

## QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR ELECTRONICS INDUSTRY

### What are Occupational Standards(OS)?

- OS describe what individuals need to do, know and understand in order to carry out a particular job role or function
- OS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding

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### Introduction

## Qualifications Pack – LED Light Repair Technician

**SECTOR:** ELECTRONICS

**SUB-SECTOR:** LED LIGHTING

**OCCUPATION:** LED Light Testing and Quality Assurance

**REFERENCE ID:** ELE/Q9302

**ALIGNED TO:** NCO-2004/NIL

**LED Light Repair Technician:** The LED Light Repair Technician is responsible for mending the non-functional LED light.

**Brief Job Description:** The individual at work checks the non-functional LED light in a systematic manner to find out the fault; dismantles it; repairs the fault and reassemble the light to make it functional.

**Personal Attributes:** The job requires the individual to be self-motivated, inquisitive, analytical with attention to details, able to work as an individual; and goal oriented, and have stamina for working long hours in sitting position.

Qualifications Pack For LED Light Repair Technician

Job Details	Qualifications Pack Code	ELE/Q9302		
	Job Role	LED Light Repair Technician		
	Credits(NSQF) [OPTIONAL]	TBD	Version number	1.0
	Sector	Electronics	Drafted on	19/05/14
	Sub-sector	LED Lighting	Last reviewed on	24/06/14
	Occupation	Testing and Quality Assurance	Next review date	24/06/15

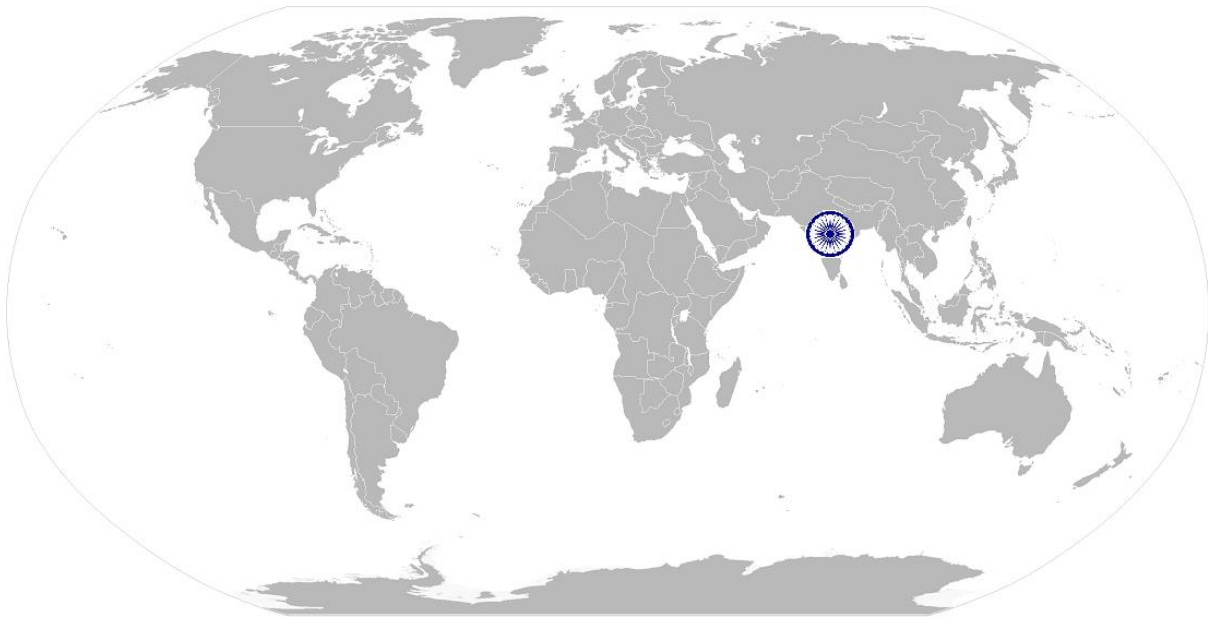
Job Role	LED Light Repair Technician
Role Description	Check the non-functional LED Light in as per standard procedure to find out the fault; dismantle the LED Light; repair the fault and reassemble the light to make it functional
NSQF level	4
Minimum Educational Qualifications	ITI
Maximum Educational Qualifications	Diploma
Training	Not Applicable
Experience	1 year experience in LED Light repair
Applicable National Occupational Standards (NOS)	<p><b>Compulsory:</b></p> <ol style="list-style-type: none"> <li><a href="#">ELE/N9302 Diagnose and repair fault in LED Light</a></li> <li><a href="#">ELE/N9919 Work with superiors and colleagues</a></li> <li><a href="#">ELE/N9921 Follow safety standards</a></li> </ol> <p><b>Optional:</b> Not applicable</p>
Performance Criteria	As described in the relevant OS units

**ELE/N9302**

**Diagnose and repair fault in LED Light**

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# National Occupational Standard



## Overview

This unit is about diagnosing the fault in the non-functional LED Light and fixing it to make the light operational again.

