Model Curriculum

Multi Skill Technician (Electrical)

SECTOR:	**ELECTRONICS**
SUB-SECTOR:	**CONSUMER ELECTRONICS**
OCCUPATION:	**SALES AND AFTER SALES SERVICE**
REF ID:	**ELE/Q3109 v1.0**
NSQF LEVEL:	**4**

Skill India

ESSCI

N·S·D·C National Skill Development Corporation

Certificate

CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARD

Is hereby issued by the

Electronics Sector Skills Council of India

For the

MODEL CURRICULUM

Complying to National Occupational Standards of

Job Role/Qualification Pack : **Multi Skill Technician (Electrical)**, QP No : **ELE/Q3109 NSQF Level 4**

Date of Issuance : 1st Sep ,2017
Valid up to* : 31st Aug ,2019

*Valid up to the next QP Review Date or the date mentioned above (whichever is earlier)

Authorized Signatory
(Electronics Sector Skills Council of India)

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Multi Skill Technician (Electrical)

CURRICULUM / SYLLABUS

This course encompasses 9 out of 9 National Occupational Standards (NOS) of "Multi Skill Technician (Electrical)" Qualification Pack issued by "Electronic Sector Skill Council".

Program Name	**Multi Skill Technician (Electrical)**		
Qualification Pack Name & Reference ID.	ELE/Q3109 VERSION 1.0		
Version No.	1.0	**Version Update Date**	01/08/2018
Pre-requisites to Training	8th Standard passed		
Training Outcomes	**After completing this programme, participants will be able to:** • Gain familiarity with the small appliances products & gain Knowledge about Appliances Industry. • Knowledge about various products in Small Appliances. • Identify and use tools, equipment & material & Proper use of tools keeping safety in mind.		

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	**Engage with customer for service - I** **Theory Duration** (hh:mm) 05:00 **Practical Duration** (hh:mm) 10:00 **Corresponding NOS Code** ELE/N3101	• Check the customer complaint registered at customer care for installation schedule. • Call customer to confirm problem and fix time for visit. • Telephone etiquettes • Check warranty status and annual maintenance contract of the appliance. • Anticipate possible problems to carry tools and parts accordingly. • Ascertain customer location in order to make the routine plan for the day.	• User Manual/Service Manual • Telephone/Mobile • Complaints register • All tools for small home appliances repair
2	**Engage with customer for service - II** **Theory Duration** (hh:mm) 05:00 **Practical Duration** (hh:mm) 10:00 **Corresponding NOS Code** ELE/N3101	• Enquire about symptoms and history of problems in the appliance. • Ask about the age of the appliance and status of upkeep. • Handle different types of customers. • Identify the problem based on customer's information. • Communicate the problem identified and educate the customer on possible reasons. • Suggest possible solutions to customer.	• UserManual/Service Manual • All tools for small home appliances repair
3	**Diagnose and Repair Fault in LED Light - I** **Theory Duration** (hh:mm) 10:00 **Practical Duration** (hh:mm) 20:00 **Corresponding NOS Code** ELE/N9302	• Connect faulty LED with AC source and diagnose the fault • Perform soldering and de-soldering. • Dismantle LED light • Connect LED with DC Source and diagnose the fault. • Replace the LED light engine if found faulty. • Check voltage output at different sections. • Repair/Replace damaged components. • Reassemble LED light.	• User Manual/Service Manual • Soldering Tools • Digital Multi Meter • Digital Clamp Meter • LED Light • LED strip • Screwdriver set • Tweezer

