

**LEVEL:** 

2

TITLE:
MOBILE PHONE REPAIRS AND MAINTENANCE

**YEAR:** 

2024

### **NSQ LEVEL 2- MOBILE PHONE REPAIRS AND MAINTENANCE**

### **GENERAL INFORMATION**

### **QUALIFICATION PURPOSE**

This Qualification is designed to equip trainee with knowledge and skills to carry out Mobile phone repairs and maintenance.

## **QUALIFICATION OBJECTIVES**

Learner should be able to:-

- 1. Observe Safety Precautions during Repairs
- 2. Communicate effectively in Mobile Phone Repairs and Maintenance work environment.
- 3. Identify Mobile Communication Technologies (GSM, CDMA, LTE, 5G, etc.)
- 4. Identify Mobile Phone Components
- 5. Understand Mobile Phone Repair Tools
- 6. Handle Mobile Phone Batteries
- 7. Troubleshoot Common Software and Hardware-Related Problems
- 8. Handle Data Backup and Recovery
- 9. Document Repair Processes
- 10. Apply Professional Standards and Ethics

## **Mandatory Units**

Unit No.	Reference Number	NOS Title	Credit Value	Guided Learning Hours	Remark
1	ICT/GRM/2/001	Occupational Health and Safety	2	20	Level 2
2	ICT/GRM/2/002	Communication in the Mobile Phones World	2	20	Level 2
3	ICT/GRM/2/003	Teamwork	2	20	Level 2
4	ICT/GRM/2/004	Introduction to Mobile and Wireless Technologies	2	20	Level 2
5	ICT/GRM/2/005	Handling Mobile Phone Batteries	2	20	Level 2
6	ICT/GRM/2/006	Mobile Phone Repair Tools	2	20	Level 2
7	ICT/GRM/2/007	Diagnosing and Repairing Mobile Phone Hardware	4	40	Level 2
8	ICT/GRM/2/008	Diagnosing and Repairing Mobile Phone Software	4	40	Level 2
9	ICT/GRM/2/009	Data Privacy and Protection for Mobile Phones	2	20	Level 2
10	ICT/GRM/2/010	Components of a Mobile Phone	2	20	Level 2
		TOTAL	24	240	

**Optional Units** 

Unit No	Reference Number	NOS Title	Credit Value	Guided Learning Hours	Remark
10	ICT/GRM/2/011	Advance Mobile Phones Spare Parts Business	3	30	Level 2
11	ICT/GRM/2/012	Advance Mobile Phone Workshop Business	3	30	Level 2

TOTAL	6	60	

**NOTE:** This is a 24 credit qualification, to achieve this qualification; Learners are required to achieve 24 credits. All units are compulsory for the learners. Each Credit is equivalent to 10 Guided LearningHours (GLH). The Total Learning Hours will therefore consist of the GLH *plus* the independent learning hours of the candidate, which is generally 50% - 150% of the GLH. *The actual Total Learning Hours foreach Credit will then be a minimum of 15 hours*.

### LEVEL 2: MOBILE PHONE REPAIRS AND MAINTENANCE

Unit 1: OCCUPATIONAL HEALTH AND SAFETY

**Unit Reference Number: ICT/GRM/2/001** 

NSQ Level: 2

Credit Value: 2

**Guided Learning Hours: 20** 

**Unit Purpose:** This Unit aims to equip learner with knowledge to apply safety protocols to prevent accidents, injuries, and health hazards.

### **Unit assessment requirements/ evidence requirements:**

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

- 1. Direct Observation/oral questions (DO)
- 2. Question and Answer (QA)
- 3. Witness Testimony (WT)
- 4. Assignment (ASS), etc.