**ELE/N9302**

**Diagnose and repair fault in LED Light**

National Occupational Standard

<b>Unit Code</b>	<b>ELE/9301</b>
<b>Unit Title (Task)</b>	<b>Diagnose and repair fault in LED Light</b>
<b>Description</b>	This OS unit is about diagnosing the fault in the non-functional LED Light and mending it to make the light operational again.
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>Find and repair component-level fault</li> <li>Find and repair LED strip-level fault</li> <li>Achieve productivity and quality standards</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Finding and repairing component level fault</b>	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. connect the non-functional LED Light with the AC source and switch it on</p> <p>PC2. check that there is no loose, de-soldered wires and connections if the light does not switch on</p> <p>PC3. solder wires and make connections in case of loose, de-soldered wires and connections to make the light operational again</p> <p>PC4. dismantle the LED light if no loose, de-soldered wires and connections are found externally</p> <p>PC5. check the LED light engine with DC supply as per the voltage / current requirements of the product</p> <p>PC6. replace the LED light engine if it is found faulty</p> <p>PC7. check the supply unit with AC supply / multimeter to find out the voltage / current output in case LED light Engine is not found defective</p> <p>PC8. check voltage / current output at different sections of the supply unit with multimeter to find out its damaged section in case of no voltage / current output found in supply unit</p> <p>PC9. check the components with multimeter individually of the section where voltage output is found to be less than desired / no output</p> <p>PC10. repair / replace the damaged components / SMPs</p> <p>PC11. check output voltage/current of the supply unit again with multimeter</p> <p>PC12. reassemble the LED light if repaired / replaced supply unit is found okay</p>
<b>Finding and repairing LED strip level fault</b>	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC13. connect the non-functional LED Light with the AC source and switch it on</p> <p>PC14. check how many LED strips are non-functional / damaged from the array of LED strips in the light</p> <p>PC15. remove the glass shell from the LED light</p> <p>PC16. replace the burnt out / damaged LED strips</p> <p>PC17. check the LED array after connecting it with AC source and switching it on</p> <p>PC18. replace the glass shell on the LED Light and close it if all the strips are found operational</p>
<b>Achieving productivity and</b>	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC19. correctly find the root cause of non-functional LED light and repair it in</p>

## ELE/N9302

## Diagnose and repair fault in LED Light

quality standards	<p>minimum possible time</p> <p>PC20. document the fault diagnosis and repair process as per SOP</p>
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context</b> (Knowledge of the company / organization and its processes)	<p>The individual on the job needs to know and understand:</p> <p>KA1. company's policies on: incentives, testing &amp; repairing standards and personnel management</p> <p>KA2. company's standard operating procedures and processes related to LED Luminary product testing and repair</p> <p>KA3. importance of the individual's role in the workflow</p> <p>KA4. reporting structure</p> <p>KA5. safety and quality standards followed in the organization</p>
<b>B. Technical Knowledge</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. various electronic &amp; electrical components, materials and their specific properties &amp; usages</p> <p>KB2. basics of power electronics and its usages in lighting controls, or LED power supplies and LED drivers</p> <p>KB3. special safety and handling precautions to be taken during LED luminary testing</p> <p>KB4. 5S standards (sorting, setting, standardise, sustain, shining) + safety, security</p>
<b>Skills (S) [Optional]</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Reading and Writing Skills</b>
	<p>The user/individual on the job needs to know and understand how:</p> <p>SA1. to read values on components</p> <p>SA2. to write LED light fault diagnosing and repair process as per company's specified format</p>
	<b>Communication Skills</b>
	<p>The user/individual on the job needs to know and understand how:</p> <p>SA3. to effectively communicate with colleagues about fault diagnosing and repairing methods</p> <p>SA4. to effectively communicate with supervisor to understand the repairing methods of the LED light</p> <p>SA5. to communicate about routinely found faults in LED lights</p>
<b>B. Professional Skills</b>	<b>Analytical Thinking</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB1. analysis of voltage / current output of various sections and components of the supply unit</p> <p>SB2. analysis of the Led light diagram to understand and select sections for fault diagnosis</p>
	<b>Using Tools</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB3. use multimeter, tester, LCR meter and power analyzer</p>