4	**Diagnose and Repair Fault in LED Light - II** **Theory Duration** (hh:mm) 05:00 **Practical Duration** (hh:mm) 15 :00 **Corresponding NOS Code** ELE/N9302	• Connect LED light with AC source and diagnose. • Remove glass shell from LED light. • Replace damaged LED strips • Connect LED array with AC source and diagnose. • Replace glass shell on LED light. • Find the fault and repair in minimum possible time. • Document the fault diagnosis and repair process as per SOP.	• User Manual/Service Manual • Soldering Tools • Digital Multi Meter • Digital Clamp Meter • LED Light • LED strip • Screwdriver set • Tweezer
5	**Repair Small Home Appliances (Geyser & fan)-I** **Theory Duration** (hh:mm) 10:00 **Practical Duration** (hh:mm) 25:00 **Corresponding NOS Code** ELE/N3124	• Understand complete functioning and service procedures of ceiling fan and geyser. • Find out the fault based on symptoms and customer report. • Use a range of diagnose documents. • Use tools and equipment for diagnosing the fault. • Perform basic diagnosis tests. • Inform superior in case of any difficulty.	• User Manual/Service Manual • Digital Multi Meter • Digital Clamp Meter • Screwdriver set • Tweezer • Mixer/grinder/juicer
6	**Repair Small Home Appliances (Geyser & fan)-II** **Theory Duration** (hh:mm) 05:00 **Practical Duration** (hh:mm) 15:00 **Corresponding NOS Code** ELE/N3124	• Test basic electrical and electronic components with multi meter. • Check mains outlet. • Correct minor external faults. • Educate customer on major external faults. • Replace the faulty component/module and re assemble the ceiling fan/geyser. • Take help from assistant/junior technician and train them about the process. • Follow company guidelines in case of components/modules are not available and update the customer and supervisor.	• User Manual/Service Manual • Digital Multi Meter • Digital Clamp Meter • Screwdriver set • Tweezer • Mixer/grinder/juicer

7	**Repair Small Home Appliances (Geyser & fan)-III** **Theory Duration** (hh:mm) 05:00 **Practical Duration** (hh:mm) 15:00 **Corresponding NOS Code** ELE/N3124	• Connect the power supply to ceiling fan/geyser and confirm functionality as per service manual. • Demonstrate the functionality to the customer. • Complete documentation and collect applicable charges and provide receipt as per company policies. • Inform the customer about the repairs carried out, preventive care to be taken by them and the usage tips – if any and answer to the queries regarding the Ceiling Fan / Geyser or the faults politely to their satisfaction. • Offer the recommended accessories & extended warranties/AMC to the customer – if available. • Clean the repair area of all the debris & dispose them with customer's permission. • Collect the defective component(s) or module(s) & handover them to stores. • Thank the customer and request for positive feedback. • Inform the superior about job closure. • Interact with technicians to understand the field problems. • Educate junior level technicians about commonly occurring problems, diagnosis procedures and handling customers. • Achieve productivity and quality as per company norms.	• User Manual/Service Manual • Digital Multi Meter • Digital Clamp Meter • Screwdriver set • Tweezer • Ceiling fan/geyser
8	**Repair Small Home Appliances (Geyser & fan)-IV** **Theory Duration** (hh:mm) 5:00 **Practical Duration** (hh:mm) 15:00 **Corresponding NOS Code** ELE/N3124	• Comply with health and safety, environmental and other relevant regulations and organizational guidelines at work. • Adhere to procedures and guidelines for PPE and other relevant safety regulations while performing repair operations. • Ensure work area is clean and safe from hazards. • Ensure that all tools, equipment, power tool cables, extensions are in a safe and usable condition.	

		• Dispose of waste items in a safe and environmentally acceptable manner. • Leave the work area in a safe condition and free from foreign object debris.	
9	**Install the Water Purifier - I** **Theory Duration** (hh:mm) 10:00 **Practical Duration** (hh:mm) 25:00 **Corresponding NOS Code** ELE/N3118	• Visit customer premises before carrying out the installation. • Interact the customer and confirm about location of installation of water purifier. • Check whether location meets the installation requirements. • Make customer aware of any pre-installation works. • Make necessary markings and seek appointment for next visit.	
10	**Install the Water Purifier - II** **Theory Duration** (hh:mm) 10:00 **Practical Duration** (hh:mm) 25:00 **Corresponding NOS Code** ELE/N3118	• Remove packaging and check accessories. • Install water purifier. • Connect the water purifier to nearest water supply. • Check water purifier's functioning. • Complete documentation. • Inform supervisor or superior on job completion. • Achieve productivity and quality as per company standards.	
11	**Repair Dysfunctional Water Purifier - I** **Theory Duration** (hh:mm) 10:00 **Practical Duration** (hh:mm) 25:00 **Corresponding NOS Code** ELE/N3119	• Diagnose the fault by initial inspection and customer interaction. • Check for water pressure as per company standards. • Separate and inspect every element if the fault is not identified by basic inspection. • Send to factory for in-depth diagnosis if the fault is not identified.	
12	**Repair Dysfunctional Water Purifier - II**	• Replace the fault art location if the fault is due to damage of components such as valves or filter membrane.	

