

Government of Pakistan

National Vocational and Technical Training Commission

Prime Minister's Youth Skills Development

"Skills for All"



Course Contents / Lesson Plan

Course Title: Domestic Electrical Appliance Technician

Duration: 3 Months

Trainer Name	
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Course Title	Domestic Electrical Appliance Technician
Objectives and Expectations	<p>Employable skills and hands-on practice in Domestic Electrical Appliance Technician</p> <p>This is a special course designed to address unemployment in the youth. The course aims to achieve the above objective through hands on practical training delivery by a team of dedicated professionals having rich market/work experience. This course is therefore not just for developing a theoretical understanding/back ground of the trainees.</p> <p>Contrary to that it is primarily aimed at equipping the trainees to perform commercially in a market space in independent capacity or as a member of a team.</p> <p>The course therefore is designed to impart not only technical skills but also soft skills (i.e. interpersonal/communication skills; personal grooming of the trainees etc.) as well as entrepreneurial skills (i.e. marketing skills; free lancing etc.). The course also seeks to inculcate work ethics to foster better citizenship in general and improve the image of Pakistani work force in particular.</p> <p>Main Expectations:</p> <p>In short, the course under reference should be delivered by professional instructors in such a robust hands-on manner that the trainees are comfortably able to employ their skills for earning money (through wage/self-employment) at its conclusion.</p> <p>This course thus clearly goes beyond the domain of the traditional training practices in vogue and underscores an expectation that a market-centric approach will be adopted as the main driving force while delivering it. The instructors should therefore be experienced enough to be able to identify the training needs for the possible market roles available out there. Moreover, they should also know the strengths and weaknesses of each trainee to prepare them for such market roles during/after the training.</p> <p>Specially designed practical tasks to be performed by the trainees have been included in the Annexure-I to this document. The record of all tasks performed individually or in groups must be preserved by the management of the training Institute clearly labeling name, trade, session, etc. so that these are ready to be physically inspected/verified through monitoring visits from time to time. The weekly distribution of tasks has also been indicated in the weekly lesson plan given in this document.</p> <p>To maintain interest and motivation of the trainees throughout the course, modern techniques such as:</p> <ul style="list-style-type: none"> • Motivational Lectures • Success Stories • Case Studies

These techniques would be employed as an additional training tool wherever possible (these are explained in the subsequent section on Training Methodology).

Lastly, evaluation of the competencies acquired by the trainees will be done objectively at various stages of the training and a proper record of the same will be maintained. Suffice to say that for such evaluations, practical tasks would be designed by the training providers to gauge the problem-solving abilities of the trainees.

(i) Motivational Lectures

The proposed methodology for the training under reference employs motivation as a tool. Hence besides the purely technical content, a trainer is required to include elements of motivation in his/her lecture. To inspire the trainees to utilize the training opportunity to the full and strive towards professional excellence. Motivational lectures may also include general topics such as the importance of moral values and civic role & responsibilities as a Pakistani. A motivational lecture should be delivered with enough zeal to produce a deep impact on the trainees. It may comprise of the following:

- Clear Purpose to convey the message to trainees effectively.
- Personal Story to quote as an example to follow.
- Trainees Fit so that the situation is actionable by trainees and not represent a just idealism.
- Ending Points to persuade the trainees on changing themselves.

A good motivational lecture should help drive creativity, curiosity, and spark the desire needed for trainees to want to learn more.

The impact of a successful motivational strategy is amongst others commonly visible in increased class participation ratios. It increases the trainees' willingness to be engaged on the practical tasks for a longer time without boredom and loss of interest because they can see in their mind's eye where their hard work would take them in short (1-3 years); medium (3 -10 years) and long term (more than 10 years).

As this tool is expected that the training providers would make arrangements for regular well planned motivational lectures as part of a coordinated strategy interspersed throughout the training period as suggested in the weekly lesson plans in this document.

