COMPUTER FORM 1 SCHEMES OF WORK – TERM 1								
WE EK	LES SO N	TOPIC	SUB-TOPIC	LEARNING OBJECTIVES	TEACHING/LEARNING ACTIVITIES	TEACHING/LEARNING RESOURCES	REFERENCES	REMARKS
1	1		DEFINITION OF A COMPUTER	By the end of the lesson, the learner should be able to • Define computer • Distinguish between data and information • Explain unique characteristics of computer as a data processing tool	Learner to: • Through questions and answer define computer • Through brainstorming distinguish between data and information • Through group discussion, discuss characteristics of a computer as data processing tools	• A calculator • A personal Computer • Charts • Sample data	• Lomghorn Secondary. S.Mburu, G. Chemwa page 1-2 • Computer studies Dr. Onunga and Renu Shah Page 1-2	
	2-3		PHYSICAL PARTS OF A COMPUTER	By the end of the lesson, the learner should be able to • State and explain various physical parts of a computer	• Through question and answer list parts of a Computer • Through brainstorming, explain various parts of a computer	• A working personal computer	• Gateway secondary Revision S.Mburu G. Chemwa pg 1 • Foundations of Computer studies by Pepela pg 3	
2	1		CLASSIFICATION OF COMPUTERS	By the end of the lesson, the learner should be able to • Classify computer according to physical size	Learner to • In group of two identify and discuss pictures from books, magazines	• Charts or photographs from books, magazines or newspapers	• Gateway secondary Revision S.Mburu G. Chemwa pg 7-8	
	2-3		CLASSIFICATION OF COMPUTERS	• Classify computer according to functionality and according to purpose	• Discussion • Q/A	• Charts or photographs from books, magazines or newspapers	• Onunga and Renu Shah Page6	

3	1		DEVELOPMENT OF COMPUTERS	By the end of the lesson, the learner should be able to • Explain how computers have developed	• Through brainstorming identify and discuss non-electronic tools	• Charts or photographs from books, magazines or newspapers	• Lomghorn Secondary. S.Mburu, G. Chemwa page 10	
	2-3		ELECTRONIC COMPUTERS	• List five generations computers	• In group of three, discuss five generation computers	• Charts or photographs from books, magazines or newspapers	• Lomghorn Secondary. S.Mburu, G. Chemwa page 12-13 • Foundations of Computer studies by Pepela pg 22	
4	1		AREAS WHERE COMPUTER ARE USED	By the end of the lesson, the learner should be able to • Identify areas where computers are used • Describe the listed areas where computers are used	Learner to • Through brainstorming identify and discuss areas where computers are used	• Flash Cards	• Lomghorn Secondary. S.Mburu, G. Chemwa page 14-15	
	2-3		•THE COMPUTER LABORATORY •MEASURES THAT PROTECT COMPUTER	• Define computer laboratory • Describe the safety precautions and practices that protect computer	• Through question and answer define computer laboratory • In group of three, discuss safety precautions and practices that protect computer	• UPS,Surge protector • charts	• Foundations of Computer studies by Pepela pg 47	
5	1		MEASURES THAT PROTECT USER	• Describe the safety precautions and practices that protect user	• In group of three, discuss safety precautions practices that protect user	• Antiglare standard furniture		
	2-3		PRACTICAL	By the end of the lesson,	• Through	• Computer	• Gateway	

			HANDS-ON SKILLS	the learner should be able to • Start up a computer • Restart a computer • Shutting down computer	demonstration by the teacher, learner to observe and imitate on how to start up a computer, restart a computer and shut down computer		Secondary Revision, S.Mburu G.Chemwa pg 21-23	
6	1		KEYBOARD AND MOUSE SKILLS KEYBOARD SKILLS	By the end of the lesson, the learner should be able to • Define keyboard • Identify parts of the Keyboard	Learner to • Through brainstorming define keyboard and identify parts of the Keyboard	• Computer keyboard • Mobile keyboard	• Gateway Secondary Revision, S.Mburu G.Chemwa pg 22	
	2-3		KEYBOARD SKILLS	• Discuss parts of the keyboard • Type using keyboard	• In group of three, discuss parts of the keyboard and type using keyboard	• charts	• Foundations of Computer studies by Pepela pg 25	
7	1		TYPING TUTOR	• Identify typing tutors • Use typing tutors	• Through question and answer identify typing tutors and use typing tutors	• Typing tutor software computer		
	2-3		MOUSE SKILLS	• Define computer mouse • Identify parts of the mouse	• Through brainstorming define computer mouse and identify parts of the mouse	• Computer mouse	• Lomghorn Secondary. S.Mburu, G. Chemwa page 23	
8	1		MOUSE SKILLS	By the end of the lesson, the learner should be able to: • Describe parts of mouse • Use mouse techniques	• In group of three, discuss parts of the mouse	• Computer mouse	• Foundations of Computer studies by Pepela pg 23-25	
	2-3		MOUSE SKILLS	• Drag and drop items • Open file and folders through double clicking, right clicking	• Through demonstration by the teacher, learner to observe and imitate on how to drag and drop items	• Computer mouse	• Foundations of Computer studies by Pepela pg 23-25	

			COMPUTER SYSTEM					
9	1		COMPUTER SYSTEMS INPUT DEVICES (KEYING DEVICES	By the end of the lesson, the learner should be able to • Describe computer system • Define input devices	Learner to • Through brainstorming describe computer system • define input devices	• Computer system • PDA's	• Longhorn Secondary. S.Mburu, G. Chemwa page 30-31	
	2-3		INPUT DEVICES (KEYING DEVICES)	• List keying devices • Describe keying devices	• Through questions and answer, list keying devices, describe keying devices	• Computer Keyboard • PDA's Keypad	• Foundations of Computer studies by Pepela pg 68	
10	1		POINTING DEVICES	• Define pointing devices • List pointing devices • Describe the listed pointing devices	• Through question and answer define scanning device • In group of three, describe the listed pointing devices	• Mouse • Joystick • Light pen	• Gateway Secondary Revision, S.Mburu G.Chemwa pg 30-34	
	2-3		SCANNING DEVICES	• Define scanning devices • List scanning devices • Describe scanning devices	• Through question and answer define scanning device • In group of three, describe the listed scanning device	• Pictures from books and Magazines	• Foundations of Computer studies by Pepela pg 70	
11	END TERM 1 EXAM							
12	REVISION							

COMPUTER FORM 1 SCHEMES OF WORK – TERM 2								
COMPUTER SYSTEMS (cont)								
WE EK	LES SO N	TOPIC	SUB - TOPIC	OBJECTIVES	LEARNING/TEACHING ACTIVITIES	LEARNING/TEACHING RESOURCES	REFERENCES	REMARKS
1	1		COMPUTER SYSTEMS DIGITIZERS SPEECH RECOGNITION DEVICES	By the end of the lesson, the learner should be able to - Define digitizer - List other input technologies - Describe the listed input technologies	Learner to: - Through question and answer define digitizer - Through brainstorming to list other input technologies - Through group discussion, discuss the listed input technologies	- Pictures from books and newspapers - PDA's	- Lomghorn Secondary. S.Mburu, G. Chemwa page 37-38 - Foundations of Computer studies by Pepela pg 76	
	2-3		CENTRAL PROCESSING UNIT	By the end of the lesson, the learner should be able to - Define term CPU - List functional elements of CPU	- Through questions and answer define the term CPU - Through brainstorming, list and illustrate the functional elements of CPU	A working personal computer	- Gateway Secondary Revision, S.Mburu G.Chemwa pg 40 - Foundations of Computer studies by Pepela pg 77	
2	1		CONTROL UNIT AND ARITHMETIC LOGIC UNIT	Describe the control Unit and Arithmetic Logic Unit	Through brainstorming, describe the Control Unit and Arithmetic Logic Unit	Charts	Longhorn Secondary. S.Mburu, G. Chemwa page 41-42	
	2-3		MAIN MEMORY	By the end of the lesson, the learner should be able to - Classify computer memories - List examples of primary memory and secondary memory - State characteristics of	Learner to: - Through question and answer classify computer memories - Trough brainstorming list examples of primary memory and secondary memory - Through questions and answer state	- Pictures from books - RAM module	Gateway Secondary Revision, S.Mburu G.Chemwa pg 41-43	

						characteristics of RAM and ROM		
3	1		SPECIAL PURPOSE MEMORIES	• Define special purpose memory • List special purpose memories • Describe Cache memory and Buffers	• Through question and answer define special purpose memory and list special purpose memories • Through brainstorming describe Cache memory and Buffers	• Input/output devices • microprocessor	• Foundations of Computer studies by Pepela pg 77	
	2-3		SPECIAL PURPOSE MEMORIES	• Define registers • List types of registers • Describe the listed types of registers	• Through question and answer define registers and list types of registers • In group of five, discuss the listed types of registers	• Chart	• Longhorn Secondary. S.Mburu, G. Chemwa page 44-45	
4	1		MEMORY CAPACITY	By the end of the lesson, the learner should be able to • Define byte • Express memory quantities • Calculate memory quantities	Learner to: • Through questions and answer define byte • Through teachers demonstration, express memory quantities and calculate memory quantities	• RAM module • Flash cards	• Foundations of Computer studies by Pepela pg 79-80	
	2-3		OVERALL FUNCTIONAL ORGANIZATION OF THE CPU	• Define computer bus • List types of computer buses • Describe the listed computer buses • Give an illustration of the overall functional organization of the CPU	• Through brainstorming, define computer bus • In group of five, discuss the listed types of computer buses • Through group discussion, illustrate the overall functional organization of the	• Schematic diagram from the book	• Gateway Secondary Revision, S.Mburu G.Chemwa pg 48	