	Theory Duration (hh:mm) 15:00 **Practical Duration** (hh:mm) 25:00 **Corresponding NOS Code** ELE/N3119	• Remove and replace the faulty module with a functional one, either on a second visit or as pre-identified and collected from the service centre, if the problem is at the PCB level or components that cannot be replaced at site. • Confirm the functionality of repaired unit. • Achieve productivity and quality as per company norms.	
13	**Repair and Dysfunctional Mixer/Juicer /Grinder - I** **Theory Duration** (hh:mm) 15:00 **Practical Duration** (hh:mm) 25:00 **Corresponding NOS Code** ELE/N3120	• Understand the usage pattern of mixer/grinder from the customer. • Diagnose the fault by initial inspection and customer interaction. • Separate and inspect every element if the fault is not identified by basic inspection. • Send to factory for in-depth diagnosis if the fault is not identified.	
14	**Repair and Dysfunctional Mixer/Juicer /Grinder - II** **Theory Duration** (hh:mm) 15:00 **Practical Duration** (hh:mm) 25:00 **Corresponding NOS Code** ELE/N3120	• Replace the fault art location if the fault is due to damage of components such as relay or thermostat. • Remove and replace the faulty module with a functional one, either on a second visit or as pre-identified and collected from the service centre, if the problem is at the PCB level or components that cannot be replaced at site. • Confirm the functionality of repaired unit. • Achieve productivity and quality as per company norms.	
15	**Work with Superior and Colleague - I** **Theory Duration** (hh:mm) 15:00 **Practical Duration**	• Understand work requirements by receiving instructions from reporting supervisor. • Understand standard operating procedure of the company. • Escalate problems that cannot be handled including repetitive PCB defects,	

	(hh:mm) 25 :00 **Corresponding NOS Code** ELE/N9919	machine failures, potential hazards, process disruptions, repairs and maintenance of machine. • Report work completed and receive feedback on work done. • Resolve personnel issues. • Rectify errors as per feedback and minimize mistakes to zero in future. • 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. • Handover completed work and deliver the work of expected quality despite constraints.	
16	**Work with Superior and Colleague - II** **Theory Duration** (hh:mm) 15:00 **Practical Duration** (hh:mm) 25:00 **Corresponding NOS Code** ELE/N9919	• Collect required spares and raw materials from tool room or stores. • Deposit unused or faulty materials, parts and tools to stores. • Assist colleagues where necessary and as per capability. • Resolve conflicts with colleagues at work to achieve smooth workflow. • Complete rework in time based on feedback from quality or process departments. • Put team over individual goals.	
17	**Follow safety standards** **Theory Duration** (hh:mm) 15:00 **Practical Duration** (hh:mm) 25 :00 **Corresponding NOS Code** ELE/N9921	• Understand potential sources of accidents. • Follow company policies and rules regarding hazardous materials. • Use safety gear to avoid accidents. • Understand safety procedures followed by the company. • Follow daily safety measure. • Communicate with supervisor	
18	**Evaluating an opportunity before starting a micro-enterprise - I**	• Identify gaps in the market for different products/services.	

