







# Mobile Phone Hardware Repair Technician

QP Code: ELE/Q8104

Version: 2.0

NSQF Level: 4

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## **ELE/Q8104: Mobile Phone Hardware Repair Technician**

## **Brief Job Description**

The individual at work is responsible for rectifying faults in the mobile phone brought in by the customer. The individual receives the faulty mobile phone, diagnoses the problems, performs front end or hardware level repair as required, resolves software issues and ensures effective functioning before delivering back to customer.

### **Personal Attributes**

The job requires the individual to have attention to details, patience, ability to listen, steady hands, logical thinking and customer orientation. The individual must work on desk with different types of equipment.

## **Applicable National Occupational Standards (NOS)**

## **Compulsory NOS:**

- 1. ELE/N8104: Interact with customer and perform front end repair
- 2. ELE/N8107: Repair and rectify the faults in mobile phone
- 3. ELE/N9905: Work effectively at the workplace
- 4. ELE/N1002: Apply health and safety practices at the workplace

### **Qualification Pack (QP) Parameters**

Sector	Electronics
Sub-Sector	Communication and Broadcasting
Occupation	After Sales Service
Country	India
NSQF Level	4
Credits	NA
Aligned to NCO/ISCO/ISIC Code	NCO-2015/7422.2301





Minimum Educational Qualification & Experience	8th Class (+ ITI (2 years after 8th) with 2 years of relevant experience) OR 10th Class with 2 Years of experience relevant OR Certificate-NSQF (Level-3 in repairing of mobile phone domain) with 2 Years of experience relevant OR 12th Class
Minimum Level of Education for Training in School	8th Class
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	31/03/2022
Next Review Date	02/08/2025
<b>Deactivation Date</b>	09/01/2024
NSQC Approval Date	31/03/2022
Version	2.0
Reference code on NQR	2022/EHW/ESSC/05636
NQR Version	1.0





## ELE/N8104: Interact with customer and perform front end repair

## **Description**

This OS unit is about interacting with the customers and their customer requirements or problems faced in the mobile phone and performing front end repair where disassembling of hardware is not required

### **Elements and Performance Criteria**

### Engaging with customers

To be competent, the user/individual on the job must be able to:

- **PC1.** receive the customers and greet them as per companys norms
- **PC2.** follow behavioural etiquettes while interacting with customers
- **PC3.** ensure the customers are comfortable in the store
- **PC4.** communicate in the language which the customers are comfortable with
- **PC5.** understand the profile of the customers and offer service
- **PC6.** inform about repair charges and warranty applicable

## Understanding the complaint

To be competent, the user/individual on the job must be able to:

- **PC7.** interact with customers to understand the customers purpose of visit such as repair of phone, purchase of accessories, software upload, collection of repaired phone
- **PC8.** listen to customers and understand the customer level complaint such as display not working, not switching on
- **PC9.** interrogate the customers to assess the cause of problem such as physical damage, uploading of any unauthorised software or application
- **PC10.** decide on the action to be performed, i.e., front end repair or hardware level repar is required
- **PC11.** inform customers about the time taken and estimated cost for hardware level repair
- PC12. provide document to customers for collecting the device after repair

### Documenting on computer

To be competent, the user/individual on the job must be able to:

- **PC13.** use the system to identify the warranty coverage of the mobile phone and other terms and conditions
- **PC14.** understand the customer relationship management policy of the mobile brand and inform customers about them
- **PC15.** log into customer portal and enter the details of the customer and other details such as phone model, complaints, warranty coverage
- **PC16.** understand and use the interactive ERP system of the company and enter appropriate details
- **PC17.** use the system to prepare invoice, stock management, order placement, accessories availability, etc.

## Performing front end repair

To be competent, the user/individual on the job must be able to:

PC18. Identify problem and decide the action to be taken





- **PC19.** upload only licensed and brand approved applications as per customer requirement using system
- **PC20.** understand the application and software compatability with the mobile phone and suggest to customers accordingly
- **PC21.** check the accessories and perform a demo with the customer to ensure their functionality (chargers, SD card, etc)
- PC22. open the panel of the mobile phone without damaging them
- PC23. replace the parts such as battery and clean the inner parts of the phone
- **PC24.** ensure the functionality of the replaced part
- **PC25.** provide necessary details on the warranty, terms and conditions of the replaced parts
- **PC26.** educate customers on effective usage of mobile phone to save battery and to avoid any repeat problem

### Interacting with superior and meeting target

To be competent, the user/individual on the job must be able to:

- **PC27.** understand the work requirement from superior, periodically
- PC28. report to superior on the work completed
- PC29. seek technical assistance from superior whenever required
- **PC30.** document the work completed on the company ERP software for tracking and future references

## **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** companys policies on: incentives, delivery standards, and personnel management
- **KU2.** companys sales and after sales support policy
- **KU3.** importance of the individuals role in the workflow
- **KU4.** reporting structure
- **KU5.** companys policy on products warranty and other terms and conditions
- **KU6.** companys line of business and product portfolio
- **KU7.** companys service level agreement (SLA) with the brand
- **KU8.** basic electronics involved in the hardware
- **KU9.** operate various models of moilephone
- **KU10.** features of mobile phone and their purpose
- **KU11.** different types of mobile phone and their model specifications
- **KU12.** how to document the spares movement note and capture all the action performed
- **KU13.** different accessories available for mobile phones and their purpose
- **KU14.** software and applications related to mobile phone
- **KU15.** procedures of replacing accessories such as battery, SD card
- **KU16.** software and applications available in the mobile phone market, their usage and purpose
- **KU17.** licensed and authorised software compatable for mobile phones and the downloading procedure
- **KU18.** specifications of accessories such as chargers, battery





- **KU19.** service level agreement with the brand on parameters such as turn around time (TAT), repair procedure, warranty
- **KU20.** companys ERP system and operational procedure
- KU21. safety rules, policies and procedures
- **KU22.** quality standards to be followed

## **Generic Skills (GS)**

User/individual on the job needs to know how to:

- **GS1.** prepare complaints note with customer details, issues faced, phone details
- **GS2.** note customer complaints and solution provided
- **GS3.** prepare invoice with appropriate details
- **GS4.** to share work load as required
- GS5. to achieve the targets given on service
- **GS6.** how to develop a rapport with customers
- **GS7.** how to listen carefully and interpret their requirement
- **GS8.** how to suggest customer on possible solutions
- **GS9.** how to seek inputs from customers at assess the problems
- **GS10.** how to put the customer at ease and suggest solutions
- **GS11.** how to communicate in local language
- **GS12.** how to educate and inform customer about contractual issues such as warranty, cost of service and module or accessories replacement
- **GS13.** how to educate on precautions to be taken for effective uage of mobile phone
- **GS14.** importance of personal grooming
- **GS15.** significance of etiquette such as maintaining the appropriate physical distance with customer during conversation
- **GS16.** importance of being patient and courteous with all types of customers
- **GS17.** being polite and courteous under all circumstances
- **GS18.** how to operate computer and laptop with ease
- **GS19.** software and applications related to mobile phone with its features and purpose
- **GS20.** how to download software and application from companys website and from cloud
- **GS21.** how to download mobile phone related document from internet such as model specification ,repair manual





## **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Engaging with customers	8	12	-	-
<b>PC1.</b> receive the customers and greet them as per companys norms	1	2	-	-
<b>PC2.</b> follow behavioural etiquettes while interacting with customers	2	2	-	-
<b>PC3.</b> ensure the customers are comfortable in the store	2	2	-	-
<b>PC4.</b> communicate in the language which the customers are comfortable with	1	2	-	-
<b>PC5.</b> understand the profile of the customers and offer service	1	2	-	-
<b>PC6.</b> inform about repair charges and warranty applicable	1	2	-	-
Understanding the complaint	6	14	-	-
<b>PC7.</b> interact with customers to understand the customers purpose of visit such as repair of phone, purchase of accessories, software upload, collection of repaired phone	1	2	-	-
<b>PC8.</b> listen to customers and understand the customer level complaint such as display not working, not switching on	1	3	-	-
<b>PC9.</b> interrogate the customers to assess the cause of problem such as physical damage, uploading of any unauthorised software or application	1	2	-	-
<b>PC10.</b> decide on the action to be performed, i.e., front end repair or hardware level repar is required	1	3	-	-
<b>PC11.</b> inform customers about the time taken and estimated cost for hardware level repair	1	2	-	_
<b>PC12.</b> provide document to customers for collecting the device after repair	1	2	-	-
Documenting on computer	9	13	-	-





Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> use the system to identify the warranty coverage of the mobile phone and other terms and conditions	2	3	-	-
<b>PC14.</b> understand the customer relationship management policy of the mobile brand and inform customers about them	2	3	-	-
<b>PC15.</b> log into customer portal and enter the details of the customer and other details such as phone model, complaints, warranty coverage	2	3	-	-
<b>PC16.</b> understand and use the interactive ERP system of the company and enter appropriate details	2	3	-	-
<b>PC17.</b> use the system to prepare invoice, stock management, order placement, accessories availability, etc.	1	1	-	-
Performing front end repair	9	9	-	-
<b>PC18.</b> Identify problem and decide the action to be taken	1	1	-	-
<b>PC19.</b> upload only licensed and brand approved applications as per customer requirement using system	1	1	-	-
<b>PC20.</b> understand the application and software compatability with the mobile phone and suggest to customers accordingly	1	1	-	-
<b>PC21.</b> check the accessories and perform a demo with the customer to ensure their functionality (chargers, SD card, etc)	1	1	-	-
PC22. open the panel of the mobile phone without damaging them	1	1	-	-
<b>PC23.</b> replace the parts such as battery and clean the inner parts of the phone	1	1	-	-
<b>PC24.</b> ensure the functionality of the replaced part	1	1	-	-
<b>PC25.</b> provide necessary details on the warranty, terms and conditions of the replaced parts	1	1	-	-





Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC26.</b> educate customers on effective usage of mobile phone to save battery and to avoid any repeat problem	1	1	-	-
Interacting with superior and meeting target	8	12	-	-
<b>PC27.</b> understand the work requirement from superior, periodically	2	3	-	-
PC28. report to superior on the work completed	2	3	-	-
<b>PC29.</b> seek technical assistance from superior whenever required	2	3	-	-
<b>PC30.</b> document the work completed on the company ERP software for tracking and future references	2	3	-	-
NOS Total	40	60	-	-





## **National Occupational Standards (NOS) Parameters**

NOS Code	ELE/N8104
NOS Name	Interact with customer and perform front end repair
Sector	Electronics
Sub-Sector	Communication and Broadcasting
Occupation	AFTER SALES SERVICE
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	31/03/2022
Next Review Date	31/08/2025
NSQC Clearance Date	31/03/2022



## ELE/N8107: Repair and rectify the faults in mobile phone

## **Description**

This OS unit is about repairing the faulty module in the hardware and checking for effective functioning. Also, software issues are also checked and rectified.

### **Elements and Performance Criteria**

## Following standard repair procedure

To be competent, the user/individual on the job must be able to:

- PC1. follow the standard procedure as documented by the mobile phone brand for each model
- PC2. take anti static precautions before work and wear ESD wrist straps or aprons
- PC3. follow standard operating procedure while handling hardware modules such as handling PCB with ESD standards
- PC4. use recommended tools for specific operation suggested by the brand
- PC5. maintain zero-material defect during material handling by following standard operating procedure

## Assembling and disassembling the mobile phone

To be competent, the user/individual on the job must be able to:

- PC6. open the outer panel of the mobile phone using metal / plastic case opening tools
- PC7. use the brand recommended screwdrivers to remove the screws to open the inner casing
- PC8. locate the connectors and release them to remove the motherboard from the device
- PC9. use hot air gun and other devices to remove the LCD screen from the pane
- **PC10.** follow similar process and use appropriate tools to assemble the mobile phone