## UNIT 01: OCCUPATIONAL HEALTH AND SAFETY

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA  The learner can:		Evidence Type				ef.	ence Paş	
LO 1:	1.1	Identify Relevant OHS Regulations								
Understand	1.2	Use Relevant OHS Laws and Regulations								
Occupational	1.3	Identify potential hazards in a mobile phone								
Health and Safety	1.3	repair setting, including risks from electrical								
(OHS) Regulations		equipment, toxic chemicals, ergonomic issues, and tools.								
	1.4	Use appropriate safety measures needed in mobile phone industry								
LO 2:	2.1	Identify safety equipment								
Use safety	2.2	Explain how to use each safety equipment								
equipmentin	2.3	Demonstrate how to handle each safety								
mobile phone Industry		equipment								
LO 3:	3.1	Identify standard operating procedures								
Adhere to		(SOP) that are in line with industry best								
adequate		practices when handling mobile phones								
safety		repair and maintenance equipment								
precautions	3.2	Use the standard operating procedures (SOP)								
when using										
mobile phone	3.3	Explain how to maintain hygienic, safe and								
equipment.	3.4	secure workplace.  Explain the importance of using the correct							<u> </u>	
	3.4	tools during mobile phone repairs								
LO 4:	4.1	Use proper disassembly and reassembly								
Safely Handle	1.1	techniques to avoid damage to mobile phones								
Mobile Phone		and components.								
Components and	4.2	Use sharp tools (e.g., screwdrivers, prying								
Tools		tools) and heated equipment (e.g., soldering irons) safely								
	4.3	Use correct procedures for using electrical								
		equipment like multi-meters and power								
		supplies.								
	4.4	Use Safety Protocols for ESD (Electrostatic Discharge)								
LO 5:	5.1	Define emergency								
Understand emergency	5.2	Define first aid								
preparedness and	5.3	Explain how to provide first aid to handle								
first Aid		cuts and electrical shock								
	6.1	Define Personal Protective Equipment (PPE)								
Apply Personal	6.2	Demonstrate the correct use of personal								
Protective		protective equipment (PPE) such as anti-								
Equipment (PPE)		static wristbands, safety goggles, gloves, and								
		heat-resistant gloves to protect against								
		physical, electrical, or chemical risks.								

6.3	Use PPE in various repair tasks, including	Ţ				
	when handling batteries, soldering, or disassembling devices	•				

Learners Signature: Assessors Signature: IQA Signature (if sampled)	Date Date: Date:
EQA Signature (if sampled)	Date:

### **LEVEL 2:** *MOBILE PHONE REPAIRS AND MAINTENANCE*

Unit 2: COMMUNICATION IN MOBILE PHONES WORLD

**Unit Reference Number: ICT/GRM/2/002** 

NSQ Level: 2

**Credit Value: 2** 

**Guided Learning Hours: 20** 

**Unit Purpose:** This Unit aims to equip learner with knowledge of relevant mobile phone terms and their emerging terminologies.

### **Unit assessment requirements/ evidence requirements:**

Assessment must be carried out in real workplace environment in which learning and human development is carried out. Simulation is/or is not allowed in this unit and level.

- 1. Direct Observation/oral questions (DO)
- 2. Question and Answer (QA)
- 3. Witness Testimony (WT)
- 4. Assignment (ASS), etc.

UNIT 02: COMMUNICATION IN MOBILE PHONES WORLD

LEARNING OBJECTIVE (LO)		PERFORMANCE CRITERIA  The learner can:	Evidence Type	Evido Ref. No.	ence Page
The learner will:		The leather can.			
LO 1: Understand terms	1.1	Identify appropriate terms to use in mobile phone industry			
and Terminologies	1.2	Define mobile phone terms			
used in	1.3	Explain mobile phone terms			
mobile phones industry	1.4	Use appropriate terms to communicate effectively			
LO 2: Apply the	2.1	Identify common acronyms used in the industry such as GSM, SIM, etc			
appropriate mobile phone	2.2	Explain the full meaning of each acronym			
acronyms used in the Mobile Phone industry	2.3	Use appropriate acronyms to communicate effectively			
LO 3: Understand	3.1	Identify appropriate timing to call or text someone			
Digital Etiquette (Netiquette)	3.2	Demonstrate professionalism in communication through the use of tone and content			
	3.3	Use of neutral language when discussing sensitive topics over the phone.			
LO 4: Understand Technical	4.1	Use mobile phones efficiently—such as making calls, sending messages, using mobile data, and managing apps			
Communication Skills	4.2	Use translation apps to facilitate multilingual communication			
	4.3	Use emojis and Media to communicate effectively			

**UNIT 003:** Teamwork

Unit reference number: ICT/IT/2/003

NSQ level: 2

Credit value: 2

**Guided learning hours: 20** 

**Unit Purpose:** This unit is designed to equip the learner with the knowledge and skills required to relate cordially in the workplace.

### **Unit Assessment Requirements/Evidence Requirements:**

Assessment must be carried out in real workplace environment in which learning and human development is carried out. Simulation is allowed in this unit and level.

