Code	Sub-Module Units	Content	Total (Hours)
		Application software installation • Limitations for operating system/application software installation • Operating system accessories	
5.1.06	Operating System	 Definition Types Functions of operating systems 	6
5.1.07	Directory and File Management	 Definition of folders and files Types of files Function of files and folders Creating folders and files Manipulation of folders / files 	6
5.1.08	Storage Media	 Definition of memory Storage concepts Types of storage media 	6
5.1.09	Data Management	 Data back-up Methods of data security Methods of data Back-up Data recovery procedures 	8
5.1.10	Basic Computer Networking	 Computer networking Types of computer networking Importance of computer networking Networking components 	10
.1.11	Computer Security	 Hardware security Safe Power regulation equipment Anti-virus software 	4
.1.12	Office Automation	 Definition of Office Automation Ways of office automation 	8

Code	Sub-Module Units	Content	Total (Hours)
51 13A 3 (2)	Internet	 Meaning of Internet Electronic mail (E-mail) Historical development of internet Importance of internet Internet connectivity Internet services 	14
5.1.14	Electronic Mail (E-Mail)	 Definition of e-mail E-mail software Requirements for connectivity 	4
5.1.15	Other Networks	 Definitions of intranets Importance of intranets Features of intranets Extranets 	4
5.1.16	Emerging Issues and Trends in ICT	 Impact of computers in society Challenges in computer technology Coping mechanisms 	4
Т	otal	-67	120

INTRODUCTION TO		Practice
Theory	5.1.01P	Specific Objective By the end of the sub-
Specific Objectives By the end of the sub- module unit, the trainee should be able to:		module unit, the trainee should be able to identify different types of computers Content
 a) define common ICT concepts b) describe the classification of computers. 	5.1.01P1	Visit large corporations, specialized industries and local firms to identify the different types of computers in use
Competence		III use
The trainee should have the ability to classify computers.		Suggested Teaching/ Learning Resources Textbooks
Content		Magazines
Definition of ICT concepts - Computer	sylvet.	 White board Resource persons Charts Dummy computers
- Data	000	and the second s
InformationInformation systemsCommunication		Suggested Teaching/ Learning Activities - Group discussions
systems Classification of computers		DemonstrationObservationIllustrations
- According to generation		Suggested Evaluation Methods
0		- Questions and
 According to processing 		Answers - Practical Tests
	Theory Specific Objectives By the end of the submodule unit, the trainee should be able to: a) define common ICT concepts b) describe the classification of computers. Competence The trainee should have the ability to classify computers. Content Definition of ICT concepts - Computer - Data - Information - Information systems - Communication systems Classification of computers - According to generation - According to size/power - According to	Theory Specific Objectives By the end of the submodule unit, the trainee should be able to: a) define common ICT concepts b) describe the classification of computers. Competence The trainee should have the ability to classify computers. Content Definition of ICT concepts - Computer - Data - Information - Information systems - Communication systems Classification of computers - According to generation - According to size/power - According to processing

5.1.02	COMPUTER STRUCTURE		 a) draw the physical structure of a computer and its
	Theory		peripheral devices b) illustrate the
5.1.02T	Specific Objectives By the end of the sub- module unit, the trainee		computer electronic circuit.
	should be able to:		Content
	a) outline the physical parts of a computer and its peripheral	5.1.02P1	Physical components - System unit - Mouse
	devices		- Keyboard
	b) explain the		- Monitor
*	functional units of a computer		Disk drivesOthers
*	TO STANDARD AND CONTRACT OF STANDARD	5.1.02P2	Electronic circuit
5.1.02C	Competence The trainee should have		 Arithmetic logic unit Control unit
			- Main memory
Ę	the ability to illustrate		- Input/output devices
	the functional parts / units of a computer.	, a'X	- Backing storage - Bus architecture
4	Content	in the second	- Others
5.1.02 Γ1	Computer parts and peripherals	354	Suggested Teaching/
	- physical structure of a computer system		Learning Resources - Internet
5.1.02T2	Functional units of a		- Textbooks
3.1.0212	computer and its		- Magazines
	peripherals		- White board
	- Input / output devices		- Dummy computers
	Control unitArithmetic logic units		Suggested Teaching/
	- Main memory		Learning Activities
	- Backing storage		- Demonstration
			 Observation
	 Communication 		
	channels		Practice exercisesIllustrations