Course-related motivational lectures online link is available in **Annexure-II**.

(ii) Success Stories

Another effective way of motivating the trainees is using Success Stories. Its inclusion in the weekly lesson plan at regular intervals has been recommended till the end of the training.

A success story may be disseminated orally, through a presentation, or using a video/documentary of someone that has risen to fortune, acclaim, or brilliant achievement. A success story shows how a person achieved his goal through hard work, dedication, and devotion. An inspiring success story contains compelling and significant facts articulated clearly and easily comprehensible words. Moreover, it is helpful if it is assumed that the reader/listener knows nothing of what is being revealed. The optimum impact is created when the story is revealed in the form of:-

- Directly in person (At least 2-3 cases must be arranged by the training institute)

	<ul style="list-style-type: none"> • Through an audio/ videotaped message (2-3 high-quality videos must be arranged by the training institute) <p>It is expected that the training provider would collect relevant high-quality success stories for inclusion in the training as suggested in the weekly lesson plan given in this document.</p> <p>The suggestive structure and sequence of a sample success story and its various shapes can be seen in Annexure III.</p> <p>(iii) Case Studies</p> <p>Where a situation allows, case studies can also be presented to the trainees to widen their understanding of the real-life specific problem/situation and to explore the solutions.</p> <p>In simple terms, the case study method of teaching uses a real-life case example/a typical case to demonstrate a phenomenon in action and explain theoretical as well as practical aspects of the knowledge related to the same. It is an effective way to help the trainees comprehend in depth both the theoretical and practical aspects of the complex phenomenon in depth with ease. Case teaching can also stimulate the trainees to participate in discussions and thereby boost their confidence. It also makes the classroom atmosphere interesting thus maintaining the trainee interest in training till the end of the course.</p> <p>Depending on suitability to the trade, the weekly lesson plan in this document may suggest case studies be presented to the trainees. The trainer may adopt a PowerPoint presentation or video format for such case studies whichever is deemed suitable but only those cases must be selected that are relevant and of a learning value.</p> <p>The Trainees should be required and supervised to carefully analyze the cases.</p> <p>For this purpose, they must be encouraged to inquire and collect specific information/data, actively participate in the discussions, and intended solutions to the problem/situation.</p> <p>Case studies can be implemented in the following ways: -</p> <ol style="list-style-type: none"> A good quality trade-specific documentary (At least 2-3 documentaries must be arranged by the training institute) Health & Safety case studies (2 cases regarding safety and industrial accidents must be arranged by the training institute) Field visits (At least one visit to a trade-specific major industry/site must be arranged by the training institute)
Entry-level of trainees	

Learning Outcomes of the course	<p>By the end of this course, students will be able to:</p> <ul style="list-style-type: none"> • Ensure occupational safety including personal, environmental, tools and equipments. • Understand and follow the operating guidelines and procedures. • Underused the installation of electronic home appliances accordingly. • Perform test run. • Diagnose the faults of home electric appliances. • Perform repairing including mechanical and electrical. • Carryout dismantling and assembling. • Demonstrate home electric appliances. • Replacement of faulty parts • Perform preventive maintenance.
Course Execution Plan	<p>The total duration of the course: 3 months (12 Weeks) Class hours: 4 hours per day Theory: 20% Practical: 80% Weekly hours: 20 hours per week Total contact hours: 260 hours</p>
Companies offering jobs in the respective trade	<p>Public/Private industries including:</p> <ol style="list-style-type: none"> 1. Dawlance. 2. Electrolux. 3. Gree. 4. Haier. 5. Orient. 6. Panasonic. 7. Pel. 8. Sharp.
Job Opportunities	<ul style="list-style-type: none"> • Home Appliance Repairer • Service Technician • Governmental institutes. • Semi-Governmental Institutes. • Private Institutes. • Workshops • Service centers • Appliance production units • Overseas employment • Self-employment.
No of Students	25
Learning Place	Classroom / Lab
Instructional Resources	