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**Diagnose and repair fault in LED Light**

	<b>Planning</b>
	The user/individual on the job needs to know and understand how: SB4. to plan for fault diagnosis and repair in systematic way
	<b>Problem solving</b>
	The user/individual on the job needs to know and understand how: SB5. to find and use alternate components for damaged components / sections in case of non availability of the same components SB6. to recalibrate the testing tools like multimeter in case it is not working properly

**ELE/N9302**

**Diagnose and repair fault in LED Light**

## **NOS Version Control**

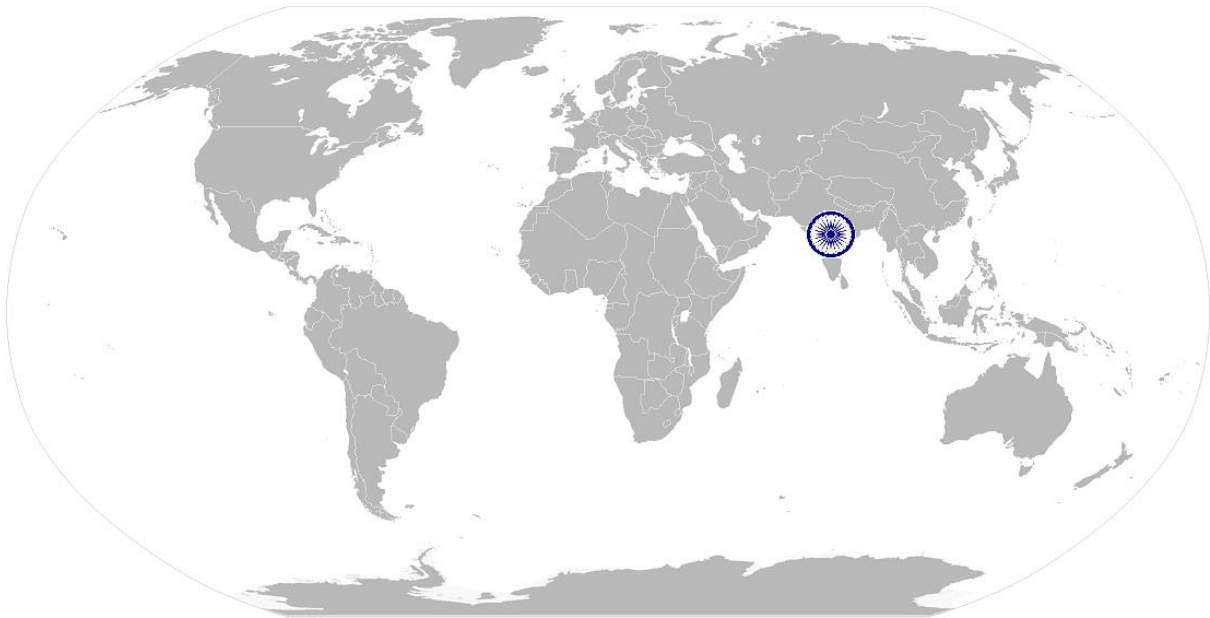
<b>NOS Code</b>	<b>ELE/N9302</b>		
<b>Credits(NSQF) [OPTIONAL]</b>	<b>TBD</b>	<b>Version number</b>	<b>1.0</b>
<b>Industry</b>	<b>Electronics</b>	<b>Drafted on</b>	<b>19/05/14</b>
<b>Industry Sub-sector</b>	<b>LED</b>	<b>Last reviewed on</b>	<b>24/06/14</b>
		<b>Next review date</b>	<b>24/06/15</b>

**ELE/N9919**

**Work with superiors and colleagues**

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# National Occupational Standard



## Overview

This unit is about the individual's level of communication with colleagues and other departments within the organisation. It determines the ability to work as a team member to achieve the required deliverables on schedule.

