1. 595 Information and Communication Technologies – Ordinary Level

2. Introduction

The area of Information and Communication Technologies (ICT) is becoming an increasingly important feature in daily life and will become even more widespread as time goes on. The way that many people now work, play, communicate, purchase goods and services, and even interact with their government, is increasingly dependent on ICT. Both large and small organisations now depend fully on an ICT-skilled workforce to be efficient, productive, and competitive. From a more social perspective, those who do not possess the prerequisite access and skills to unlock the potential offered by ICT, can, through their inability to participate fully in society, find themselves on the wrong side of what is called the 'digital divide'. Those who possess the required skills to proficiently use ICT are said to be digitally literate. The proficient use of ICT has varying implications for different sectors of society (and even for different regions of the world). Initiatives promoting digital literacy have a perceptible positive impact - whether their intention is to maximise the productivity of a workforce or to promote the inclusion of marginalised citizens into an increasingly knowledge-based society.

This syllabus is designed to prepare candidates for the GCE Ordinary Level to possess proficient end-user ICT skills that would enable them to fit in almost every sector of the information society such as government and public administration, education and research, corporate/private sector and business operations. It incorporates a wide range of ICT applications that are commonly prevalent in almost all sectors of life and business in the world today.

Considering the fact that ICT is a globally standardized sector, this syllabus is relevant, up-to-date and in line with the world's leading end-user ICT certification programmes such as that of the ICDL¹ Foundation that is currently accepted in more than 148 countries. Hence candidates are not only prepared for the Cameroon society but for a challenging and rapidly evolving global e-society.

This subject is largely independent and Mathematics is not a prerequisite, though an added advantage. The syllabus is designed to suit candidates from all educational backgrounds such as Arts, Science, Technical-commercial and Technical-industrial.

Candidates who successfully follow this syllabus will have a good practical understanding of computing and its applications, and will find the transition to Computer Science and Information and Communication Technologies (ICT) at the Advanced Level.

3. Progression Opportunities and Career Prospects

¹ ICDL stands for International Computer Driving Licence.

3.1 Progression Opportunities

The syllabus for GCE Ordinary Level ICT lays a foundation for

- GCE Advanced Level ICT and Computer Science
- Professional certifications such as ICDL, A+, Microsoft, Cisco, LINUX etc.
- Enhanced educational research
- Global ICT trends

3.2 Career prospects

- Employment prospects as Computer Operators in public and private sectors.
- Self-employment in areas such as Documentation, Multimedia business centres.

4. Aims

General Aims. The general aim of this syllabus is to prepare candidates to use the computer and its most popular application software to perform both personal and professional tasks. In pursuance of this goal, the candidate should be able to:

- Develop an understanding of the main principles of using computers to solve problems.
- Appreciate the range of applications of computers and the effects of their use.
- Understand the organisation of computer systems, software, data, hardware the implications of this for communications and people.
- Acquire the skills necessary for them to apply computer-based solutions to problems.
- Prepare the candidates for the Advanced Level ICT and Advanced Level Computer Science.

NB. Specific Aims: This syllabus is prepared with specific aims at the beginning of each section, making it easier to identify and understand information items on the one hand and skilled tasks that are expected of each candidate on the other hand.

5. Assessment Objectives

- Cognitive Skills and Specific learning outcomes which are going to be assessed are found
 at the beginning of each section of this syllabus and detailed in the column "Knowledge
 Item/Learning Outcome". Candidates will be assessed using the first three levels of
 Bloom's Taxonomy. i.e. knowledge, comprehension and application.
- Psycho-motor skills which are going to be assessed are found at the beginning of each section of this syllabus and detailed in the column "Task Item/Learning Outcome".

6.1 The examination structure and weighting of assessment objectives

The examination will comprise three papers as follows.

Description	Exam Type	Duration	Composition	Remarks
Paper 1	MCQ	1hr 30mins	30%	This paper will have 50 multiple choice questions covering the entire syllabus.
Paper 2	Essay	2 hrs	30%	This paper will consist of 7 questions of which candidates will be required to answer five. Section A of this paper will comprise two compulsory questions while Section B will require candidates to answer any three out of five questions.
Paper 3	Practical	1 hr 30mins	40%	This paper will consist of practical tasks, testing candidates on Section 2 and any other two sections ranging from Section 3 to Section 7

9	Type of	No of Questio ns		Duratio	Objective to	No or % of questions	Weigh	Level of difficulty		
Paper	Questio ns Duratio n No to answer Total Set		be tested	for each objective	Weighting in %	*	**	***		
					Knowledge	30(60%)				
					Comprehensi on	15(30%)				
1	MCQ	5 0	50	1½ Hours	Application	5(10%)	30 60	60%	30%	10%
				110010	Analysis					
					Synthesis					
					Evaluation					
	Section A: Stimulus				Knowledge	40%				
		Stimulus 2	2 2	2 Hours	Comprehensi on	40%	-	60 %	30 %	
					Application	20%				10 %
	Questions				Analysis					,0
					Synthesis					
2					Evaluation		30			
_					Knowledge	40%				
	Section B:				Comprehensi on	40%				
	Essay Type	5	3		Application	20%		60 %	30 %	10 %
	Questions				Analysis					/0
					Synthesis					
					Evaluation					
3	Application 01	1	1	1½			40	60	30	10
	Application 02	1	1	Hours				%	%	%

Total				100		

7.0 Curricular Recommendations

English Language Requirement

There is no language requirement though candidates taking this examination are expected to have acquired English Language foundation skills starting from early secondary school education.

Examination Centre Approval

Centres wishing to offer this subject are expected to apply to the Cameroon GCE Board for an inspection of its computing facilities and subsequent approval, well before the registration of candidates begins. (For a list of centre requirements and standards, see Cameroon GCE Board)

7.0 Syllabus Content

SECTION 1: Concepts of Information and Communication Technologies

Section Goals

In this section, the candidate is required to understand the main concepts of ICT at a general level, and to know about the different types and the various parts of a computer system.

The candidate shall be able to:

- Understand the different types of computers and their brief evolution.
- Understand what hardware is; know about factors that affect computer performance and know about peripheral devices.
- Understand what software is and give examples of common applications software and operating system software.
- Understand how information networks are used within computing, and be aware of the different options to connect to the Internet.
- Understand what Information and Communication Technology (ICT) is and give examples
 of its practical applications in everyday life.
- Understand health and safety and environmental issues in relation to using computers.
- Recognize important security issues associated with using computers.
- Recognize important legal issues in relation to copyright and data protection associated with using computers.