- 1. Direct Observation (DO)
- 2. Question and Answer (QA)
- 3. Witness Testimony (WT)
- 4. Personal statement (PS) or Reflective Practice (RP)
- 5. Assignment (ASS)
- 6. Recognition of Prior Learning (RPL)

## UNIT 003: Teamwork

LEARNING OBJECTIVE (LO)		PERFORMANCE CRITERIA The learner can:	vid ype		ee		ef.	enc Pa	
I O 1.	1 1	The learner can:		1	1		1		
LO 1: Understand the	1.1	List the advantages of working as a team.							
benefits of	1.2	Describe the attributes of a							
Working in a		team player:							
Team at		<ul> <li>Mutual respect</li> </ul>							
Workplace		<ul> <li>Common goal</li> </ul>							
		Discipline							
		Mutual understanding							
		• Trust							
		<ul> <li>Honesty and sincerity,</li> </ul>							
		etc.							
	1.3	List members that constitute							
		a team in the ICT work							
		environment:							
		Systems Analysts							
		Software Developers							
		Database Administrators							
		(DBAs)							
		Network Engineers							
		Security Analysts							
		Help Desk Technicians,							
		etc.							
	1.4	Identify team members in a							
		environment.							
Lo 2:	2.1	Explain the need for good							
Understand how		working relationship with							
to relate with		team members at the							
team members		workplace.							
	2.2	Identify the roles of other							
		team members.							
	2.3	Discuss your own role in							
		achieving the objectives of							
	2 1	the team.							
	2.4	Explain the role of a Network Administrator in an ICT work							
		environment.							
	2.5	Discuss the relationship between							
		the Network Administrator and							
		positions within the ICT team.							

LEARNING OBJECTIVE (LO)		PERFORMANCE CRITERIA The learner can:	Evidence Type		lence Page
LO3: Observe Positive Work Relationships with colleagues	3.1	State the qualities of a good Network Administrator:			
	3.2	Relate with other members at workplace			
	3.3	Explain the importance of effective communication and collaboration with other team members to ensure smooth operations			
	3.4	Communicate information that may affect other workers.			

Learners Signature:	Date
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

### **LEVEL 2:** *MOBILE PHONE REPAIRS AND MAINTENANCE*

## Unit 3: INTRODUCTION TO MOBILE AND WIRELESS TECHNOLOGIES

Unit Reference Number: ICT/GRM/2/004

NSQ Level: 2

**Credit Value: 2** 

**Guided Learning Hours: 20** 

Unit Purpose: This unit aims to equip learner with knowledge and skills of applications modern wireless communication systems.

### **Unit assessment requirements/ evidence requirements:**

Assessment must be carried out in real workplace environment in which learning and human development is carried out. Simulation is allowed in this unit and level.

- 1. Direct Observation/oral questions (DO)
- 2. Question and Answer (QA)
- 3. Witness Testimony (WT)
- 4. Assignment (ASS), etc.

## **UNIT 4:** INTRODUCTION TO MOBILE AND WIRELESS TECHNOLOGIES

LEARNING		PERFORMANCE	Eviden	ce	Evide	nce
OBJECTIVE (LO)		CRITERIA	Type		Ref.	Page
					No.	
The learner will:						
		The learner can:				
LO 1:	1.1	Explain the basic principles of wireless				
Understand		communication, including signal propagation,				
Wireless		frequency spectrum, and modulation				
Communication		techniques.				
	1.2	Discuss emerging trends in wireless				
		technologies, such as 5G, the Internet of				
	1.0	Things (IoT), and mobile edge computing				
	1.3	Discuss the potential future applications of				
	2.1	emerging trends in wireless technologies				
LO 2:	2.1	Identify the components of mobile and				
Know		wireless communication networks, including				
components of		cellular networks (2G, 3G, 4G, and 5G), Wi-				
Mobile and	2.2	Fi, and Bluetooth.				
wireless Network	2.2	Explain the functions of the components of				
	2.3	mobile and wireless communication networks				
		Describe various types of network topologies				
LO 3:	3.1	Identify key wireless communication standards				
Understand		such as GSM, CDMA, LTE, 5G, and Wi-Fi				
Wireless	3.2	Describe key wireless communication				
Communication		standards such as GSM, CDMA, LTE, 5G, and				
Standards	2.2	Wi-Fi				
	3.3	Explain the role of key wireless				
		communication standards in enabling wireless communication				
LO4:	4.1					
Know mobile	4.1	Identify various types of mobile devices,				
devices		including their hardware components and				
uevices	4.2	mobile operating systems				
		Design simple mobile applications				
	4.3	Develop simple mobile applications				

Learners Signature:	Date
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

### LEVEL 2: MOBILE PHONE REPAIRS AND MAINTENANCE

**Unit 5:** HANDLING MOBILE PHONE BATTERIES

**Unit Reference Number: ICT/GRM/2/005** 

NSQ Level: 2

**Credit Value: 2** 

**Guided Learning Hours: 20** 

Unit Purpose: This unit aims to equip learners with knowledge and skills to safely handle various types of mobile phone batteries.