## ELE/N9919

## Work with superiors and colleagues

### National Occupational Standard

Unit Code	ELE/N9919
Unit Title (Task)	Work with superiors and colleagues
Description	This OS unit is about communicating, coordinating and maintaining proper relationship with colleagues and seniors in order to achieve smooth work flow
Scope	<p>This unit/ task covers the following:</p> <ul style="list-style-type: none"> <li>Interact with supervisor or superior</li> <li>Coordinate with colleagues</li> </ul>
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
<b>Interacting with supervisor</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. understand work requirements by receiving instructions from reporting supervisor</p> <p>PC2. understand standard operating procedure of the company</p> <p>PC3. escalate problems that cannot be handled including repetitive PCB defects, machine failures, potential hazards, process disruptions, repairs and maintenance of machine</p> <p>PC4. report work completed and receive feedback on work done</p> <p>PC5. resolve personnel issues</p> <p>PC6. rectify errors as per feedback and minimize mistakes to zero in future</p> <p>PC7. communicate about process flow improvements, quality of output, product defects received from previous process, repairs and maintenance of tools and machinery as required and find technical solutions on specific issues</p> <p>PC8. handover completed work and deliver the work of expected quality despite constraints</p>
<b>Interacting with colleagues</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC9. collect required spares and raw materials from tool room or stores</p> <p>PC10. deposit unused or faulty materials, parts and tools to stores</p> <p>PC11. assist colleagues where necessary and as per capability</p> <p>PC12. resolve conflicts with colleagues at work to achieve smooth workflow</p> <p>PC13. complete rework in time based on feedback from quality or process departments</p> <p>PC14. put team over individual goals</p>
Knowledge and Understanding (K)	
<b>A. Organizational Context</b> (Knowledge of the company / organization and its processes)	<p>The individual on the job needs to know and understand:</p> <p>KA1. company's policies on: incentives, delivery standards, and personnel management</p> <p>KA2. work flow involved in company's process</p> <p>KA3. importance of the individual's role in the workflow</p> <p>KA4. reporting structure</p>

# **ELE/N9919**

## **Work with superiors and colleagues**

<b>B. Technical Knowledge</b>	<p>The individual on the job needs to know and understand:</p> <p>KB1. how to communicate effectively</p> <p>KB2. how to build team coordination</p>
<b>Skills (S) [Optional]</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Teamwork and Multitasking</b>
	<p>The individual on the job needs to know and understand how:</p> <p>SA1. to deliver product to next work process on time</p> <p>SA2. to share work load as required</p>
<b>B. Professional Skills</b>	<b>Decision Making</b>
	<p>The individual on the job needs to know and understand:</p> <p>SB1. how to report potential areas of disruptions to work process</p> <p>SB2. when to report to supervisor and when to deal with a colleague depending on the type of concern</p>
	<b>Reflective Thinking</b>
	<p>The individual on the job needs to know and understand:</p> <p>SB3. To reduce repetitive errors and improve work process</p>
	<b>Critical Thinking</b>
	<p>The individual on the job needs to know and understand:</p> <p>SB4. how to spot process disruptions and delays</p>