MODULES

Sched uled Weeks	Module Title	Days	Hours	Learning Units	Home Assignment
Week 1	Basic Electrical Theory	Day 1	Hour 1-2	Introduction to electrical Theory	<p>• Task 1</p> <p><u>Details may be seen at Annexure-I</u></p>
			Hour 3-4	Basic Mathematics & Basic Electrical Units	
		Day 2	Hour 1-2	Introduction to Electrical Instruments & Equipment Electrical Symbols	
			Hour 3-4	Ohm's Law	
		Day 3	Hour 1-2	Series circuit	
			Hour 3-4	Parallel circuit	
		Day 4	Hour 1-2	Combined series and parallel circuit	
			Hour 3-4	Work, power, and electrical energy	
		Day 5	Hour 1-2	Earthing Voltmeter	
			Hour 3-4	Ammeter Multi-meter Power Measurement (Direct & Indirect Method)	
Week 2	Electrical Wiring	Day 1	Hour 1-2	Types of wiring	<p>• Task 2</p> <p><u>Details may be seen at Annexure-I</u></p>
			Hour 3-4	Types of symbols	
		Day 2	Hour 1-2	Types of wiring diagram Lay out diagram	

				Wiring diagram	
			Hour 3-4	Current path diagram Series Board diagram	
		Day 3	Hour 1-2	Fault diagnosis & Remedies: <ul style="list-style-type: none"> Choice of Cable/wire 	
			Hour 3-4	<ul style="list-style-type: none"> Selection of Power plug, switches & Sockets 	
		Day 4	Hour 1-2	Socket Circuit	
			Hour 3-4	Single Pole switch Circuit	
		Day 5	Hour 1-2	Series Board Circuit	
			Hour 3-4	Review of concepts covered Practical application exercises and problem-solving	
Week 3	Workshop Practice	Day 1	Hour 1-2	Introduction (Workshop, Work Place, Tools) <ul style="list-style-type: none"> Order of workplace Introduction to general tools used in the metal workshop, their care, and proper use Safety precautions 	<ul style="list-style-type: none"> Task 3 <p><i><u>Details may be seen at Annexure-I</u></i></p>
			Hour 3-4	Measuring (General Introduction) <ul style="list-style-type: none"> Purpose of measuring and checking tools Accuracy of 	

				measuring <ul style="list-style-type: none"> • Linear measuring (steel rules, calipers, vernier calipers) • Measuring Faults • Care and Maintenance of Measuring tools 	
		Day 2	Hour 1-2	Marking <ul style="list-style-type: none"> • Necessity of marking • Common marking tools (scriber, steel rule, & centre punch) 	
			Hour 3-4	Filing <ul style="list-style-type: none"> • Process of filing • Types of files with regards to cut and shape 	
		Day 3	Hour 1-2	Sawing <ul style="list-style-type: none"> • Cutting principle (rake angle) • The saw blade (pitch of teeth, setting of teeth, and tightening the blade in the frame) 	
			Hour 3-4	Drilling <ul style="list-style-type: none"> • Drilling of thought holes (effect of movements of the drill, cutting process) • Main parts (their name and function) • Clamping and removing of twist drills • Drilling faults 	

		Day 4	Hour 1-2	Reaming <ul style="list-style-type: none"> • Purpose and process of reaming • Types of reamers (Hand reamers, machine reamers, and adjustable reamers) 	
			Hour 3-4	Counter Sinking and Counter boring <ul style="list-style-type: none"> • Counter sinking tools, purpose, and procedure • Size / No. of Counter bore 	
		Day 5	Hour 1-2	Filing Exercise - I <ul style="list-style-type: none"> • Filing of Channel 	
			Hour 3-4	Marking Exercise <ul style="list-style-type: none"> • Flat Filing • Marking • Centre Punching Filing Exercise — II <ul style="list-style-type: none"> • Flat Filing • Square Filing 	
Week 4	Electric Fan	Day 1	Hour 1-2	Construction of Fans	• Task 4 <i>Details may be seen at Annexure-I</i>
			Hour 3-4	Kinds of Fans	
		Day 2	Hour 1-2	Functions of Parts	
			Hour 3-4	Circuit Diagram	
		Day 3	Hour 1-2	Fault diagnosis & Remedies <ul style="list-style-type: none"> • Bearing is damaged • Bush is Loose 	

