COMPUTER FORM 1 SCHEMES OF WORK – TERM 1								
WEEK	**LESSON**	**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. Chemwapg 1 ● Foundations of Computer studies by Pepelapg 3	
2	**1**		CLASSIFICATION OF COMPUTERS	By the end of the lesson, the learner should be able	Learner to	● Charts or photographs from books,	● Gateway	

				to ● Classify computer according to physical size	● In group of two identify and discuss pictures from books, magazines	magazines or newspapers	secondary Revision S.Mburu G. Chemwapg 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 Pepelapg 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 Pepelapg 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 HANDS-ON SKILLS	By the end of the lesson, the learner should be able to ● Start up a computer ● Restart a computer	● Through demonstration by the teacher, learner to observe and imitate on how to start up a computer, restart a computer and shut down	● Computer	● Gateway Secondary Revision, S.MburuG.Chemwapg 21-23	

				● Shutting down computer	computer			
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.MburuG.Chemwapg 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 Pepelapg 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	● In group of three, discuss parts of the mouse	● Computer mouse	● Foundations of Computer studies by Pepelapg 23-25	

				● Use mouse techniques				
	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 Pepelapg 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 Pepelapg 68	
10	**1**		POINTING DEVICES	● Define pointing devices ● List pointing devices ● Describe the listed pointing	● Through question and answer define scanning device ● In group of three, describe the listed	● Mouse ● Joystick ● Light pen	● Gateway Secondary Revision, S.MburuG.Chemwapg 30-34	

				devices	pointing devices			
	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 Pepelapg 70	
11	**END TERM 1 EXAM**							
12	**REVISION**							

COMPUTER FORM 1 SCHEMES OF WORK – TERM 2

COMPUTER SYSTEMS (cont)

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

	N							
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 Pepelapg 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.MburuG.Chemwapg 40 ● Foundations of Computer studies by Pepelapg 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	Learner to:	● Pictures from books	● Gateway Secondary	

				to ● Classify computer memories ● List examples of primary memory and secondary memory ● State characteristics of RAM and ROM	● Through question and answer classify computer memories ● Trough brainstorming list examples of primary memory and secondary memory ● Through questions and answer state characteristics of RAM and ROM	● RAM module	Revision, S.MburuG.Chemwapg 41-43	
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 Pepelapg 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	Learner to: ● Through questions	● RAM module ● Flash cards	● Foundations of Computer studies by	

				● Define byte ● Express memory quantities ● Calculate memory quantities	and answer define byte ● Through teachers demonstration, express memory quantities and calculate memory quantities		Pepelapg 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 CPU	● Schematic diagram from the book	● Gateway Secondary Revision, S.MburuG.Chemwapg 48	
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.MburuG.Chemwapg 48	
	2-3		TRENDS IN PROCESSORS TECHNOLOGY AND	● List processors Type Manufactures	● Through question and answer, list processors Type,	● Photograph	● Longhorn	

			SPEED	Year and speed	manufactures, year and speed		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.MburuG.Chemwapg 51-60 ● Foundations of Computer studies by Pepelapg 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 Pepelapg 81	

	2-3		HARD COPY OUTPUT DEVICES	● List factors to consider when purchasing a printer	● Through question and answer list factors to consider when purchasing a printer	● Printers ● Pictures from magazines ● Newspapers	● Longhorn Secondary. 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.MburuG.Chemwapg 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 Pepelapg 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	● Describe interfacing cables	● Through discussion, describe interfacing cables	● Computer power cables	● Longhorn Secondary. S.Mburu, G.	

			INTERFACING			● Interface cables	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 Pepelapg 101	
	2-3		""	● Mount hard drives and optical drives	● Through teachers demonstration, mount hard drives and optical drives	● Computer	● Foundations of Computer studies by Pepelapg 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 Pepelapg 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 Pepelapg 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 Pepelapg 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 Pepelapg 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 Pepelapg 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.MburuG.Chemwapg 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 and multitasking operating system	(a) Draw a summary diagram of various operating system types	● PC's loaded with different operating systems, pupils book part 3,4	● Foundations of Computer studies by Pepelapg 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 Pepelapg 170	
	2-3			● Command line, menu driven and graphical user	● Draw a summary diagram of various operating system	● Chart	● Gateway Secondary Revision,	

				interface operating system	types		S.MburuG.Chemwapg 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 file ● Rename files or folders ● Copy, move, sort files and folders	Learner to ● Save changes to a file, rename files and folders	● Personal computer loaded with any version of windows	● Longhorn 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	In a group of three		● Longhorn Secondary.	