					CPU		
5	1		TYPES OF PROCESSORS	• Classify processors • Discuss the listed processor classifications	• Through question and answer Classify processors • Through group discussion, discuss the listed processor classification	• Photograph	• Gateway Secondary Revision, S.Mburu G.Chemwa pg 48	
	2-3		TRENDS IN PROCESSORS TECHNOLOGY AND SPEED	• List processors Type Manufactures Year and speed	• Through question and answer, list processors Type, manufactures, year and speed	• Photograph	• Longhorn Secondary. S.Mburu, G. Chemwa page 44-47	
6	1		OUTPUT DEVICES	By the end of the lesson, the learner should be able to • Define output device • Classify output devices • List softcopy output devices • Describe monitor as a soft copy output device	Learner to: (a) Through question and answer define output device and classify output devices (b) Through group discussion, discuss the listed softcopy output devices	• CRT,LCD, TFT monitors • Speakers • LED	• Gateway Secondary Revision, S.Mburu G.Chemwa pg 51-60 • Foundations of Computer studies by Pepela pg 80	
	2-3		MONITOR DISPLAY TERMINOLOGIES AND VIDEO GRAPHIC ADAPTERS	• Define the terminologies used in monitor • List and describe the video graphic adapters	• Through question and answer define terminologies • Through group discussion, describe the listed video graphic adapters	• Photograph from books	• Longhorn Secondary. S.Mburu, G. Chemwa page 49-52	
7	1		HARDCOPY OUTPUT DEVICES	• Describe hard copy output devices	• Through group discussion, describe hard copy output devices	• Printers • Pictures from magazines • Newspapers	• Foundations of Computer studies by Pepela pg 81	
	2-3		HARD COPY OUTPUT DEVICES	• List factors to consider when	• Through question and answer list	• Printers	• Longhorn Secondary.	

				purchasing a printer	factors to consider when purchasing a printer	• Pictures from magazines • Newspapers	S.Mburu, G. Chemwa page 53	
8	1		SECONDARY STORAGE DEVICES AND MEDIA	• List secondary storage media • Describe removable storage device	• Through question and answer list secondary storage media • Through group discussion, describe removable storage device	• Flash disc • Floppy • Diskettes • Memory sticks • Compact disk • Hard disk	• Gateway Secondary Revision, S.Mburu G.Chemwa pg 61-69	
	2-3		SECONDARY STORAGE DEVICES AND MEDIA	By the end of the lesson, the learner should be able to • Discuss fixed storage device	• Through brainstorming, discuss fixed storage device	• Flash disc • Floppy • Diskettes • Memory sticks • Compact disk • Hard disk	• Foundations of Computer studies by Pepela pg 101	
9	1		POWER SUPPLY AND PERIPHERAL DEVICE INTERFACING	• Distinguish between power and interface cables • Describe power cables	• Through question and answer, distinguish between and interface cables	• Computer power cables • Interface cables	• Longhorn Secondary. S.Mburu, G. Chemwa page 65-67	
	2-3		POWER SUPPLY AND PERIPHERAL DEVICE INTERFACING	• Describe interfacing cables	• Through discussion, describe interfacing cables	• Computer power cables • Interface cables	• Longhorn Secondary. S.Mburu, G. Chemwa page 65-67	
10	1		BASIC COMPUTER SET-UP AND CABLING	By the end of the lesson, the learner should be able to • Explain basic computer setup and cabling	• Through teachers demonstration, explain basic computer setup and cabling	• Computer power cables • Interface cables	• Foundations of Computer studies by Pepela pg 101	
	2-3		""	• Mount hard drives and optical drives	• Through teachers demonstration, mount hard drives and optical drives	• Computer	• Foundations of Computer studies by Pepela pg 101	

11	1		COMPUTER SOFTWARE	By the end of the lesson, the learner should be able to • Distinguish between system software and application software	• Through question and answer, distinguish between system software and application software	• Computer software's	• Longhorn Secondary. S.Mburu, G. Chemwa page 73-76	
	2-3		COMPUTER SOFTWARE	• Classify software according to purpose	• Through brainstorming, classify software according to purpose	• Computer software's	• Foundations of Computer studies by Pepela pg 143-144	
12	1		COMPUTER SOFTWARE	• Classify software according to acquisition	Through brainstorming, classify software according to acquisition	• Computer software's	• Foundations of Computer studies by Pepela pg 143-144	
	2-3		COMPUTER SOFTWARE	• Classify software according to end user- License • Evaluate criteria for selecting computer system	• Through brainstorming, classify software according to user- License • Through question and answer, Evaluate criteria for selecting computer system	• Computer software's	• Foundations of Computer studies by Pepela pg 143-144	
13	**END TERM EXAM AND REVISION**							

COMPUTER FORM 1 SCHEMES OF WORK – TERM 3	
OPERATING SYSTEM (OS)	

WEEK	LESSON	TOPIC	SUB - TOPIC	OBJECTIVES	LEARNING/TEACHING ACTIVITIES	LEARNING/TEACHING RESOURCES	REFERENCES	REMARKS
1	1		DEFINITION OF AN OPERATING SYSTEM	By the end of the lesson, the learner should be able to • Illustrate an operating system as a supervisor of hardware and application software	Learner to • Identify operating system used by the computer	• Charts • computer	• Longhorn Secondary. S.Mburu, G. Chemwa page 82 • Foundations of Computer studies by Pepela pg 155	
	2-3			• Identify parts of operating system	• Through brainstorming describe parts of the operating system	• Charts • computer	• Longhorn Secondary. S.Mburu, G. Chemwa page 82 • Foundations of Computer studies by Pepela pg 155	
2	1		FUNCTION OF AN OPERATING SYSTEM	By the end of the lesson, the learner should be able to • List devices under the operating system	• Through questions and answers, list devices under control of operating system	• Flash Cards	• Longhorn Secondary. S.Mburu, G. Chemwa page 83-85	
	2-3		DEVICES UNDER THE OPERATING SYSTEM CONTROL	• State functions of an operating system in resource management	• Through brainstorming, state functions of operating system	• Computer • Operating system • software	• Gateway Secondary Revision, S.Mburu G.Chemwa pg 87	
3	1		TYPES OF OPERATING SYSTEM	By the end of the lesson, the learner should be able to • List types of operating system	Learner to (a) List and describe types of operating system	• PC's loaded with different operating systems, pupils book part 3,4	• Longhorn Secondary. S.Mburu, G. Chemwa page 83-85	
	2-3			Describe: • Single program	(a) Draw a summary diagram of various	• PC's loaded with different	• Foundations of Computer	

				and multitasking operating system	operating system types	operating systems, pupils book part 3,4	studies by Pepela pg 170	
4	1			• Multi- user and single user operating system	• Draw a summary diagram of various operating system types	• Chart	• Foundations of Computer studies by Pepela pg 170	
	2-3			• Command line, menu driven and graphical user interface operating system	• Draw a summary diagram of various operating system types	• Chart	• Gateway Secondary Revision, S.Mburu G.Chemwa pg 90-91	
5	1		HOW OPERATING SYSTEM ORGANIZE INFORMATION	By the end of the lesson, the learner should be able to • State and explain factors that dictate file organization	• Identify features on windows desktop	• PC loaded with any version of windows	• Longhorn Secondary. S.Mburu, G. Chemwa page 89-94	
	2-3			• Describe files, folders and drives • Start Microsoft windows	• Identify features on windows desktop	• PC loaded with any version of windows	• Longhorn Secondary. S.Mburu, G. Chemwa page 89-94	
6	1		MANAGING FILE AND FOLDERS	By the end of the lesson, the learner should be able to • Distinguish between folder and directory • Draw directory (folder) tree	Learner to • Create folder in both Graphical user interface and MS-DOS	• Flash cards	• Longhorn Secondary. S.Mburu, G. Chemwa page 95-97	
	2-3		MANAGING FILE AND FOLDERS	• Create ne files and folders • Identify parts of an application window		• Flash cards	• Longhorn Secondary. S.Mburu, G. Chemwa page 95-97	
7	1			• Save changes to a	Learner to	• Personal	• Longhorn	

				• file • Rename files or folders • Copy, move, sort files and folders	• Save changes to a file, rename files and folders	computer loaded with any version of windows	Secondary. S.Mburu, G. Chemwa page 95-97	
	2-3			• Manipulate files and folders using Short cut menu, drag and drop Selecting multiple files and folders Searching for files and folders	• In group of two, manipulate files and folders using Shortcut menu, drag and drop Selecting multiple files and folders Searching for files and folders	• Personal computer loaded with any version of windows	• Longhorn Secondary. S.Mburu, G. Chemwa page 90	
8	1		DISK MANAGEMENT USING WINDOWS	By the end of the lesson, the learner should be able to • Format disk • Back-up data	Learner to: In group of three • Format disk • Back-up data	• Personal computer loaded with any version of windows	• Longhorn Secondary. S.Mburu, G. Chemwa page 106-113	
	2-3			• scan problems related to disk • defragment a disk	In group of three • use scan disk to detect disk errors • defragment a disk	• floppy diskette • flash disk	• Longhorn Secondary. S.Mburu, G. Chemwa page 106-113	
9	1			• Compress files within a disk • Scan a disk for virus	In a group of three • Compress a disk	• floppy diskette • flash disk	• Longhorn Secondary. S.Mburu, G. Chemwa page 106-113	
	2-3			• Create/restore back-up data • Create startup disk • Partition a disk	In group of three • Partition a disk	• Un partition • Hard disk	• Longhorn Secondary. S.Mburu, G. Chemwa page 106-113	
10	1		INSTALLATION AND CONFIGURING AN OPERATING SYSTEM	By the end of the lesson, the learner should be able to • Know installation requirements	Learner to • List installation requirement • Describe the listed installation requirements	• Personal computer without an operating system	• Longhorn Secondary. S.Mburu, G. Chemwa page 114-117	