	Theory Duration (hh:mm) 15:00 **Practical Duration** (hh:mm) 25 :00 **Corresponding NOS Code** FIC/N9005	• Identify the customer needs for different products/services. • Identify different features of products/services to be marketed. • Identify the cheap and regular sources of supply for raw materials. • Determine the pricing of the products depending upon competitive businesses. • Identify various mediums (online/offline) to sell products/services to target such as customers such as blogs, personal websites, e-commerce portals, exhibitions, stalls, etc. • Identify different sources of loans/funds and the formalities to raise the same. • Understand basic government rules and regulations specific to the region and including registering a company. • Determine the amount of manpower required to run an enterprise for delivering products/services.	
19	**Evaluating an opportunity before starting a micro-enterprise - II** **Theory Duration** (hh:mm) 15:00 **Practical Duration** (hh:mm) 25:00 **Corresponding NOS Code** FIC/N9005	• Deal effectively with all stake holders such as vendors, customers, suppliers etc. • Assure and maintain quality of products and services delivered. • Effectively manage the employees in the enterprise. • Do primary accounting and effectively manage money.	
	Total Duration **600:00** **Theory Duration** **200:00** **Practical Duration** **400:00**	**Unique Equipment Required:** • Service Manual/ User Manuals (each) • 12 Watt LED Lights • 3 Watt LED Lights • 5 Watt LED Lights • 7 Watt LED Lights • 9 Watt LED Lights • Ac Power Source • Allen Key Set	

		• Clamp Meter • Connecting Wires • Digital Multimeter • Electrical Drill • ESD Gloves • ESD Mat • ESD Wrist Band • Grinder • Juicer • Lead Solder • LED Street Light • LED Tubelight • Lux Meter • Microwave Oven • Mixer • Plier • Precision Screw Driver • Regulated Dc Power Supply • Safety Helmet • Safety Shoes • Screw Driver Set • Soldering Flux • Soldering Iron • Soldering Station • Spanner Set • TDS Meter • Water Pressure Gauge • Water Purifier • Wire Stripper

Grand Total Course Duration: **600 Hours 00 Minutes**

*(This syllabus/curriculum has been approved **Electronics Sector Skills Council of India**)*

Trainer Prerequisites for Job role: "Multi Skill Technician (Electrical) " mapped to Qualification Pack: "ELE/ Q3109 Version1.0"

Sr. No.	Area	Details
1	**Job Description**	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack "ELE/Q3109 v 1.0".
2	**Personal Attributes**	Aptitude for conducting training, and pre/ post work to ensure competent, employable candidates at the end of the training. Strong communication skills, interpersonal skills, ability to work as part of a team; a passion for quality and for developing others; well-organized and focused, eager to learn and keep oneself updated with the latest in the mentioned field.
3	**Minimum Educational Qualifications**	Diploma(Electronics) or B.Sc. (Electronics) or BE (Electronics) or Higher Qualification in Electronics Esteem
4a	**Domain Certification**	Certified for Job Role: "Multi Skill Technician (Electrical)" mapped to QP: "ELE/ Q 3109 version1.0". Minimum accepted score =80%
4b	**Platform Certification**	Recommended that the Trainer is certified for the Job Role: "Trainer", mapped to the Qualification Pack: "MEP/Q0102". Minimum accepted score as per SSC Guidelines is 80%.
5	**Experience**	1. Post graduate 2. Graduate with 6 months of relevant work experience in Electrical. 3. Diploma (Electrical) with 3 years of relevant work experience 4. 10+2 with 5 years of relevant work experience

Annexure: Assessment Criteria

Assessment Criteria for Multi Skill Technician (Electrical)	
Job Role	Multi Skill Technician (Electrical)
Qualification Pack	ELE/Q3109 version1.0
Sector Skill Council	Electronic

Sr. No.	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 unique question papers for theory part for each candidate at each examination/training center(as per assessment criteria below)
4	Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training canter based on this criteria
5	To pass the Qualification Pack, every trainee should score a minimum of 60% in aggregate and 40% in each NOS
6	The marks are allocated PC wise; however, every NOS will carry a weight age in the total marks allocated to the specific QP