				● Scan a disk for virus	● Compress a disk	● floppy diskette ● flash disk	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	

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**		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	
3	**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 computer	● Q/A Demonstration practical	● Books ● Handouts ● Working computer	● Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 66-69	
4	**1**		FUNCTIONS AND	By the end of the lesson, the learner should be able	● Q/A demonstration	● Working computer	● Longhorn Computer	

			FORMULAE	to ● Differentiate between functions and formulae ● Apply functions and formulae on a document	Practical	● Books	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	
5	**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	● Q/A Demonstration practical	● Books ● Handouts ● Working computer	● Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page	

				● Explain the different charts ● Insert charts			77-79	
6	**1-3**		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	
7	**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 FORMATTING A DOCUMENT	By the end of the lesson, 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	
7-8	**MIDTERM EXAMS AND BREAK**							

9	**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	
10	**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	● Q/A demonstration practical	● Books ● Newspapers ● Working computer	● Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 22-23	

				● Insert columns/page headers and footers				
11	**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	
12	**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	
13	**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	
14	**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, the learner should be able to ● Edict a data base	● Q/A Demonstration practical	● Letters ● Cart ● Working computer	● Longhorn 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	By the end of the lesson, the learner should be able	● Q/A Observation	● Letters	● Longhorn Computer	

			PUBLICATION	to ● Explain the DTP S/W ● Discuss the types of DTP publications	Practical	● Working 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, sort, filter, total, forms ● Apply the above	● Q/A Demonstration practical	● Books ● Working computer	● Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page	

				features			164	
	THE SCHOOL CLOSES/END OF TERM EXAMS							

COMPUTER FORM 2 SCHEMES OF WORK – TERM 3

INTERNET AND E-MAIL

WEEK	LESSON	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 ● Explain elements of IC	● Q/A Demonstration Practical	● Handouts ● Books ● Modem S/W ● Working computer	● Longhorn Computer studies Secondary. S.Mburu, G. Chemwa page 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	● Q/A Demonstration practical	● Handouts ● Books	● Longhorn Computer studies	

				to ● Manipulate an e-mail		● Web pages ● Working computer	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,	● Q/A Demonstration	● Web sites	● Longhorn	

				the learner should be able to ● Define the term graphic ● Insert/edit graphics	practical	● Web pages ● Working computer	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 data security ● Identify security threats on ICT	● Q/A Demonstration practical	● Books ● Working computer	● Longhorn Computer studies Secondary. 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	
				By the end of the lesson,				

10	**1**		ICT PROTECTION	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.JohnOnunga page 327-328	
11	**End of year exams and Holiday**							

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	● Discussions in groups ● Exercises by the	● Charts ● Floppy diskettes	● Longhorn Computer studies Bk 3	

				to ● Represent data in digital computers (i) On electronic circuits (ii) On magnetic media (iii) Optical media	teacher	● Compact disk ● Electronic circuit	page 23 ● Computer studies by Onunga and Shah page 1	
	3-4	Data Representation	DATA REPRESENTATION	By the end of the lesson, the learner should be able to ● Give reasons why binary system is used in computers ● Define bits, bytes, nibble and word	● Discussions ● Question and answer	● charts	● Longhorn Computer 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	● Group discussions ● Questions and	● charts ● simple	● Longhorn Computer	

				to ● Represent data in actual number system ● Represent data in Hexadecimal number system	answering ● exercises	calculations ● 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 to ● Convert binary fraction to decimal number system ● Convert a decimal fraction to binary	● Discussions ● Questions and answers	● Charts ● Simple calculations ● Questions papers	● Longhorn Computer studies Bk 3 page 26 ● Computer studies by Onunga and Shah page	
		PROBLEM SOLVING AND QUIZ						

	3-4	**Teacher administers questions and answer session for better retention**						
4	**1**	DATA REPRESENTATION	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 REPRESENTATIONS	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 REPRESENTATIONS	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	● Discussions ● Question and answer	● Charts ● Scientific Calculators	● Longhorn Computer studies Bk 3 page 26 ● Computer studies by Onunga and	

				Scheme (BCD) ● Explain the extended Binary coded decimal interchange code (EBCDIC)			Shah page 22-27	
	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	
				By the end of the lesson,	● Teachers		● Longhorn	