### **Unit assessment requirements/ evidence requirements:**

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

- 5. Direct Observation/oral questions (DO)
- 6. Question and Answer (QA)
- 7. Witness Testimony (WT)
- 8. Assignment (ASS), etc.

## UNIT 05: HANDLING MOBILE PHONE BATTERIES

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA  The learner can:	Evidence Type																								Ev Re No	nce Pa	ge
LO 1:	1.1	Identify different types of phone batteries																											
Understand batteries used in	1.2	Describe their characteristics																											
mobile phones	1.3	Explain battery specifications																											
LO 2:	2.1	Identify battery problems																											
Diagnose	2.2	Describe the cause of battery problem																											
Common Battery	2.3	Test battery health																											
Issues																													
LO 3:	3.1	Identify tools used in handling and servicing																											
Know tools used		batteries																											
in handling and	3.2	Explain the purpose of tools used in handling																											
servicing		and servicing batteries																											
batteries	3.3	Handle battery with care																											
	3.4	Demonstrate how to service a battery																											
	3.5	Replace damaged battery																											

Learners Signature:	Date
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:
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### **LEVEL 2:** *MOBILE PHONE REPAIRS AND MAINTENANCE*

Unit 6: MOBILE PHONE REPAIR TOOLS

**Unit Reference Number: ICT/GRM/2/006** 

NSQ Level: 2

**Credit Value: 2** 

**Guided Learning Hours: 20** 

Unit Purpose: This unit aims to equip leaners with the knowledge and skills of how to use mobile phones repair tools.

## **Unit assessment requirements/ evidence requirements:**

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

- 5. Direct Observation/oral questions (DO)
- 6. Question and Answer (QA)
- 7. Witness Testimony (WT)
- 8. Assignment (ASS), etc.

## UNIT 06: MOBILE PHONE REPAIR TOOLS

LEARNING OBJECTIVE		PERFORMANCE CRITERIA	Evido Type	Evidence Type		Ev Re	ider f.	ice Page
(LO)			- 3 P			No		
Th. 1		The learner can:						
The learner will:								
LO 1:	1.1	Identify hardware repair tools		Π				
Know mobile	1.2	Identify software repair tools						
phone Repair	1.3	Explain the purpose of each tool						
Tools								
LO 2:	2.1	Use various repair tools effectively and						
Use mobile		efficiently						
phone Repair	2.2	Practice safety while using repair tools						
Tools	2.3	Conduct repairs without damaging delicate parts						
LO 3:	3.1	Identify common types of issues						
Diagnose		(Hardware/Software)						
Common Mobile	3.2	Identify diagnostic tools and equipment to use						
Phone Issues	3.3	Diagnose an issue using systematic						
		troubleshooting process						
	3.4	Repair the phone issue						
LO 4:	4.1	Identify Standard Operating Procedures (SOPs)						
Observe Safety	4.2	Use Appropriate Personal Protective Equipment						
Protocols in		(PPE)						
Mobile Repair	4.3	Use Electrostatic Discharge (ESD) Prevention						
	4.4	Handle tools safely and appropriately						
	4.5	Use proper ventilation and chemical safety						
	4.6	Perform work in a clean and organized						
		environment						
	4.7	Ensure device and data Security						
LO 5:	5.1	Select appropriate tools for diagnosis						
Apply the tools	5.2	Use diagnostic software effectively						
to fix phone	5.3	Troubleshoot Battery and Charging Issues						
problems	5.4	Resolve Connectivity Issues (Wi-Fi, Bluetooth,						
		etc.)						
	5.5	Perform Software Reset and Reinstallation						
	5.6	Test and Verify Repair Success		1 1				
	5.7	Document the Troubleshooting and Repair						
		Process						

Learners Signature:	Date
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

### LEVEL 2: MOBILE PHONE REPAIRS AND MAINTENANCE

## Unit 7: DIAGNOSING AND REPAIRING MOBILE PHONES HARDWARE

**Unit Reference Number: ICT/GRM/2/007** 

NSQ Level: 2

**Credit Value: 4** 

**Guided Learning Hours: 40** 

Unit Purpose: This unit aims to equip learner with the knowledge and skills of how to repair mobile phone hardware issues.

### Unit assessment requirements/ evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out. Simulation is/or is not allowed in this unit and level.