Assessable Outcomes	Assessment Criteria	Total Marks	Out of	Theory	Practical Skills
ELE/N3101 Engage with customer for service	PC1. check customer complaint registered at customer care or installation schedule	100	3	1	2
	PC2. call customer to confirm problem and fix time for visit		4	2	2
	PC3. greet the customer and confirm the problem registered		4	2	2
	PC4. be polite and patient when interacting with customer		4	2	2
	PC5. check about warranty status of appliance and annual maintenance contract		3	1	2
	PC6. anticipate possible problems to carry tools and parts accordingly		4	2	2
	PC7. ascertain customer location in order to make the route plan for the day		3	1	2
	PC8. enquire about the symptoms and history of problems in the appliance		5	2	3
	PC9. ask about the age of appliance and status of upkeep		5	2	3
	PC10. identify the problem based on customer's information		5	2	3
	PC11. communicate the problems identified and educate on possible reasons		5	2	3
	PC12. inform about costs involved		5	2	3
	PC13. discuss the problem(s) identified with customer		6	3	3
	PC14. suggest possible solutions and costs involved		6	3	3
	PC15. explain the time required and methodology for servicing necessary		7	3	4
	PC16. seek customer's approval on further action		6	3	3
	PC17. accurately assess the problem and solution(s) necessary		3	1	2
	PC18. offer most appropriate and cost-effective service as per customer's requirement		3	1	2
	PC19. communicate problem effectively in order to secure customer's confidence		4	1	3
	PC20. ensure customer satisfaction and positive feedback		4	1	3

	PC21. record minimum customer complaints post service		3	1	2
	PC22. avoid repeat problem post service		4	1	3
	PC23. prepare most optimum route plan to complete daily target visits		4	1	3
		Total	**100**	**40**	**60**
ELE/N9302 Diagnose and repair fault in LED Light	PC1. connect the non-functional LED Light with the AC source and switch it on	**100**	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
	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 source and switching it on		5	2	3
	PC18. replace the glass shell on the LED Light and close it if all the strips are found operational		5	2	3
	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
	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
		Total	**100**	**40**	**60**
ELE/N3124 Repair small home appliances (Geyser & Fan)	PC1.understand the complete functioning of the Ceiling Fan / Geyser & manufacturer's recommendation(s) on the diagnostic & service procedures to be followed	**100**	2	1	1
	PC2.understand the possible fault (s) based on the symptoms observed & also reported by customer		2	0	2
	PC3.use a range of diagnostic documents – like service manual, circuit/wiring diagrams, fault analysis charts, flow charts – to investigate the fault		2	1	1
	PC4.use a range of tools & equipment to carry out the diagnostic tests to investigate the fault		2	1	1
	PC5.perform basic diagnostic tests to confirm that the power source is providing requisite inputs to the Ceiling Fan / Geyser & there are no fault with the same and there are no external faults like improper mounting etc.		4	1	3

	PC6.isolate the Ceiling Fan / Geyser / Geyser from the power source & disassemble the component(s) or module(s) from the Ceiling Fan / Geyser and perform the functional test(s) to confirm their working		4	1	3
	PC7.inform the superior if unable to follow the company guidelines and identify the fault		2	1	1
	PC8.test the basic electrical & electronic components using multi-meter		2	1	1
	PC9.check the mains outlet with a multi-meter for correct voltage output		2	1	1
	PC10.correct the minor external faults like loose connections, improper mounting		3	1	2
	PC11.educate the customer to get the major external faults like faulty or intermittent power		2	1	1
	PC12.replace the faulty component or module and re assemble the Ceiling Fan / Geyser		2	1	1
	PC13.take help from assistant/junior technician (if any) & train them about the repair process		3	1	2
	PC14.follow the company's guidelines in case the replacement component(s) or module(s) are not available or any such scenario		3	1	2
	PC15.update the supervisor & the customer in the above situation		3	1	2
	PC16.switch ON the power supply to the Ceiling Fan / Geyser and carry out the functionality test a per the service manual and confirm that it is working normally		2	1	1
	PC17.demonstrate and confirm the functionality of the Ceiling Fan / Geyser to the customer		3	1	2
	PC18.complete documentation procedures to record complaint closure, collect the applicable charges from the customer & provide receipt of the same as per company policies		2	1	1
	PC19.inform the customer about the repairs carried out, preventive care to be taken by them and the usage tips – if any and answer to the queries regarding the Ceiling Fan / Geyser or the faults politely to their satisfaction		2	1	1