WEEK	LESSON	TOPIC	SUB - TOPIC	OBJECTIVES	LEARNING/TEACHING ACTIVITIES	LEARNING/TEACHING RESOURCES	REFERENCES	REMARKS
	2-3			• Install operating system	• With the help of the teacher install operating system	• Installation and start up disk • Manufactures documentations	• Foundations of Computer studies by Pepela pg 170	

COMPUTER FORM 2 SCHEMES OF WORK – TERM 1								
APPLICATION PACKAGES (WORD PROCESSORS)								
WEEK	LESSON	TOPIC	SUB - TOPIC	OBJECTIVES	LEARNING/TEACHING ACTIVITIES	LEARNING/TEACHING RESOURCES	REFERENCES	REMARKS
1			Reporting from home and settling for first term work					
2	1		DEFINITION OF WORD PROCESSOR	By the end of the lesson, the learner should be able to • Define the term word processor • Explain the purpose of a word processor	• Q/A discussion	• Newspapers • Letters • Cards • books	• Longhorn Secondary. S.Mburu, G. Chemwa page 1-3	
	2-3		USING A WORD PROCESSING PACKAGE	By the end of the lesson, the learner should be able to • Start a Microsoft word • Explain the Microsoft screen layout	• Q/A demonstration practical	• Handouts • Books • Working personal computer	• Longhorn Secondary. S.Mburu, G. Chemwa page 5-10	
3	1		RUNNING THE PROGRAMME	By the end of the lesson, the learner should be able to • Save and retrieve • Close and exit	• Q/A demonstration practical	• Books • Handouts • Working computer	• Longhorn Secondary. S.Mburu, G. Chemwa page 13-17	
	2-3		EDITING AND	By the end of the lesson,				

			FORMATTING A DOCUMENT	the learner should be able to • Select a document • Move, copy and delete • Insert and type over	• Q/A demonstration practical	• Handouts • Books • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 16-19	
4	1		FIND AND REPLACE	By the end of the lesson, the leaner should be able to • Define the term find and replace • Find and replace a documents • Use thesaurus	• Q/A Demonstration practical	• Letters • Card working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 16-24	
	2-3		TEXT FORMATTING	By the end of the lesson, the learner should be able to • Bold, italicize, underline, change fonts	• Q/A Demonstration practical	• Letters • Cards • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 22-23	
5	1		PARAGRAPH FORMATTING	By the end of the lesson, the learner should be able to • Drop cap, sub and superscript • Align and indent text	• Q/A demonstration practical	• Handouts • Cards • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 22-23	
	2-3		PARAGRAPH FORMATTING	By the end of the lesson, the learner should be able to • Space and section break • Bullet and number • Insert columns/page headers and footers	• Q/A demonstration practical	• Books • Newspapers • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 22-23	

14

6	1		SET-UP	By the end of the lesson, the learner should be able to • Set up margins • Set paper size and orientation	• Q/A demonstration practical	• Handouts • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 33-35	
	2-3		SET-UP	By the end of the lesson, the learner should be able to • Define the term table • Crate tables • Insert rows and columns • Merge/split rows	• Q/A Demonstration practical	• Handouts • Working computer • books	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 37-39	
7	1		TABLE CONVERSION/ ARITHMETIC CALCULATIONS	By the end of the lesson, the learner should be able to • convert text to a table and vice verse • import tables/perform calculations	• Q/A Demonstration practical	• Handouts • Working computer • Chalk board	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 40-41	
	2-3		MAIL MERGE	By the end of the lesson, the learner should be able to • Define the term mail merge • Create: main document and data source • Merge fields	• Q/A Demonstration practical	• Letters • Card • Working computer • Chalk board	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 44-46	
8	1		GRAPHICS	By the end of the lesson, the learner should be able to • Define the term graphic • Insert/edit graphics	• Q/A Demonstration practical	• Clip art • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 44-49	

	2-3		PRINTING	By the end of the lesson, the learner should be able to • Define the term printing • Set up the printer and print	• Q/A Demonstration practical	• Letters • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 44	
9	1		SPREAD SHEETS (SPREADSHEETS)	By the end of the lesson, the learner should be able to • Define the term spreadsheets • Explain the application areas of spreadsheet	• Q/A Discussion	• Call register • Accounts book	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 52-53	
	2-3		CREATING A WORKSHEET	By the end of the lesson, the learner should be able to • Define the term worksheet • Create a worksheet • Save/retrieve a worksheet	• Q/A demonstration practical	• Handouts • Class register • Accounts book • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 57-65	
10	1		CELL DATA TYPES	By the end of the lesson, the learner should be able to • Define the term cell data type • Explain the different data types	• Q/A discussion	• Books	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 66	
	2-3		CELL REFERENCING	By the end of the lesson, the learner should be able to • Define the term cell referencing • Explain the different cell referencing • Apply cell referencing on a	• Q/A Demonstration practical	• Books • Handouts • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 66-69	

				computer			
11	1		FUNCTIONS AND FORMULAE	By the end of the lesson, the learner should be able to • Differentiate between functions and formulae • Apply functions and formulae on a document	• Q/A demonstration Practical	• Working computer • Books	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 70-73
	2-3		WORKSHEET FORMATTING	By the end of the lesson, the learner should be able to • Format a worksheet: text, numbers, rows, columns and global	• Q/A Demonstration practical	• Books • Handouts • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 74-79
12	1		DATA MANAGEMENT	By the end of the lesson, the learner should be able to • Explain the terms, Sort, filter, total forms • Apply the above features	• Q/A Demonstration practical	• Books • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 73-75
	2-3		CHARTS/GRAPHICS	By the end of the lesson, the learner should be able to • Definite the terms chart • Explain the different charts • Insert charts	• Q/A Demonstration practical	• Books • Handouts • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 77-79
	END TERM EXAMS/SCHOOLS CLOSE						

COMPUTER FORM 2 SCHEMES OF WORK – TERM 2

DATABASES

WEEK	LESSON	TOPIC	SUB - TOPIC	OBJECTIVES	LEARNING/TEACHING ACTIVITIES	LEARNING/TEACHING RESOURCES	REFERENCES	REMARKS
1			Reporting from home and settling for the second term work					
2	1		DATABASE	By the end of the lesson, the learner should be able to • Define the database • Explain the concept of D/base	• Q/A discussion	• Class list	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 93-94	
	2-3		DATABASE MODELS	By the end of the lesson, the learner should be able to • Define the term d/base model • Explain the difference d/base models • Discuss the features of a database	• Q/A demonstration practical	• Handouts • Books • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 96-98	
3	1		DATA ORGANIZATION	By the end of the lesson, the learner should be able to • Organize data in a database • Start Ms Access	• Q/A demonstration practical	• Handouts • Books • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 97-100	
	2-3		MS ACCESS SCREEN LAYOUT	By the end of the lesson, the learner should be able to • Explain the access screen layout • Create a database	• Q/A Demonstration practical	• Letters • Cards • Books • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 100-104	
4	1		EDITING A D/BASE	By the end of the lesson,	• Q/A Demonstration	• Letters	• Longhorn	

				the learner should be able to • Edict a data base	practical	• Cart • Working computer	Computer studies Secondary. S.Mburu, G. Chemwa page 108-109	
	2-3		QUERIES	By the end of the lesson, the learner should be able to • Define the term query • Crate a query	• Q/A Demonstration Practical	• Letters • Card • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 116-117	
5	1		UPDATING A QUERY	By the end of the lesson, the learner should be able to • Update a query • View a query	• Q/A Demonstration practical	• Handouts • Books • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 120-122	
	2-3		FORM DESIGN	By the end of the lesson, the learner should be able to • Explain the form layout • Create a form	• Q/A Demonstration practical	• Books • Newspaper • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 110-113	
6	1		FORMATTING FIELDS	By the end of the lesson, the learner should be able to • Display records in a form • Format fields	• Q/A Demonstration practical	• Handouts	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 113	
	2-3		REPORTS LAYOUT	By the end of the lesson, the learner should be able to • Define a report • Create a report • Modify a report	Q/A Demonstration Practical	• Handouts • Books • Working Computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page	

							125-129
7	1		REPORTS LAYOUT	By the end of the lesson, the learner should be able to • Sort and group data in a report • Design labels	• Q/A Demonstration practical	• Forms • Report • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 40-41
	2-3		PRINTING	By the end of the lesson, the learner should be able to • Define the term printing • Print: form and a report	• Q/A Demonstration Practical	• Forms • Report • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 112
				DESKTOP PUBLISHING			
8	1		DESKTOP PUBLISHING	By the end of the lesson, the learner should be able to • Define DTP S/W • State then purpose of DTPS/W	• Q/A Demonstration practical	• Clip art • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 132-134
	2-3		DESIGNING A PUBLICATION	By the end of the lesson, the learner should be able to • Explain the DTP S/W • Discuss the types of DTP publications	• Q/A Observation Practical	• Letters • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 133-134
9	1		DESIGNING A PUBLICATION	By the end of the lesson, the learner should be able to • Run the DTP program • Explain the DTP screen layout	• Q/A discussion	• Cards, certificates, text, calendars, text books	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 134-136