- 1. Direct Observation/oral questions (DO)
- 2. Question and Answer (QA)
- 3. Witness Testimony (WT)
- 4. Assignment (ASS),
- 5. e.t.c

 $\textbf{UNIT 07:} \ \textbf{DIAGNOSING AND REPAIRING MOBILE PHONES HARDWARE} \\$ 

LEARNING		PERFORMANCE CRITERIA	Evidence Eviden		nce			
OBJECTIVE (LO)			· · -			Page		
						1	No.	
The learner will:		The learner can:						
LO 1:	1.1	Identify the various components of a phone						
Understand the	1.2	Differentiate between internal components						
Structure and		(e.g., processor, RAM, storage) and external						
Function of Mobile		components (e.g., screen, casing, buttons)						
Phone Hardware	1.3	Describe the functions of each components						
	1.4	Recognize the various forms of each						
		component						
LO 2:	2.1	Identify Hardware Issues						
Diagnose Common	2.2	Identify the possible causes of a problem						
Hardware Problems	2.3	Select appropriate repair tools						
	2.4	Use tools to diagnose the problem						
	2.5	Disassemble a phone						
	2.6	Repair a phone using the correct tools						
	2.7	Assemble a phone						
	2.8	Test the repaired phone						
	2.9	Document the solution						
LO 3:	3.1	Identify phone hardware issues/problems						
Enhance	3.2	Develop troubleshooting skills						
Troubleshooting	3.3	Solve phone hardware related issues						
Skills	3.4	Demonstrate to others what the problem is						
		and how to repair it.						
	3.5	Demonstrate documentation skills						

Learners Signature:	Date
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

### LEVEL 2: MOBILE PHONE REPAIRS AND MAINTENANCE

Unit 8: DIAGNOSING AND REPAIRING MOBILE PHONES SOFTWARE

**Unit Reference Number: ICT/GRM/2/008** 

NSQ Level: 2

**Credit Value: 4** 

**Guided Learning Hours: 40** 

Unit Purpose: This unit aims to equip learner with knowledge and skills of how to repair mobile phone software issues.

### **Unit assessment requirements/ evidence requirements:**

Assessment must be carried out in real workplace environment in which learning and human development is carried out. Simulation is/or is not allowed in this unit and level.

- 1. Direct Observation/oral questions (DO)
- 2. Question and Answer (QA)
- 3. Witness Testimony (WT)
- 4. Assignment (ASS),

## UNIT 08: DIAGNOSING AND REPAIRING MOBILE PHONES SOFTWARE

LEARNING OBJECTIVE (LO)		PERFORMANCE CRITERIA	Type Re		Evid Ref. No.				
		The learner can:							
The learner will:									
LO 1:	1.1	Identify the major mobile phone OS platforms						Τ	T
Understand		such as Andrios, iOS, etc							
Mobile	1.2	Explain how the OS manage hardware, app							
Operating		and interfaces							
Systems (OS)	1.3	Install mobile phone firmware and OS							
	1.4	Update mobile phone OS							
LO 2:		Identify Common Software Issues:							
Troubleshoot		Operating system crashes							
software Related		Slow performance							
Problems Mobile	2.1	Application errors and crashes							
Phones	2.1	Connectivity issues (Wi-Fi, Bluetooth,							
		GSM network)							
		Firmware corruption							
		Security issues (malware, viruses)							
	2.2	Identify the possible causes of the problem							
	2.3	Use appropriate repair tools to properly							
		identify the root cause of a problem							
	2.4	Perform Data backup whenever necessary							
	2.5	Perform the repairs							
	2.6	Perform Firmware and OS Updates where							
		necessary							
	2.7	Apply mobile phone-Specific Software Fixes							
		where necessary							
	2.8	Perform Recovery whenever necessary							
	2.9	Test and Verify Software Repairs							
LO 3:	3.1	Identify phone software issues/problems							
Enhance	3.2	Develop troubleshooting skills							
Troubleshooting	3.3	Solve phone software related issues							
Skills	3.4	Demonstrate to others what the problem is and							
		how to repair it.							┷
LO 4:	4.1	Define Backup and Recovery							
Know Data	4.2	Explain the importance of regularly backing up							
Backup and		user data such as contacts, photos, messages,							
Recovery		etc.							ــــــــ
Procedures	4.3	Describe the procedures for data backup and							
		recovery						$\perp$	<u> </u>
	4.4	Identify the Data to backup							<u> </u>
	4.5	Use different backup methods such as cloud							
		storage or local backups.						$\perp$	╀
	4.6	Perform Data Recovery							

Learners Signature:	Date
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EOA Signatura (if samulad)	Do4o.
EQA Signature (if sampled)	Date:

### **LEVEL 2:** *MOBILE PHONE REPAIRS AND MAINTENANCE*

Unit 9: DATA PRIVACY AND PROTECTION FOR MOBILE PHONES

**Unit Reference Number: ICT/GRM/2/009** 

NSQ Level: 2

**Credit Value: 2** 

**Guided Learning Hours: 20** 

Unit Purpose: This unit aims to equip learner with knowledge and skills on how to safeguard confidential information from unauthorized access.

