module 1.2 Buying a computer	11
Specifications for PCs	12
Determine what is available	
Decide what you want to use your computer for	
Other tips	
Laptop versus desktop	15
Buying peripherals and other devices	16
Screen	
Mouse	
Keyboard	
Printer	
Scanner	
Extra storage	
Other devices	
Module 1.3 Internet connection choices	21
Terminology	21
Methods of connecting	22
Using cables: Dial-up / non permanent	
Using cables: Permanent / dedicated/leased Lines	
Wireless	
What to consider when looking at broadband	28
Places where people can connect to the Internet	29
Cyber cafés	
Hot spots	
At home	
From business	
Anywhere	
Module 1.4 Some problems and solutions	32
Introduction	32
Determine if it really is an error	
Check all connections	
Going back in time	
Power problems	34
Problems at boot up	35
The non-system disk error	
Booting in 'Safe mode'	
Screen does not display	
The 'frozen' computer / program	37



Help – my computer is slow!	37
Reboot your PC	
What’s new on your PC?	
More memory?	
Hard drive woes	

Module 1.5 Problems with I/O devices and storage 42

Mouse, keyboard and screen problems	42
The mouse and keyboard	
Blank and strange screens	
Sound	43
Printing problems	44
No printing occurs	
Printer does not print correctly	
Controlling your print jobs	
Storage problems	48
Troubleshooting writing to CD or DVD	
The ‘full’ disk	
Getting a file to open	
Read-only files	

SECTION 2

Computers in modern society 53

Module 2.1 Communication and networks in modern society 55

Wide Area Networks	55
What is a WAN?	
Modern trends in communicating over a wide area	
WAN communication connections	
Uses of computer communications	59
Introduction	
Webcams	
Video conferencing	
Internet broadcasts	
Podcasting	
Voice over Internet Protocol (VoIP)	
Mailing lists	
Blogs	
Online auctions	
Fax to e-mail	

Module 2.2 Security, legal and ethical issues 65

Computer crime	65
Examples	
Containing and preventing computer crime	67
Security in ICT	68
Control access	
Make backups	
Install malware detection and removal tools	
Safeguard against system failure	



Legal issues: Let's talk about rights	75
What rights do you have as a worker or employee?	
What rights do you have as a consumer?	
Ethical issues	77
Module 2.3 The impact of ICT	81
Introduction	81
The world of business and the labour market	82
Global markets versus competition	
Advertising and marketing	
Work conducted across international boundaries	
Impact on labour force	
The impact of e-commerce on businesses and clients	
Education and training	87
Environment	88
Health issues	89
Communication and access to information – issues	90
Privacy of information	
Accuracy of information	
The cost of technology	92
Increase in overhead costs	
The digital divide	
In conclusion	93

SECTION 3

Word processing with Microsoft Word 97

Module 3.1 Mail merge 99

How mail merge works	99
Steps that must be followed	

Module 3.2 Working with styles 106

What is a style?	106
Using existing styles	107
Formatting a document using existing styles	
Changing the style of a paragraph	
Creating and changing styles	111

Module 3.3 Working with long documents 115

Creation of a table of contents page	115
Bookmarks	118
Creation of a bookmark	
Jump to a bookmark	
Delete a bookmark	119
Hyperlinks	119
Footnotes and endnotes	121
What are footnotes and endnotes?	
Inserting of footnotes and endnotes	



Module 3.4 Forms created in Word	124
Forms that are filled in by hand	124
Word forms	126
Introduction to Word forms	
Creating Word forms	

SECTION 4

Spreadsheets with Excel

Module 4.1 Working with dates and times	133
Dates	133
Date format	
Calculations with dates	
Calculations with time	136
Module 4.2 Text and statistical functions	139
Functions with text data	139
Statistical functions	143
Module 4.3 Worksheets and choices	147
Simple use of multiple worksheets	147
Nested IF functions	150
The AND and OR functions	152
The VLOOKUP function	152
Looking up a specific value	
Looking up a value in an interval	

SECTION 5

Databases with Microsoft Access

Module 5.1 Designing a simple database	163
Decide what data should be stored	163
Design with a focus on improving data capture	165
Input Mask	
Cellphone numbers	
Giving a default value to certain fields	
Testing for validity	
Module 5.2 Calculations in queries and reports	172
Introduction	172
Calculated fields in queries	172
What is a calculated field?	175
Calculated fields in reports	175
Calculations on fields without grouping	
The use of functions in grouping	



SECTION 6

Using computers to work effectively with information 183

Module 6.1 Successfully working with information..... 185

A strategy for the handling of information 185

Practical information handling (Completing your PAT) 186

Introduction

Step 1: Define the task

Step 2: Determine how and where the information can be found

Step 3: Find sources and extract information

Step 4: Use information

Step 5: Present it!

Step 6: Evaluate the product and the process

Module 6.2 Test and improve your knowledge 199

Operational knowledge questions - I

OfficeFullOfErrors

On holiday – e-mail, Internet, technology

Operational knowledge questions - II

Computerising the school's library and media centre

Help your mom!

Operational knowledge questions - III

Storage and memory

Use of the computer by the RSC

Operational knowledge questions - IV

Module 6.3 Practise makes perfect 222

Champion Dog Training School

Waiter evaluation at the Café 77 Restaurant

Sinoville High School Interests Survey

TOPGYM

File management and word processing

Budget Tours

Snappers photography club

Competition administration

APPENDIX

Effective presentations in PowerPoint 253

INDEX 261