Specific Objectives
By the end of the submodule unit, the trainee
should be able to:

5.1.02P

	Suggested Evaluation		Content
	Methods	5.1 03P1	Care of computer and its
	- Written Tests		peripherals
	- Oral presentations		Blowing and cleaning
	- Practical Tests		a computer with the
			right materials
5.1.03	COMPUTER CARE		- Covering of computers
			when not in use_
	Theory		Others
5.1.03T	Specific Objectives		Suggested Teaching/
	By the end of the sub-		Learning Resources
	module unit, the trainee		- Textbooks
	should be able to:		White board
	a) explain the		Dummy computers .
	importance of		and the second second
	computer care		Suggested Teaching/
	b) discuss health issues		Learning Activities
	in computer		- Demonstration
	environment.		- Observation
	en nomment.		- Practice exercises
5.1.03C	Competence		Illustrations = 2
	The trainee should have	X.	intistrations (O
	the ability to service		Suggested Evaluation
	office computers	1/2	Methods Vivy
	omee complicia	65)	Written Tests
	Content		- Questions and
5.1.03T1	Importance of computer		Answers
1 2 2 2 3 3	care		- Practical Tests
5.1.03T2	Health issues in		7.460.607 7.503
	computer environment	5.1.04	SOFTWARE AND
	- Ergonomics		HARDWARE
	- Personal health		
	- Others		Theory
	Practice	5.1.04T	Specific Objectives
			By the end of the sub-
5.1.03P	Specific Objective		module unit, the trainee
	By the end of the sub-		should be able to:
	module unit, the trainee		a) define hardware and
	should be able to take		software
	good care of a computer		b) explain the hardware
	and its peripherals.		components
			c) explain types of
			software
			SOITWAIC

	d) outline the factors to consider when purchasing hardware/software.	5.J.04P1	Content Hardware components - Input/output devices - CPU components
5.1.04C	Competence		 Storage devices and others
J.1.04C	The trainee should have		00,013
	the ability to make a		Suggested Teaching/
	decision on the right		Learning Resources
	hardware /software to		- Internet
	purchase or use.		- Textbooks
	purchase or use.		- Magazines
	Content		- White board
5.1.04T1	Definitions terms		- Dummy computers
3.1.0411	- Hardware		Dummy complicits
	- Software		Suggested Teaching/
5.1.04T2	Hardware component		Learning Activities
3.1.0412	- Output devices		- Demonstration
	- Input devices		- Observation
	- Central processing		- Practice exercises
	unit (CPU)	coll	- Illustrations
	- Storage media	X.O	Supported Evaluation
	- Other		Suggested Evaluation Methods
5.1.04T3	Software	7,	
	- Systems	,)	- Questions and
	- Applications		Answers Descript Tosts
5.1.04 T 4	Factors to consider when purchasing		- Practical Tests
	hardware/software.	5.1.05	COMPUTER
	- Hardware		INSTALLATION
	considerations		
	- Software		Theory
	considerations		*
		5.1.05T	Specific Objectives
	Practice		By the end of the sub-
			module unit, the trainee
5.1.04P	Specific Objective		should be able to:
	By the end of the sub-		a) explain the
	Module unit, the trainee		installation of basic
	should be able to		computer
	identify various		components
	hardware components.		

	b) describe the procedure of		Practice
	installing operating systems/application software c) explain the limitations for the operating system/application software installation d) describe operating	5 1 05P	Specific Objectives By the end of the submodule unit, the trainee should be able to: a) connect the various components of a computer b) prepare a disk for installation of
5.1 05C	System accessories. Competence The trainee should have		operating system(s) c) install operating system to a
	the ability to: i) connect computer peripherals ii) install operating		d) install application software to a computer
	system and applications software.	5.1.05P1	Content Connecting computer peripherals
5.1.0571	Content Computer components installation - Connecting to mains	5.1.05P2	 Power, keyboard, mouse, UPS, printer, CPU others. Disk preparation disk partitioning
	 Connecting to Uninterruptible Power Supply 	5.1.05P3	 disk formatting Operating system installation
	- Connecting to keyboard, mouse, monitor, printer, CPU	5.1.05P4	Application software installation
5.1.05T2	and other peripherals Installation of operating system/application		Suggested Teaching/ Learning Resources - Internet
5.1.05T3	software Limitations for the operating		TextbooksMagazinesWhite board
5.1.05T4	system/application software installation Operating system accessories		- Dummy computers