### **Unit assessment requirements/ evidence requirements:**

Assessment must be carried out in real workplace/business environment in which learning and human development is carried out.

- 1. Direct Observation/oral questions (DO)
- 2. Question and Answer (QA)
- 3. Witness Testimony (WT)
- 4. Assignment (ASS),

## UNIT 09: DATA PRIVACY AND PROTECTION FOR MOBILE PHONES

LEARNING OBJECTIVE (LO)		PERFORMANCE CRITERIA	1	Evidence Type		Ev Re No	nce Pag	e	
The learner will:		The learner can:							
LO 1:	1.1	Define Data Privacy							_
Understand Data	1.2	Define Data Protection							
Privacy and	1.3	Explain why Data Privacy and Protection for							
Protection		mobile phones is important							
LO 2:	2.1	Define Professional Ethics							
Understand	2.2	Identify Privacy Laws and Regulations							
Professional	2.3	Use Privacy Laws and Regulations							
Ethics	2.4	Implement accountability practices							
	2.5	Use confidentiality							
	2.6	Demonstrate Responsible Data Usage and Ethical Practices							
	2.7	Implement Compliance with Laws and Regulations							
	2.8	Implement data retention policies							
LO 3:	3.1	Define Identity Theft							
Safeguard	3.2	Identify Personal Data to Protect							
Personal	3.3	Identify measures to Protect Personal Data							
Information	3.4	Implement measures to Protect Personal Data							
LO 4	4.1	Explain unauthorized access and data breaches							
Prevent	4.2	Use encryption and secure authentication							
Unauthorized		techniques							
Access and Data	4.3	Implement mitigation measure to minimize data							
Breaches		breach risks							
LO 5	5.1	Identify unauthorized monitoring							
Prevent	5.2	Identify techniques to prevent unauthorized							
Surveillance and		monitoring							
Monitoring	5.3	Implement measures that will prevent unauthorized monitoring							

Learners Signature:	Date
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

**LEVEL 2:** *MOBILE PHONE REPAIRS AND MAINTENANCE* 

UNIT 10: COMPONENTS OF A MOBILE PHONE

**Unit Reference Number: ICT/GRM/2/010** 

NSQ Level: 2

**Credit Value: 2** 

**Guided Learning Hours: 20** 

Unit Purpose: This unit aims to equip leaner with knowledge of how hardware and software components work together to enable communication and other mobile functionalities.

### **Unit assessment requirements/ evidence requirements:**

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

- 1. Direct Observation/oral questions (DO)
- 2. Question and Answer (QA)
- 3. Witness Testimony (WT)
- 4. Assignment (ASS), etc.

## UNIT 010: COMPONENTS OF A MOBILE PHONE

LEARNING (LO)		PERFORMANCE CRITERIA	Evidence Evid					
OBJECTIVE (LO)			T	ype			ket. No.	Page
The learner will:		The learner can:						
LO 1:	1.1	Identify the key hardware components of a						
Understand the		mobile phone such as the motherboard,						
Components of a		battery, screen, camera, speakers, antennas,						
Mobile Phone		e.t.c						
	1.2	Explain the roles of each component and						
		how they contribute to the phone's overall						
		functionality						
	1.3	Identify the key softwares of a mobile						
		phone such as the operating system (OS),						
		firmware, and applications						
	1.4	Explain how the hardware and software						
		components interact to perform various						
		tasks like calling, texting, and browsing the						
		internet						
LO 2:	2.1	Identify faulty components						
Know Mobile Phone	2.2	Determine necessary repairs or						
Repair and		replacements.						
Maintenance	2.3	Troubleshoot common problems, such as						
		screen malfunctions, power issues, network						
		problems, and software bugs						
LO 3:	3.1	Disassemble mobile phones						
Assembly and	3.2	Assemble mobile phones						
Disassembly Mobile	3.3	Use specialized tools required for mobile						
Phone		phone repairs, such as screwdrivers,						
		opening picks, suction cups, and anti-static						
		equipment						

Learners Signature:	Date
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

### LEVEL 2: MOBILE PHONE REPAIRS AND MAINTENANCE

Unit 11: ADVANCE MOBILE PHONES SPARE PARTS BUSINESS

**Unit Reference Number: ICT/GRM/2/011** 

NSQ Level: 2

**Credit Value: 5** 

**Guided Learning Hours: 50** 

**Unit Purpose:** This Unit aims to equip learners with knowledge and skills to operate a business that specializes in sourcing, selling, and distributing mobile phone spare parts and accessories.