	PC20.offer the recommended accessories & extended warranties/AMC to the customer – if available.		2	1	1
	PC21.clean the repair area of all the debris & dispose them with customer's permission		2	1	1
	PC22.collect the defective component(s) or module(s) & handover them to stores		2	1	1
	PC23.thank the customer for giving us a chance to serve them & request them to give a positive feedback		2	1	1
	PC24.inform the superior about the job closure		2	1	1
	PC25.interact with service technicians from time to time in-order to understand problems faced on the field		3	1	2
	PC26.educate junior level technicians about the commonly occurring problems, diagnosis procedures & customer handling		3	1	2
	PC27.diagnose the problem accurately and in short time		3	1	2
	PC28.identify the problem modules such as the motor, bush, bearing etc		2	1	1
	PC29.optimise the time taken to fix the dysfunctional Ceiling Fan / Geyser		3	1	2
	PC30.rectify to avoid the repeat fault in the Ceiling Fan / Geyser		3	1	2
	PC31.record minimum customer complaints post service		2	1	1
	PC32.select the right spares as per recorded complaints at the customer care		2	1	1
	PC33.educate customer on Ceiling Fan / Geyser maintenance to avoid problems in the future		3	1	2
	PC34.ensure damage free handling of the Ceiling Fan / Geyser		2	1	1
	PC35.achieve 100% customer satisfaction		2	1	1
	PC36.make sale of related products such as new equipment or AMC – as applicable		2	1	1
	PC37.comply with health and safety, environmental and other relevant regulations and organizational guidelines at work		3	1	2

	PC38.adhere to procedures and guidelines for personal protective equipment (PPE) and other relevant safety regulations while performing the repair operations		2	1	1
	PC39.ensure work area is clean and safe from hazards		2	1	1
	PC40.ensure that all tools, equipment, power tool cables, extensions are in a safe and usable condition		2	1	1
	PC41.dispose of waste items in a safe and environmentally acceptable manner		2	0	2
	PC42.leave the work area in a safe condition and free from foreign object debris		2	1	1
		Total	**100**	**40**	**60**
ELE/N3118 Install the water purifier	PC1. visit the customer's premise before carrying out the installation	**100**	2	1	1
	PC2. interact with the customer to understand whether the water purifier would be placed under the sink (UTS) or on the wall		3	1	2
	PC3. check that the location meets structural requirements such as distance from power supply, vicinity to plumbing point, etc.		2	1	1
	PC4. make the customer aware of any pre installations/masonry/electrical work to be carried out and educate the customer about requirement of adequate water pressure at the inlet source		2	1	1
	PC5. make necessary markings for placement of the water purifier unit		2	1	1
	PC6. seek appointment for the next visit		2	1	1
	PC7. remove the packaging in which the purifier was shipped to customer from point of sale/ warehouse		2	1	1
	PC8. check that the product matches the customer order in terms of colour and make		2	1	1
	PC9. check that all supporting accessories purchased have are there in the pack		2	1	1
	PC10. check that tools and fitments required for the installation are available		2	1	1
	PC11. clear up the packaging material waste and dispose as per company's norms		2	1	1
	PC12. check if pre installation requirements are met		3	1	2

	PC13. make measurements at the location identified and drill holes ensuring no internal wiring damage takes place		4	2	2
	PC14. mount the filter and ensure that the screws are fastened securely		3	1	2
	PC15. drain the inlet line before connecting it to the water purifier		3	1	2
	PC16. connect the outlet pipe to the drain (if applicable)		3	1	2
	PC17. connect the purifier to the nearest power supply point		3	1	2
	PC18. ensure that the filter is aligned as per instructions in the installation manual		5	2	3
	PC19. run the purifier and ensure there are no leaks at any point		5	2	3
	PC20. demonstrate the features and utility to the customer		5	1	4
	PC21. explain maintenance procedures to be followed while using the water purifier		5	2	3
	PC22. fill in customer acknowledgement form		2	1	1
	PC23. seek customer's signature		2	1	1
	PC24. complete other documentation for recording completion of installation		3	1	2
	PC25. call customer care and inform about job completed		3	1	2
	PC26. understand the work requirement from superior, periodically		3	1	2
	PC27. report to superior on the work completed		3	1	2
	PC28. escalate the customer issues and problems that are unresolved in the field		3	1	2
	PC29. document the work completed on the company ERP software for tracking and future references		3	1	2
	PC30. remove packaging without damage to the water purifier unit and accessories		2	1	1
	PC31. position the water filter as per requirements specified in instructions manual		2	1	1
	PC32. educate customer on importance of proper placing		2	1	1
	PC33. carry and use the correct tools and equipment for installation		2	1	1