CATEGORY	KNOWLEDGE AREA	REF.	KNOWLEDGE ITEM/LEARNING OUTCOMES
1.1 Hardware	1.1.1 Concepts	1.1.1.1	Understand the different categories of computers (supercomputers, mainframes, minicomputers, microcomputers); and their brief historical evolution.
		1.1.1.2	Understand what a personal computer is. Distinguish between desktop, laptop (notebook), tablet PC in terms of typical users.
		1.1.1.3	Understand the term hardware
		1.1.1.4	Identify common handheld portable digital devices like: personal digital assistant (PDA), mobile phone, smartphone, multimedia player and know their main features.
		1.1.1.5	Know the main parts of a computer like: Motherboard, Central Processing Unit (CPU), buses, Power Supply system, types of memory, hard disk, common input and output devices. Identify expansion cards e.g. graphics, sound cards, TV Cards, Network Interface Cards (NIC) etc.
		1.1.1.6	Identify common input/output ports like: USB, serial, parallel, network port, FireWire.
	1.1.2 Computer Performance	1.1.2.1	Know some of the factors that impact on a computer's performance like: CPU speed, RAM size, graphics card processor and memory, the number of applications running.
		1.1.2.2	Know that the speed (operating frequency) of the CPU is measured in megahertz (MHz) or gigahertz (GHz)
		1.1.2.3	Types of microprocessors and their evolution. Examples: Intel processors and AMD processors.
	1.1.3 Memory and Storage	1.1.3.1	Know what computer memory is: RAM (random-access memory), ROM (read only memory) and distinguish between them.
		1.1.3.2	Understand the binary number system. Know some basic codes used in computing(ASCII, BCD, EBCDIC)
		1.1.3.3	Know storage capacity measurements: bit, byte, KB, MB, GB, TB (1kb = 1024 bytes)
		1.1.3.4	Know the main types of storage media like: internal hard disk, external hard disk, network drive, CD, DVD, USB flash drive, memory card, online file storage.
	1.1.4 Input and Output device	1.1.4.1	Identify some of the main input devices like: mouse, keyboard, trackball, scanner, touchpad, stylus, joystick, web camera (webcam), digital camera, and microphone.

CATEGORY	KNOWLEDGE AREA	REF.	KNOWLEDGE ITEM/LEARNING OUTCOMES
		1.1.4.2	Know some of the main output devices like: screens/monitors, printers, speakers, headphones.
		1.1.4.3	Understand some devices are both input and output devices like: touchscreens.
1.2 Software	1.2.1 Concepts	1.2.1.1	Understand the term software and differentiate between systems software and applications software. Give examples.
		1.2.1.2	Understand what an operating system is and name some common operating systems.
		1.2.1.3	Identify and know the uses of some common software applications: word processing, spreadsheet, database, presentation, e-mail, web browsing, photo editing, and computer games.
		1.2.1.4	Distinguish between operating systems software and applications software.
		1.2.1.5	Know some options available for enhancing accessibility like: voice recognition software, screen reader, screen magnifier, on-screen keyboard
		1.2.1.6	Notions of programming languages. Types of language translators. Give examples of programming languages.
1.3 Networks	1.3.1Network Types	1.3.1.1	Understand what a computer network is. Understand the terms local area network (LAN), wireless local area network (WAN), wide area network (WAN).
		1.3.1.2	Understand Network Topologies.
		1.3.1.3	Understand the term client/server.
		1.3.1.4	Understand what the Internet is and know some of its main uses.
		1.3.1.5	Understand what an Intranet, Extranet is.
	1.3.2 Data Transfer	1.3.2.1	Understand the concepts of downloading from, uploading to a network.
		1.3.2.2	Understand what transfer rate means. Understand how it is measured: bits per second (bps), kilobits per second (Kbps), megabits per second (mbps).
		1.3.2.3	Know about different Internet connection services: dialup, broadband.
		1.3.2.4	Know about different options for connecting to the Internet like: phone line, mobile phone, cable, wireless, satellite.
		1.3.2.5	Understand some of the characteristics of broadband:

CATEGORY	KNOWLEDGE AREA	REF.	KNOWLEDGE ITEM/LEARNING OUTCOMES
			always on, typically a flat fee, high speed, higher risk of intruder attack.
		1.3.2.6	Understand the advantages and disadvantages of data communication networks.
1.4 ICT in Everyday Life	1.4.1 Electronic World	1.4.1.1	Understand the term Information and Communication Technology (ICT).
		1.4.1.2	Know about different Internet services for consumers like: e-commerce, e-banking, e-government.
		1.4.1.3	Understand the term e-learning. Know some of its features like: flexible learning time, flexible learning location, multimedia learning experience, cost effectiveness.
		1.4.1.4	Understand the term teleworking. Know some of the advantages of teleworking like: reduced or no commuting time, greater ability to focus on one task, flexible schedules, reduced company space requirements. Know some disadvantages of teleworking like: lack of human contact, less emphasis on teamwork.
		1.4.1.5	Understand different computer professions
	1.4.2 Communication	1.4.2.1	Understand the term electronic mail (email).
		1.4.2.2	Understand the term instant messaging (IM).
		1.4.2.3	Understand the term Voice over Internet Protocol VoIP).
		1.4.2.4	Understand the term Really Simple Syndication (RSS) feed.
		1.4.2.5	Understand the term web log (blog).
		1.4.2.6	Understand the term podcast.
	1.4.3 Virtual Communities	1.4.3.1	Understand the concept of an online (virtual) community. Recognize examples like: social networking websites, Internet forums, chat rooms, online computer games.
		1.4.3.2	Know ways that users can publish and share content online: web log (blog), podcast, photos, video and audio clips.
		1.4.3.3	Know the importance of taking precautions when using online communities: make your profile private, limit the amount of personal information you post, be aware that posted information is publicly available, be cautious of strangers.
	1.4.4 Health	1.4.4.1	Understand the term ergonomics.