### Diagnosing the problem

To be competent, the user/individual on the job must be able to:

- **PC11.** understand the customer level complaint and confirm the issue
- PC12. take preventive measures and identify if there are any other issues in the mobile phone
- PC13. use the self diagnostic tools (similar to power on self test (POST) card) to perform standard diagnosis process and ensure functionality of different parts of the device
- **PC14.** follow the standard diagnostic procedure as documented by the mobile phone brand for each model
- **PC15.** check the recently installed application or software and verify the compatability of the software with the mobile phone

### Fixing the software

To be competent, the user/individual on the job must be able to:

- **PC16.** check the recently installed application or software and verify the compatability of the software with the mobile phone
- **PC17.** uninstall the applications that is not compatable or creating issues in the mobile phone
- **PC18.** install the licensed and authorised softwares to resolve issues and suiting the customers requirement

### Repairing the component or module

To be competent, the user/individual on the job must be able to:





- PC19. understand the scope of component level of repair as suggested by the brand
- **PC20.** estimate the cost of repair and verify if it is with in Beyond Economic Repair (BER)
- **PC21.** heat the singled out component using hot air gun to melt the solder joints and remove from
- PC22. clean the board by melting the old solder and removing
- PC23. place the new component precisely on the board at specified location
- **PC24.** solder the component on the PCB using soldering stations
- **PC25.** ensure the soldering is proper and the component is fixed as per the specification
- PC26. operate automated BGA (ball grid array) work station to precisely remove the chip from the board and repair them
- **PC27.** perform reballing function by dismantling, heating the chip to be removed from the board, remove the solder remains, put new solder balls, place the chip and solder them with the
- **PC28.** check for functioning of the hardware after repairing
- **PC29.** ensure that there is no damage of PCB while removal and fixing of SMD components
- PC30. ensure other components are not damaged while using hot air gun for removal of a component which could cause damage
- **PC31.** ensure adequate soldering for fixing the component and no further rework is required Replacing faulty component

To be competent, the user/individual on the job must be able to:

- **PC32.** receive spare module / component from stores or OEM
- PC33. identify and decide on replacing the module or component as the appropriate solution
- **PC34.** take adequate measures and follow procedures when replacing expensive or delicate components such as LCD
- **PC35.** ensure that cost of replacing is justified as the repair cost is beyond economic repair (BER)
- **PC36.** ensure that replaced module or component is working and no further rework is required Using equipment

To be competent, the user/individual on the job must be able to:

- PC37. identify and use appropriate tools and manuals for repairing the specific issue
- **PC38.** prevent any accidents while handling hazardous tools
- **PC39.** achieve results using appropriate tools for specific rework activity
- PC40. maintain zero-material defect during material handling by following standard operating procedure for tools handling

### Seeking assistance on unresolved faults

To be competent, the user/individual on the job must be able to:

- **PC41.** seek technical assistance from engineer on faults that cannot be fixed
- **PC42.** receive instruction from engineers on use of specific tools or new repair processes
- PC43. discuss with superior if the cost estimate is found to be Beyond Economic repair (BER) and take recommended action
- **PC44.** coordinate with superior for performing quality check on the repaired module

### Reporting and achieving productivity target

To be competent, the user/individual on the job must be able to:

**PC45.** report on the work load and completion status





- **PC46.** submit the appropriate documentation on completion of task assigned
- PC47. document the work completed on the company ERP software for tracking and future references
- PC48. achieve 100% daily and weekly target of number of repairs
- **PC49.** meet the target of quality as per the Service Level Agreement (SLA) of the brand and avoid rework
- **PC50.** repair within the turnaround time (TAT) and deliver them

## **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- KU1. companys policies on: incentives, delivery standards, and personnel management
- KU2. companys after sales support policy
- importance of the individuals role in the workflow KU3.
- KU4. reporting structure
- KU5. companys policy on products warranty and other terms and conditions
- KU6. companys line of business and product portfolio
- **KU7.** companys repair and stores policy
- **KU8.** documentation procedure followed in the company
- KU9. companys policy on repair time, turnaround time, production targets, working hours
- **KU10.** basic electronics involved in the hardware
- **KU11.** diagnostic or power on tests of different OEMs
- **KU12.** operations of different models of mobile phone
- **KU13.** features of mobile phone and their purpose
- **KU14.** different types of mobile phone and their model specifications
- **KU15.** new product specifications and their spares and repair details
- **KU16.** how to document the spares movement note and capture activity performed
- **KU17.** software and applications related to mobile phone
- **KU18.** assembling and disassembling mobile phone
- **KU19.** handling procedure of display systems in mobile phone (LCD and LED)
- **KU20.** frequently encountered problems in mobile phone and their repair procedures
- **KU21.** terminologies and procedures mentioned in repair manual
- **KU22.** softwares and operating system related to mobile phone
- **KU23.** applications including games that can be installed in mobile phone and the authentic source to download them
- **KU24.** licensed versions of software and application, its terms and conditions associated with it
- **KU25.** different types of soldering techniques such as surface mount, through hole
- **KU26.** basic electronic repairing and reworking such as desoldering, soldering, removal and fixing components
- **KU27.** usage of tools such as electric screwdrivers, multimeter, soldering station, hot air blower, BGA workstation
- **KU28.** overview of IPC Standards





- KU29. critical process handling such as Torque Drivers, Soldering Temperature Maintenance, Light Intensity, Hot Air Blower Temperature Calibrations
- **KU30.** problem solving techniques such as PDCA, RCA, 7QC Tools
- **KU31.** X-Ray validations for BGA Rework
- KU32. MSD component handling
- KU33. BGA rework in detail
- **KU34.** RF testing methodologies
- KU35. estimate cost of repair and verify Beyond Economic Repair (BER) value
- **KU36.** service level agreement (SLA) and conditions associated with it
- **KU37.** Electrostatic Discharge (ESD), its purpose and precautionary measures to be taken
- **KU38.** process system such as 5S
- KU39. documentation procedure to record customer, mobile phone and repair details
- **KU40.** check and test various electronic components on their functionality
- **KU41.** quality standards to be followed
- **KU42.** implementation process for Engineering Change Order (ECO)