	2-3		DESIGNING A PUBLICATION	By the end of the lesson, the learner should be able to • Set up a publication • Manipulate text and graphics	Q/A demonstration practical	• Cards, certificates, text calendars, textbooks • Working Computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 139-143
10	**1**		TEXT	By the end of the lesson, the learner should be able to • Design page layout • Use a ruler to measure	• Q/A discussion	• Calendars, textbooks	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 158
	2-3		GRAPHICS	By the end of the lesson, the learner should be able to • Define the term graphics • Change full stroke • Reshape objects	• Q/A Demonstration practical	• Books • Handouts • Working Computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 150
11	**1**		GRAPHICS	By the end of the lesson, the learner should be able to • Copy an object • Import and wrap text	• Q/A Demonstration Practical	• Books • Handouts • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 161-162
	2&3		GRAPHICS	By the end of the lesson, the learner should be able to • Group objects • Lock objects	• Q/A Demonstration Practical	• Books • Handouts • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 164-168
12/ 13	**1**		ROTATE/CROP	By the end of the lesson, the learner should be able to • Explain the terms,	• Q/A Demonstration practical	• Books • Working computer	• Longhorn Computer studies

				sort, filter, total, forms			Secondary. S.Mburu, G. Chemwa page 164	
				• Apply the above features				

THE SCHOOL CLOSES/END OF TERM EXAMS								

COMPUTER FORM 1 SCHEMES OF WORK – TERM 1

INTERNET AND E-MAIL

WE EK	LES SO N	TOPIC	SUB - TOPIC	OBJECTIVES	LEARNING/TEACHING ACTIVITIES	LEARNING/TEACHING RESOURCES	REFERENCES	REMARKS
1			Reporting from home and settling for the first term work					
2	1		INTERNET AND E-MAIL	By the end of the lesson, the learner should be able to • Define the term internet • Explain the development of internet	• Q/A discussion • Demonstration • observation	• internet • Text book • Working Computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 168-169	
	2-3		IMPORTANCE OF THE INTERNET	By the end of the lesson, the learner should be able to • Explain the importance of the internet	• Q/A demonstration practical	• Handouts • Books • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 266-275	
3	1		INTERNET CONNECTIVITY	By the end of the lesson, the learner should be able to • Define the internet connectivity	• Q/A Demonstration Practical	• Handouts • Books • Modem S/W • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page	

					• Explain elements of IC		273-276
	2-3		INTERNET SERVICES	By the end of the lesson, the learner should be able to • Explain the internet services	• Q/A Demonstration Practical	• Letters • Cards • Books • computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 273-276
	1		ACCESSING INTERNET	By the end of the lesson, the learner should be able to • Log in/Sign in • Surf/browse	• Q/A Demonstration practical	• Web pages • Books • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 279
4	**2-3**		HYPER LINKS AND SEARCH ENGINES	By the end of the lesson, the learner should be able to • Define the term search engine • Use search engines	• Q/A Demonstration practical	• Letters • Card • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 177-179
5	**1**		ELECTRONIC MAIL	By the end of the lesson, the learner should be able to • Explain the term e-mail • Discuss the use of email s/w	• Q/A Demonstration practical	• Handouts • Books • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 178-180
	2-3		E-MAIL	By the end of the lesson, the learner should be able to • State the e-mail facilities • Compose mails • Check mails	• Q/A Demonstration practical	• Books • Web pages • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 30-37

6	1		E-MAIL	By the end of the lesson, the learner should be able to • Manipulate an e-mail	• Q/A Demonstration practical	• Handouts • Books • Web pages • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 180	
	2-3		SET-UP	By the end of the lesson, the learner should be able to • Fax e-mail • Attach files	• Q/A Demonstration practical	• Websites • Web pages • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 181-182	
7	1		TEL MESSAGING	By the end of the lesson, the learner should be able to • Explain the term tel messaging • Develop contact mgt	• Q/A Demonstration practical	• Handouts • Web pages • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 181-182	
	2-3		EMERGING ISSUES	By the end of the lesson, the learner should be able to • Explain the emerging issues • Search for the emerging issues in the net	• Q/A Demonstration practical	• Websites • Web pages • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 182-183	
8	1		GRAPHICS	By the end of the lesson, the learner should be able to • Define the term graphic • Insert/edit graphics	• Q/A Demonstration practical	• Web sites • Web pages • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 44-49	
	2-3		G. DATA SECURITY AND CONTROLS	By the end of the lesson, the learner should be able to • Define the term	• Q/A Demonstration practical	• Books • Working computer	• Longhorn Computer studies Secondary.	

				data security • Identify security threats on ICT			S.Mburu, G. Chemwa page 185-186	
9	1		CONTROL MEASURES	By the end of the lesson, the learner should be able to • Discuss the control measures on ICT	• Q/A discussion	• Internet • Books • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 186-188	
	2-3		COMPUTER CRIMES	By the end of the lesson, the learner should be able to • Define the term computer crimes • Explain the computer crimes	• Q/A Demonstration Practical	• Books • Internet • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 188-190	
10	1		ICT PROTECTION	By the end of the lesson, the learner should be able to • Discuss ICT protection measures	Q/A Demonstration practical	• Books • Internet • Handouts • Working computer	• Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 190-193	
	2-3		LAWS OF ICT	By the end of the lesson, the learner should be able to • Define the terms ethics • Explain the ethical issues	• Q/A demonstration practical	• Books • Internet • Handouts • Books • Working computer	• Computer studies by S.John Onunga page 327-328	
11	1		ICT LEGISLATION	By the end of the lesson, the learner should be able to • Discuss ICT laws	• Q/A discussion		• Computer studies by S.John Onunga page 328-331	
	2-3		WORKSHEET FORMATTING	By the end of the lesson, the earner should be able to • Format a	• Q/A Demonstration practical	• Books • Handouts • Working computer	• Longhorn Computer studies Secondary.	

				w/sheet: text, numbers, rows, columns and global			S.Mburu, G. Chemwa page 190-193	

SCHOOLS CLOSES END OF YEAR

COMPUTER FORM 3 SCHEMES OF WORK – TERM 1

WEEK	LESSON	TOPIC	SUB - TOPIC	OBJECTIVES	LEARNING/TEACHING ACTIVITIES	LEARNING/TEACHING RESOURCES	REFERENCES	REMARKS
1	1	Data Representation in a computer	DEFINITION & INTRODUCTION	By the end of the lesson, the learner should be able to • Define data • Define information • Classify computers according to functionality with illustration	• Questions and answers • Discussions in groups • brainstorming	• computer keyboard • electronic circuits • Charts • Photographs • Pictures from books	• Longhorn Computer studies Bk 3 page 1-3 • Computer studies by Onunga and Shah page 1	
	2		DATA REPRESENTATION	By the end of the lesson, the learner should be able to • Represent data in digital computers (i) On electronic circuits (ii) On magnetic media (iii) Optical media	• Discussions in groups • Exercises by the teacher	• Charts • Floppy diskettes • Compact disk • Electronic circuit	• Longhorn Computer studies Bk 3 page 23 • Computer studies by Onunga and Shah page 1	
	3-4	Data Representati on	DATA REPRESENTATION	By the end of the lesson, the learner should be able	• Discussions	• charts	• Longhorn Computer	

		on		to • Give reasons why binary system is used in computers • Define bits, bytes, nibble and word	• Question and answer		studies Bk 3 page 24 • Computer studies by Onunga and Shah page 1	
2	1	Data Representation	NUMBER SYSTEMS	By the end of the lesson, the learner should be able to • Define decimal number • Represent data in decimal number system • Represent data in actual number system	• Group discussions • Exercises given and marked by the teacher	• Charts • Simple calculations	• Longhorn Computer studies Bk 3 page 25 • Computer studies by Onunga and Shah page 6	
	2		NUMBER SYSTEM	By the end of the lesson, the learner should be able to • Represent data in actual number system • Represent data in Hexadecimal number system	• Group discussions • Questions and answering • exercises	• charts • simple calculations • Computer	• Longhorn Computer studies Bk 3 page 26 • Computer studies by Onunga and Shah page 7-8	
	3/4	**QUIZ AND PROBLEM SOLVING** **Teacher administers small assignment and revises for better retention**						
3	1	Data representation	FURTHER CONVERSION OF NUMBER SYSTEMS	By the end of the lesson, the learner should be able to • Convert binary number to decimal number system • Convert decimal numbers to binary numbers	• Questions and answers • Discussions in groups	• Charts • Simple calculations • Questions papers	• Longhorn Computer studies Bk 3 page 26 • Computer studies by Onunga and Shah page 8	
	2	"	"	By the end of the lesson,, the learner should be able	• Discussions • Questions and	• Charts • Simple	• Longhorn Computer	

			to • Convert binary fraction to decimal number system • Convert a decimal fraction to binary	answers	• calculations • Questions papers	studies Bk 3 page 26 • Computer studies by Onunga and Shah page	
	3-4	**PROBLEM SOLVING AND QUIZ** **Teacher administers questions and answer session for better retention**					
4	**1**	DATA REPRESENTA TION	Converting octal numbers to decimal and binary numbers	By the end of the lesson, the learner should be able to • Convert octal numbers to decimal numbers • Convert octal numbers to binary numbers	• Discussion • Question and answer	• Chart	• Longhorn Computer studies Bk 3 page 26 • Computer studies by Onunga and Shah page 12	
	2	DATA REPRESENTA TIONS	Converting hexadecimal numbers to binary number	By the end of the lesson, the learner should be able to • Convert hexadecimal to decimal numbers • Convert hexadecimal numbers to binary numbers	• Discussions • Question and answer	• Charts • Simple calculations • Computers • Scientific calculators	• Longhorn Computer studies Bk 3 page 26 • Computer studies by Onunga and Shah page 13-15	
3-4		**QUIZ AND PROBLEM SOLVING** **Can be inform of a question/answer session for retention**					
5	**1**	DATA REPRESENTATI ONS	Symbolic Representation using coding schemes	By the end of the lesson, the learner should be able to • Explain the binary coded decimal code as a representation Scheme (BCD) • Explain the extended Binary coded decimal	• Discussions • Question and answer	• Charts • Scientific Calculators	• Longhorn Computer studies Bk 3 page 26 • Computer studies by Onunga and Shah page 22-27	