CATEGORY	KNOWLEDGE AREA	REF.	KNOWLEDGE ITEM/LEARNING OUTCOMES
		1.4.4.2	Recognize that lighting is a health factor in computer use. Be aware that use of artificial light, amount of light, direction of light are all important considerations.
		1.4.4.3	Understand that correct positioning of the computer, desk and seat can help maintain a good posture.
		1.4.4.4	Recognize ways to help ensure a user's wellbeing while using a computer like: take regular stretches, have breaks, use eye relaxation techniques.
	1.4.5 Environment	1.4.5.1	Know about the option of recycling computer components, printer cartridges and paper.
		1.4.5.2	Know about computer energy saving options: applying settings to automatically turn off the screen/monitor, to automatically put the computer to sleep, switching off the computer.
1.5 Security	1.5.1 Identity/Authentication	1.5.1.1	Understand that for security reasons a user name (ID) and password are needed for users to identify themselves when logging on to a computer.
		1.5.1.2	Know about good password policies like: not sharing passwords, changing them regularly, adequate password length, adequate letter and number mix.
	1.5.2 Data Security	1.5.2.1	Understand the importance of having an off-site backup copy of files.
		1.5.2.2	Understand what a firewall is.
		1.5.2.3	Know ways to prevent data theft like: using a user name and password, locking computer and hardware using a security cable.
	1.5.3 Viruses	1.5.3.1	Understand what a computer virus is.
		1.5.3.2	Be aware how viruses can enter a computer system.
		1.5.3.3	Know how to protect against viruses and the importance of updating antivirus software regularly.
1.6 Law	1.6.1 Copyright	1.6.1.1	Understand the term copyright.
		1.6.1.2	Know how to recognize licensed software: by checking product ID, product registration, by viewing the software licence.
		1.6.1.3	Understand the term end-user license agreement.
		1.6.1.4	Understand the terms shareware, freeware, open source.
	1.6.2 Data Protection	1.6.2.1	Identify the main purposes of data protection legislation or conventions: to protect the rights of the data subject, to set out the responsibilities of the data controller.

CATEGORY	KNOWLEDGE AREA	REF.	KNOWLEDGE ITEM/LEARNING OUTCOMES
		1.6.2.2	Identify the main data protection rights for a data subject in Cameroon.
		1.6.2.3	Identify the main data protection responsibilities for a data controller in your country.

Section 2 – Using the Computer and Managing Files

The following is the Syllabus for Section 2, *Using the Computer and Managing Files,* which provides the basis for the theory and practice-based test in this section.

Section Goals:

This section requires the candidate to demonstrate competence in running and managing a personal computer.

The candidate shall be able to:

- Use the main features of the operating system including adjusting the main computer settings and using built-in help features.
- Operate effectively around the computer desktop and work effectively in a graphical user environment.
- Know about the main concepts of file management and be able to efficiently organize files and folders so that they are easy to identify and find.
- Use utility software to compress and extract large files and use anti-virus software to protect against computer viruses.
- Demonstrate the ability to use simple text editing and print tools available within the operating system.

CATEGORY	SKILL SET	REF.	TASK ITEM/LEARNING OUTCOMES
2.1 Operating System	2.1.1 First Steps	2.1.1.1	Start the computer and log on securely using a user name and password.
		2.1.1.2	Restart the computer using an appropriate routine.
		2.1.1.3	Shut down a non-responding application.
		2.1.1.4	Shut down the computer using an appropriate routine.
		2.1.1.5.	Use available Help functions.
	2.1.2 Setup	2.1.2.1	View the computer's basic system information: operating system name and version number installed RAM (random- access memory).
		2.1.2.2	Change the computer's desktop configuration: date & time, volume settings, desktop display options (colour settings, desktop background, screen pixel resolution, screen saver options).
		2.1.2.3	Set, add keyboard language.

CATEGORY	SKILL SET	REF.	TASK ITEM/LEARNING OUTCOMES
		2.1.2.4	Install, uninstall a software application.
		2.1.2.5	Use keyboard print screen facility to capture a full screen, active window.
	2.1.3 Working with Icons	2.1.3.1	Identify common icons like those representing: files, folders, applications, printers, drives, recycle bin/wastebasket/trash.
		2.1.3.2	Select and move icons.
		2.1.3.3	Create, remove a desktop shortcut icon, make an alias.
		2.1.3.4	Use an icon to open a file, folder, application.
	2.1.4 Using Windows	2.1.4.1	Identify the different parts of a window: title bar, menu bar, toolbar or ribbon, status bar, scroll bar.
		2.1.4.2	Collapse, expand, restore, resize, move, close a window.
		2.1.4.3	Switch between open windows.
2.2 File Management	2.2.1 Main Concepts	2.2.1.1	Understand how an operating system organizes drives, folders, files in a hierarchical structure.
		2.2.1.2	Know devices used by an operating system to store files and folders like: hard disk, network drives, USB flash drive, CD-RW, DVD-RW.
		2.2.1.3	Know how files, folders are measured: KB, MB, GB.
		2.2.1.4	Understand the purpose of regularly backing up data to a removable storage device for off-site storage.
		2.2.1.5	Understand the benefits of online file storage: convenient access, ability to share files.
	2.2.2 Files and Folders	2.2.2.1	Open a window to display folder name, size, location on a drive.
		2.2.2.2	Expand, collapse views of drives and folders.
		2.2.2.3	Navigate to a folder, file on a drive.
		2.2.2.4	Create a folder and a further subfolder.
	2.2.3 Working with Files	2.2.3.1	Identify common file types: word processing files, spreadsheet files, database files, presentation files, portable document format files, image files, audio files, video files, compressed files, temporary files, executable files.
		2.2.3.2	Open a text editing application. Enter text into a file, name and save the file to a location on a drive.
		2.2.3.3	Change a file's status: read-only/locked, read-write.
		2.2.3.4	Sort files in ascending, descending order by name, size, type, date modified.
		2.2.3.5	Recognize good practice in folder, file naming: use meaningful names for folders and files to help with