			Hour 3-4	Fault diagnosis & Remedies (contd.) <ul style="list-style-type: none"> • Capacitor is burnt • Winding burnt 	
		Day 4	Hour 1-2	Fault diagnosis & Remedies (contd.) <ul style="list-style-type: none"> • Revolving System problem • Fan is Becoming Heated • Fan is giving High sound • Connection problem 	
			Hour 3-4	Fan does not work	
		Day 5	Hour 1-2	Fan speed is slow	
			Hour 3-4	Fan does not start without push Fan gives sound while running	
Week 5	Electric Iron	Day 1	Hour 1-2	Types of electric iron	• Task 5 <u>Details may be seen at Annexure-I</u>
			Hour 3-4	Construction of Electric Iron	
		Day 2	Hour 1-2	Functions of Parts	
			Hour 3-4	Circuit Diagram	
		Day 3	Hour 1-2	<ul style="list-style-type: none"> • Fault diagnosis & Remedies • Element is Dead • Thermostat is not controlling the Temperature 	
			Hour 3-4	Fault diagnosis & Remedies (contd.) <ul style="list-style-type: none"> • Selector Pointer is 	

				<ul style="list-style-type: none"> damaged Heatproof cap is damaged 	
		Day 4	Hour 1-2	Fuse burns when electric iron is on Body is short-circuited	
			Hour 3-4	Indication light does not work <ul style="list-style-type: none"> Iron does not give heat properly 	
		Day 5	Hour 1-2	Additional troubleshooting scenarios and practical problem-solving	
			Hour 3-4	Review of concepts covered Practical application exercises and problem-solving	
Week 6	Washing machine	Day 1	Hour 1-2	Construction of Washing Machine	<ul style="list-style-type: none"> Task 6 <i>Details may be seen at Annexure-I</i>
			Hour 3-4	Kinds of Washing Machine	
		Day 2	Hour 1-2	Functions of Parts	
			Hour 3-4	Circuit Diagram	
		Day 3	Hour 1-2	Fault diagnosis & Remedies <ul style="list-style-type: none"> Rubber Seal is worn out Bearing is damaged Bushes are loose Belt problem 	
			Hour 3-4	Fault diagnosis & Remedies (contd.) <ul style="list-style-type: none"> Timer Contact Damaged Fuse indicator 	

				Problem <ul style="list-style-type: none"> • Electric motor is burnt 	
		Day 4	Hour 1-2	Fault diagnosis & Remedies (contd.) <ul style="list-style-type: none"> • Capacitor is burnt • Motor Winding Shortage • Spinning problems 	
			Hour 3-4	Washing machine does not work	
		Day 5	Hour 1-2	Motor of washing machine does not work and gives sound Rotary plate does not rotate when the washing machine is on	
			Hour 3-4	Motor of washing machine is heated Machine gives sound while running Machine gives electric shock	
Week 7	Electric Heater & Hair Drier	Day 1	Hour 1-2	Construction of Electric Heater Types of Electric Heater Functions of Parts	•Task 7 <u>Details may be seen at Annexure-I</u>
			Hour 3-4	Circuit diagram Fault diagnosis & Remedies (Overview) <ul style="list-style-type: none"> • Element is burnt • Flexible Cable is short 	
		Day 2	Hour 1-2	<ul style="list-style-type: none"> • Joint is melt • Wiring problem • Flexible cable is short 	