				interchange code (EBCDIC)			
	2	DATA REPRESENTATION	Symbolic Representation using coding schemes	By the end of the lesson, the learner should be able to • Explain the American standard code for information interchange code (ASCII) as a representation scheme	• Discussion in groups	• Charts • Scientific and simple calculator • computer	• Longhorn Computer studies Bk 3 page 26 • Computer studies by Onunga and Shah page 22-27	
	3-4	**QUIZ FOR TETENTION** **Administer a small exam**					
6	1		BINARY ARITHMETIC OPERATIONS	By the end of the lesson, the learner should be able to • Represent signed binary numbers using prefixing an extra sign bit to a binary number and ones complement	• Teacher demonstrates • Group discussions • Questions and answering	• Simple calculators • PDA's • charts	• Longhorn Computer studies Bk 3 page 27 • Computer studies by Onunga and Shah page 27	
	2		BINARY ARITHMETIC OPERATIONS	By the end of the lesson, the learner should be able to • Represent signed binary numbers using two's complement	• Teachers demonstrates • Question and answer • Group discussions	"	• Longhorn Computer studies Bk 3 page 27 • Computer studies by Onunga and Shah page 27	
	3-4		BINARY ADDITION	By the end of the lesson, the learner should be able to • Perform seven possible binary additions • Outline the procedure for	• Demonstration by the teacher • Teacher gives and marks questions • Group discussions	• Charts	• Longhorn Computer studies Bk 3 page 27 • Computer studies by Onunga and Shah page 27	

				binary additions			
7	1		BINARY ARITHMETIC OPERATIONS	By the end of the lesson, the learner should be able to • Perform direct subtraction • Perform subtraction using ones complement	• Discussions • Demonstration by teacher • Question and answer	• Charts • calculator	• Longhorn Computer studies Bk 3 page 26 • Computer studies by Onunga and Shah page 28	
	2		BINARY ARITHMETIC OPERATIONS	By the end of the lesson, the learner should be able to • Perform subtraction using twos complement	• Discussions • Demonstration by teacher • Question and answer	• Charts • calculator	• Longhorn Computer studies Bk 3 page 26 • Computer studies by Onunga and Shah page 28	
	3-4	**QUIZ AND PROBLEM SOLVING** **Teacher evaluates by giving questions to ascertain whether objectives are achieved**						
8	1	Data Processing	DEFINITION AND INTRODUCTION	By the end of the lesson, the learner should be able to • Define data information and data processing • Describe the data processing cycle • Give methods of data collection	• Group discussions • Question and answering • brainstorming	• charts • computer	• Longhorn Computer studies Bk 3 page 32 • Computer studies by Onunga and Shah page 32-35	
	2	Data Processing	DATA PROCESSING CYCLE	By the end of the lesson, the learner should be able to • List stages for data processing • Describe the listed data processing cycle stage	• Group discussions • Question and answering • Brainstorming	• charts • computer	• Longhorn Computer studies Bk 3 page 32 • Computer studies by Onunga and Shah page 32-35	
	3-	Data	DATA PROCESSING	By the end of the lesson,	• Discussion in groups	• Flash cards		

	4	Processing	CYCLE	the learner should be able to • Give the errors that influence the accuracy of data and information output • Explain the errors in data processing	• Question and answer • Assignments marked by the teacher	• Charts • computer	• Longhorn Computer studies Bk 3 page 35 • Computer studies by Onunga and Shah page 33	
9	1	Data processing	DATA INTEGRITY	By the end of the lesson, the learner should be able to • Define data integrity • Give the measurements of data integrity • Accuracy • Timelines • Relevance • Describe the listed data integrity measurements	• Discussion in groups • Illustrations by the teacher • Question and answer	• Flash cards • Simple information system	• Computer studies by Onunga and Shah page 41	
	2	Data processing	DATA PROCESSING METHODS	By the end of this lesson, the learner should be able to • State the ways of minimizing threat to data integrity • List and describe the methods of data processing	• Discussion in groups • Illustrations by the teacher • Question and answer	• Flash cards • Simple information system	• Computer studies by Onunga and Shah page 41	
	3-4	Data processing	COMPUTER FILES	By the end of the lesson, the learner should be able to • Define a computer file • Give the types of computer files • State the advantages of computerized	• Discussion in groups • Illustrations by the teacher • Question and answer	• Charts	• Computer studies by Onunga and Shah page 49	

				filing				
10	1	Data processing	ELEMENTS OF COMPUTER FILE	By the end of the lesson, the learner should be able to • List the elements of a computer file • Describe the listed elements of a computer file	• Discussion in groups • Question and answer • demonstration	• database • chart with relation database	• Longhorn Computer studies Bk 3 page 40	
	2	Data processing	CLASSIFICATION OF COMPUTER FILES	By the end of the lesson, the learner should be able to • Classify computer files • Differentiate between logical and physical computer files	• Illustration by the teacher	• Floppy diskette • Compact disc • Computer video tape	• Longhorn Computer studies Bk 3 page 41 • Computer studies by Onunga and Shah page 50	
	3-4	Data processing	COMPUTER PROCESSING FILES	By the end of the lesson, the learner should be able to • Give the types of processing files • Describe the listed types of processing files • Master files • Transaction file • Reference files • Backup files • Sort files	• Discussions • Illustration by the teacher • Question and answer	• Charts • Flash cards	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 41	
11	1	Data processing	FILE ORGANIZATION METHODS	By the end of the lesson, the learner should be able to • Define file organization • List the methods of organizing files on a storage media • Describe the listed methods of	• Question and answer • Brainstorming • Discussions in groups	• Floppy diskettes • Compact disk • Video tapes	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 42 • Computer studies by Onunga and	

WEEK	LESSON	TOPIC	SUB - TOPIC	OBJECTIVES	LEARNING/TEACHING ACTIVITIES	LEARNING/TEACHING RESOURCES	REFERENCES	REMARKS
				file organization			Shah page 55	
	2	Data processing	ELECTRONIC DATA PROCESSING	By the end of the lesson, the learner should be able to • Give the data processing modes • Describe (i) Online processing (ii) Real-time processing (iii) Distributed processing	• Discussions in groups • Question and answer • Illustration by the teacher	• Charts • Flash cards	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 43-45 • Computer studies by Onunga and Shah page 61	
	3-4	Data processing	ELECTRONIC DATA PROCESSING MODES	By the end of the lesson, the learner should be able to • Describe (i) Time- sharing (ii) Batch processing (iii) Multi processing (iv) Multi-tasking (v) Interactive processing	• Discussions in groups • Question and answer • Illustration by the teacher	• Charts • Flash cards	• Computer studies by Onunga and Shah page 612-69	
12-13		**END OF TERM EXAMS AND CLOSING OF SCHOOL**						

COMPUTER FORM 3 SCHEMES OF WORK – TERM 2

WEEK	LESSON	TOPIC	SUB - TOPIC	OBJECTIVES	LEARNING/TEACHING ACTIVITIES	LEARNING/TEACHING RESOURCES	REFERENCES	REMARKS

1	1	ELEMENTARY PROGRAMMING PRINCIPLES	DEFINITION OF PROGRAMMING	By the end of this lesson, the learner should be able to • Define programming • List the terms used in programming • Describe the listed terms • Differentiate between source program and object program	• Question and answer • Discussion in groups • Illustration by the teacher	• Charts • Books • Journals • Software • computer	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 47 • Computer studies by Onunga and Shah page 72	
	2	ELEMENTARY PROGRAMMING PRINCIPLES	LEVELS OF PROGRAMMING LANGUAGE	By the end of the lesson, the learner should be able to • Classify the programming languages • Describe the low level programming language	• Demonstration • Q/A	• Flash cards • Charts • books	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 49-51 • Computer studies by Onunga and Shah page 73	
	3-4	ELEMENTARY PROGRAMMING PRINCIPLES	LEVELS OF PROGRAMMING LANGUAGE	By the end of the lesson, the learner should be able to • Describe the high level language • State the advantages and disadvantages of low-level and high level languages	• Q/A • Discussion	• Flash cards • Charts	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 59 • Computer studies by Onunga and Shah page 74-75	
2	1	ELEMENTARY PROGRAMMING PRINCIPLES	PROGRAM DEVELOPMENT	By the end of the lesson, the learner should be able to • List the stages in program	• Question and answer • Discussion in groups	• Flash cards • charts	• Longhorn Computer studies by Mburu and	