CATEGORY	SKILL SET	REF.	TASK ITEM/LEARNING OUTCOMES
			recall and organization.
		2.2.3.6	Rename files, folders.
	2.2.4 Copy, Move	2.2.4.1	Select a file, folder individually or as a group of adjacent, non-adjacent files, folders.
		2.2.4.2	Copy files, folders between folders and between drives.
		2.2.4.3	Move files, folders between folders and between drives.
	2.2.5 Delete, Restore	.2.2.5.1	Delete files, folders to the recycle bin/wastebasket/trash
		2.2.5.2	Restore files, folders from the recycle bin/wastebasket/trash.
		2.2.5.3	Empty the recycle bin/wastebasket/trash.
	2.2.6 Searching	2.2.6.1	Use the Find tool to locate a file, folder.
		2.2.6.2	Search for files by all or part of file name, by content.
		2.2.6.3	Search for files by date modified, by date created, by size.
		2.2.6.4	Search for files by using wildcards: file type, first letter of file name.
		2.2.6.5	View list of recently used files.
2.3 Utilities/ Preventive Maintenance	2.3.1 File Compression	2.3.1.1	Understand what file compression means.
		2.3.1.2	Compress files in a folder on a drive.
		2.3.1.3	Extract compressed files from a location on a drive.
	2.3.2 Anti-Virus	2.3.2.1	Understand what a virus is and the ways a virus can be transmitted onto a computer.
		2.3.2.2	Use anti-virus software to scan specific drives, folders, files.
		2.3.2.3	Understand why anti-virus software needs to be updated regularly.
	2.3.3 Hardware	2.3.3.1	Power protection system (Stabilizers, surge arrestors, UPS backups, circuit breakers)
2.4 Print Management	2.4.1 Printer Options	2.4.1.1	Change the default printer from an installed printer list.
		2.4.1.2	Install a new printer on the computer.
	2.4.2 Print	2.4.2.1	Print a document from a text editing application.
		2.4.2.2	View a print job's progress in a queue using a desktop print manager.
		2.4.2.3	Pause, re-start, delete a print job using a desktop print manager.

Recommended Operating System Software for this section:

- Microsoft Windows (XP/VISTA/7/8)
- LINUX

Section 3 – Word Processing

The following is the Syllabus for Section 3, *Word Processing*, which provides the basis for the theory-based and practice-based test in this section.

Section 3 Goals

In this section the candidate is required to demonstrate the ability to use a word processing application to create everyday letters and documents.

The candidate shall be able to:

- Work with documents and save them in different file formats.
- Choose built-in options such as the Help function to enhance productivity.
- Create and edit small-sized word processing documents that will be ready to share and distribute.
- Apply different formats to documents to enhance them before distribution and recognize good practice in choosing the appropriate formatting options.
- Insert tables, images and drawn objects into documents.
- Prepare documents for mail merge operations.
- Adjust document page settings and check and correct spelling before finally printing documents.

CATEGORY	SKILL SET	REF.	TASK ITEM/LEARNING OUTCOMES
3.1 Using the Application	3.1.1 Working with Documents	3.1.1.1	Open, close a word processing application. Open, close documents.
		3.1.1.2	Create a new document based on default template, other available template like: memo, fax, agenda etc.
		3.1.1.3	Save a document to a location on a drive. Save a document under another name to a location on a drive.
		3.1.1.4	Save a document as another file type like: text file, Rich Text Format, template, software specific file extension, version number.
		3.1.1.5	Switch between open documents.
	3.1.2 Enhancing Productivity	3.1.2.1	Set basic options/preferences in the application: user name, default folder to open, save documents.
		3.1.2.2	Use available Help functions.
		3.1.2.3	Use magnification/zoom tools.

CATEGORY	SKILL SET	REF.	TASK ITEM/LEARNING OUTCOMES
		3.1.2.4	Display, hide built-in toolbars. Restore, minimize the ribbon.
3.2 Document Creation	3.2 Document Creation	3.2.1.1	Switch between page view modes.
		3.2.1.2	Enter text into a document.
		3.2.1.3	Insert symbols or special characters like: ©, ®, ™.
	3.2.2 Select, Edit	3.2.2.1	Display, hide non-printing formatting marks like: spaces, paragraph marks, manual line break marks, tab characters.
		3.2.2.2	Select character, word, line, sentence, paragraph, entire body text.
		3.2.2.3	Edit content by entering, removing characters, words within existing text, by over-typing to replace existing text.
		3.2.2.4	Use a simple search command for a specific word, phrase.
		3.2.2.5	Use a simple replace command for a specific word, phrase.
		3.2.2.6	Copy, move text within a document, between open documents.
		3.2.2.7	Delete text.
		3.2.2.8	Use the undo, redo command.
3.3 Formatting	3.3.1 Text	3.3.1.1	Change text formatting: font sizes, font types.
		3.3.1.2	Apply text formatting: bold, italic, underline.
		3.3.1.3	Apply text formatting: subscript, superscript.
		3.3.1.4	Apply different colours to text.
		3.3.1.5	Apply case changes to text.
		3.3.1.6	Apply automatic hyphenation.
	3.3.2 Paragraphs	3.3.2.1	Create, merge paragraph(s).
		3.3.2.2	Insert, remove soft carriage return (line break).
		3.3.2.3	Recognize good practice in aligning text: use align, indent, tab tools rather than inserting spaces.
		3.3.2.4	Align text left, centre, right, justified.
		3.3.2.5	Indent paragraphs: left, right, first line.
		3.3.2.6	Set, remove and use tabs: left, centre, right, decimal.
		3.3.2.7	Recognize good practice in paragraph spacing: apply spacing between paragraphs rather than use the Return key.

CATEGORY	SKILL SET	REF.	TASK ITEM/LEARNING OUTCOMES
		3.3.2.8	Apply spacing above, below paragraphs. Apply single, 1.5 lines, double line spacing within paragraphs.
		3.3.2.9	Add, remove bullets, numbers in a single level list. Switch between different standard bullet, number styles in a single level list.
		3.3.2.10	Add a box border and shading/background colour to a paragraph.
	3.3.3 Styles	3.3.3.1	Apply an existing character style to selected text.
		3.3.3.2	Apply an existing paragraph style to one or more paragraphs.
		3.3.3.3	Use copy format tool.
3.4 Objects	3.4.1 Table Creation	3.4.1.1	Create a table ready for data insertion.
		3.4.1.2	Insert, edit data in a table.
		3.4.1.3	Select rows, columns, cells, entire table.
		3.4.1.4	Insert, delete, rows and columns.
	3.4.2 Table Formatting	3.4.2.1	Modify column width, row height.
		3.4.2.2	Modify cell border line style, width, colour.
		3.4.2.3	Add shading/background colour to cells.
	3.4.3 Graphical Objects	3.4.3.1	Insert an object (picture, image, chart, drawn object) to a specified location in a document.
		3.4.3.2	Select an object.
		3.4.3.3	Copy, move an object within a document, between open documents.
		3.4.3.4	Resize, delete an object.
3.5 Mail Merge	3.5.1 Preparation	3.5.1.1	Open, prepare a document, as a main document for a mail merge.
		3.5.1.2	Select a mailing list, other data file, for use in a mail merge.
		3.5.1.3	Insert data fields in a mail merge main document (letter, address labels).
	3.5.2 Outputs	3.5.2.1	Merge a mailing list with a letter, label document as a new file or printed output.
		3.5.2.2	Print mail merge outputs: letters, labels.
3.6 Prepare Outputs	3.6.1 Setup	3.6.1.1	Change document orientation: portrait, landscape. Change paper size.
		3.6.1.2	Change margins of entire document, top, bottom, left, right.