	b) describe the procedure of		Practice
	installing operating systems/application software c) explain the limitations for the operating system/application software installation	5.1 05P	Specific Objectives By the end of the submodule unit, the trainee should be able to: a) connect the various components of a computer b) prepare a disk for
	 d) describe operating system accessories. 		installation of operating system(s)
5.1 05C	Competence The trainee should have the ability to: i) connect computer peripherals ii) install operating		c) install operating system to a computer d) install application software to a computer
	system and	5.1.05P1	Content
	applications software. Content	14/61.	Connecting computer peripherals - Power, keyboard, mouse, UPS, printer.
5.1.0571	Computer components installation - Connecting to mains - Connecting to	5.1.05P2	CPU, others. Disk preparation - disk partitioning - disk formatting
	Uninterruptible Power Supply	5.1.05P3	Operating system installation
	 Connecting to keyboard, mouse, monitor, printer, CPU 	5.1.05P4	Application software installation
5.1.05T2	and other peripherals Installation of operating system/application software		Suggested Teaching/ Learning Resources - Internet
5.1.05T3	Limitations for the operating		TextbooksMagazinesWhite board
5.1.05T4	system/application software installation Operating system accessories		- Dummy computers

	Suggested Teaching/ Learning Activities - Demonstration - Observation - Practice exercises - Illustrations	5 1 07T3
	Suggested Evaluation Methods - Questions and Answers - Practical Tests	5.1.07P
5.1.07	DIRECTORY AND FILE MANAGEMENT	
	Theory	5.1.07P
5.1 07T	Specific Objectives By the end of the submodule unit, the trainee should be able to: a) define directories and files b) describe the types of files c) explain the functions of directories and files.	easylvet
5 1.01C	Competence The trainee should have the ability to create and manipulate files/folders.	
5.1.0771	Content Definition of terms Directories	
5.1.07T2	FilesTypes of filesSystem filesApplication filesUser files	

Functions of directories and files

- Directories
- Files

Practice

Specific Objectives
By the end of the subModule unit, the trainee
should be able to:

- a) create folders and files
- b) manipulate folders and files

Content Creating folders and files

Folders

Manipulation of folders/files

Suggested Teaching. Learning Resources

- Internet
- Textbooks
- White board
- Computers

Suggested Teaching Learning Activities

- Demonstration
- Observation
- Illustrations

Suggested Evaluation Methods

- Assignment
- Questions and Answers
- Practical Tests

5.1.08	STORAGE MEDIA	5.1.08P2	Preparation of storage media
	Theory		- deleting of information
5.1.08T	Specific Objectives By the end of the sub-	£ 1.09D2	 formatting of storage media Storage of information
	module unit, the trainee should be able to: a) define memory	5.1.08P3	- save/moving / copying of information
	 b) explain the various storage concepts c) explain the types of 		Suggested Teaching/ Learning Resources
	storage media.		- Internet
	Au		- Textbooks
	Content		- Magazines
5.1.08T1 5.1.08T2	Definition of memory Storage concepts		- White board
3.1.0012	- Bit		Suggested Teaching/
	- Byte		Learning Activities
	- Word		- Demonstration
	- Storage capacity and		- Observation
	others		- Practice exercises
5.1.08T3	Types of storage media - Internal media	itie	- Illustrations
	- External media	6057	Suggested Evaluation Methods
	Practice		 Oral presentations Practical Tests
5.1.08P	Specific Objectives	5 1 00	DATA
	By the end of the sub- module unit, the trainee should be able to:	5.1.09	MANAGEMENT
	a) identify types of the storage media		Theory
	b) prepare storage media for use	5.1.091	Specific Objectives By the end of the sub-
	c) store information in the internal and external media.		module unit, the trainee should be able to: a) define the term data back-up
	Content		b) explain the
5.1.08P1	Types of the storage media		importance of data back-up
	960000F035***TX		