## **Generic Skills (GS)**

User/individual on the job needs to know how to:

- GS1. read the standard operating or repair procedure manual for different equipment
- GS2. note the process done for diagnose
- GS3. document the completed work
- GS4. to share work load as required
- to achieve the target GS5.
- **GS6.** operate computer and laptop
- **GS7.** operate the different software related to mobile phone
- GS8. download software and applications from companys website and from cloud appropriately
- GS9. to share work load as required
- **GS10.** to achieve the target
- **GS11.** to improve work processes
- **GS12.** to reduce errors and correct themselves with the experienced mistakes operate tools such as manual and electric screw drivers for disassembling and assembling of equipments
- GS13. use hot air blower/ gun for desoldering
- **GS14.** use semi-automated or automated BGA work station
- **GS15.** use other specific devices for repairs such as soldering iron, multimeter, POST cards
- **GS16.** use metal or plastic ply to open the panel of mobile phone
- **GS17.** use antistatic device such as ESD wrist strips
- **GS18.** to spot process disruptions and delays
- **GS19.** to report on any issues faced to superiors without delay
- **GS20.** is there any software error in the mobile phone which can be checked with with USB cable and can be reported / corrected from OS console





- **GS21.** whether the mobile phone is beyond repair or use and throw type or repairable
- **GS22.** whether it is the LCD plus touch panel or the battery or motherboard which is faulty and can they be replaced
- GS23. whether the motherboard can be replaced at location other than OEM
- **GS24.** are there any hardware issues with camera modules, USB ports and LED light, SOUND devices like speaker mic, antennas for BLE, WiFI, GSM/LTE, NFC, light sensors, proximity sensors, gyro sensors, GPS sensors





## **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Following standard repair procedure	4	6	-	-
<b>PC1.</b> follow the standard procedure as documented by the mobile phone brand for each model	1	1	-	-
<b>PC2.</b> take anti static precautions before work and wear ESD wrist straps or aprons	1	1	-	-
<b>PC3.</b> follow standard operating procedure while handling hardware modules such as handling PCB with ESD standards	1	1	-	-
<b>PC4.</b> use recommended tools for specific operation suggested by the brand	-	2	-	-
<b>PC5.</b> maintain zero-material defect during material handling by following standard operating procedure	1	1	-	-
Assembling and disassembling the mobile phone	5	5	-	-
<b>PC6.</b> open the outer panel of the mobile phone using metal / plastic case opening tools	1	1	-	-
<b>PC7.</b> use the brand recommended screwdrivers to remove the screws to open the inner casing	1	1	-	-
<b>PC8.</b> locate the connectors and release them to remove the motherboard from the device	1	1	-	-
<b>PC9.</b> use hot air gun and other devices to remove the LCD screen from the pane	1	1	-	-
<b>PC10.</b> follow similar process and use appropriate tools to assemble the mobile phone	1	1	-	-
Diagnosing the problem	5	10	-	-
<b>PC11.</b> understand the customer level complaint and confirm the issue	1	2	-	-
<b>PC12.</b> take preventive measures and identify if there are any other issues in the mobile phone	1	2	-	-





Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> use the self diagnostic tools (similar to power on self test (POST) card) to perform standard diagnosis process and ensure functionality of differentparts of the device	1	2	-	-
<b>PC14.</b> follow the standard diagnostic procedure as documented by the mobile phone brand for each model	1	2	-	-
<b>PC15.</b> check the recently installed application or software and verify the compatability of the software with the mobile phone	1	2	-	-
Fixing the software	6	9	-	-
<b>PC16.</b> check the recently installed application or software and verify the compatability of the software with the mobile phone	2	3	-	-
<b>PC17.</b> uninstall the applications that is not compatable or creating issues in the mobile phone	2	3	-	-
<b>PC18.</b> install the licensed and authorised softwares to resolve issues and suiting the customers requirement	2	3	-	-
Repairing the component or module	1	12	-	-
<b>PC19.</b> understand the scope of component level of repair as suggested by the brand	-	1	-	-
<b>PC20.</b> estimate the cost of repair and verify if it is with in Beyond Economic Repair (BER)	1	-	-	-
<b>PC21.</b> heat the singled out component using hot air gun to melt the solder joints and remove from PCB	-	1	-	-
<b>PC22.</b> clean the board by melting the old solder and removing	-	1	-	-
<b>PC23.</b> place the new component precisely on the board at specified location	-	1	-	-
<b>PC24.</b> solder the component on the PCB using soldering stations	-	1	-	-
<b>PC25.</b> ensure the soldering is proper and the component is fixed as per the specification	-	1	-	-





Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC26.</b> operate automated BGA (ball grid array) work station to precisely remove the chip from the board and repair them	-	1	-	-
<b>PC27.</b> perform reballing function by dismantling, heating the chip to be removed from the board, remove the solder remains, put new solder balls, place the chip and solder them with the PCB	-	1	-	-
<b>PC28.</b> check for functioning of the hardware after repairing	-	1	-	-
<b>PC29.</b> ensure that there is no damage of PCB while removal and fixing of SMD components	-	1	-	-
<b>PC30.</b> ensure other components are not damaged while using hot air gun for removal of a component which could cause damage	-	1	-	-
<b>PC31.</b> ensure adequate soldering for fixing the component and no further rework is required	-	1	-	-
Replacing faulty component	5	5	-	-
PC32. receive spare module / component from stores or OEM	1	1	-	-
<b>PC33.</b> identify and decide on replacing the module or component as the appropriate solution	1	1	-	-
<b>PC34.</b> take adequate measures and follow procedures when replacing expensive or delicate components such as LCD	1	1	-	-
<b>PC35.</b> ensure that cost of replacing is justified as the repair cost is beyond economic repair (BER)	1	1	-	-
<b>PC36.</b> ensure that replaced module or component is working and no further rework is required	1	1	-	-
Using equipment	4	4	-	-
<b>PC37.</b> identify and use appropriate tools and manuals for repairing the specific issue	1	1	-	-
PC38. prevent any accidents while handling hazardous tools	1	1	-	-





Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC39.</b> achieve results using appropriate tools for specific rework activity	1	1	-	-
<b>PC40.</b> maintain zero-material defect during material handling by following standard operating procedure for tools handling	1	1	-	-
Seeking assistance on unresolved faults	4	6	-	-
<b>PC41.</b> seek technical assistance from engineer on faults that cannot be fixed	1	1	-	-
<b>PC42.</b> receive instruction from engineers on use of specific tools or new repair processes	1	2	-	-
<b>PC43.</b> discuss with superior if the cost estimate is found to be Beyond Economic repair (BER) and take recommended action	1	2	-	-
<b>PC44.</b> coordinate with superior for performing quality check on the repaired module	1	1	-	-
Reporting and achieving productivity target	6	3	-	-
PC45. report on the work load and completion status	1	-	-	-
<b>PC46.</b> submit the appropriate documentation on completion of task assigned	1	1	-	-
<b>PC47.</b> document the work completed on the company ERP software for tracking and future references	1	1	-	-
<b>PC48.</b> achieve 100% daily and weekly target of number of repairs	1	1	-	-
<b>PC49.</b> meet the target of quality as per the Service Level Agreement (SLA) of the brand and avoid rework	1	-	-	-
<b>PC50.</b> repair within the turnaround time (TAT) and deliver them	1	-	-	-
NOS Total	40	60	-	-





## **National Occupational Standards (NOS) Parameters**

NOS Code	ELE/N8107
NOS Name	Repair and rectify the faults in mobile phone
Sector	Electronics
Sub-Sector	Communication and Broadcasting
Occupation	After Sales Service
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	31/03/2022
Next Review Date	19/07/2023
NSQC Clearance Date	19/01/2023



## **ELE/N9905: Work effectively at the workplace**

## **Description**

This unit is about the communicating and managing work effectively at the workplace as well as taking measures to enhance own competence and working in a disciplined and ethical manner.

## Scope

The scope covers the following:

- Communicate effectively at the workplace
- Work effectively
- Maintain and enhance professional competence
- Work in a disciplined and ethical manner
- Uphold social diversity at the workplace

### **Elements and Performance Criteria**

## Communicate effectively at the workplace

To be competent, the user/individual on the job must be able to:

- PC1. exchange information and instruction with colleagues, and seek clarifications and feedback as necessary
- PC2. assist colleagues where required
- PC3. follow business communication etiquette in all interactions and communicative formats (online, digital, and in-person)
- PC4. document and share all relevant information with stakeholders in agreed formats and as per agreed timelines

### Work effectively

To be competent, the user/individual on the job must be able to:

- PC5. identify and obtain clarity regarding organisational, team and own goals and targets
- PC6. prioritise and plan work in order to achieve goals and targets
- PC7. monitor own and team performance as per agreed plan
- PC8. complete duties accurately, systematically and within required timeframes
- PC9. express emotions appropriately at the workplace and manage own response to heightened emotions
- **PC10.** maintain orderliness and cleanliness in the work area

## Maintain and enhance professional competence

To be competent, the user/individual on the job must be able to:

- **PC11.** identify own strengths and weaknesses in relation to goals and targets
- **PC12.** adapt self, service, or product to meet success criteria
- **PC13.** seek and select opportunities for continuous professional development
- **PC14.** formulate a professional development plan to enhance capabilities
- **PC15.** build or contribute to the organizational knowledge base of cases, clients, issues, solutions, and innovations





- **PC16.** examine developments and trends in field of work and their potential impact on work
- **PC17.** take feedback from peers, supervisors and clients to improve own performance and practices Work in a disciplined and ethical manner

To be competent, the user/individual on the job must be able to:

- PC18. perform tasks as per workplace standards, organisational policies and legislative requirements
- **PC19.** display appropriate professional appearance at the workplace and adhere to the organisational dress code
- **PC20.** demonstrate responsible and disciplined behaviour at the workplace such as punctuality; completing tasks as per given time and standards; demonstrating professional behaviour at all times, adopting environment- friendly practices, etc.
- **PC21.** identify the cause of conflict and options for resolution with peers or escalate grievances and problems to appropriate authority as per procedure for conflict resolution
- **PC22.** protect the rights of the client and organisation when delivering services
- **PC23.** ensure services are delivered equally to all clients regardless of personal and cultural beliefs
- PC24. operate within an agreed ethical code of practice and report unethical conduct to the appropriate authorities
- **PC25.** follow organisational guidelines and legal requirements on disclosure and confidentiality Uphold social diversity at the workplace

To be competent, the user/individual on the job must be able to:

- PC26. recognize and evaluate biased practices against underrepresented groups like women and persons with disabilities, in workplace systems and processes
- PC27. identify and report discrimination and harassment based on gender, disability, or cultural difference at the workplace
- **PC28.** use inclusive or neutral language and gestures in all interactions
- **PC29.** respect the personal and professional space of others
- **PC30.** access grievance redressal mechanisms as per legislations

### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- organisation's policies on dress code, workplace timings, workplace behaviour, performance KU1. management, incentives, delivery standards, information security, etc.
- KU2. organizational hierarchy and escalation matrix
- KU3. importance of the individual's role in the workflow
- KU4. organisational norms on health, safety and sustainability
- KU5. work area inspection procedures and practices
- KU6. professional etiquette and grooming
- communication etiquette across communicative mediums (online, digital, and in-person) KU7. including strategies/methods for sharing information, documentation, and providing and receiving feedback
- **KU8.** importance of self-evaluations and developing a continuous learning and professional development plan