### **Unit assessment requirements/ evidence requirements:**

Assessment must be carried out in real workplace/bussiness environment in which learning and human development is carried out.

- 1. Direct Observation/oral questions (DO)
- 2. Question and Answer (QA)
- 3. Witness Testimony (WT)
- 4. Assignment (ASS),

## UNIT 11: ADVANCE MOBILE PHONES SPARE PARTS BUSINESS

LEARNING OBJECTIVE (LO) The learner		PERFORMANCE CRITERIA  The learner can:	Evidence Type		Ev Re No	f.	nce Pa	ge		
will:	1.1	Identify the various spare parts of a Mobile								
Understand the Mobile phone	1.2	Phone Identify industry stakeholders (end user,				H				
Industry	1.3	manufacturers, etc) in the value chain								
		Identify industry trend								
LO 2: Understand	2.1	Identify popular phone brands, models and their repair needs								
Market Demand	2.2	Gather information about new phone models, discontinued models and availability of their parts								
	2.3	Determine spare parts that are in high demand								
LO 3: Know Sourcing	3.1	Select reliable suppliers, manufacturer, or wholesalers who provide quality spare parts								
Quality Spare	3.2	Gather parts for common repairs such as								
Parts		screens, charging ports, SIM trays and other essential components.								
	3.3	Differentiate the different categories of spare parts via classification.								
LO 4 Understand	4.1	Identify a suitable Inventory Management System (IMS) software								
Inventory Management	4.2	Implement the IMS to track the availability of parts, restock popular items, and avoid overstocking of low-demand products								
	4.3	Use IMS software or point-of-sale (POS) systems that allow efficient tracking of inventory levels, order history, and supplier performance								
LO 5 Offer a wide	5.1	Maintain a comprehensive variety of spare parts as well as accessories								
range of products	5.2	Provide Mobile phone hardware repair tools								
107	5.3	Provide Mobile phone software repair tools								
LO 6 Know Ensure	6.1	Test every spare part for functionality and quality before stocking.								
quality control	6.2	Deliver high quality parts to customers								
and testing	7.1	D.1:								
LO 7 Know	7.1	Deliver competitive pricing while maintaining quality								
competitive	7.2	Provide discounts to bulk buyers								
pricing strategy	7.3	Deliver flexible pricing options for regular customers								
LO 8	8.1	Explain to customers, especially repair								
Understand Customer		technicians who may need guidance in selecting the correct parts for different phone models								
Castoffier	<u> </u>	the correct parts for afficient phone models	<u> </u>	<u> </u>	<u> </u>	L				

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA  The learner can:	Evidence Type		Evidence Ref. Page No.				
Service and Technical Support	8.2	Deliver excellent customer service by offering support before and after the sale and handling product inquiries							
	8.3	Address Customer Complaints Efficiently							
LO 9	9.1	Locate a suitable place to conduct the business							
Build an online and offline presence	9.2	Maintain a well-organized retail shop or distribution center where local customers can browse and purchase parts in person.							
	9.3	Develop a user-friendly e-commerce platform where customers can easily find the parts they need, view technical specifications, and place orders							
LO 10	10.1	Explain what logistics and delivery are							
Know logistics and delivery	10.2	Carry out same-day or next-day delivery to local repair shops							
	10.3	Operate logistics system to ensure fast and accurate delivery of spare parts to customers							
LO 11	11.1	Describe their warranty and return procedure							
Know warranty and return policy	11.2	Provide warranties on spare parts to ensure customers feel confident in the products they purchase.							
	11.3	Implement a clear return and replacement policy to handle defective parts and customer complaints effectively.							
LO 12 Understand Compliance with	12.1	Identify all relevant regulations regarding the sale of mobile phone parts, including warranties, trade laws, and consumer rights							
legal and	12.2	Explain the relevant regulations							
environmental regulations	12.3	Implement environmentally friendly practices, such as recycling used parts and responsibly disposing of electronic waste							
LO 13 Understand the need to build	13.1	Identify strategic partner such as mobile repair shops, technicians, and service centers to supply them with parts regularly.							
partnership with	13.2	Maintain relationship with the strategic partners							
repair technicians	13.3	Discuss customized product requirement with							
technicians	13.4	partners.  Implement bulk discounts and loyalty programs to help foster long-term relationships.							
LO 14	14.1	Identify financial sources for the business							
Know Financial Management and planning	14.2	Implement proper financial management, including cash flow, pricing strategies, and profit margins to sustain the business in a competitive market.							
	14.3	Operate the business to make profit		ļ					Щ
	14.4	Plan for future expansion							

Learners Signature:	Date
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

### **LEVEL 2:** *MOBILE PHONE REPAIRS AND MAINTENANCE*

### Unit 12: ADVANCE MOBILE PHONES WORKSHOP BUSINESS

**Unit Reference Number: ICT/GRM/2/012** 

NSQ Level: 2

**Credit Value: 5** 

**Guided Learning Hours: 50** 

Unit Purpose: This Unit aims to equip learners with knowledge and skills of high-quality mobile phone repair services, maintenance, and technical support.