**ELE/N9919**

**Work with superiors and colleagues**

## **NOS Version Control**

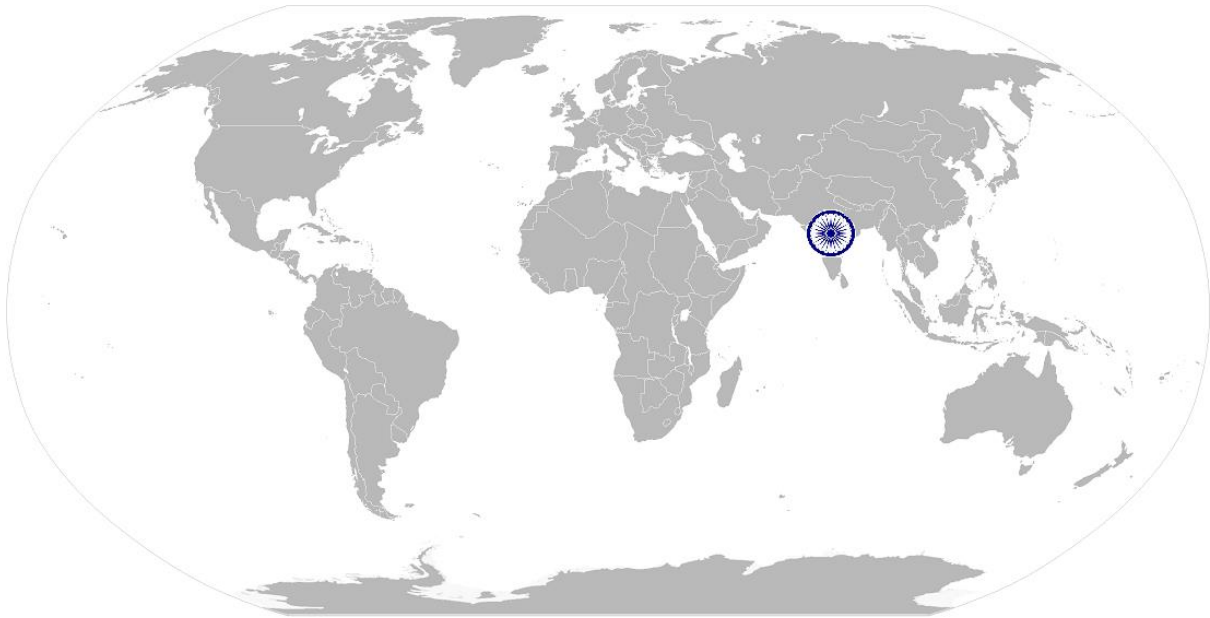
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<b>Credits(NSQF) [OPTIONAL]</b>	<b>TBD</b>	<b>Version number</b>	<b>1.0</b>
<b>Industry</b>	<b>Electronics</b>	<b>Drafted on</b>	<b>10/03/14</b>
<b>Industry Sub-sector</b>	<b>Passive Components</b>	<b>Last reviewed on</b>	<b>24/03/14</b>
		<b>Next review date</b>	<b>24/03/15</b>

**ELE/N9921**

**Follow safety standards**

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# National Occupational Standard



## Overview

This unit is about the worker's commitment towards reporting potential hazards and containing accidents in order to make the work environment safe, healthy and secure, for self and colleagues

## ELE/N9921

## Follow safety standards

### National Occupational Standard

Unit Code	ELE/N9921
Unit Title (Task)	Follow safety standards
Description	This OS unit is about following safety procedures, communicating potential hazards and dangers of accidents on the job
Scope	<p>This unit/ task covers the following:</p> <ul style="list-style-type: none"> <li>Understand potential sources of accidents</li> <li>Use safety gear to avoid accidents</li> <li>Understand the safety procedures followed by the company</li> </ul>
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
<b>Understanding potential sources of accidents</b>	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. spot and report potential hazards on time</p> <p>PC2. follow company policy and rules regarding hazardous materials</p> <p>PC3. avoid accidents related to use of potentially dangerous chemicals, gases, sharp tools and hazards from machines which involves exposure to possible injuries such as cuts, bites, stings, minor burns, etc.</p> <p>PC4. Handle with care when using an electrical drill and sharp cutting objects</p>
<b>Using safety gear</b>	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC5. understand which safety gear must be used for a particular task</p> <p>PC6. eye, respiratory and hearing protection as per company policy</p> <p>PC7. use safety gear such as respirator, mask, skull caps, gloves, goggles, jacket , etc., as prescribed for the job</p>
<b>Understanding of safety procedures</b>	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC8. comply with standard health and safety procedure followed in the company while handling an equipment and hazardous materials and tools or situations</p> <p>PC9. understand and follow the evacuation procedure properly such as fire drills, emergency evacuation procedures, first aid to self and others, etc., which help in case of an emergency</p>
<b>Following daily safety measure</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC10. take adequate safety measures while on work to prevent accidents</p> <p>PC11. ensure zero accidents in work</p> <p>PC12. avoid damage of components due to negligence in ESD procedures</p> <p>PC13. ensure no loss for company due to safety negligence</p> <p>PC14. ensure proper machine maintenance, work process achieving quality outputs as per the company standard</p>
<b>Communicating to supervisor</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC15. improve process flow to reduce anticipated or repetitive hazards</p> <p>PC16. report on mishandling of tools, machines or hazardous materials and on electrical problems that could result in accident</p> <p>PC17. escalate about any hazardous materials or things found in the premises</p> <p>PC18. report about any breach of safety procedure in the company</p> <p>PC19. follow electrostatic discharge (ESD) measures for electronic component safety</p>