CATEGORY	SKILL SET	REF.	TASK ITEM/LEARNING OUTCOMES
		3.6.1.3	Recognize good practice in adding new pages: insert a page break rather than using the Return key.
		3.6.1.4	Insert, delete a page break in a document.
		3.6.1.5	Add, edit text in headers, footers.
		3.6.1.6	Add fields in headers, footers: date, page number information, file name.
		3.6.1.7	Apply automatic page numbering to a document.
	3.6.2 Check and Print	3.6.2.1	Spell-check a document and make changes like: correcting spelling errors, deleting repeated words.
		3.6.2.2	Add words to a built-in custom dictionary using a spell checker.
		3.6.2.3	Preview a document.
		3.6.2.4	Print a document from an installed printer using output options like: entire document, specific pages, number of copies.

Recommended Application Software for this section:

- Microsoft Office Word (2003/2007/2010)
- Open Office Word

Section 4 – Spreadsheets

The following is the Syllabus for Section 4, *Spreadsheets*, which provides the basis for the theory-based and practice-based test in this section.

Section Goals

In this section the candidate is required to understand the concept '*spreadsheets*' and to demonstrate the 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/LEARNING OUTCOMES
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.
	4.1.2 Enhancing Productivity	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.
4.2 Cells	4.2.1 Insert, Select	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.

CATEGORY	SKILL SET	REF.	TASK ITEM/LEARNING OUTCOMES
		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.
	4.2.2 Edit, Sort	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.
	4.2.3 Copy, Move, Delete	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.
		4.2.3.4	Delete cell contents.
4.3 Managing Worksheets	4.3.1 Rows and Columns	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.
	4.3.2 Worksheets	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.
4.4 Formulas and Functions	4.4.1 Arithmetic Formulas	4.4.1.1	Recognize good practice in formula creation: refer to cell references rather than type numbers into formulas.
		4.4.1.2	Create formulas using cell references and arithmetic operators (addition, subtraction, multiplication,

CATEGORY	SKILL SET	REF.	TASK ITEM/LEARNING OUTCOMES
			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.
	4.4.2 Functions	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: =, >, <.
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.
		4.6.1.4	Move, resize, delete a chart.
	4.6.2 Edit	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.

CATEGORY	SKILL SET	REF.	TASK ITEM/LEARNING OUTCOMES
		4.6.2.4	Change the column, bar, line, pie slice colours in the chart.
		4.6.2.5	Change font size and colour of chart title, chart axes, chart legend text.
4.7 Prepare Outputs	4.7.1 Setup	4.7.1.1	Change worksheet margins: top, bottom, left, right.
		4.7.1.2	Change worksheet orientation: portrait, landscape. Change size.
		4.7.1.3	Adjust page setup to fit worksheet contents on a specified number of pages. paper
		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.

Recommended Application Software for this section:

- Microsoft Office Excel (2003/2007/2010)
- Open Office Spreadsheet

Section 5 – Using Databases

The following is the Syllabus for Section 5, *Using Databases*, which is the basis for the theory-based and practice-based test in this section.

Section Goals

In this section the candidate is required to understand the concept of a database and demonstrate competence in using a database. The candidate shall be able to:

- Understand what a database is and how it is organized and operated.
- Create a simple database and view the database content in various modes.
- Create a table, define and modify fields and their properties; enter and edit data in a table.
- Sort and filter a table or form; create, modify and run queries to retrieve specific information from a database.
- Understand what a form is and create a form to enter, modify and delete records and data in records.
- Create routine reports and prepare outputs ready for distribution.

CATEGORY	SKILL SET	REF.	TASK ITEM/LEARNING OUTCOMES
5.1 Understanding Databases	5.1.1 Key Concepts	5.1.1.1	Understand what a database is.
		5.1.1.2	Understand the difference between data and information.
		5.1.1.3	Understand how a database is organized in terms of tables, records and fields.
		5.1.1.4	Know some of the common uses of large-scale databases like: airline booking systems, government records, bank account records, hospital patient details.
	5.1.2 Database Organization	5.1.2.1	Understand that each table in a database should contain data related to a single subject type.
		5.1.2.2	Understand that each field in a table should contain only one element of data.
		5.1.2.3	Understand that field content is associated with an appropriate data type like: text, number, date/time, yes/no.
		5.1.2.4	Understand that fields have associated field properties like: field size, format, default value.
		5.1.2.5	Understand what a primary key is.
		5.1.2.6	Understand what an index is. Understand how it allows for faster data access.
	5.1.3 Relationships	5.1.3.1	Understand that the main purpose of relating tables in a database is to minimize duplication of data.
		5.1.3.2	Understand that a relationship is built by matching a unique field in one table with a field in another table.
		5.1.3.3	Understand the importance of maintaining the integrity of relationships between tables.
	5.1.4 Operation	5.1.4.1	Know that professional databases are designed and created by database specialists.
		5.1.4.2	Know that data entry, data maintenance and information retrieval are carried out by users.
		5.1.4.3	Know that a database administrator provides access to specific data for appropriate users.
		5.1.4.4	Know that the database administrator is responsible for recovery of a database after a crash or major errors.
5.2 Using the Application	5.2.1 Working with Databases	5.2.1.1	Open, close a database application.
		5.2.1.2	Open, close a database.

CATEGORY	SKILL SET	REF.	TASK ITEM/LEARNING OUTCOMES
		5.2.1.3	Create a new database and save to a location on a drive.
		5.2.1.4	Display, hide built-in toolbars. Restore, minimize the ribbon.
		5.2.1.5	Use available Help functions.
	5.2.2 Common Tasks	5.2.2.1	Open, save and close a table, query, form, report.
		5.2.2.2	Switch between view modes in a table, query, form, report.
		5.2.2.3	Delete a table, query, form, report.
		5.2.2.4	Navigate between records in a table, query, and form.
		5.2.2.5	Sort records in a table, form, query output in ascending, descending numeric, alphabetic order.
5.3 Tables	5.3.1 Records	5.3.1.1	Add, delete records in a table.
		5.3.1.2	Add, modify, delete data in a record.
	5.3.2 Design	5.3.2.1	Create and name a table and specify fields with their data types like: text, number, date/time, yes/no.
		5.3.2.2	Apply field property settings: field size, number format, date/time format, default value.
		5.3.2.3	Create a validsation rule for number, date/time, currency.
		5.3.2.4	Understand consequences of c hanging data types, field properties in a table.
		5.3.2.5	Set a field as a primary key.
		5.3.2.6	Index a field (with, without duplicates allowed).
		5.3.2.7	Add a field to an existing table.
		5.3.2.8	Change width of columns in a table.
5.4 Retrieving Information	5.4.1 Main Operations	5.4.1.1	Use the search command for a specific word, number, date in a field.
		5.4.1.2	Apply a filter to a table, form.
		5.4.1.3	Remove the application of a filter from a table, form.
	5.4.2 Queries	5.4.2.1	Understand that a query is used to extract and analyse data.
		5.4.2.2	Create a named single table query using specific search criteria.