Week	Lesson	Topic	Subtopic	Objectives	Learning Activities	Learning Resources	References	Remarks
				development • Describe (i) program recognition (ii) program definition			Chemwa Bk 3 page 60-66	
	2	ELEMENTARY PROGRAMMING PRINCIPLES	PROGRAM DEVELOPMENT	By the end of the lesson, the learner should be able to • Describe (i) Program design (ii) Program coding	• Demonstration • Illustrations by teacher	• Computer software	• Computer studies by Onunga and Shah page 83	
	3-4	ELEMENTARY PROGRAMMING PRINCIPLES	PROGRAM DEVELOPMENT	By the end of the lesson, the learner should be able to • Describe (i) program testing (ii) Program implementation and maintenance	• Discussions in groups • Illustrations by the teacher • Question and answer	• Flash cards • charts	• Computer studies by Onunga and Shah page 85	
3	1	ELEMENTARY PROGRAMMING PRINCIPLES	PROGRAM DOCUMENTATION	By the end of the lesson, the learner should be able to • Define the term program documentation • State the forms of documentation • Describe the target groups for documentation	• Discussions in groups • Illustrations by the teacher • Question and answer	• Chalkboard • charts	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 67	
	2	ELEMENTARY PROGRAMMING PRINCIPLES	DEVELOPMENT OF ALGORITHMS	By the end of the lesson, the learner should be able to • Define algorithm • List tools used in algorithm • Distinguish	• Discussion in groups • Question and answer • Illustration by the teacher	• Chalkboard • Charts • Flash cards	• Longhorn Computer studies by Mburu and Chemwa Bk 3	

				between pseudo code and flow charts			page 68	
	3-4	ELEMENTARY PROGRAMMING PRINCIPLES	DESIGNING MORE COMPLEX ALGORITHMS	By the end of the lesson, the learner should be able to • Give comparison between a pseudo code and a flow chart • Design complex algorithms	• Question and answer • Demonstration by the teacher • Group discussions	• Charts	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 68	
4	1	ELEMENTARY PROGRAMMING PRINCIPLES	PROGRAM CONTROL STRUCTURES	By the end of the lesson, the learner should be able to • Define program control structures • List three control structures • Describe sequence as a control structure	• Discussions in groups	• Charts • chalkboard	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 72-78 • Computer studies by Onunga and Shah page 93	
	2	ELEMENTARY PROGRAMMING PRINCIPLES	PROGRAM CONTROL STRUCTURES	By the end of the lesson, the learner should be able to • Describe the use of iteration (looping) as a control structure	• Discussion in groups	• Charts • chalkboard	• Computer studies by Onunga and Shah page 94	
	3-4	ELEMENTARY PROGRAMMING PRINCIPLES	Program control structures	By the end of the lesson, the learner should be able to • Describe selection as a control structure • Design a more complex algorithm	• Illustration by the teacher • Discussion in groups • Question and answer	• Chart • chalkboard	• Computer studies by Onunga and Shah page 94	
5	1	**PROBLEM SOLVING**						

	2	SYSTEM DEVELOPMENT	Definition	By the end of the lesson, the learner should be able to • Define the term system • Describe a system list • List the characteristics of a system	• Discussion • Question and answer	• Charts • Chalkboard • Journals • Computer • books	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 91-95 • Computer studies by Onunga and Shah page 168	
	3-4	SYSTEM DEVELOPMENT	Information system	By the end of the lesson, the learner should be able to • Describe the listed characteristics of a system • Define information system	• Discussion in groups • Illustration by the teacher	• Charts • Flash cards • Chalkboard • Computer • Books	• Computer studies by Onunga and Shah page 170	
6	1	SYSTEM DEVELOPMENT	Information system	By the end of the lesson, the learner should be able to • State the main purpose of an information system • Give reasons why information system is developed • State the role of information system analyst	• Discussion • Illustrations by the teacher • Question and answer	• Charts • Flash cards • Computer	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 95	
	2	SYSTEM DEVELOPMENT	Theories of system development	By the end of the lesson, the learner should be able to • Describe tradition approach • Describe rapid application development	• Discussions in groups • Illustration by the teacher	• Chalk board • Flash cards • Charts	• Computer studies by Onunga and Shah page 170	

	3-4		Theories of system development	By the end of the lesson, the learner should be able to • Describe the structured approach • Give examples of ways of information of gathering	• Discussions in groups • Illustration by the teacher	• Chalk board • Flash cards • Charts	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 97	
7	1	SYSTEM DEVELOPMENT	Stages of system development	By the end of the lesson, the learner should be able to • State and define all the stages of system development	• Illustration by the teacher • Question and answer	• Chalk board • charts	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 97	
	2	SYSTEM DEVELOPMENT	Stages of system development	By the end of the lesson, the learner should be able to • Give the methods used in information gathering • Describe interviews studying of available documents as used in information gathering	• Demonstration • Discussion	• Chalk board • Charts	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 100-104 • Computer studies by Onunga and Shah page 175	
	3-4	SYSTEM DEVELOPMENT	Stages of system development	By the end of the lesson, the learner should be able to • Prepare a questionnaire • Prepare and present a fait finding report • Describe how automated methods are used	• Discussions in groups • Question and answer • Illustration by the teacher	• Sample questionnaire • Chalkboard	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 104	

8	1	SYSTEM DEVELOPMENT	Requirements specification	By the end of the lesson, the learner should be able to • Describe output specification • Describe input specification	• Discussions • Question and answer	• Chalkboard • Charts	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 105	
		SYSTEM DEVELOPMENT	Requirements specification	By the end of the lesson, the learner should be able to • Describe file/data stores • Describe hardware and software requirements	• Discussions • Question and answer	• Chalkboard • Charts	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 109	
		SYSTEM DEVELOPMENT	System design	By the end of the lesson, the learner should be able to • Define system flowchart • Identify common flowchart symbols	• Discussions • Question and answer	• Chalkboard • Charts	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 109	
9	1	SYSTEM DEVELOPMENT	Designing a system flowchart	By the end of the lesson, the learner should be able to • Identify guidelines fro designing system flowcharts • Write a system flowchart using a case study	• Discussions • Question and answer • Illustration by the teacher	• Charts • Chalkboard	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 110	
	2		Designing a system flowchart	By the end of the lesson, the learner should be able to • Write a simple book borrowing module flowchart • Write cleaners information system	• Illustration by the teacher • Discussion in groups	• Charts • Chalkboard	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 110	

39

				flowchart				
	3-4		Designing a system flowchart	By the end of the lesson, the learner should be able to • Write a sample library books management system flowchart • Use data flow diagrams	• Question and answer • Discussion in groups	• Chalkboard • chart	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 110	
10	**1**	SYSTEM DEVELOPMENT	System Construction	By the end of the lesson, the learner should be able to • Define the term system construction • Identify number of technique that can be used to construct a designed system	• Question and answer • Discussion in groups	• Charts • Chalkboard • Information system (Cleaner)	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 110	
	2		System Implementation	By the end of the lesson, the learner should be able to • Define system implementation and file conversion • Describe factors considered during file conversion	• Illustrations by the teacher • discussion	• Charts • chalkboard	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 116	
	3-4		Change over strategies	By the end of the lesson, the learner should be able to • Define the term changeover • List the system change over strategies • Describe three listed changeover strategies	• Discussions • Question and answer	• Flash card • Charts • chalkboard	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 116	

11	**1**		System maintenance and revision	By the end of the lesson, the learner should be able to • Define system maintenance • Define system review • Describe security control measures	• Illustration by the teacher • Question and answer	• Charts • Flash cards	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 116	
	2		System documentation	By the end of the lesson, the learner should be able to • Write a report on case study	• Illustration by the teacher • Question and answer	• Charts • Flash cards	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 117	
	3-4		System documentation	By the end of the lesson, the learner should be able to • Develop a system using a case study	• Illustration by the teacher • Discussions	• A chart • Computer • Printer • Chalkboard	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 117	
12	**1**		System documentation	By the end of the lesson, the learner should be able to • Identify comprehensive system documentation details • Write a report on the case study	• Discussions • Question and answer	• Charts • Computer	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 118-120	
	2,3 & 4		**PRACTICALS**					
END OF TERM EXAMINATION								

COMPUTER FORM 3 SCHEMES OF WORK – TERM 3

WEEK	LESSON	TOPIC	SUB - TOPIC	OBJECTIVES	LEARNING/TEACHING ACTIVITIES	LEARNING/TEACHING RESOURCES	REFERENCES	REMARKS
1	1	PROGRAMMING WITH VISUAL AIDS	Definition	By the end of the lesson, the learner should be able to • Define the term visual basic • Start up visual basic • Identify features of visual basic	• Demonstration by the teacher • Discussions • Question and answer	• Chalkboard • Computer • chart	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 122	
	2	PROGRAMMING	Visual basic toolbox	By the end of the lesson, the learner should be able to • Identify parts of the visual basic tool box • Describe parts of the visual basic toolbox	• Demonstration • Question and answer	• Chalkboard • Photograph • computer	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 123	
	3-4		Saving a visual project	By the end of the lesson, the learner should be able to • Save a visual basic project • Open an existing visual basic project	• Demonstration by the teacher • Question and answer • Practical	• Computer • Chalkboard	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 123	
2	1		Visual basic fundamental concepts	By the end of the lesson, the learner should be able to • Identify the visual basic fundamental concepts • Describe the listed	• Discussions • Questions and answer	• Chalkboard • Charts • Computer • Simple calculators	• Longhorn Computer studies by Mburu and Chemwa Bk 3	

				fundamental concepts			page 136
	2		Mathematical operators	By the end of the lesson, the learner should be able to • Identify mathematical operators • Describe the listed mathematical operators	• Discussions • Question and answers	• Chalkboard • Charts • Computer • Simple calculators	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 137
	3-4		Numeric strings and values	By the end of the lesson, the learner should be able to • convert a numeric string to a value • Convert a value to a string	• Illustrations by the teacher • Discussions • Question and answer	• Charts • computer	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 137
3	**1**		Project developments	By the end of the lesson, the learner should be able to • Create a program used to calculate the area of a rectangle	• Discussion in groups • Illustrations by the teacher	• Charts • Computer	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 145
	2		Project developments	By the end of the lesson, the learner should be able to • Write a program used to find roots of a quadratic expression	• Discussion in groups • Illustrations by the teacher	• Charts • Computer	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 147
	3-4		Case construct Looping construct	By the end of this lesson, the learner should be able to • Use case statement that can	• Demonstration by the teacher • Discussion • Question and answer	• Chart • Chalkboard • Computer • printer	• Longhorn Computer studies by Mburu and