			Hour 3-4	Electric heater does not work When electric heater is switched on, the fuse is burnt Electric heater gives electric shock	
		Day 3	Hour 1-2	Supply terminal has melted and the heater does not work	
			Hour 3-4	Construction of Hair drier Functioning of parts of Hair Drier	
		Day 4	Hour 1-2	Fault diagnoses & remedies (Overview) It does not work Fuse is burnt when it is switched on	
			Hour 3-4	It does not work automatically	
		Day 5	Hour 1-4	Review, Q&A, and further clarification on any complex topics	
Week 8	Microwave Oven & Electric Kettle	Day 1	Hour 1-2	Construction of Microwave Oven Functioning of Microwave oven parts	<p>• Task 8</p> <p><u>Details may be seen at Annexure-I</u></p>
			Hour 3-4	Fault diagnoses & remedies (Overview) It does not work Fuse is burnt when it is switched on	
		Day 2	Hour 1-2	Microwave oven does not work Fuse is burnt when it is switched on	

			Hour 3-4	It does not work automatically	
		Day 3	Hour 1-2	Review and practical application of concepts from the first half	
			Hour 3-4	Construction of Electric Kettle Functions of Parts	
		Day 4	Hour 1-2	Circuit Diagram Fault diagnosis & Remedies (Overview)	
			Hour 3-4	<ul style="list-style-type: none"> • Element is Burnt • Thermostat is not working properly 	
		Day 5	Hour 1-2	In-depth discussion of complex topics and case studies	
			Hour 3-4	Q&A sessions Final review and clarification of any remaining doubts	
Week 9	Toaster / Sandwich maker	Day 1	Hour 1-2	Construction of Toaster Types of Toaster	•Task 9 <i>Details may be seen at Annexure-I</i>
			Hour 3-4	Function of Parts Circuit Diagram	
		Day 2	Hour 1-2	Fault diagnosis & Remedies (Overview)	
			Hour 3-4	It does not work	
		Day 3	Hour 1-2	Fuse is burnt when it is switched on	
			Hour 3-4	It does not work automatically	

		Day 4	Hour 1-4	In-depth discussion of complex topics and case studies	
		Day 5	Hour 1-2	Q&A sessions	
			Hour 3-4	Final review and clarification of any remaining doubts	
Week 10	Blender Juicer/Grinder	Day 1	Hour 1-2	Introduction to the construction of Juicer Blender	• Task 10 <i><u>Details may be seen at Annexure-I</u></i>
			Hour 3-4	Understanding the basic functioning of different parts/components.	
		Day 2	Hour 1-2	Techniques for identifying common faults in Juicer Blender	
			Hour 3-4	Overview of troubleshooting methods and initial diagnosis.	
		Day 3	Hour 1-2	In-depth exploration of common reasons why Juicer Blender may not be functioning.	
			Hour 3-4	Hands-on exercises for identifying and addressing non-functional Juicer Blender.	
		Day 4	Hour 1-2	Specifically focus on issues related to burnt fuses upon activation.	
			Hour 3-4	Practical steps for diagnosing and solving problems associated with burnt fuses.	
		Day 5	Hour 1-2	Understanding issues where Juicer Blender fails to operate automatically as intended	

			Hour 3-4	Practical application of remedies and troubleshooting techniques for automatic functionality	
Week 11	Electric Motor	Day 1	Hour 1-2	Construction of AC Single-phase Electric Motor	<p>•Task 11 <i>Details may be seen at Annexure-I</i></p>
			Hour 3-4	Types of Electric Motor	
		Day 2	Hour 1-2	Function of Parts	
			Hour 3-4	Fault diagnosis & Remedies (Overview)	
		Day 3	Hour 1-2	Assembling and disassembling the motor	
			Hour 3-4	Replacing the bearing & winding of motor	
		Day 4	Hour 1-2	Review and practical application of concepts from the first half	
			Hour 3-4	In-depth discussion of Fault diagnosis & Remedies	
		Day 5	Hour 1-2	Continued discussion and practical demonstrations	
			Hour 3-4	Q&A sessions Final review and clarification of any remaining doubts	
Week 12	vacuum cleaner.	Day 1	Hour 1-2	Introduction to the overall construction of a vacuum cleaner.	<p>•Task 12 <i>Details may be seen at Annexure-I</i></p>
			Hour 3-4	In-depth examination of the components and their specific functions.	