	Contem	5 1 11C	Competence
5 1 1111	Hardware security		The trainee should have
	- Physical security		the ability to protect
6 1 1120	- Logical security		both hardware and software
5.1.1172	Software security		sonware
	- Safekeeping and		C
	handling		Suggested Teaching/
	- Registration of		Learning Resources
	software		- Textbooks
	- Protection from		- Magazines
	computer viruses		White board
	- Integrity		
	- Back-ups		Suggested Teaching/
	- Others		Learning Activities
			- Demonstration
	Practice		- Observation
			 Practice exercises
5.1.11P	Specific Objectives		
	By the end of the sub-		Suggested Fvaluation
	module unit, the trainee		Methods
	should be able to:		- Questions and
	a) identify power	co.	Answers
	regulating		- Practical Tests
	equipments	X	
	b) scan a computer for	5.1.12	OFFICE
	viruses		AUTOMATION
	Content		Theory
5.1 11P1	Power regulation		0.01
	equipment	5.1.12T	Specific Objectives
	- Uninterruptible Power		By the end of the sub-
	Supply (UPS)		module unit, the trainee
	 Surge and spike 		should be able to:
	protectors		a) define office
	- Others		automation
5.1.11P2	Anti-virus software		b) explain different
	- Norton		ways of office
	- MacAfee		automation.
	- AVG		
	- Kaspersky	5.1.12C	Competence
	- Others		The trainee should have
			the ability to use office
			automation tools and
			techniques

5.1.1271	Content Definition of office		Suggested Evaluation Methods
	automation		- Questions and
5.1.1212	Ways of office		Answers
	automation		- Practical Tests
	- Internet		
	 Teleconferencing 	5.1.13	INTERNET
	- E-mail		
	- Fax		Theory
	- E-cabinet		
	- Electronic funds	5.1.13T	Specific Objectives
	transfer		By the end of the sub-
	- Others		module unit, the trainee
			should be able to:
	Practice		 a) define Internet
			b) explain the
5.1.12P	Specific Objective		historical
2.1.121	By the end of the sub-		development of the
	module unit, the trainee		internet
	should be able to		c) explain the
	identify the various		importance of the
	office automation tools.		internet
	office batemation tools.	.01	d) describe internet
	Content	N/J	connectivity
5.1.12P1	Visit large corporations.	5	e) describe internet
2.1.1211	specialized industries		service.
	and local firms to		
	identify the various	5.1.14C	Competence
	office automation tools		The trainee should have
	in use		the ability to connect
	77 000		and surf the net
	Suggested Teaching/		
	Learning Resources		Content -
	- Textbooks	5.1.13T1	Meaning of Internet
	- White board	5.1.13T2	Historical development
			of the Internet
	Suggested Teaching/	5.1.13T3	Importance of Internet
	Learning Activities	5.1.13T4	Internet connectivity
	- Observation		- Telephone lines
	- Practice exercises		- Modems
	1 Indian Charles		- Internet Service
			Providers (ISP)
			- Internet software
			The state of the s

5 1 13 7 5	Internet services - World wide web - Electronic wave	5.1.15	ELECTRONIC MAIL (E-MAIL)
	Practice		Theory
5 1 14P	Specific Objectives By the end of the submodule unit, the trainee should be able to: a) connect to internet b) surf the internet.	5 1.15T	Specific Objectives By the end of the sub- module unit, the trainee should be able to: a) define electronic mail b) list various E-mail
5.1 14P1	Content Connect to Internet - Leased line		software available in the market c) describe types of E-mail connectivity.
5.1.14P2	 Dial up Surfing the Internet Meaning Browsers Search engines Search techniques 	5.1.15C	Competence The traince should have the ability to effectively use E-mail facilities.
	Suggested Teaching/ Learning Resources - Internet - Textbooks - Magazines - White board	5.1.15T1 5.1.15T2 5.1.15T3	Content Electronic mail (E-mail) - Meaning of E-mail - Importance of E-mail E-mail software Requirements for connectivity
	- Dummy computers		Practice
	Suggested Teaching/ Learning Activities - Demonstration - Observation - Practice exercises - Illustrations Suggested Evaluation Methods - Questions and Answers	5.1.15T	Specific Objective By the end of the sub- module unit, the trainee should be able to should be able to use E-mail facilities.
	- Practical Tests		