## ELE/N9921

## Follow safety standards


Knowledge and Understanding (K)	
<b>A. Organizational Context</b> (Knowledge of the company / organization and its processes)	<p>The individual on the job needs to know and understand:</p> <p>KA1. company's policies on handling: harmful chemicals and sharp tools, safety and hazards of machines, fire safety/drill, first aid and, disposal of harmful chemicals and materials, quality standards</p> <p>KA2. company occupational safety and health policy followed</p> <p>KA3. company emergency evacuation procedure</p> <p>KA4. company's medical policy</p>
<b>B. Technical Knowledge</b>	<p>The individual on the job needs to know and understand:</p> <p>KB1. how to maintain the work area safe and secure</p> <p>KB2. how to handle hazardous material</p> <p>KB3. how to follow safety procedures while operating hazardous tools and equipment</p> <p>KB4. emergency procedures to be followed such as fire accidents and fire safety education</p> <p>KB5. how to use machines and tools without causing bodily harm</p> <p>KB6. first aid execution</p> <p>KB7. disposal of hazardous chemicals, tools and materials by following prescribed environmental norms or as per company policy</p>
Skills (S) [Optional]	
<b>A. Core Skills/ Generic Skills</b>	<p><b>Communication Skills</b></p> <p>The individual on the job needs to know and understand how:</p> <p>SA1. to effectively communicate the danger</p> <p>SA2. to understand the quality standard of the company</p>
<b>B. Professional Skills</b>	<p><b>Reflective Thinking</b></p> <p>The individual on the job needs to know and understand how:</p> <p>SA3. to learn from past mistakes regarding use of hazardous machines, tools or chemicals</p> <p><b>Critical Thinking</b></p> <p>The individual on the job needs to know and understand:</p> <p>SA4. how to spot danger</p> <p>SA5. procedure to follow in the event of a fire or other hazard</p> <p><b>Handling Safety Equipment</b></p> <p>The individual on the job needs to know and understand:</p> <p>SA6. to wear gloves, goggles, masks, caps, shoes, coats, etc.</p> <p>SA7. to use safety equipment such as fire extinguisher during fire accidents</p> <p><b>Decision Making</b></p> <p>The individual on the job needs to know and understand:</p> <p>SA8. importance of reporting potential sources of danger</p> <p>SA9. appropriate actions to be taken in the event of an accident</p> <p>SA10. procedure for disposing of hazardous materials, safely and following environmental guidelines</p>

**ELE/N9921**

**Follow safety standards**

## NOS Version Control

NOS Code	ELE/N9921		
Credits(NSQF) [OPTIONAL]	TBD	Version number	1.0
Industry	Electronics	Drafted on	10/03/14
Industry Sub-sector	Passive Components	Last reviewed on	24/03/14
		Next review date	24/03/15

CRITERIA FOR ASSESSMENT OF TRAINEES				
				
Job Role	LED Light Repair Technician			
QP #	ELE/Q9302			
Sector Skill Council	Electronics Sector Skills Council of India			
Guidelines for Assessment:				
1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each 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 PC.				
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.				
3. Individual assessment agencies will create <i>unique question papers for theory part for each candidate at each examination/training center</i> (as per assessment criteria below)				
4. Individual assessment agencies will create <i>unique evaluations for skill practical for every student at each examination/training center</i> based on this criteria				
5. To pass the Qualification Pack , every trainee should score a minimum of 70% in every NOS				
6. In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.				
				Marks Allocation

# **ELE/N9921**

## **Follow safety standards**

Element	Performance Criteria	Total Marks (400)	Out Of	Theory	Skills Practical
<b>ELE/N9302 Diagnose and repair fault in LED Light</b>					
<b>Finding and repairing component level fault</b>	PC1. connect the non-functional LED Light with the AC source and switch it on	<b>100</b>	2	1	1
	PC2. check that there is no loose, de-soldered wires and connections if the light does not switch on		2	1	1
	PC3. solder wires and make connections in case of loose, de-soldered wires and connections to make the light operational again		2	1	1
	PC4. dismantle the LED light if no loose, de-soldered wires and connections are found externally		2	1	1
	PC5. check the LED light engine with DC supply as per the voltage / current requirements of the product		2	1	1
	PC6. replace the LED light engine if it is found faulty		3	1	2
	PC7. check the supply unit with AC supply / multimeter to find out the voltage / current output in case LED light Engine is not found defective		3	1	2
	PC8. check voltage / current output at different sections of the supply unit with multimeter to find out its damaged section in case of no voltage / current output found in supply unit		2	1	1
	PC9. check the components with multimeter individually of the section where voltage output is found to be less than desired / no output		3	1	2
	PC10. repair / replace the damaged components / SMPs		3	1	2
	PC11. check output voltage/current of the supply unit again with multimeter		3	1	2
	PC12. reassemble the LED light if repaired / replaced supply unit is found okay		3	1	2
<b>Finding and repairing LED strip level fault</b>	PC13. connect the non-functional LED Light with the AC source and switch it on		5	2	3
	PC14. check how many LED strips are non-functional / damaged from the array of LED strips in the light		5	3	2
	PC15. remove the glass shell from the LED light		5	2	3
	PC16. replace the burnt out / damaged LED strips		5	2	3
	PC17. check the LED array after connecting it with AC		5	2	3