				display the name of a weekday when its number is provided • Write a program using do-loop • Write a program using FOR-NEXT LOOP			Chemwa Bk 3 page 147	
4	1		Working with graphical objects	By the end of the lesson, the learner should be able to • Insert a picture using picture box • Define module and procedure • Declare general subroutines	• Demonstration • Question and answer • discussion	• chart • computer	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 150	
	2		Working with graphical objects	By the end of the lesson, the learner should be able to • Write a general subroutine that solves $y = x^n$ given that the value of n are integers	• Demonstration • Question and answer • practical	• computer • printer • chart • chalkboard	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 151	
	3-4		Creating means and dialog boxes	By the end of the lesson, the learner should be able to • Create a dropdown menu • Create a message and dialog boxes	• Demonstration • Discussions • Question and answers	• computer • printer • chart • chalkboard	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 151	
	1		List boxes and control boxes	By the end of the lesson, the learner should be able to • Define list box and combo box • Create a list box	• Discussion • Demonstration • Practical	• Chart • Photograph • Computer • chalkboard	• Longhorn Computer studies by Mburu and Chemwa Bk 3	

				and a combo box • Create a project that loads a list of items			page 161	
5	2		Visual basic data structures	By the end of the lesson, the learner should be able to • Define the term arrays • Declare an array	• Discussion • Demonstration • Practical	• Chart • Photograph • Computer • chalkboard	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 163	
	3-4		Visual basic data structures	By the end of the lesson, the learner should be able to • Declare two dimensional arrays • Write array of records	• Discussion • Demonstration • Practical	• Chart • Photograph • Computer • chalkboard	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 161	
6	1		Data files	By the end of the lesson, the learner should be able to • Define a file • Identify types of files recognized by visual basic • Link visual basic to data base	• Demonstration • Practical • Discussion	• Chart • Computer • chalkboard	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 187-189	
	2	INTRODUCTION TO DATA BASE DESIGN	Definition	By the end of the lesson, the learner should be able to • Define database • Identify relationships in database	• Demonstration • Practical • Discussion	• Chart • Computer • chalkboard	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 187-189	
	3-4		Defining attributes	By the end of the lesson, the learner should be able to • Define a foreign	• Question and answer • Practical • Demonstration	• computer • chart • chalkboard	• Longhorn Computer studies by	

				key • Distinguish between an entity and attributes • Create one to many relationships	• discussions		Mburu and Chemwa Bk 3 page 203-204	
7	1		File table structure	By the end of the lesson, the learner should be able to • Create a table • Set primary key and foreign key	• Demonstration • Discussion • Practical	• Computer • Chart • Chalkboard	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 217	
	2		Enforcing Referential integrity	By the end of the lesson, the learner should be able to • Enforce referential integrity between tables • Normalize table	• Demonstration • Discussion • Practical	• Computer • Chart • Chalkboard	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 217	
	3-4		Forms and commands	By the end of the lesson, the learner should be able to • Create a form/ interface • Call for commands	• Discussion in groups • Demonstration • Practical • Question and answer	• Computer • Chart • Chalkboard	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 21o	3-4
8	1		Creating reports	By the end of the lesson, the learner should be able to • Describe the tools used to automate database • Create a switchboard	• Discussion in groups • Demonstration • Practical • Question and answer	• Chart • computer	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 211	
	2		Automating database	By the end of the lesson, the learner should be able	• Discussion in groups	• Chart • computer	• Longhorn Computer	

WEEK	LESSON	TOPIC	SUB - TOPIC	OBJECTIVES	LEARNING/TEACHING ACTIVITIES	LEARNING/TEACHING RESOURCES	REFERENCES	REMARKS
				to • Describe the tools used to automate database • Create a switchboard	• Demonstration • Practical • Question and answer		studies by Mburu and Chemwa Bk 3 page 212	
	3-4		Automating database	By the end of the lesson, the learner should be able to • Create macros • Develop a system using a case study	• Demonstration • Assignment	• Computer • Chart	• Longhorn Computer studies by Mburu and Chemwa Bk 3 page 212	

REVISION AND END TERM EXAMS

COMPUTER FORM 4 SCHEMES OF WORK – TERM 1

WEEK	LESSON	TOPIC	SUB - TOPIC	OBJECTIVES	LEARNING/TEACHING ACTIVITIES	LEARNING/TEACHING RESOURCES	REFERENCES	REMARKS
1	Reporting from home and settling for the first term							
2	1		Definition of networking terms	By the end of the lesson, the learner should be able to • Define the term computer network • Explain the term data communication	• Q/A discussion	• Newspaper • Letters • books	• Longhorn Computer studies by S.Mburu and C. Chemwa page 1-5 • Computer studies by Onunga & Rena Shah Bk 4 page 1-5	
	2-3		Networking	By the end of the lesson, the learner should be able to • Explain the types of computer n/w • Discuss the purpose of n/w	• Q/A demonstration practical	• Handouts • Books • Internet • Working Pc	• Longhorn Computer studies by S.Mburu and C. Chemwa page 5-9 • Computer studies by Onunga & Rena Shah Bk 4 page 6	

	4			By the end of the lesson, the learner should be able to • Explain the demerits of n/w	• Q/A demonstration practical	• Twisted cables • Internet 5 • Working pc	• Longhorn Computer studies by S.Mburu and C. Chemwa page 10-17 • Computer studies by Onunga & Rena Shah Bk 4 page 6	
3	**1**		Elements of networking	By the end of the lesson, the learner should be able to • Discuss communication with cables	• Q/A demonstration practical	• Handouts • Books • Internet • Working PC	• Longhorn Computer studies by S.Mburu and C. Chemwa page 17-22 • Computer studies by Onunga & Rena Shah Bk 4 page 9-11	
	2-3		Elements of networking	By the end of the lesson, the learner should be able to • Explain the types of wireless communication	• Q/A demonstration practical	• Books • Internet • Working PC	• Longhorn Computer studies by S.Mburu and C. Chemwa page 23-28 • Computer studies by Onunga & Rena Shah Bk 4 page 17-22	
4	**1**		Communication Devices	By the end of the lesson, the learner should be able to • Define the term communication devices • Explain the work of: Modems, network cards, hubs	• Q/A demonstration practical	• Letters • Software • Working Pc	• Longhorn Computer studies by S.Mburu and C. Chemwa page 30-33 • Computer studies by Onunga & Rena Shah Bk 4 page 20	
	2-3		Network Software	By the end of the lesson, the learner should be able	• Q/A demonstration practical	• Handouts • Books	• Longhorn	

				to • Discuss the different network s/w: O/S, protocols		• Working PC	Computer studies by S.Mburu and C. Chemwa page 30-31	
	4		Types of computer networks	By the end of the lesson, the learner should be able to • Discuss the three types of computer networks LAN,MAN, WAN	• Q/A demonstration practical	• Internet • Books • Working PC	• Longhorn Computer studies by S.Mburu and C. Chemwa page 4-5 • Computer studies by Onunga & Rena Shah Bk 4 page 22	
5	**1**		Network topologies	By the end of the lesson, the learner should be able to • Define the term network topology • Differentiate btw. Logical and physical topologies	Q/A demonstration practical	• Internet • Books • Working PC	• Longhorn Computer studies by S.Mburu and C. Chemwa page 33-34 • Computer studies by Onunga & Rena Shah Bk 4 page 16	
	2-3		Network Topologies	By the end of the lesson, the learner should be able to • Define the term network topology • Differentiate between Logical and physical topologies • Explain a star topology	• Q/A demonstration practical	• Internet • Books • Working PC	• Longhorn Computer studies by S.Mburu and C. Chemwa page 35-36 • Computer studies by Onunga & Rena Shah Bk 4 page 18	
	4		Network Topologies	By the end of the lesson the learner should be able to • Explain a Mesh Topology Tree Topology	• Q/A demonstration practical	• Working PC • Handouts	• Longhorn Computer studies by S.Mburu and C. Chemwa page 37-38	

49

							• Computer studies by Onunga & Rena Shah Bk 4 page 19	

2. APPLICATION AREAS OF NFORMATION AND COMMUNICATION TECHNOLOGY

6	1		Application areas of ICT	By the end of the lesson, the learner should be able to • Explain Application areas of ICT • Financial system	• Q/A demonstration practical	• Internet • Books • Working PC	• Longhorn Computer studies by S.Mburu and C. Chemwa page 37-39 • Computer studies by Onunga & Rena Shah Bk 4 page 27	
	2-3		Application areas of ICT	By the end of the lesson, the learner should be able to • Explain application areas of ICT in common system	• Q/A demonstration practical	• Internet • Books • Working PC	• Longhorn Computer studies by S.Mburu and C. Chemwa page 40-41 • Computer studies by Onunga & Rena Shah Bk 4 page 27	
	4		Application of ICT	By the end of the lesson, the learner should be able to • Explain application areas of ICT in retail system • Explain application areas of ICT in Reservation system	Q/A demonstration practical	• Internet • Books • Working PC	• Longhorn Computer studies by S.Mburu and C. Chemwa page 40-59 • Computer studies by Onunga & Rena Shah Bk 4 page	

						28	
7	1		Application areas of ICT	By the end of the lesson, the learner should be able to • Explain Application areas of ICT in Education	• Q/A demonstration practical	• Internet • Books • Working PC	• Longhorn Computer studies by S.Mburu and C. Chemwa page 41-58 • Computer studies by Onunga & Rena Shah Bk 4 page 49	
	2-3		Application areas of ICT	By the end of the lesson, the learner should be able to • Explain Application of ICT in Education System	• Q/A demonstration practical	• Internet • Books • Working	• Longhorn Computer studies by S.Mburu and C. Chemwa page 41-58 • Computer studies by Onunga & Rena Shah Bk 4 page 50	
	4		Application areas of ICT	By the end of the lesson, the learner should be able to • Explain Application areas of ICT in industrial System	• Q/A demonstration practical	• Internet • Books • Working PC	• Longhorn Computer studies by S.Mburu and C. Chemwa page 41-58 • Computer studies by Onunga & Rena Shah Bk 4 page 39	
8	**Half Term**							