	PC34. operate and check that they are in a safe and stable condition		2	1	1
	PC35. complete installation in time target given		2	0	2
	PC36. educate customer on proper operation and maintenance procedures		2	1	1
	PC37. complete daily field schedule as per instructions/format within the designated time		2	1	1
		Total	**100**	**40**	**60**
ELE/N3119 Repair dysfunctional Water Purifier	PC1. diagnose the fault based on customer interaction and initial inspection	**100**	4	2	2
	PC2. check if the water pressure is as specified by company standards		3	1	2
	PC3. shut off the system by turning of water supply and unplug the unit		3	1	2
	PC4. place a piece of cloth or towel under the unit in order to avoid any water spills on the floor		3	1	2
	PC5. carry out basic inspection of feed water valve, tank valve, tubing, housing etc.		3	1	2
	PC6. separate and inspect every part of the unit if the fault is not identified through basic inspection		4	2	2
	PC7. send to factory for in depth diagnosis, if problem remains un-identified at site		4	2	2
	PC8. replace component at location, if the fault identified is because of damage of components such as valves or wearing out of membrane or filter		11	4	7
	PC9. remove and replace the faulty module with a functional one, either on a second visit or as pre-identified and collected from the service centre, if the problem is at the PCB level or components that cannot be replaced at site		11	4	7
	PC10. reassemble the unit		3	1	2
	PC11. start supply of water to the unit and confirm that unit is functioning		3	1	2
	PC12. check that all the modules of the unit work as per specifications		4	2	2
	PC13. demonstrate and confirm functionality of the unit with customer		4	2	2
	PC14. educate the customer about cleaning procedures and other best practices		3	1	2

	PC15. collect necessary payments from the customer, if applicable		3	1	2
	PC16. fill in customer acknowledgement form		3	1	2
	PC17. complete other documentation procedures to record complaint closure		3	1	2
	PC18. ensure damage free handling of the unit		2	1	1
	PC19. diagnose the problem accurately and in assigned time		2	1	1
	PC20. identify the problem modules accurately such as inlet valve, auto shut off valve, saddle valve, housing, O ring, PCB		2	1	1
	PC21. fix the dysfunctional water purifier in designated time		2	1	1
	PC22. rectify completely to avoid repeat fault in the water purifier		2	1	1
	PC23. record minimum customer complaints post service		2	1	1
	PC24. meet daily target on attending to number of complaints		2	1	1
	PC25. select the right spares according to recorded complaints at the customer care		2	1	1
	PC26. clearly communicate type of module required to the service centre, if a faulty module is to be replaced		2	1	1
	PC27. secure repairs completion receipt from customer		2	1	1
	PC28. educate customer on water purifier maintenance and correct practices to follow in order to avoid further problems		2	0	2
	PC29. ensure 100% customer satisfaction		2	0	2
	PC30. recover payments as per rate sheet/ communication from customer care		2	1	1
	PC31. sell related products such as new equipment or Annual Maintenance Contracts (AMC) as per company policy		2	1	1
		Total	**100**	**40**	**60**
ELE/N3120 Repair dysfunctional mixer/juicer/grinder	PC1. understand usage pattern of the mixer/grinder from the customer	**100**	4	2	2
	PC2. diagnose the fault based on customer interaction and initial inspection		5	2	3
	PC3. unplug the unit , turn overload switch back to original position if the appliance turned off due to overload		4	2	2

