SCHEMES OF WORK 2022

COMPUTER

FORM 4

TERM 1-3

				COMPUTER STUDIES FORM 4 S	SCHEMES OF WORK	– TERM 1		
WEEK		TOPIC	SUB - TOPIC	OBJECTIVES	LEARNING/TEACHI	LEARNING/TEACHING	REFERENCES	REMARKS
	N				NG ACTIVITIES	RESOURCES		
1	Reporting	g from home and	settling for the first term		1			1
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	NewspaperLettersbooks	 Longhorn Computer studies by S.Mburu and C. Chemwa page 1-5 Computer studies by Onunga & Rena Shah Bk 4 page 1-5 	
	2		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 demonstra tion 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 	
	3			By the end of the lesson, the learner should be able to Explain the demerits of n/w	Q/A demonstra tion 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	
	4	Elements of network	By the end of the lesson, the learner should be able to • Discuss communication with cables	Q/A demonstra tion 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 	
3	1	Elements of network	By the end of the lesson, the learner should be able to • Explain the types of wireless communication	Q/A demonstra tion practical	BooksInternetWorking PC	 Longhorn Computer studies by S.Mburu and C. Chemwa page 23-28 Computer studies by Onunga & Rena Shah Bk 4 page 17-22 	
	2	Communication Dev	By the end of the lesson, the learner should be able to • Define the term communication devices	Q/A demonstra tion practical	LettersSoftwareWorking Pc	 Longhorn Computer studies by S.Mburu and C. Chemwa page 30-33 	

			Explain the work of: Modems, network cards, hubs			Computer studies by Onunga & Rena Shah Bk 4 page 20
	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 demonstra tion practical	HandoutsBooksWorking 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 demonstra tion 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
4	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	InternetBooksWorking PC	 Longhorn Computer studies by S.Mburu and C. Chemwa page 33-34 Computer studies by Onunga & Rena

					Shah Bk 4 page 16
2	Network Topologies	By the end of the lesson, the learner should be able to • Explain a star topology	Q/A demonstra tion practical	InternetBooksWorking PC	 Longhorn Computer studies by S.Mburu and C. Chemwa page 35-36 Computer studies by Onunga & Rena Shah Bk 4 page 18
3	Network Topologies	By the end of the lesson the learner should be able to • Explain a Mesh Topology Tree Topology	Q/A demonstra tion practical	Working PCHandouts	 Longhorn Computer studies by S.Mburu and C. Chemwa page 37-38 Computer studies by Onunga & Rena Shah Bk 4 page 19
4	Application areas of IC	By the end of the lesson, the learner should be able to • Explain Application areas of ICT • Financial system	Q/A demonstra tion practical	InternetBooksWorking PC	 Longhorn Computer studies by S.Mburu and C. Chemwa page 37-39

						 Computer studies by Onunga & Rena Shah Bk 4 page 27
5	1	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 demonstra tion practical	InternetBooksWorking PC	 Longhorn Computer studies by S.Mburu and C. Chemwa page 40-41 Computer studies by Onunga & Rena Shah Bk 4 page 27
	2	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

	4	Application areas of IC	By the end of the lesson, the learner should be able to • Explain Application areas of ICT in Education	Q/A demonstra tion practical TERM	 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 BREAK 	
6	1-2	Application areas of IC	By the end of the lesson, the learner should be able to Explain Application of ICT in Education System	Q/A demonstra tion practical	InternetBooksWorking	 Longhorn Computer studies by S.Mburu and C. Chemwa page 41-58 Computer studies by Onunga & Rena Shah Bk 4 page 50 	

	3	A	pplication 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 demonstra tion 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 	
	4	A	pplication 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 demonstra tion practical	InternetBooksWorking 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 	
7	1	A	pplication 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 demonstra tion practical	InternetBooksWorking 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	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 demonstra tion practical	InternetBooksWorking Pc	 Longhorn Computer studies by S.Mburu and C. Chemwa page 63
3	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
4	Application areas of ICT	By the end of the lesson, the learner should be able to	• Q/A Discussion	InternetBooksJournals	 Longhorn Computer studies by