CATEGORY	SKILL SET	REF.	TASK ITEM/LEARNING OUTCOMES
		5.4.2.3	Create a named two-table query using specific search criteria.
		5.4.2.4	Add criteria to a query using one or more of the following operators: = (Equal), <> (Not equal to), < (Less than), <= (Less than or equal to), > (Greater than), >= (Greater than or equal to).
		5.4.2.5	Add criteria to a query using one or more of the following logical operators: AND, OR, NOT.
		5.4.2.6	Use a wildcard in a query, * or %, ? or
		5.4.2.7	Edit a query: add, modify, remove criteria.
		5.4.2.8	Edit a query: add, remove, move, hide, unhide fields.
		5.4.2.9	Run a query.
5.5 Objects	5.5.1 Forms	5.5.1.1	Understand that a form is used to display and maintain records.
		5.5.1.2	Create and name a form.
		5.5.1.3	Use a form to insert new records.
		5.5.1.4	Use a form to delete records.
		5.5.1.5	Use a form to add, modify, delete data in a record.
		5.5.1.6	Add, modify text in headers, footers in a form.
5.6 Outputs	5.6.1 Reports, Data Export	5.6.1.1	Understand that a report is used to print selected information from a table or query.
		5.6.1.2	Create and name a report based on a table, query.
		5.6.1.3	Change arrangement of data fields and headings within a report layout.
		5.6.1.4	Present specific fields in a grouped report by sum, minimum, maximum, average, count, at appropriate break points.
		5.6.1.5	Add, modify text in headers, footers in a report.
		5.6.1.6	Export a table, query output in spreadsheet, text (.txt, .csv), XML format to a location on a drive.
	5.6.2 Printing	5.6.2.1	Change the orientation (portrait, landscape) of a table, form, query output, report. Change paper size.
		5.6.2.2	Print a page, selected record(s), complete table.
		5.6.2.3	Print all records using form layout, specific pages using form layout

CATEGORY	SKILL SET	REF.	TASK ITEM/LEARNING OUTCOMES
		5.6.2.4	Print the result of a query.
		5.6.2.5	Print specific page(s) in a report, print complete report.

Recommended Application Software for this section:

- Microsoft Office Access (2003/2007/2010)
- Open Office Database

Section 6 – Presentation

The following is the Syllabus for Section 6, *Presentation*, which is the basis for the theory-based and practice-based test in this section.

Section Goals

In this section the candidate is required to demonstrate competence in using presentation software. The candidate shall be able to:

- Work with presentations and save them in different file formats.
- Choose built-in options such as the Help function within the application to enhance productivity.
- Understand different presentation views and when to use them, choose different slide layouts and designs.
- Enter, edit and format text in presentations. Recognize good practise in applying unique titles to slides.
- Choose, create and format charts to communicate information meaningfully.

- Insert and edit pictures, images and drawn objects.
- Apply animation and transition effects to presentations and check and correct presentation content before finally printing and giving presentations.

CATEGORY	SKILL SET	REF.	TASK ITEM/LEARNING OUTCOMES
6.1 Using the Application	6.1.1 Working with Presentations	6.1.1.1	Open, close a presentation application. Open, close presentations.
		6.1.1.2	Create a new presentation based on default template.
		6.1.1.3	Save a presentation to a location on a drive. Save a presentation under another name.
		6.1.1.4	Save a presentation as another file type: Rich Text Format, template, show, image file format, version number.
		6.1.1.5	Switch between open presentations.
	6.1.2 Enhancing Productivity	6.1.2.1	Set user preferences in the application: user name, default folder to open and save files.
		6.1.2.2	Use available Help functions.
		6.1.2.3	Use magnification/zoom tools.
		6.1.2.4	Display, hide built-in toolbars. Restore, minimize the ribbon.
6.2 Developing a Presentation	6.2.1 Presentation Views	6.2.1.1	Understand the uses of different presentation view modes: normal view, slide sorter view, outline view, slide show view.
		6.2.1.2	Recognize good practice in adding slide titles: use a different title for each slide to distinguish it in outline view, when navigating in slide show view.
		6.2.1.3	Change between presentation view modes: normal view, slide sorter view, slide show view.
	6.2.2 Slides	6.2.2.1	Choose a different built-in slide layout for a slide.
		6.2.2.2	Apply an available design template to a presentation
		6.2.2.3	Change background colour on specific slide(s), all slides.
		6.2.2.4	Add a new slide with a specific slide layout like: title slide, chart and text, bulleted list, table/spreadsheet.
		6.2.2.5	Copy, move slides within the presentation, between open presentations.
		6.2.2.6	Delete slide(s).
	6.2.3 Master Slide	6.2.3.1	Insert a graphical object (picture, image, drawn object) into a master slide. Remove a graphical object from a master slide.
		6.2.3.2	Enter text into footer of specific slides, all slides in a presentation.