	2		BINARY ARITHMETIC OPERATIONS	the learner should be able to ● Represent signed binary numbers using two's complement	demonstrates ● Question and answer ● Group discussions	"	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 binary additions	● 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	
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	
	3-4	Data Processing	DATA PROCESSING CYCLE	By the end of the lesson, the learner should be able to ● Give the errors that influence the accuracy of data and information	● Discussion in groups ● Question and answer ● Assignments marked by the teacher	● Flash cards ● Charts ● computer	● Longhorn Computer studies Bk 3 page 35 ● Computer studies by	

				output ● Explain the errors in data processing			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	● Discussion in groups ● Illustrations by the teacher	● Charts	● Computer studies by Onunga and	

				● Define a computer file ● Give the types of computer files ● State the advantages of computerized filing	● Question and answer		Shah page 49	
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	● Discussions ● Illustration by the teacher ● Question and answer	● Charts ● Flash cards	● Longhorn Computer studies by Mburu and ChemwaBk 3	

				● Describe the listed types of processing files ● Master files ● Transaction file ● Reference files ● Backup files ● Sort files			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 file organization	● Question and answer ● Brainstorming ● Discussions in groups	● Floppy diskettes ● Compact disk ● Video tapes	● Longhorn Computer studies by Mburu and ChemwaBk 3 page 42 ● Computer studies by Onunga and 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 ChemwaBk 3 page 43-45 ● Computer studies by Onunga and Shah page 61	

	3-4	Data processing	ELECTRONIC DATA PROCESSING MODES	Bythe 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 ChemwaBk 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 ChemwaBk 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	● Q/A ● Discussion	● Flash cards ● Charts	● Longhorn Computer studies by Mburu and ChemwaBk 3 page 59 ● Computer studies by Onunga and	

				low-level and high level languages			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 development ● Describe (i) program recognition (ii) program definition	● Question and answer ● Discussion in groups	● Flash cards ● charts	● Longhorn Computer studies by Mburu and ChemwaBk 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	● Discussions in groups ● Illustrations by the teacher ● Question and answer	● Flash cards ● charts	● Computer studies by Onunga and Shah page 85	

				maintenance				
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 ChemwaBk 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 between pseudo code and flow charts	● Discussion in groups ● Question and answer ● Illustration by the teacher	● Chalkboard ● Charts ● Flash cards	● Longhorn Computer studies by Mburu and ChemwaBk 3 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	● Question and answer ● Demonstration by the teacher ● Group discussions	● Charts	● Longhorn Computer studies by Mburu and ChemwaBk 3 page 68	

				● Design complex algorithms				
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 ChemwaBk 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 ChemwaBk 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	● Discussion ● Illustrations by the teacher ● Question and answer	● Charts ● Flash cards ● Computer	● Longhorn Computer studies by Mburu and ChemwaBk 3 page 95	

				analyst				
	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 ChemwaBk 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 ChemwaBk 3 page 97	
	2	SYSTEM DEVELOPMEN	Stages of system development	By the end of the lesson, the learner should be able	● Demonstration	● Chalk board	● Longhorn Computer	

		T		to ● Give the methods used in information gathering ● Describe interviews studying of available documents as used in information gathering	● Discussion	● Charts	studies by Mburu and ChemwaBk 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 ChemwaBk 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 ChemwaBk 3 page 105	
				By the end of the lesson,	● Discussions	● Chalkboard		

		SYSTEM DEVELOPMENT	Requirements specification	the learner should be able to ● Describe file/data stores ● Describe hardware and software requirements	● Question and answer	● Charts	● Longhorn Computer studies by Mburu and ChemwaBk 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 ChemwaBk 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 ChemwaBk 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	● Illustration by the teacher ● Discussion in groups	● Charts ● Chalkboard	● Longhorn Computer studies by Mburu and ChemwaBk 3 page 110	

				● Write cleaners information system 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 ChemwaBk 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 ChemwaBk 3 page 110	
	2		System Implementation	By the end of the lesson, the learner should be able to ● Define system implementation and file conversion	● Illustrations by the teacher ● discussion	● Charts ● chalkboard	● Longhorn Computer studies by Mburu and ChemwaBk 3 page 116	

				● Describe factors considered during file conversion				
	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 ChemwaBk 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 ChemwaBk 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 ChemwaBk 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 ChemwaBk 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 ChemwaBk 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 ChemwaBk 3 page 122	
	2	PROGRAMMING	Visual basic toolbox	Bythe 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 ChemwaBk 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	● Demonstration by the teacher ● Question and answer ● Practical	● Computer ● Chalkboard	● Longhorn Computer studies by Mburu and ChemwaBk 3 page 123	

				visual basic project				
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 fundamental concepts	● Discussions ● Questions and answer	● Chalkboard ● Charts ● Computer ● Simple calculators	● Longhorn Computer studies by Mburu and ChemwaBk 3 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 ChemwaBk 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 ChemwaBk 3 page 137	
3	**1**		Project developments	By the end of the lesson, the learner should be able	● Discussion in	● Charts	● Longhorn Computer	