9	1		Application areas of ICT	By the end of the lesson, the learner should be able to • Explain application areas of ICT in entertainment and virtual reality	• Q/A demonstration practical	• Internet • Books • Working Pc	• Longhorn Computer studies by S.Mburu and C. Chemwa page 61,64-65 • Computer studies by Onunga & Rena Shah Bk 4 page 51/55	
	2-3		Application areas of ICT	By the end of the lesson, the learner should be able to • Explain application areas of ICT in marketing and law enforcement	• Q/A demonstration practical	• Internet • Books • Working Pc	• Longhorn Computer studies by S.Mburu and C. Chemwa page 63	
	4		Application areas of ICT	By the end of the lesson, the learner should be able to • Explain application area of ICT in transportation system	• Q/A Discussion	• Internet • Books • Working Pc	• Longhorn Computer studies by S.Mburu and C. Chemwa page 44-46 • Computer studies by Onunga & Rena Shah Bk 4 page 47	
	1		Application areas of ICT	By the end of the lesson, the learner should be able to • Explain Application areas of ICT in Library System	• Q/A Discussion	• Internet • Books • Journals	• Longhorn Computer studies by S.Mburu and C. Chemwa page	

						44	

IMPACT OF INFORMATION AND COMMUNICATION TECHNOLOGY ON SOCIETY

10	2-3		Application areas of ICT in the society	By the end of the lesson, the learner should be able to
				• Discuss effects on
				  (i) Employment
				  (ii) Automated production
					• Q/A demonstration practical	• Letters
						• Working PC
						• Newspapers
							• Longhorn Computer studies by S.Mburu and C. Chemwa page 44	

	4		Impact of ICT in the society	By the end of the lesson, the learner should be able to • Discuss effects if ICT on work's health • State the characteristics of future trends in ICT • Discuss rapid evolution in ICT	• Q/A Discussion	• Handouts • Journals	• Longhorn Computer studies by S.Mburu and C. Chemwa page 44 • Computer studies by Onunga & Rena Shah Bk 4 page 60	

11	1		Impact of ICT in the society	By the end of the lesson, the learner should be able to
				• Discuss effects of ICT on
				  (i) Environmental issues
				  (ii) Cultural effects
					• Q/A Discussion	• Handouts
						• Journals
						• Videos
						• Photographs
							• Longhorn Computer studies by S.Mburu and C. Chemwa page 44
							• Computer studies by Onunga & Rena Shah Bk 4 page 63	

	2-3		Evolution of computer systems	By the end of the lesson, the learner should be able to • Discuss Artificial intelligence	• Q/A Discussion	• Class Register • Accounts book • Journals	• Longhorn Computer studies by S.Mburu and C. Chemwa page	

WE EK	LES SO N	TOPIC	SUB - TOPIC	OBJECTIVES	LEARNING/TEACHING ACTIVITIES	LEARNING/TEACHING RESOURCES	REFERENCES	REMARKS
							52-53 • Computer studies by Onunga & Rena Shah Bk 4 page 81	
	4		Evolution of Computer systems	By the end of the lesson, the learner should be able to • Explain expanded information superhighway	• Q/A Demonstration Practical	• handouts • class register • accounts	• Longhorn Computer studies by S.Mburu and C. Chemwa page 79-80	

COMPUTER FORM 4 SCHEMES OF WORK – TERM 2								
CAREER OPPORTUNITIES IN ICT								
WE EK	LES SO N	TOPIC	SUB - TOPIC	OBJECTIVES	LEARNING/TEACHING ACTIVITIES	LEARNING/TEACHING RESOURCES	REFERENCES	REMARKS
1	Reporting from home and settling for the first term work							
2	1		Career opportunities in ICT	By the end of the lesson, the learner should be able to • Discuss the roles of a system analyst, a chief programmer	• Q/A Discussion	• Books • Journals	• Longhorn Computer studies by S.Mburu and C. Chemwa page 79 • Computer studies by Onunga & Rena Shah Bk 4 page 95	
	2-3		Career	By the end of the lesson,	• Q/A	• Books	• Longhorn	

			opportunities in ICT	the learner should be able to • Discuss functions of computer programmer and d/b administrator	Demonstration Practical	• Handouts • Newspapers • Realia	Computer studies by S.Mburu and C. Chemwa page 81 • Computer studies by Onunga & Rena Shah Bk 4 page 97	
	4		Career Opportunities in ICT	By the end of the lesson, the learner should be able to • Discuss the functions of a s/w engineer and a computer engineer	• Q/A demonstration Practical	• Books • Working PC	• Longhorn Computer studies by S.Mburu and C. Chemwa page 80	
3	1		Career opportunities in ICT	By the end of the lesson, the learner should be able to • Discuss the function of a web designer, web administrator and computer operator	• Q/A demonstration Practical	• Books • Handouts • Journals	• Longhorn Computer studies by S.Mburu and C. Chemwa page 81	
	2-3		Career opportunities in ICT	By the end of the lesson, the learner should be able to • Discuss the function of computer technician and data processing manager	Learner to Q/A discussion	• Books • Realia	• Longhorn Computer studies by S.Mburu and C. Chemwa page 78	
	4		Career opportunities in ICT	By the end of the lesson, the learner should be able to • Discuss other educational	• Q/A Discussion	• Books • Newspapers	• Longhorn Computer studies by S.Mburu and C. Chemwa page	

				opportunities in the various institutions			83-84
4	1		Identification of further Educational opportunities	By the end of the lesson, the leaner should be able to Explain the different courses offered in universities, polytechnics, middle level colleges	• Q/A Discussion	• Books	- Longhorn Computer studies by S.Mburu and C. Chemwa page 83-84 - Computer studies by Onunga & Rena Shah Bk 4 page 106-110
	2-3		Developing project using ms access d/base Description of a given system	By the end of the lesson, the learner should be able to - Identify a problem - Definition of a problem	• Q/A discussion	- Books - Sampled projects	- Longhorn Computer studies by S.Mburu and C. Chemwa page 83-84 - Computer studies by Onunga & Rena Shah Bk 4 page 106-112
	4		Fact finding	By the end of the lesson, the learner should be able to: Identify the number of manual documents that are needed for the system given	• Q/A observation	• Books	- Longhorn Computer studies by S.Mburu and C. Chemwa page 83-84 - Computer studies by Onunga & Rena Shah Bk 4 page 106-120

5	1		Fact finding	By the end of the lesson, the learner should be able to • Design a sample interview guideline for the system given	• Q/A practical	• Sampled projects • Books	• Longhorn Computer studies by S.Mburu and C. Chemwa page 83-84	
	2-3		Fact finding	By the end of the lesson, the learner should be ale to • Design a sample questionnaire for the system giver	• Q/A practical	• Sampeled projects • books	• Longhorn Computer studies by S.Mburu and C. Chemwa page 93-94 • Computer studies by Onunga & Rena Shah Bk 4 page 122	
	4		System design • Preliminary design phase	By the end of the lesson, the learner should be able to • Identify the flowchart symbols • Design a simple flowchart for the system	• Q/A practical	• Sampled projects • Books	• Longhorn Computer studies by S.Mburu and C. Chemwa page 94-95	
6	1		System design • Preliminary design phase	By the end of the lesson, the learner should be able to • Design a complex flowchart for the system	• Q/A practical	• Sampled projects • Books	• Longhorn Computer studies by S.Mburu and C. Chemwa page 94-95	
	2-3		Detailed design	By the end of the lesson, the learner should be able to • Design the outputs	Q/A practical	• Sampled projects • Books	• Longhorn Computer studies by	

				for the system			S.Mburu and C. Chemwa page 94-95	
	4		Detailed design	By the end of the lesson, the leaner should be able to • Design input interface for the system	• Q/A practical	• Sampled projects • Books	• Longhorn Computer studies by S.Mburu and C. Chemwa page 96-100	
7	1		Files and data stores design	By the end of the lesson, the learner should be able to • Design a database	• Q/A practical	• Sampled projects • Books	• Longhorn Computer studies by S.Mburu and C. Chemwa page 100-101	
	2-3		Creating relationships	By the end of the lesson, the learner should be able to • Create relationships	• Q/A practical	• Books	• Longhorn Computer studies by S.Mburu and C. Chemwa page 103	
	4		Hardware and software requirements	By the end of the lesson, the learner should be able to • Identify h/w and s/w requirements for the system	• Q/A discussion	• Books • Realia	• Longhorn Computer studies by S.Mburu and C. Chemwa page 103	
9	1,2, 3,4		Constructing information management system given • Designing inputs	By the end of the lesson, the learner should be able to • Design inputs	• practical	• internet • sampled projects • books	• Longhorn Computer studies by S.Mburu and C. Chemwa page	

							86-153	
10	1,2, 3,4		Designing outputs	By the end of the lesson, the learner should be able to • Design outputs	• practical	• books • internet • sampled projects	• Longhorn Computer studies by S.Mburu and C. Chemwa page 86-153	
11			• Designing	By the end of the lesson, the learner should be able to • Design various management systems	• practical	• Books	• Longhorn Computer studies by S.Mburu and C. Chemwa page 86-153	
12	1,2, 3,4	Writing end of term exams						
13	**The school closes**							

COMPUTER FORM 4 SCHEMES OF WORK – TERM 3	
1	Reporting from home and settling for the third term work
2-3	POST MOCKS AND JOINTS
4-7	REVISION
7	K.C.S.E BEGINS