- KU9. developments and trends impacting professional practice
- **KU10.** importance of taking and using feedback from colleagues and clients to identify and introduce improvements in work performance
- **KU11.** professional ethics and workplace norms on reporting and/or penalizing unethical behaviour and practices.
- **KU12.** guidelines and legal requirements on disclosure, confidentiality, and conflicts of interest
- **KU13.** strategies for collaboration with colleagues and clients.
- **KU14.** professional responses and strategies against inappropriate language or behaviour toward self and others
- **KU15.** Implicit bias (based on gender, disability, class, caste, colour, race, culture, religion, etc.) and its consequences in the workplace
- **KU16.** organizational guidelines, prevalent legislations and accessibility norms and processes to support PwDs at the workplace
- **KU17.** strategies for time, effort and resource allocation towards the goals.
- KU18. basic concepts of work productivity including waste reduction, efficient material usage and optimization of time

## **Generic Skills (GS)**

User/individual on the job needs to know how to:

- GS1. complete documentation and forms such as work orders, invoices maintenance records activity logs, attendance sheets as per organizational format in English and/or local language
- GS2. write basic accident or incident report accurately in an appropriate format
- read warnings, instructions and other text material on product labels, components, etc. and GS3. relevant signages, warnings, labels or descriptions on equipment, etc. while carrying out work activities
- GS4. convey and share technical information clearly using appropriate language
- GS5. clarify task-related information
- GS6. liaise with authorities and supervisors as per organizational protocol
- listen, speak, and write in an inclusive, respectful manner in line with organizational protocol **GS7.**
- GS8. seek clarification from immediate supervisor or responsible authority or exercise most appropriate solutions to safety breaches at work
- GS9. report to the supervisor and when to deal with a colleague depending on the type of concern
- **GS10.** deliver product to next work process on time
- **GS11.** improve work process and report potential areas of delays and disruptions
- **GS12.** communicate problems appropriately to others
- **GS13.** identify symptoms of the fault to the cause of the problem and resolve, otherwise seek assistance and support from other sources to solve the problem
- **GS14.** anticipate and avoid hazards that may occur during repairs because of tools, materials used or repair processes
- **GS15.** complete tasks efficiently and accurately within stipulated time
- **GS16.** appreciate and respect social diversity in all professional settings
- **GS17.** develop awareness and accountability for perspectives on gender, disabilities, and sociocultural issues leading to discrimination, bias, or harassment at the workplace





**GS18.** maintain positive and effective relationships with colleagues and customers





## **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Communicate effectively at the workplace	5	13	-	-
<b>PC1.</b> exchange information and instruction with colleagues, and seek clarifications and feedback as necessary	1	3	-	-
PC2. assist colleagues where required	1	3	-	-
<b>PC3.</b> follow business communication etiquette in all interactions and communicative formats (online, digital, and in-person)	1	4	-	-
<b>PC4.</b> document and share all relevant information with stakeholders in agreed formats and as per agreed timelines	2	3	-	-
Work effectively	6	13	-	-
<b>PC5.</b> identify and obtain clarity regarding organisational, team and own goals and targets	1	2	-	-
<b>PC6.</b> prioritise and plan work in order to achieve goals and targets	1	2	-	-
<b>PC7.</b> monitor own and team performance as per agreed plan	1	2	-	-
<b>PC8.</b> complete duties accurately, systematically and within required timeframes	1	2	-	-
<b>PC9.</b> express emotions appropriately at the workplace and manage own response to heightened emotions	1	2	-	-
<b>PC10.</b> maintain orderliness and cleanliness in the work area	1	3	-	-
Maintain and enhance professional competence	8	7	-	-
PC11. identify own strengths and weaknesses in relation to goals and targets	1	1	_	-
PC12. adapt self, service, or product to meet success criteria	1	1	-	-
<b>PC13.</b> seek and select opportunities for continuous professional development	1	1	-	-





Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC14.</b> formulate a professional development plan to enhance capabilities	2	1	-	-
<b>PC15.</b> build or contribute to the organizational knowledge base of cases, clients, issues, solutions, and innovations	1	1	-	-
<b>PC16.</b> examine developments and trends in field of work and their potential impact on work	1	1	-	-
<b>PC17.</b> take feedback from peers, supervisors and clients to improve own performance and practices	1	1	-	-
Work in a disciplined and ethical manner	11	16	-	-
<b>PC18.</b> perform tasks as per workplace standards, organisational policies and legislative requirements	2	2	-	-
<b>PC19.</b> display appropriate professional appearance at the workplace and adhere to the organisational dress code	1	2	-	-
<b>PC20.</b> demonstrate responsible and disciplined behaviour at the workplace such as punctuality; completing tasks as per given time and standards; demonstrating professional behaviour at all times, adopting environment- friendly practices, etc.	1	2	-	-
<b>PC21.</b> identify the cause of conflict and options for resolution with peers or escalate grievances and problems to appropriate authority as per procedure for conflict resolution	2	2	-	-
<b>PC22.</b> protect the rights of the client and organisation when delivering services	1	2	-	-
<b>PC23.</b> ensure services are delivered equally to all clients regardless of personal and cultural beliefs	1	2	-	-
<b>PC24.</b> operate within an agreed ethical code of practice and report unethical conduct to the appropriate authorities	2	2	-	-
<b>PC25.</b> follow organisational guidelines and legal requirements on disclosure and confidentiality	1	2	-	-
Uphold social diversity at the workplace	10	11	-	-





Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC26.</b> recognize and evaluate biased practices against underrepresented groups like women and persons with disabilities, in workplace systems and processes	2	2	-	-
<b>PC27.</b> identify and report discrimination and harassment based on gender, disability, or cultural difference at the workplace	2	2	-	-
PC28. use inclusive or neutral language and gestures in all interactions	2	2	-	-
<b>PC29.</b> respect the personal and professional space of others	2	2	-	-
<b>PC30.</b> access grievance redressal mechanisms as per legislations	2	3	-	-
NOS Total	40	60	-	-





## **National Occupational Standards (NOS) Parameters**

NOS Code	ELE/N9905
NOS Name	Work effectively at the workplace
Sector	Electronics
Sub-Sector	Generic
Occupation	Generic - Organizational Behaviour
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	24/02/2022
Next Review Date	30/12/2026
NSQC Clearance Date	30/12/2021



## **ELE/N1002:** Apply health and safety practices at the workplace

## **Description**

This OS unit is about knowledge and practices relating to health, safety and security that candidates need to use in the workplace.