### ELE/N9921

### Follow safety standards

	source and switching it on				
	PC18. replace the glass shell on the LED Light and close it if all the strips are found operational		5	2	3
<b>Fixing glass shell and packing the final product</b>	PC19. correctly find the root cause of non-functional LED light and repair it in minimum possible time		8	3	5
	PC20. document the fault diagnosis and repair process as per SOP		8	3	5
<b>Achieving productivity and quality of standards</b>	PC25. assemble all the parts as per the product design to create LED luminary		8	3	5
	PC26. assemble the product right first time so that rework is not required		8	3	5
	PC27. meet 100% daily target of defect free assembled LED luminaries		8	3	5
		<b>Total</b>	100	40	60
<b>ELE/N9919 Work with superiors and colleagues</b>					
<b>Interacting with supervisor</b>	PC1. understand work requirements by receiving instructions from reporting supervisor	<b>100</b>	6	2	4
	PC2. understand standard operating procedure of the company		6	2	4
	PC3. escalate problems that cannot be handled including repetitive PCB defects, machine failures, potential hazards, process disruptions, repairs and maintenance of machine		6	2	4
	PC4. report work completed and receive feedback on work done		6	2	4
	PC5. resolve personnel issues		7	3	4
	PC6. rectify errors as per feedback and minimize mistakes to zero in future		7	3	4
	PC7. communicate about process flow improvements, quality of output, product defects received from previous process, repairs and maintenance of tools and machinery as required and find technical solutions on specific issues		7	3	4
	PC8. handover completed work and deliver the work of expected quality despite constraints		7	3	4
<b>Interacting with colleagues</b>	PC9. collect required spares and raw materials from tool room or stores		8	3	5
	PC10. deposit unused or faulty materials, parts and tools to stores		8	3	5

### ELE/N9921

### Follow safety standards

	PC11. assist colleagues where necessary and as per capability		8	3	5
	PC12. resolve conflicts with colleagues at work to achieve smooth workflow		8	3	5
	PC13. complete rework in time based on feedback from quality or process departments		8	4	4
	PC14. put team over individual goals		8	4	4
		<b>TOTAL</b>	100	40	60
<b>ELE/N9921 Follow safety standards</b>					
<b>Understanding potential sources of accidents</b>	PC1. spot and report potential hazards on time	<b>100</b>	5	2	3
	PC2. follow company policy and rules regarding hazardous materials		5	2	3
	PC3. avoid accidents related to use of potentially dangerous chemicals, gases, sharp tools and hazards from machines which involves exposure to possible injuries such as cuts, bites, stings, minor burns, etc.		5	2	3
	PC4. Handle with care when using an electrical drill and sharp cutting objects		5	2	3
<b>Using safety gear</b>	PC5. understand which safety gear must be used for a particular task		6	3	3
	PC6. eye, respiratory and hearing protection as per company policy		7	3	4
	PC7. use safety gear such as respirator, mask, skull caps, gloves, goggles, jacket , etc., as prescribed for the job		7	3	4
<b>Understanding of safety procedures</b>	PC8. comply with standard health and safety procedure followed in the company while handling an equipment and hazardous materials and tools or situations		10	4	6
	PC9. understand and follow the evacuation procedure properly such as fire drills, emergency evacuation procedures, first aid to self and others, etc., which help in case of an emergency		10	4	6
<b>Following daily safety measure</b>	PC10. take adequate safety measures while on work to prevent accidents		4	2	2
	PC11. ensure zero accidents in work		4	2	2
	PC12. avoid damage of components due to negligence in ESD procedures		4	2	2
	PC13. ensure no loss for company due to safety negligence		4	2	2