## Unit assessment requirements/ evidence requirements:

Assessment must be carried out in real workplace/business environment in which learning and human development is carried out.

- 1. Direct Observation/oral questions (DO)
- 2. Question and Answer (QA)
- 3. Witness Testimony (WT)
- 4. Assignment (ASS),

## UNIT 12: ADVANCE MOBILE PHONES WORKSHOP BUSINESS

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA  The learner can:		Evidence Type				Type Re				ence Page	
LO 1:	1.1	Identify various Mobile Phones											
Understand the Mobile phone	1.2	Identify industry stakeholders (end user, manufacturers, etc) in the value chain											
Industry	1.3	Identify industry trend											
LO 2:	2.1	Identify Mobile Phone problem											
Know Professional	2.2	Determine fixing the hardware and/or software issue/s							f. Page				
Mobile Phone Repair Services	2.3	Repair the Mobile Phone											
LO 3: Know Specialize	3.1	Select the right set of tools to repair hardware issues											
Mobile Technology	3.2	Select the right set of tools to repair software issues						0					
Repairs	3.3	Use the tools to fix the issue											
	4.1	Identify a suitable Customer and Inventory Management System (IMS)											
LO 4 Understand	4.2	Implement the IMS to track the availability of parts, restock popular items, and avoid overstocking of low-demand products				Ref.							
Inventory Management	4.3	Use IMS software or point-of-sale (POS) systems that allow efficient tracking of inventory levels, order and customer history, and supplier performance.											
LO 5	5.1	Identify Complex Hardware and Software issues that may not be easily detectable.											
Apply Advanced Diagnostic	5.2	Use repair tools to diagnose the issue											
Services	5.3	Repair the device											
Bel vices	5.4	Test the device for proper functionality											
LO 6 Know quality	6.1	Test every spare part for functionality and quality before using it for repairs											
control and testing	6.2	Deliver top-notch service to customers by ensuring that repairs are done accurately and efficiently											
LO 7	7.1	Explain to the user best way to charge the devices											
Know Longevity	7.2	Use mindful charging											
of Mobile	7.3	Use high quality phone charging cables											
Devices	7.4	Provide timely repairs and maintenance services											
LO 8	8.1	Explain to customers who may need guidance											
Understand Customer	8.2	Deliver excellent customer service by offering support before and after the repairs											
Service and Technical Support	8.3	Address Customer Complaints Efficiently											

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA  The learner can:	Evidence Type				Re	ef.		ge	
	9.1	Locate a suitable place to conduct the business									
LO 9 Build an online and offline	9.2	Maintain a well-organized workshop where local customers can bring their devices for repairs									
presence	9.3	Develop a user-friendly web application customers can easily find information about the status of the repairs									
LO 10	10.1	Explain the benefits of phone care and maintenance to customers					Evident Ref. No.				
Educate Customers on Mobile Phone	10.2	Demonstrate to the customer on how to care and maintain their phones									
Care and Maintenance	10.3	Maintain regular check-up with customers to remind them about their phone care and maintenance									
1.0.11	11.1	Describe their warranty policy									
LO 11	11.2	Provide warranties on repairs									
Know warranty and return policy	11.3	Implement a clear repair and replacement policy									
LO 12 Understand	12.1	Identify all relevant regulations including warranties, trade laws, and consumer rights									
Compliance with legal and environmental regulations	12.2	Explain the relevant regulations Implement environmentally friendly practices, such as recycling used parts and responsibly disposing of electronic waste									
LO 13	13.1	Identify strategic partners such as mobile repair shops, technicians, and service centers									
Understand the need to build	13.2	Develop and maintain relationship with strategic partners									
partnership with other repair	13.3	Discuss customized product requirement with partners.									
technicians	13.4	Implement bulk discounts and loyalty programs to help foster long-term relationships.									
	14.1	Identify financial sources for the business									
LO 14 Know Financial Management and	14.2	Implement proper financial management, including cash flow, pricing strategies, and profit margins to sustain the business in a competitive market.									
planning	14.3	Operate the business to make profit									
	14.4	Plan for future expansion									

Learners Signature:	Date			
Assessors Signature:	Date:			
IQA Signature (if sampled)	Date:			
EQA Signature (if sampled)	Date:			

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