	IMPACT (OF INFORMATION A	AND COMMUNICATION TE	Explain Application areas of ICT in Library System ECHNOLOGY ON SOCIETY			S.Mburu and C. Chemwa page 44	
8	1	i I	Application areas of ICT in the society Impact 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 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 demonstra tion practical Q/A Discussion 	 Letters Working PC Newspapers Handouts Journals 	 Longhorn Computer studies by S.Mburu and C. Chemwa page 44 Longhorn Computer studies by S.Mburu and C. Chemwa page 44 Computer studies by Onunga & Rena Shah Bk 4 page 60 	
	2		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	HandoutsJournalsVideosPhotographs	 Longhorn Computer studies by S.Mburu and C. Chemwa page 44 	

							 Computer studies by Onunga & Rena Shah Bk 4 page 63
	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 Demonstra tion Practical	handoutsclass registeraccounts	 Longhorn Computer studies by S.Mburu and C. Chemwa page 79-80
9-10		END TERM EX	KAM				

	COMPUTER STUDIES 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	Repo	rting from home	and settling for the fi	rst term work				1				
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	BooksJournals	 Longhorn Computer studies by S.Mburu and C. Chemwa page 79 Computer studies by Onunga & Rena Shah Bk 4 page 95 					
	2-3					• Books						

		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	HandoutsNewspapersRealia	 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	BooksWorking 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	BooksHandoutsJournals	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	Learner to Q/A discussion	BooksRealia	 Longhorn Computer studies by S.Mburu and C.

			computer technician and data processing manager			Chemwa page 78
	4	Career opportunities in ICT	By the end of the lesson, the learner should be able to • Discuss other educational opportunities in the various institutions	Q/A Discussion	Books Newspapers	Longhorn Computer studies by S.Mburu and C. 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 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	BooksSampled projects	 Longhorn Computer studies by S.Mburu and C. Chemwa page 83-84 Computer studies by

	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	Onunga & Rena Shah Bk 4 page 106-112 • Longhorn Computer studies by S.Mburu and C. Chemwa page 83-84 • Computer studies by Onunga & Rena Shah Bk 4 page 106-120
5	1-2	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 projectsBooks	 Longhorn Computer studies by S.Mburu and C. Chemwa page 83-84

	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	MID			TERM		BREAK
6	1-2		System design • Prelimina ry 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 projectsBooks	• Longhorn Computer studies by S.Mburu and C. Chemwa page 94-95
	3-4		System design • Prelimina ry 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 projectsBooks	• Longhorn Computer studies by S.Mburu and C. Chemwa page 94-95
7	1		Detailed design				

			By the end of the lesson, the learner should be able to • Design the outputs for the system	Q/A practical	Sampled projectsBooks	 Longhorn Computer studies by S.Mburu and C. Chemwa page 94-95
	2	Detailed design	By the end of the lesson, the leaner should be able to Design input interface for the system	Q/A practical	Sampled projectsBooks	 Longhorn Computer studies by S.Mburu and C. Chemwa page 96-100
	3	Files and data stores design	By the end of the lesson, the learner should be able to Design a database	Q/A practical	Sampled projectsBooks	 Longhorn Computer studies by S.Mburu and C. Chemwa page 100-101
	4	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
8	1	Hardware and software requirements	By the end of the lesson, the learner should be able to	Q/A discussion	Books Realia	• Longhorn Computer

			 Identify h/w and s/w requirements for the system 			studies by S.Mburu and C. Chemwa page
						103
	2	Constructing information management system given Designing inputs	By the end of the lesson, the learner should be able to • Design inputs	 practical 	internetsampled projectsbooks	 Longhorn Computer studies by S.Mburu and C. Chemwa page 86-153
	3	Designing outputs	By the end of the lesson, the learner should be able to • Design outputs	• practical	booksinternetsampled projects	 Longhorn Computer studies by S.Mburu and C. Chemwa page 86-153
	4	• Designin g	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
9- 10				END TERM EXAM		

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