CATEGORY	SKILL SET	REF.	TASK ITEM/LEARNING OUTCOMES
		6.2.3.3	Apply automatic slide numbering, automatically updated date, non-updating date into footer of specific slides, all slides in a presentation.
6.3 Text	6.3.1 Handling Text	6.3.1.1	Recognize good practice in creating slide content: use short concise phrases, bullet points, numbered lists.
		6.3.1.2	Enter text into a placeholder in standard, outline view.
		6.3.1.3	Edit text in a presentation.
		6.3.1.4	Copy, move text within, between presentations.
		6.3.1.5	Delete text.
		6.3.1.6	Use the undo, redo command.
	6.3.2 Formatting	6.3.2.1	Change text formatting: font sizes, font types.
		6.3.2.2	Apply text formatting: bold, italic, underline, shadow.
		6.3.2.3	Apply different colours to text.
		6.3.2.4	Apply case changes to text.
		6.3.2.5	Align text: left, centre, right in a text frame.
	6.3.3 Lists	6.3.3.1	Indent bulleted text. Remove indent from bulleted text.
		6.3.3.2	Adjust line spacing before and after bulleted, numbered lists.
		6.3.3.3	Switch between the different standard bullet, number styles in a list.
	6.3.4 Tables	6.3.4.1	Enter, edit text in a table slide.
		6.3.4.2	Select rows, columns, entire table.
		6.3.4.3	Insert, delete rows and columns.
		6.3.4.4	Modify column width, row height.
6.4 Charts	6.4.1 Using Charts	6.4.1.1	Input data to create built-in charts in a presentation: column, bar, line, pie.
		6.4.1.2	Select a chart.
		6.4.1.3	Change the chart type.
		6.4.1.4	Add, remove, edit a chart title.
		6.4.1.5	Add data labels to a chart: values/numbers, percentages.
		6.4.1.6	Change the background colour of a chart.
		6.4.1.7	Change the column, bar, line, pie slice colours in a chart

CATEGORY	SKILL SET	REF.	TASK ITEM/LEARNING OUTCOMES
	6.4.2 Organization Charts	6.4.2.1	Create an organization chart with a labelled hierarchy by using a built-in organization chart feature.
		6.4.2.2	Change the hierarchical structure of an organization chart.
		6.4.2.3	Add, remove co-workers, subordinates in an organization chart.
6.5 Graphical Objects	6.5.1 Insert, Manipulate	6.5.1.1	Insert a graphical object (picture, image, drawn object) into a slide.
		6.5.1.2	Select a graphical object.
		6.5.1.3	Copy, move graphical objects, charts within the presentation, between open presentations.
		6.5.1.4	Resize, delete graphical objects, charts in a presentation.
		6.5.1.5	Rotate, flip a graphical object.
		6.5.1.6	Align a graphical object relative to a slide: left, centre, right, top, bottom.
	6.5.2 Drawing	6.5.2.1	Add different types of drawn object to a slide: line, arrow, block arrow, rectangle, square, oval, circle, text box.
		6.5.2.2	Enter text into a text box, block arrow, rectangle, square, oval, circle.
		6.5.2.3	Change drawn object background colour, line colour, line weight, line style.
		6.5.2.4	Change arrow start style, arrow finish style.
		6.5.2.5	Apply a shadow to a drawn object.
		6.5.2.6	Group, ungroup drawn objects in a slide.
		6.5.2.7	Bring a drawn object one level forward, one level backward, to the front, to the back of other drawn objects.
6.6 Prepare Outputs	6.6.1 Preparation	6.6.1.1	Add, remove transition effects between slides.
		6.6.1.2	Add, remove preset animation effects for different slide elements.
		6.6.1.3	Add presenter notes to slides.
		6.6.1.4	Select appropriate output format for slide presentation like: overhead, handout, on-screen show.
		6.6.1.5	Hide, show slides.
	6.6.2 Check and Deliver	6.6.2.1	Spell check a presentation and make changes like: correcting spelling errors, deleting repeated words.
		6.6.2.2	Change slide setup, slide orientation to portrait,

CATEGORY	SKILL SET	REF.	TASK ITEM/LEARNING OUTCOMES
			landscape. Change paper size.
	6.6.2.3	Print entire presentation, specific slides, handouts, notes pages, outline view of slides, number of copies of a presentation.	
		6.6.2.4	Start a slide show from first slide, from current slide.
		6.6.2.5	Navigate to next slide, previous slide or specified slide during a slide show.

Recommended Application Software for this section:

- Microsoft Office PowerPoint (2003/2007/2010)
- Open Office Presentation

SECTION 7 – Web Browsing and Communication

The following is the Syllabus for Section 7, Web Browsing and Communication, which provides the basis for the theory and practice-based test in this section.

Section Goals

This section is further divided into two sub-sections.

The first sub-section, *Web Browsing*, requires the candidate to know about the Internet and to use a web browsing application. The candidate shall be able to:

- Understand what the Internet is and common terms associated with it. Be aware of some security considerations when using the Internet.
- Accomplish everyday web browsing tasks including changing browser settings.
- Search for information and complete and submit web-based forms.
- Save web pages and download files from the web. Copy web content into a document.

The second sub-section, *Communication*, requires the candidate to understand some of the concepts of electronic mail (e-mail) and know about other communication options. The candidate shall be able to:

- Understand what e-mail is and know some advantages and disadvantages of its use. Be aware of other communication options.
- Be aware of network etiquette and security considerations when using e-mail.
- Create, spell check and send e-mail. Reply to and forward e-mail, handle file attachments and print an e-mail.
- Be aware of ways to enhance productivity when working with e-mail software.
 Organize and manage e-mail.

CATEGORY	SKILL SET	REF.	TASK ITEM/LEARNING OUTCOMES
7.1 The Internet	7.1.1 Concepts	7.1.1.1	Understand what the Internet is.
		7.1.1.2	Understand what the World Wide Web (WWW) is.
		7.1.1.3	Define and understand the terms: Internet Service Provider (ISP), Uniform Resource Locator (URL), and hyperlink.
		7.1.1.4	Understand the make-up and structure of a web address.
		7.1.1.5	Understand what a web browser is and name different web browsers.
		7.1.1.6	Know what a search engine is.
		7.1.1.7	Understand the term Really Simple Syndication (RSS) feed. Understand the purpose of subscribing to an RSS feed.
		7.1.1.8	Understand the term podcast. Understand the purpose of subscribing to a podcast.
	7.1.2 Security Considerations	7.1.2.1	Know how to identify a secure web site: https, lock symbol.
		7.1.2.2	Know what a digital certificate for a web site is.
		7.1.2.3	Understand the term encryption.
		7.1.2.4	Know about security threats from web sites like: viruses, worms, Trojan horses, spyware. Understand the term malware.
		7.1.2.5	Understand that regularly updated anti-virus software helps to protect the computer against security threats.
		7.1.2.6	Understand that a firewall helps to protect the computer against intrusion.
		7.1.2.7	Know that networks should be secured by user names and passwords.
		7.1.2.8	Identify some risks associated with online activity like: unintentional disclosure of personal information, bullying or harassment, targeting of