5.1.15P1	Content E-mail facilities - send and receive mail - Fax messages - File sharing and attachments - Contact management	5.1.16C	Competence The trainee should have the ability to effectively access information through intranets and extranets.
	- Planning and		Content
	conducting on-line	5.1 16P1	Definition of Intranets
	meeting	5.1.16P2	Importance of Intranets
		5.1.16P3	Features of Intranets
	Suggested Teaching/	5.1.16P4	Extranets
	Learning Resources		 Meaning of Extranets
	- Textbooks		- Importance of
	- Magazines		Extranets
	- White board		- Limitations of
			Extranets
	Suggested Teaching/		
	Learning Activities		Practice
	- Demonstration		
	- Observation	5.1.16T	Specific Objective
			By the end of the sub-
	Suggested Evoluation	XJO	module unit, the trainee
	Methods		should be able to access
	- Written Tests		information on Intranets
	- Questions and		and Extracts.
	Answers		
	- Practical Tests		Content
5.1.16	OTHER NETWORKS	5.1.16P1	Visit organisations with the well established Intranets and Extranets
	Theory		and learn how they
	Theory		operate and access
5.1.16T	Specific Objectives By the end of the sub-		information
	module unit, the trainee	(a)	Suggested Teaching/
	should be able to:		Learning Resources
	a) define Intranets		- Textbooks
	b) explain the		- Magazines
	importance of		
	Intranets		Suggested Teaching/
	c) describe the features		Learning Activities
	of Intranets		- Demonstration
	d) describe Extranets.		- Practice exercises

5 1.17	Suggested Evaluation Methods - Written Tests - Practical Tests EMERGING	5.1.1713	 Emerging issues in networking and ICT Coping with the emerging issues Ways of managing the
5 1.17	TRENDS AND ISSUES IN ICT		effects of emerging a trends and issues
	Theory		Practice
5.1.177	Specific Objectives By the end of the submodule unit, the trainee should be able to: a) identify emerging trends in ICT b) discuss challenges emerging trends and	5.1.17P	Specific Objective By the end of the sub- module unit, the trainee should be able to discuss the impact of emerging trends and issues in ICT on a hypothetical business.
	issues in ICT c) discuss ways coping with challenges posed by of emerging trends issues in ICT.	5.J.17P1	Content Group discussion on impact of emerging trends and issues in ICT on a business
5.1.17C	Competence The trainee should have the ability to cope with the emerging trends and issues in ICT.		Suggested Teaching/ Learning Resources - Internet - Textbooks - Resource persons - Charts
5.1.1771	Content Emerging trends and issues - Technology transfer - Economic - Industrial/domestic applications		Suggested Teaching/ Learning Activities - Group discussions - Demonstration - Observation - Practice exercises
	E-learningE-commerce		Suggested Evoluation Methods
5.1.17T2	 Others Effects of emerging trends and issues in ICT 		Written TestsPractical Tests

6.1.0 ENTREPRENEURSHIP

6.1.1 Introduction

This module unit is intended to equip the trainee with knowledge, skills, values and attitudes that will enable him/her plan, start and manage a personal, group, private or public business enterprise. It is also intended to instill in a trainee the drive to venture into profit making business activities.

6.1.2 General Objectives

By the end of the module unit, the trainee should be able to:

- a) acquire entrepreneurial competences necessary for planning, starting and managing a business
- b) demonstrate positive attitude towards self-employment
- c) portray desire to venture into business
- d) identify viable business opportunities
- (e) demonstrate entrepreneurial behaviour in planning, starting, and managing a business enterprise
- demonstrate creativity and innovation in their day to day business
- g) appreciate the role of business planning in supply chain management
- h) cope the emerging trends and issues in entrepreneurship.

12.1.3 Module Unit Summary and Time Allocation

Code	Sub-Module Units	Content	Time (Hours)
6.1.01	Introduction to Entrepreneurship	 Meaning of terms Difference between self employment and salaried employment Contribution of entrepreneurship to national development 	2
6.1.02	Evolution of Entrepreneurship	 History of entrepreneurship Myths associated with entrepreneurship in Kenya Theories of entrepreneurship 	4
6.1.03	The Entrepreneur	 Types of entrepreneurs Qualities of an entrepreneur Roles of an entrepreneur in an enterprise 	6