**ELE/N9921**

**Follow safety standards**

	PC14. ensure proper machine maintenance, work process achieving quality outputs as per the company standard		4	2	2
<b>Communicating to supervisor</b>	PC15. improve process flow to reduce anticipated or repetitive hazards		4	1	3
	PC16. report on mishandling of tools, machines or hazardous materials and on electrical problems that could result in accident		4	1	3
	PC17. escalate about any hazardous materials or things found in the premises		4	1	3
	PC18. report about any breach of safety procedure in the company		4	1	3
	PC19. follow electrostatic discharge (ESD) measures for electronic component safety		4	1	3
		<b>TOTAL</b>	100	40	60

Qualifications Pack For LED Light Repair Technician

Definitions

Keywords /Terms	Description
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.
Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or an area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of OS.
Sub-function	Sub-functions are sub-activities essential to fulfil the achieving the objectives of the function.
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 they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria	Performance criteria are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (OS)	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	Knowledge and understanding 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.

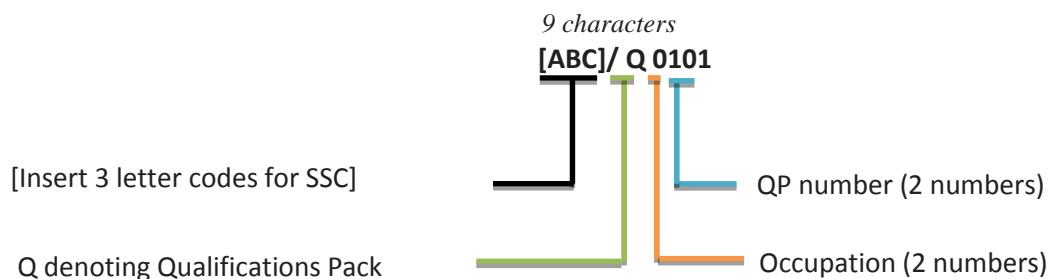
*Qualifications Pack For LED Light Repair Technician*

Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills	Core skills or generic skills 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.
Keywords /Terms	Description
IPR	Intellectual Property Rights
NOS	National Occupational Standard(s)
NVQF	National Vocational Qualifications Framework
NSQF	National Qualifications Framework
NVEQF	National Vocational Education Qualifications Framework
QP	Qualifications Pack

## Annexure

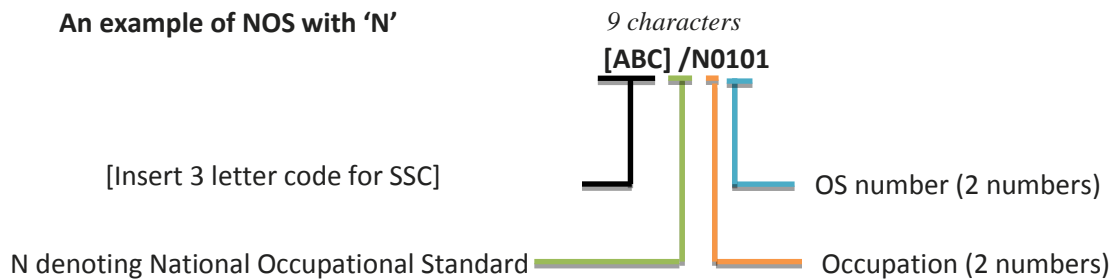
### Nomenclature for QP and NOS

#### Qualifications Pack



#### Occupational Standard

##### An example of NOS with 'N'



*Qualifications Pack For LED Light Repair Technician*

The following acronyms/codes have been used in the nomenclature above:

Sub-sector	Range of Occupation numbers
Passive Components	01 - 10
Semiconductors	11 - 20
PCB Manufacturing	21 - 30
Consumer Electronics	31 - 40
IT Hardware	41 - 50
PCB Assembly	51 - 55
Solar Electronics	56 - 60
Strategic Electronics	61 - 65
Automotive Electronics	66 - 70
Industrial Electronics	71 - 75
Medical Electronics	76 - 80
Communication Electronics	81 - 85
PCB Design	86 - 90
LED	91 - 95

Sequence	Description	Example
Three letters	Industry name	ELE
Slash	/	/
Next letter	Whether QP or NOS	Q
Next two numbers	Occupation code	01
Next two numbers	OS number	01