## Scope

The scope covers the following:

- Deal with workplace hazards
- Apply fire safety practices
- Follow emergencies, rescue and first-aid procedures
- Effective waste management/recycling practices

### **Elements and Performance Criteria**

### Deal with workplace hazards

To be competent, the user/individual on the job must be able to:

- identify job-site hazards and possible causes of accident in the workplace
- PC2. perform work complying to organizational safe working practices and observing hazard signs displayed on containers, equipment and in various work areas such as inside buildings, in open areas and public spaces, etc.
- PC3. use appropriate personal protective equipment (PPE) for specific tasks and work conditions, contaminant (concentration w.r.t air) requirements and severity of hazard while conforming to the Indian/International standards
- PC4. follow standard safety procedures while handling tool/, equipment, hazardous substances and while working in hazardous environments
- PC5. dispose electronic waste (such as toxins; metals such as lead, cadmium, barium; flame retardant plastics, welding slag etc.) as per industry approved techniques
- PC6. avoid damage of components due to negligence in electrostatic discharge (ESD) procedures
- PC7. locate general health and safety equipment in the workplace such as fire extinguishers; first aid equipment; safety instruments, clothing and installations (fire exits, exhaust fans)
- PC8. maintain appropriate posture while handling heavy objects
- PC9. apply good housekeeping practices at all times

### Apply fire safety practices

To be competent, the user/individual on the job must be able to:

- PC10. take preventive measures to prevent fire hazards
- **PC11.** use appropriate fire extinguishers for different types of fires
  - Types of fires: Class A: e.g. ordinary solid combustibles, such as wood, paper, cloth, plastic, charcoal, etc.; Class B: flammable liquids and gases, such as gasoline, propane, diesel fuel, tar, cooking oil, and similar substances; Class C: e.g. electrical equipment such as appliances, wiring, breaker panels, etc. (These categories of fires become Class A, B, and D fires when the electrical equipment that initiated the fire is no I
- **PC12.** exhibit rescue and first-aid techniques in case of fire or electrocution

Follow emergencies, rescue and first-aid procedures





To be competent, the user/individual on the job must be able to:

- **PC13.** administer appropriate first aid to victims in case of bleeding, burns, choking, electric shock, poisoning etc.
- **PC14.** administer first aid to victims in case of a heart attack or cardiac arrest due to electric shock,
- PC15. participate regularly in emergency procedures such as raising alarm, safe/efficient, evacuation, correct means of taking shelter and escaping, correct assembly point, roll call, correct return to work
- **PC16.** use correct method to move injured people and others during an emergency

### Effective waste management/recycling practices

To be competent, the user/individual on the job must be able to:

- PC17. identify recyclable and non-recyclable, and hazardous waste generated
- **PC18.** segregate waste into different categories
- **PC19.** ensure disposal of non-recyclable waste appropriately
- **PC20.** deposit non-recyclable and reusable material at identified location
- PC21. follow processes specified for disposal of hazardous waste

## **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- KU1. importance of working in clean and safe work environment following safety practices and procedures
- KU2. health and safety roles and responsibilities of relevant personnel within and outside the organisation
- KU3. key internal and external sources of health and safety information
- KU4. basic knowledge of electronic devices and related health risks
- KU5. meaning of hazards and risks
- KU6. various types of health and safety hazards commonly present in the work environment such as physical hazards, electrical hazards, chemical hazards, fire hazards, equipment related hazards, health hazards, etc.
- KU7. methods of accident prevention
- **KU8.** importance of using protective clothing/equipment while working
- KU9. general principles for identifying and controlling health and safety risks
- **KU10.** main hazards and preventive as well as control measures while working with different types of equipment
- **KU11.** importance of carrying out electrical and non-electrical isolation to prevent hazards from loss of machine/system/process control
- **KU12.** main hazards and preventive as well as control measures when working with electrical systems or using electrical equipment
- KU13. forms and classifications of hazardous substances
- **KU14.** safe working practices while working at various hazardous sites
- **KU15.** prevention and control measures to reduce risks from exposure to hazardous substances
- **KU16.** health effects associated with exposure to noise and vibration and the appropriate control measures





- **KU17.** precautionary activities to prevent the fire accident
- **KU18.** various causes of fire such as heating of metal, spontaneous ignition, sparking, electrical eating, loose fires (smoking, welding, etc.) chemical fires etc.
- **KU19.** techniques of using the different fire extinguishers
- **KU20.** different methods and material to extinguish fires
- **KU21.** different materials used for extinguishing fire such as sand, water, foam, CO2, dry powder
- **KU22.** rescue techniques used during a fire hazard
- **KU23.** various types of safety signs and their meaning
- **KU24.** basic first aid treatment relevant to the common work place injuries e.g. shock, electrical shock, bleeding, breaks to bones, minor burns, resuscitation, poisoning, eye injuries
- KU25. contents of written accident report
- **KU26.** potential injuries and ill health associated with incorrect handing of tools and equipment
- **KU27.** safe lifting and carrying practices
- **KU28.** potential impact to a person who is moved incorrectly
- **KU29.** personal safety, health and dignity issues relating to the movement of a person by others
- KU30. ESD measures and 5S
- **KU31.** efficient utilization and management of material and water
- **KU32.** ways to recognize common electrical problems and practices of conserving electricity
- **KU33.** usage of different colours of dustbins, categorization of waste into dry, wet, recyclable, nonrecyclable and items of single-use plastics
- **KU34.** organization's procedure for minimizing waste
- **KU35.** waste management and methods of waste disposal
- **KU36.** common sources of pollution and ways to minimize it
- **KU37.** names, contact information and location of people responsible for health and safety in the workplace
- **KU38.** location of documents and equipment for health and safety compliance/practices in the workplace
- **KU39.** safety notices, signs and instructions at workplace

### **Generic Skills (GS)**

User/individual on the job needs to know how to:

- interpret general health and safety guidelines labels, charts, signages GS1.
- GS2. read operation manuals
- GS3. write health and safety compliance report
- GS4. write an accident/incident report in local language or English
- GS5. provide an emergency or safety incident brief to seniors or relevant authorities in a calm, clear and to-the-point manner
- communicate general health and safety guidelines to colleagues/co-workers GS6.
- **GS7.** communicate appropriately with co-workers in order to clarify instructions and other issues
- **GS8.** act in case of any potential hazards observed in the work place





- GS9. plan and organize their own work schedule, work area, tools, equipment in compliance with organizational policies for health, safety and security
- **GS10.** take adequate measures to ensure the safety of clients and visitors at the workplace
- **GS11.** identify immediate or temporary solutions to resolve delays
- **GS12.** evaluate the work area for health and safety risks or hazards
- **GS13.** use cause and effect relations to anticipate potential issues, problems and their solution in the work area related to safety
- **GS14.** recognise emergency and potential emergency situations
- **GS15.** protect self and others from a health and safety risk or hazard
- **GS16.** communicate and collaborate to incorporate sustainable practices (greening) in workplace processes
- **GS17.** record data on waste disposal at workplace





## **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Deal with workplace hazards	20	31	-	-
<b>PC1.</b> identify job-site hazards and possible causes of accident in the workplace	2	3	-	-
<b>PC2.</b> perform work complying to organizational safe working practices and observing hazard signs displayed on containers, equipment and in various work areas such as inside buildings, in open areas and public spaces, etc.	3	4	-	-
PC3. use appropriate personal protective equipment (PPE) for specific tasks and work conditions, contaminant (concentration w.r.t air) requirements and severity of hazard while conforming to the Indian/International standards	3	4	-	-
<b>PC4.</b> follow standard safety procedures while handling tool/ ,equipment, hazardous substances and while working in hazardous environments	3	4	-	-
<b>PC5.</b> dispose electronic waste (such as toxins; metals such as lead, cadmium, barium; flame retardant plastics, welding slag etc.) as per industry approved techniques	2	4	-	-
<b>PC6.</b> avoid damage of components due to negligence in electrostatic discharge (ESD) procedures	2	3	-	-
<b>PC7.</b> locate general health and safety equipment in the workplace such as fire extinguishers; first aid equipment; safety instruments, clothing and installations (fire exits, exhaust fans)	2	3	-	-
PC8. maintain appropriate posture while handling heavy objects	1	3	-	-
PC9. apply good housekeeping practices at all times	2	3	-	-
Apply fire safety practices	4	9	-	-
PC10. take preventive measures to prevent fire hazards	2	3	-	-





Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<ul> <li>PC11.</li> <li>use appropriate fire extinguishers for different types of fires</li> <li>Types of fires: Class A: e.g. ordinary solid combustibles, such as wood, paper, cloth, plastic, charcoal, etc.; Class B: flammable liquids and gases, such as gasoline, propane, diesel fuel, tar, cooking oil, and similar substances; Class C: e.g. electrical equipment such as appliances, wiring, breaker panels, etc. (These categories of fires become Class A, B, and D fires when the electrical equipment that initiated the fire is no l</li> </ul>	1	3	-	-
<b>PC12.</b> exhibit rescue and first-aid techniques in case of fire or electrocution	1	3	-	-
Follow emergencies, rescue and first-aid procedures	6	13	-	-
<b>PC13.</b> administer appropriate first aid to victims in case of bleeding, burns, choking, electric shock, poisoning etc.	1	3	-	-
<b>PC14.</b> administer first aid to victims in case of a heart attack or cardiac arrest due to electric shock,	1	2	-	-
<b>PC15.</b> participate regularly in emergency procedures such as raising alarm, safe/efficient, evacuation, correct means of taking shelter and escaping, correct assembly point, roll call, correct return to work	2	4	-	-
<b>PC16.</b> use correct method to move injured people and others during an emergency	2	4	_	-
Effective waste management/recycling practices	5	12	-	-
<b>PC17.</b> identify recyclable and non-recyclable, and hazardous waste generated	1	3	-	-
PC18. segregate waste into different categories	1	2	-	-
<b>PC19.</b> ensure disposal of non-recyclable waste appropriately	1	2	-	-
<b>PC20.</b> deposit non-recyclable and reusable material at identified location	1	3	-	-
<b>PC21.</b> follow processes specified for disposal of hazardous waste	1	2	-	-





Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks	
NOS Total	35	65	-	-	





## **National Occupational Standards (NOS) Parameters**

NOS Code	ELE/N1002
NOS Name	Apply health and safety practices at the workplace
Sector	Electronics
Sub-Sector	Generic
Occupation	Generic - Health Safety
NSQF Level	4
Credits	TBD
Version	3.0
Last Reviewed Date	24/02/2022
Next Review Date	24/02/2025
NSQC Clearance Date	24/02/2022

## Assessment Guidelines and Assessment Weightage

### **Assessment Guidelines**

- 1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Element/ Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each Element/ PC.
- 2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
- 3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
- 4. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
- 5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
- 6. To pass the Qualification Pack assessment, every trainee should score the Recommended Pass % aggregate for the QP.
- 7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.





Minimum Aggregate Passing % at QP Level: 70

(**Please note**: Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

## **Assessment Weightage**

## Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
ELE/N8104.Interact with customer and perform front end repair	40	60	-	-	100	35
ELE/N8107.Repair and rectify the faults in mobile phone	40	60	-	-	100	35
ELE/N9905.Work effectively at the workplace	40	60	-	-	100	15
ELE/N1002.Apply health and safety practices at the workplace	35	65	-	_	100	15
Total	155	245	-	-	400	100





## **Acronyms**

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
RAM	Random Access Memory
IC	Integrated Circuit
СРИ	Central Processing Unit
GPS	Global Positioning System
ESD	Electro Static Discharge





# Glossary

Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria (PC)	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (NOS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.
Knowledge and Understanding (KU)	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.





Organisational Context	Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills (GS)	Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
Electives	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
Options	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.