				to ● Create a program used to calculate the area of a rectangle	groups ● Illustrations by the teacher	● Computer	studies by Mburu and ChemwaBk 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 ChemwaBk 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 display the name of a weekday when its number is provided ● Write a program using do-loop ● Write a program using FOR-NEXT LOOP	● Demonstration by the teacher ● Discussion ● Question and answer	● Chart ● Chalkboard ● Computer ● printer	● Longhorn Computer studies by Mburu and ChemwaBk 3 page 147	
4	**1**		Working with graphical objects	By the end of the lesson, the learner should be able to	● Demonstration ● Question and answer	● chart ● computer	● Longhorn Computer studies by Mburu and	

				● Insert a picture using picture box ● Define module and procedure ● Declare general subroutines	● discussion		ChemwaBk 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 ChemwaBk 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 ChemwaBk 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 and a combo box ● Create a project that loads a list of	● Discussion ● Demonstration ● Practical	● Chart ● Photograph ● Computer ● chalkboard	● Longhorn Computer studies by Mburu and ChemwaBk 3 page 161	

				items				
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 ChemwaBk 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 ChemwaBk 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 ChemwaBk 3 page 187-189	
	2	INTRODUCTION TO DATA BASE DESIGN	Definition	By the end of the lesson, the learner should be able to	● Demonstration ● Practical	● Chart ● Computer	● Longhorn Computer studies by Mburu and	

				● Define database ● Identify relationships in database	● Discussion	● chalkboard	ChemwaBk 3 page 187-189	
	3-4		Defining attributes	By the end of the lesson, the learner should be able to ● Define a foreign key ● Distinguish between an entity and attributes ● Create one to many relationships	● Question and answer ● Practical ● Demonstration ● discussions	● computer ● chart ● chalkboard	● Longhorn Computer studies by Mburu and ChemwaBk 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 ChemwaBk 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 ChemwaBk 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 ChemwaBk 3 page 21o	
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 ChemwaBk 3 page 211	
	2		Automating database	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 ChemwaBk 3 page 212	
	3-4		Automating database	By the end of the lesson, the learner should be able to ● Create macros ● Develop a system	● Demonstration ● Assignment	● Computer ● Chart	● Longhorn Computer studies by Mburu and ChemwaBk 3 page 212	

				using a case study				
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	● Q/A demonstration practical	● Handouts ● Books ● Internet	● Longhorn Computer studies by S.Mburu and C. Chemwa page 5-9	

				● Explain the types of computer n/w ● Discuss the purpose of n/w		● Working Pc	● 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 to ● Discuss the different network s/w: O/S, protocols	● Q/A demonstration practical	● Handouts ● Books ● Working PC	● Longhorn 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	Q/A demonstration practical	● Internet ● Books ● Working PC	● Longhorn Computer studies by S.Mburu and C. Chemwa page 33-34	

				● Differentiate btw. Logical and physical topologies			● 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 ● 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	● Q/A demonstration practical	● Internet ● Books	● Longhorn Computer studies by S.Mburu and C.	

				● Explain application areas of ICT in entertainment and virtual reality		● Working Pc	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	● Q/A Discussion	● Handouts ● Journals	● Longhorn Computer studies by	

				● Discuss effects of ICT on (i) Environmental issues (ii) Cultural effects		● Videos ● Photographs	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 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								
WEEK	**LESSON**	**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 opportunities in ICT	By the end of the lesson, the learner should be able to ● Discuss functions of computer programmer and d/b administrator	● Q/A Demonstration Practical	● Books ● Handouts ● Newspapers ● Realia	● Longhorn 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	● Q/A Discussion	● Books ● Newspapers	● Longhorn Computer studies by S.Mburu and C.	

				● Discuss other educational opportunities in the various institutions			Chemwa page 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 msaccess 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	● Q/A observation	● Books	● Longhorn Computer studies by S.Mburu and C. Chemwa page	

				documents that are needed for the system given			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	● Q/A practical	● Sampled projects ● Books	● Longhorn Computer studies by S.Mburu and C. Chemwa page 94-95	

				system				
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 for the system	Q/A practical	● Sampled projects ● Books	● Longhorn Computer studies by 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	
				By the end of the lesson,				

	2-3		Creating relationships	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			● Designin g	By the end of the lesson, the learner should be able to	● practical	● Books	● Longhorn Computer studies by S.Mburu and C.	

				● Design various management systems			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