CATEGORY	SKILL SET	REF.	TASK ITEM/LEARNING OUTCOMES
			users by predators.
		7.1.2.9	Identify parental control options like: supervision, web browsing restrictions, computer games restrictions, computer usage time limits.
7.2 Using the Browser	7.2.1 Basic Browsing	7.2.1.1	Open, close a web browsing application.
		7.2.1.2	Enter a URL in the address bar and go to the URL.
		7.2.1.3	Display a web page in a new window, tab.
		7.2.1.4	Stop a web page from downloading.
		7.2.1.5	Refresh a web page.
		7.2.1.6	Use available Help functions.
	7.2.2 Settings	7.2.2.1	Set the web browser Home Page/Start page.
		7.2.2.2	Delete part, all browsing history.
		7.2.2.3	Allow, block pop-ups
		7.2.2.4	Allow, block cookies.
		7.2.2.5	Delete cache/temporary Internet files.
		7.2.2.6	Display, hide built-in toolbars.
	7.2.3 Navigation	7.2.3.1	Activate a hyperlink.
		7.2.3.2	Navigate backwards and forwards between previously visited web pages.
		7.2.3.3	Navigate to the Home page.
		7.2.3.4	Display previously visited URLs using the browser address bar, history.
	7.2.4 Bookmarks	7.2.4.1	Bookmark a web page. Delete a bookmark.
		7.2.4.2	Display a bookmarked web page.
		7.2.4.3	Create, delete a bookmark folder.
		7.2.4.4	Add web pages to a bookmark folder.
7.3 Using the Web	7.3.1 Forms	7.3.1.1	Complete a web-based form using: text boxes, drop-down menus, list boxes, check boxes, radio buttons.
		7.3.1.2	Submit, reset a web-based form.
	7.3.2 Searching	7.3.2.1	Select a specific search engine.
		7.3.2.2	Carry out a search for specific information using a keyword, phrase.
		7.3.2.3	Use advanced search features to refine a search: by exact phrase, by excluding words, by date, by

CATEGORY	SKILL SET	REF.	TASK ITEM/LEARNING OUTCOMES
			file format.
		7.3.2.4	Search a web based encyclopaedia, dictionary.
7.4 Web Outputs	7.4.1 Saving Files	7.4.1.1	Save a web page to a location on a drive.
		7.4.1.2	Download files from a web page to a location on a drive.
		7.4.1.3	Copy text, image, URL from a web page to a document.
	7.4.2 Prepare and Print	7.4.2.1	Prepare a web page for printing: change printed page orientation, paper size, printed page margins.
		7.4.2.2	Preview a web page.
		7.4.2.3	Choose web page print output options like: entire web page, specific page(s), selected text, number of copies and print.
Section 2	Communication		
7.5 Electronic Communication	7.5.1 Concepts/Terms	7.5.1.1	Understand the term e-mail and know its main uses.
		7.5.1.2	Understand the make-up and structure of an e-mail address.
		7.5.1.3	Understand the term short message service (SMS).
		7.5.1.4	Understand the term Voice over Internet Protocol (VoIP) and know its main benefits.
		7.5.1.5	Understand the main benefits of instant messaging (IM) like: real-time communication, knowing whether contacts are online, low cost, ability to transfer files
		7.5.1.6	Understand the concept of an online (virtual) community. Recognize examples like: social networking websites, Internet forums, chat rooms, online computer games.
	7.5.2 Security Considerations	7.5.2.1	Be aware of the possibility of receiving fraudulent and unsolicited email.
		7.5.2.2	Understand the term phishing. Recognize attempted phishing.
		7.5.2.3	Be aware of the danger of infecting the computer with a virus by opening an unrecognized e-mail message, by opening an attachment.
		7.5.2.4	Understand what a digital signature is.
	7.5.3 E-mail Theory	7.5.3.1	Understand the advantages of e-mail systems like: speed of delivery, low cost, flexibility of using a web-based e-mail account in different locations.

CATEGORY	SKILL SET	REF.	TASK ITEM/LEARNING OUTCOMES
		7.5.3.2	Understand the importance of network etiquette (netiquette) like: using accurate and brief descriptions in e-mail message subject fields, brevity in e-mail responses, spell checking outgoing e-mail.
		7.5.3.3	Be aware of possible problems when sending file attachments like: file size limits, file type restrictions (for example, executable files).
		7.5.3.4	Understand the difference between the To, Copy (Cc), Blind copy (Bcc) fields.
7.6 Using e-mail	7.6.1 Send an e-mail	7.6.1.1	Open, close an e-mail application. Open, close an e-mail.
		7.6.1.2	Create a new e-mail.
		7.6.1.3	Enter an e-mail address in the To, Copy (Cc), Blind copy (Bcc) fields
		7.6.1.4	Enter a title in the Subject field.
		7.6.1.5	Copy text from another source into an e-mail.
		7.6.1.6	Insert, remove a file attachment.
		7.6.1.7	Save a draft of an e-mail.
		7.6.1.8	Use a spell checking tool and correct spelling errors.
		7.6.1.9	Send an e-mail. Send an e-mail with a low, high priority.
	7.6.2 Receiving e-mail	7.6.2.1	Use the reply, reply to all function.
		7.6.2.2	Forward an e-mail.
		7.6.2.3	Save a file attachment to a location on a drive and open the file.
		7.6.2.4	Preview, print a message using available printing options.
	7.6.3 Enhancing Productivity	7.6.3.1	Add, remove message inbox headings like: sender, subject, date received.
		7.6.3.2	Apply a setting to reply with, without original message insertion.
		7.6.3.3	Flag an e-mail. Remove a flag mark from an e-mail.
		7.6.3.4	Identify an e-mail as read, unread. Mark an e-mail as unread, read.
		7.6.3.5	Display, hide built-in toolbars. Restore, minimize the ribbon.

CATEGORY	SKILL SET	REF.	TASK ITEM/LEARNING OUTCOMES
		7.6.3.6	Use available Help functions.
7.7 e-mail Management	7.7.1 Organize	7.7.1.1	Search for an e-mail by sender, subject, e-mail content.
		7.7.1.2	Sort e-mails by name, by date, by size.
		7.7.1.3	Create, delete an e-mail folder.
		7.7.1.4	Move e-mails to an e-mail folder.
		7.7.1.5	Delete an e-mail.
		7.7.1.6	Restore a deleted e-mail.
		7.7.1.7	Empty the e-mail bin/deleted items/trash folder.
	7.7.2 Address Book	7.7.2.1	Add contact details to an address book. Delete contact details from an address book.
		7.7.2.2	Update an address book from incoming e-mail.
		7.7.2.3	Create, update a distribution list/mailing list.

Recommended Application Software for this section:

- Internet Explorer (6/7/8/9)
 Microsoft Office Outlook (2003/2007/2010)