		Day 2	Hour 1-4	Detailed exploration of how different parts of the vacuum cleaner work together.	Final Project
		Day 3	Hour 1-2	Understanding the roles of components like the motor, suction system, filters, and brushes.	
			Hour 3-4	Techniques for identifying common faults in vacuum cleaners.	
		Day 4	Hour 1-2	Initial steps and remedies for troubleshooting issues.	
			Hour 3-4	Comprehensive coverage of reasons why a vacuum cleaner may not be working.	
		Day 5	Hour 1-2	Hands-on exercises for diagnosing and addressing non-functional vacuum cleaners.	
			Hour 3-4	Detailed examination of issues related to burnt fuses upon activation. Exploration of automatic functionality issues and practical troubleshooting steps.	

Tasks for Certificate in Domestic Electrical Appliance Technician

Description	Week
Measure the current, voltage and power of any Electrical appliance.	Week 1
Build a simple parallel circuit using multiple components connected to the same power source	Week 2
Identification and remedies of faults in Electric Fan. 4.1 Disassembling and Assembling of Electric Fan. 4.2 Fault diagnosis & Remedies (Testing, alignment, adjustments and replacement) of major component of Electric Fan. 4.2.1 Bearing is damaged 4.2.2 Bush is Loose 4.2.3 Capacitor is burnt 4.2.4 Winding burnt 4.2.5 Revolving System problem 4.2.6 Fan is Becoming Heated 4.2.7 Fan is giving High sound 4.2.8 Connection problem 4.2.9 Fan does not work 4.2.10 Fan speed is slow 4.2.11 Fan does not start without push (check and replace faulty parts)	Week 4
Identification and remedies of faults in Electric Iron. 5.1 Disassembling and Assembling of electric iron 5.2 Fault diagnosis & Remedies (Testing, alignment, adjustments and replacement) of major component of electric iron 5.2.1 Fuse burns when electric iron is on 5.2.2 Body is short circuited 5.2.3 Indication light does not work (check and replace fault) 5.2.4 Iron does not give heat properly or thermostat fault check and replace.	Week 5
Identification and remedies of faults in Washing Machine 6.1 Disassembling and Assembling of Washing machine 6.2 Fault diagnosis & Remedies (Testing, alignment, adjustments and replacement) of major component of Manual Washing machine 6.2.1 Diagnosis and Troubleshooting the Fault to use of the Error codes of fully Automatic washing machine 6.2.2 Rotary plate does not rotate when washing machine is on 6.2.3 Motor of washing machine is heated	Week 6