	PC4. carry out basic tests such as power supply inspection, volt ampere test and earth test power supply		4	2	2
	PC5. separate and inspect every module of the unit if the fault is not identified through basic tests		4	2	2
	PC6. send to factory for in depth diagnosis, if problem remains un-identified at site		4	2	2
	PC7. replace component at location, if the fault identified is because of damage of components such as relay or thermostat		12	4	8
	PC8. remove and replace the faulty module with a functional one, either on a second visit or as pre-identified and collected from the service centre, if the problem is at the PCB level or components that cannot be replaced at site		12	4	8
	PC9. reassemble the unit		4	2	2
	PC10. switch on power supply and confirm that unit is functioning		3	1	2
	PC11. demonstrate and confirm functionality of the unit with customer		4	2	2
	PC12. educate the customer about cleaning procedures, using different jars for different purposes and other best practices		4	2	2
	PC13. collect necessary payments from the customer, if applicable		3	1	2
	PC14. fill in customer acknowledgement form		3	1	2
	PC15. complete other documentation procedures to record complaint closure		3	1	2
	PC16. ensure damage free handling of the unit		2	1	1
	PC17. diagnose the problem accurately and in assigned time		2	1	1
	PC18. identify the problem modules accurately such as the power supply, overload circuit breaker, motors, PCB		2	1	1
	PC19. fix the dysfunctional appliance in designated time		2	1	1
	PC20. rectify completely to avoid repeat fault in the appliance		2	1	1
	PC21. record minimum customer complaints post service		2	1	1
	PC22. meet daily target on attending to number of complaints		1	0	1

	PC23. select the right spares according to recorded complaints at the customer care		2	1	1
	PC24. clearly communicate type of module required to the service centre, if a faulty module is to be replaced		2	0	2
	PC25. secure repairs completion receipt from customer		2	1	1
	PC26. educate customer on maintenance and correct practices to follow in order to avoid further problems		2	1	1
	PC27. ensure 100% customer satisfaction		2	0	2
	PC28. recover payments as per rate sheet/ communication from customer care		2	0	2
	PC29. sell related products such as new equipment or Annual Maintenance Contracts (AMC) as per company policy		2	1	1
		Total	**100**	**40**	**60**
ELE/N9919 Work with superiors and colleagues	PC1. understand work requirements by receiving instructions from reporting supervisor	**100**	7	3	4
	PC2. understand standard operating procedure of the company		6	3	3
	PC3. escalate problems that cannot be handled including repetitive PCB defects, machine failures, potential hazards, process disruptions, repairs and maintenance of machine		6	3	3
	PC4. report work completed and receive feedback on work done		7	3	4
	PC5. resolve personnel issues		6	2	4
	PC6. rectify errors as per feedback and minimize mistakes to zero in future		6	2	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		6	2	4
	PC8. handover completed work and deliver the work of expected quality despite constraints		6	2	4
	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

	PC11. assist colleagues where necessary and as per capability		9	4	5
	PC12. resolve conflicts with colleagues at work to achieve smooth workflow		9	4	5
	PC13. complete rework in time based on feedback from quality or process departments		8	3	5
	PC14. put team over individual goals		8	3	5
		Total	**100**	**40**	**60**
ELE/N9921 Follow safety standards	PC1. spot and report potential hazards on time	**100**	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
	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
	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
	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
	PC14. ensure proper machine maintenance, work process achieving quality outputs as per the company standard		4	2	2

	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
		Total	**100**	**40**	**60**
FIC/N9005 (Developing Entrepreneurial Skills)	PC1.identify gaps in markets for different products/services	**100**	5	2	3
	PC2. identify the customer needs for different products/services		10	3	7
	PC3. identify different features of products/services to be marketed		10	3	7
	PC4 identify the cheap and regular sources of supply for raw materials		10	3	7
	PC5. determine the pricing of the products depending upon competitive businesses		7	3	4
	PC6. identify various mediums online/offline) to sell products/services to target such as customers such as blogs, personal websites, e-commerce portals, exhibitions, stalls, etc.		7	2	5
	PC7. identify different sources of loans/funds and the formalities to raise the same		7	3	4
	PC8. understand basic government rules and regulations specific to the region and including registering a company		10	4	6
	PC9. determine the amount of manpower required to run an enterprise for delivering products/services		7	2	5
	PC10. deal effectively with all the stakeholders such as vendors, customers, suppliers etc		7	3	4
	PC11. assure and maintain quality of products and services delivered		7	2	5
	PC12. effectively manage the employees in the enterprise		6	3	3
	PC13. do primary accounting and effectively manage money		7	2	5
		Total	**100**	**40**	**60**
Grand Total		**900**	**900**	**360**	**540**
Percentage Weightage:				**40%**	**60%**
Minimum Pass% to qualify (aggregate):				**60%**	