Level 5 Diploma in Information Technology (103)
127 Credits

Unit: Windows Operating System	**Guided Learning Hours:** 200
Paper No.: 1	**Number of Credits:** 20
Prerequisites: Computer basics.	**Corequisites:** A pass or higher in Certificate in Information Systems.

Aim: The unit place emphasis on Windows operating system concepts, including: understanding the Windows environment, the desktop, how to use help features, the taskbar, running multiple programs, and managing documents and folders. Learners will learn how to identify Window operating system elements, interface with menus, dialog box controls, and how to use the operating system efficiently. Activities will include copy, paste and delete functions, customising the Taskbar, understanding file maintenance and file name extensions, exploring the Network Neighbourhood and how shared data is identified. The unit will cover: Manipulating Windows and Taskbar; Using Windows Accessories; Printing in Windows; Getting Windows Help; user Settings; Controlling the Windows Screen Display; Changing The Date/Time And Regional Settings; Viewing The Files Using Window Explorer; Creating and Managing Files and Folders; Managing Recycle Bin and Searching Files.

Required Materials: Recommended learning resources.	**Supplementary Materials:** Lecture notes and tutor extra reading recommendations.

Special Requirements: Significant hands-on labs using Windows Operating System.

Intended Learning Outcomes:	Assessment Criteria:
1. The basics of Windows Client Operating System, examining the basics of using WordPad and NotePad applications to create files.	1.1 Demonstrate starting and logging onto Windows Client Operating System 1.2 Examine the Windows Start menu and desktop icons 1.3 Identify and use the controls in menus, toolbars and dialog boxes 1.4 Demonstrate shutting down Windows 1.5 Creating file and folders 1.6 Demonstrate closing and opening WordPad and NotePad applications 1.7 Demonstrate creating and saving documents using WordPad and NotePad 1.8 Demonstrate navigating the WordPad application 1.9 Demonstrate creating bullets, paragraphs and tables in WordPad
2. Customising the Windows work environment; disk/storage capacity, command prompt, control panel, run and other secondary feature options.	2.1 Demonstrate customising the taskbar toolbars 2.2 Demonstrate changing the appearance of the desktop 2.3 Demonstrate setting up a screen saver 2.4 Demonstrate creating and removing desktop shortcuts 2.5 Explain decimal, binary, octal, and hexadecimal numbering system 2.6 Explain how Windows interprets computer storage capacity 2.7 Describe the different types of disks 2.8 Demonstrate formatting a disk and explain the purpose 2.9 Examine Windows maintenance tools such as Disk Cleanup, Check Disk and Disk Defragmenter

		2.10	Explain how the Windows maintenance tools analyse, correct and prevent disk errors
		2.11	Demonstrate how to schedule tasks to run automatically on the computer system
		2.12	Describe the strategies for backing up and restoring data
		2.13	Demonstrate backing-up and restoring data
		2.14	Explain Emergency Boot/Repair Disk
3.	The several ways of print files; from within the application; from Explorer and from desktop printer shortcut.	3.1	Demonstrate installing a printer
		3.2	Describe print queue and spooling
		3.3	Explain how print jobs are executed
		3.4	Describe the differences between a local printer and a network printer
		3.5	Explain and demonstrate how to connect a printer
		3.6	Examine the printer properties
		3.7	Define fonts and explain why they are important in terms of printed documents
		3.8	Demonstrate cancelling or pausing print jobs.
		3.9	Explain how to troubleshoot printing problems
4.	Understand how Windows organises files and folders; including how to find, organise and use files and folders on a computer system.	4.1	Create folders and subfolders; including saving and copying files to different folders
		4.2	Demonstrate using a quick shortcut to find recently used files
		6.3	Demonstrate searching for files, folders, programs or drives on a computer
		6.4	Describe how to perform advanced search by date, file type or file size
		6.5	Demonstrate searching using wildcards characters
		6.6	Examine the different ways of getting to Windows Explorer
		6.7	Analyse the Windows Explorer interface elements
		6.8	Demonstrate customising folders using classic Windows or Web view
5.	Windows multimedia support enabling applications to use sound and video.	5.1	Describe the process of connecting devices to a computer
		5.2	Describe the media control interface
		5.3	Explain how to use multimedia audio
		5.4	Explain how to use multimedia input
		5.5	Explain how to use video for Windows
		5.6	Examine the Windows multimedia functions, interfaces, commands and messages
		5.7	Demonstrate using the Paint application to create bitmap graphics
		5.8	Demonstrate creating screen captures
		5.9	Demonstrate playing sound or video files using Windows Media Player

6. Exploring the internet and analysing how internet revolutionised the way computers are used today.	6.1	Define web and the process of connecting to the internet
	6.2	Demonstrate entering a web address, basic navigation, searching the web and saving favourite webpages.
	6.3	Explain how to customise the browser interface
	6.4	Examine how to find previously visited web pages
	6.5	Demonstrate configuring outlook to receive and sent emails
	6.6	Demonstrate setting and creating outlook address book to maintain list of contacts
7. Networking services, the different type of networks and the basics of Transmission Control /Internet Protocol (TCP/IP).	7.1	Demonstrate how to log on and log off of a network.
	7.2	Explain the various hardware devices and software settings required to connect to a network.
	7.3	Describe the TCP/IP (Transmission Control Protocol/Internet Protocol) network architecture
	7.4	Be able to identify a host IP address.
	7.5	Demonstrate how to map drives; and to share drives, folders, files and printers.
	7.6	Demonstrate locating computers on a network.
	7.7	Describe domains, and the role of the Active Directory.
	7.8	Examine My Network Places and demonstrate how to use the Add Network Place wizard.
	7.9	Describe what protocols are, why they are important in networking and how to install a protocol.
8 Inter-application communication; the difference between an embedded object and a linked object.	8.1	Describe compound document
	8.2	Describe the difference between a server file and a container file
	8.3	Explain ClipBook and how to use it
	8.4	Demonstrate copying objects from one application to another.
	8.5	Demonstrate editing embedded objects
	8.6	Demonstrate inserting a graphic into another application
	8.7	Describe what a scrap is and how it can improve productivity
	8.8	Demonstrate linking an object
	8.9	Demonstrate editing a linked object
	8.10	Describe the .NET technology
	8.11	Describe basic DOS commands
9 Troubleshooting, system management and how generate reports on the current system status.	9.1	Describe how to end programs that are not responding
	9.2	Identify how to produce a complete hardware report
	9.3	Demonstrate how to troubleshoot device problems
	9.4	Identify how to start a computer in Safe Mode

		9.5	Identify how to restore a computer after startup failure
		9.6	Demonstrate network troubleshooting using command line prompts
		9.7	Demonstrate how to backup and restore the Registry
10	How to install, upgrade software and produce reports to determine compatibility issues and to preserve information about a computer.	10.1	Examine and identify whether a computer meets the system and installation requirements
		10.2	Explain the differences between an upgrade and a clean install
		10.3	Demonstrate installing software from the CD-ROM, flash drive, or a network folder
		10.4	Demonstrate installing updates to the operating system

Methods of Evaluation: A 2½ hour written examination paper with five essay questions, each carrying 20 marks. Candidates are required to answer all questions. Candidates also undertake project/coursework in Windows Operating System with a weighting of 100%.

Recommended Learning Resources: Windows Operating Systems

Text Books	• Operating Systems ISBN-13 9780072957693 • The O'Leary Series: Windows ISBN-13 9780072472509 • Microsoft® Office Series by Linda Ericksen ISBN 0-13-028476-9
Study Manuals	BCE produced study packs
CD ROM	Power-point slides
Software	Windows Operating System