<p>6.2.4 Machine motor gives sound while running</p> <p>6.2.5 Washing machine inlet and outlet value not work</p> <p>6.3 Fault diagnosis & Remedies (Testing, alignment, adjustments and replacement) of major component of Manual Washing machine</p> <p>6.3.1 Washing machine does not work</p> <p>6.3.2 Motor of washing machine does not work and gi'ves sound.</p> <p>6.3.3 Rotary plate does not rotate when washing machine is on</p> <p>6.3.4 Motor of washing machine is heated</p> <p>6.3.5 Machine gives sound while running</p> <p>6.3.6 Machine gives electric shock</p> <p>6.3.7 Open, cleaning and check the parts of dryer Washing machine</p>	
<p>Identification and remedies of faults in Electric Heater/Fan Heater</p> <p>7.1 Disassembling and Assembling of Electric Heater/Fan Heater</p> <p>7.2 <i>fault</i> diagnosis & Remedies (Testing, alignment, adjustments and replacement) of major component of Electric Heater/Fan Heater</p> <p>7.2.1 Electric heater does not work</p> <p>7.2.2 When electric heater is switched on, the fuse is burnt</p> <p>7.2.3 Wiring problem and Flexible Cable is short</p> <p>7.2.4 Element of heater is burnt</p> <p>7.2.5 Electric heater gives electric shock</p> <p>7.2.6 Supply terminal has melted and the heater does not work</p> <p>Identification and remedies of faults in Hair Dryer</p> <p>7.3 Disassembling and Assembling of Hair Dryer</p> <p>7.4 Fault diagnosis & Remedies (Testing, alignment, adjustments and replacement) of major component of Hair Dryer</p> <p>7.4.1 Hair Dryer does not work</p> <p>7.4.2 When Hair Dryer is switched on, the fuse is burnt</p> <p>7.4.3 Wiring problem and Flexible cable is short</p> <p>7.4.4 Element of hair dryer is burnt</p> <p>7.4.5 Hair Dryer gives electric shock</p> <p>7.4.6 Supply terminals has melted and the hair dryer does not work</p>	<p>Week 7</p>
<p>Identification and remedies of faults in Microwave Oven</p> <p>8.1 Disassembling and Assembling the Microwave Oven</p> <p>8.2 Microwave Oven does not work automatically</p> <p>8.3 Diagnosis and Troubleshooting the Fault to use of the Error Codes of microwave oven</p> <p>8.4 Fault diagnosis & Remedies (Testing, alignment, adjustments And</p>	<p style="text-align: center;">Week 8</p> <hr/> <p style="text-align: center;">Week8</p>

<p>replacement) of major component of Microwave Oven.</p> <p>8.5 Microwave Oven does not work</p> <ul style="list-style-type: none"> • Fuse is burnt when it is switched on Microwave Oven • Check and replacing of Door Assembly. • Check and replacing of Drive Motor • Check and replacing of High VOLTage capacitor. • Check and replacing of Control Circuit Board • Check and replacing of High Voltage Transformer • Check and replacing of Magnetron Gun <p>Identification and remedies of faults in Electric Kettle</p> <p>8.6 Disassembling and Assembling of Electric Kettle</p> <p>8.7 Fault diagnosis & Remedies (Testing, alignment, adjustments and replacement) of major component of Electric Kettle</p> <p>8.7.1 Electric kettle does not work</p> <p>8.7.2 Fuse is burnt when electric kettle is switched on</p> <p>8.7.3 Electric Kettle does not work automatically (off function)</p> <p>8.7.4 Element of Electric Kettle is burnt</p>	
<p>Identification and remedies of faults in Toaster & Sandwich maker</p> <p>9.1 Disassembling and Assembling of Toaster& Sandwich maker</p> <p>9.2 Fault diagnosis & Remedies (Testing, alignment, adjustments and replacement) of major component of Electric Kettle</p> <p>9.2.1 Toaster does not work</p> <p>9.2.2 Fuse is burnt when Toaster switched on</p> <p>9.2.3 Toaster does not work automatically</p> <p>9.2.4 Sandwich maker does not work</p> <p>9.2.5 Fuse is burnt when Sandwich makers switched on</p> <p>9.2.6 Sandwich maker does not work automatically</p>	Week 9
<p>Identification and remedies of faults in Blender Juicer/Grinder</p> <p>10.1 Disassembling and Assembling of Blender juicer/Grinder</p> <p>10.2 Fault diagnosis & Remedies (Testing, alignment, adjustments and replacement) of major component of Blender juicer /Grinder</p> <p>10.2.1 Blender juicer/Grinder does not work</p> <p>10.2.2 Wiring problem or Flexible Cable is short</p> <p>10.2.3 Fuse is burnt when Blender juicer/Grinder switched on</p> <p>10.2.4 Blender juicer/Grinder motor does not work.</p> <p>10.2.5 Blender juicer/Grinder motor does not start without push {check and replace faulty parts)</p>	Week10
<p>Identification and remedies of faults in AC Electric Motor (Single Phase)</p> <p>11.1 Disassembling and Assembling of the AC Electric motor</p>	Week11

<p>11.2 Fault diagnosis & Remedies (Testing, alignment, adjustments and replacement) of major component of AC Electric motor</p> <p>11.2.1 Replacing the bearing & winding of motor</p> <p>11.2.2 AC Electric motor gives electric shock</p> <p>11.2.3 Electric motor does not start without push (check and replace faulty parts)</p> <p>11.2.4 Motor is heated</p> <p>Motor gives sound while running</p>	
<p>Identification and remedies of faults in vacuum Cleaner</p> <p>12.1 Disassembling and Assembling of Vacuum Cleaner</p> <p>12.2 Fault diagnosis & Remedies (Testing, alignment, adjustments and replacement) of major component of Vacuum Cleaner</p> <p>12.2.1 Vacuum Cleaner does not work</p> <p>12.2.2 Replacing the faulty parts of Vacuum Cleaner</p> <p>12.2.3 Fuse is burnt when it is switched on Vacuum Cleaner</p> <p>12.2.4 Vacuum Cleaner does not work automatically</p>	<p>Week12</p>

**Motivational Lectures
Domestic Electrical Appliance Technician**

Workplace/Institute Ethics Guide

Work ethic is a standard of conduct and values for job performance. The modern definition of what constitutes good work ethics often varies. Different businesses have different expectations. Work ethic is a belief that hard work and diligence have a moral benefit and an inherent ability, virtue, or value to strengthen character and individual abilities. It is a set of values-centered on the importance of work and manifested by determination or desire to work hard.

The following ten work ethics are defined as essential for student success:

1. Attendance:

Be at work every day possible, plan your absences don't abuse leave time. Be punctual every day.

2. Character:

Honesty is the single most important factor having a direct bearing on the final success of an individual, corporation, or product. Complete assigned tasks correctly and promptly. Look to improve your skills.

3. Team Work:

The ability to get along with others including those you don't necessarily like. The ability to carry your weight and help others who are struggling. Recognize when to speak up with an idea and when to compromise by blend ideas together.

4. Appearance:

Dress for success set your best foot forward, personal hygiene, good manner, remember that the first impression of who you are can last a lifetime

5. Attitude:

Listen to suggestions and be positive, accept responsibility. If you make a mistake, admit it. Values workplace safety rules and precautions for personal and co-worker safety. Avoids unnecessary risks. Willing to learn new processes, systems, and procedures in light of changing responsibilities.

6. Productivity:

Do the work correctly, quality and timelines are prized. Get along with fellows, cooperation is the key to productivity. Help out whenever asked, do extra without being asked. Take pride in your work, do things the best you know-how. Eagerly focuses energy on accomplishing tasks, also referred to as demonstrating ownership. Takes pride in work.

7. Organizational Skills:

Make an effort to improve, learn ways to better yourself. Time management; utilize time and resources to get the most out of both. Take an appropriate approach to social interactions at work. Maintains focus on work responsibilities.

8. Communication:

Written communication, being able to correctly write reports and memos.
Verbal communications, being able to communicate one on one or to a group.

9. Cooperation:

Follow institute rules and regulations, learn and follow expectations. Get along with fellows, cooperation is the key to productivity. Able to welcome and adapt to changing work situations and the application of new or different skills.

10. Respect:

Work hard, work to the best of your ability. Carry out orders, do what's asked the first time. Show respect, accept, and acknowledge an individual's talents and knowledge. Respects diversity in the workplace, including showing due respect for different perspectives, opinions, and suggestions.