10/01/2019

REFRIGERATION & AIR CONDITIONING COURSE – PCP (THEORY & PRACTICAL) TRAINING SCHEDULE

Total course duration (800 hr)		
PCP (280 hrs)		Self learning (520 hrs)
Practical (180 hrs)	Theory (100hrs)	

	Schedule		PCP- Topic			Instruction to instructor	Learning outcome
Week	Topic	Day	Duration (Hr)	Theory	Duration (Hr)	Practical	
Week 1	Refrigeration	DAY 1	2	• Introduction to Refrigeration • Objective of Refrigeration • Laws of Refrigeration • Refrigerating Machines	3	• Physical demonstration of refrigerating machines. • Physical demonstration of their parts & functions.	• Focus should be to teach: What is the refrigeration? And why refrigeration is needed? • Refrigerating machines and their parts must be demonstrated physically as well as videos/ ppt must be used for explaining the function of each part.	Learner would be able to-: • State the law of refrigeration. • identify the internal parts of the refrigerating machines. • demonstrate the function of each part of a refrigeration unit.
	Air conditioning	DAY 2	2	• Introduction to Air Conditioning • Objections of air Conditioning • Parts of Air conditioning	3	• Physical demonstration of domestic air conditioner, Industrial air conditioner, deep	Air conditioner and their parts must be demonstrated physically as well as videos/ppt must be used for explaining	Learner would be able to- • identify the various types of AC. • identify the various parts of an AC.

				• Function of each part		freezer and their parts and their functions.	the function of each part.	• Operate an AC unit. • demonstrate the function of each part.
Week 2	Fundamental of Electricity	DAY 1	2	• Introduction to fundamentals of Electricity • Various terms used in Electricity • Various laws • Various types of circuits • Different between AC & DC • Testing instruments • Application in RAC	3	• Practical of ohm's law. • Demonstration of series and parallel circuits. • AC and DC • Application of testing instruments in RAC	• Set up should be available in the work shop to perform practical on ohm's law. • Various types of circuits must be demonstrated physically as well as with the help of videos/ppts.	Learner would be able to-: • verify and apply the ohm's law for various application. • differentiate between series and parallel circuits • carry out the connections of RAC in series and parallel circuits • identify and use the testing instruments.
	Fundamental to RAC & Relationship with RAC	DAY 2	2	• Introduction to Heat and Temperature. • Various types of thermometer scales and their conversion. • Units of heat. • Terms used in RAC -: BTU, Sensible heat, latent –heat • Mode of heat transfer • Condensation and Evaporation • Pressure and its measurement	3	• Practical to measure temperature and pressure • Demonstration for mode of heat transfer. • Conversion from centigrade to Kelvin and Fahrenheit • Demonstration of Condensation and Evaporation • Application of barometer	• Instruments for measuring pressure and temperature must be available in the work shop. • Mode of heat transfer should be demonstrated physically as well as with the help of videos/ppts.	Learner would be able to-: • demonstrate condensation and evaporation modes of heat transfer. • identify & use the equipment for measuring temperature & pressure. • measure temperature and pressure in specific units.
Week 3	Components of Refrigerator	DAY 1	2	• Introduction to Refrigeration cycle • Functions of each part. • Vapor compression	3	• Demonstrate the working of refrigerator. • Practical	• Dismantle refrigeration unit must be shown also use videos for	Learner would be able to -: • identify stages in a refrigeration cycle

				system • Condensing Unit and Parts		demonstration of each unit. • Demonstrate the condensing unit.	demonstration of function of individual parts.	• demonstrate the concept of refrigeration cycle. • identify the parts of condensing unit. • operate a condensing unit.
	Components of Refrigerator	DAY 2	2	• Compressor and their types • Functions • Possible problems • Condenser • Gas filter • Drier • Expansion valve • Evaporator	3	Demonstration of-: • Compressor • Condenser • Gas filter • Drier • Expansion valve • Evaporator	• Dismantle refrigeration unit must be shown also use videos for demonstration of function of individual parts	Learner should be able to -: • identify compressor condenser, gas filter, drier, expansion valve , and evaporator • interpret the symbols used for representing components in drawing of refrigeration system. • carry out dismantling of a refrigerator unit.
Week 4	Components of Air Conditioning	DAY 1	2	Introduction to-: • Various parts of window and split A.C • Working of each part of an A.C	3	• Demonstration of parts of de-assembled Window A.C. • Demonstration of parts of Spilt AC.	• Dismantle air conditioner unit must be shown also use videos for demonstration of function of individual parts	Learner would be able to-: • differentiate between window AC and Split AC. • identify the parts of AC unit. • carry out dismantling of a AC unit
	Components of Air Conditioning	DAY 2	2	• What is humidity? • Importance of humidity in A.C. • Purification of circulative Air. • Psychometric chart	3	• Working of Window A.C. • Working of Split A.C. • Installation of Window and Spilt A.C.	• Dismantle air conditioner unit must be shown also use videos for demonstration of	Learner would be able to-: • read & demonstrate the wiring diagram of an Air conditioner. • read dry bulb

				• Wiring diagram of Air Conditioner			function of individual parts.	temperature and wet bulb temperature through a psychometric chart.
Week 5	Refrigerants	Day 1	2	• Introduction to refrigerant • How refrigerant gives cooling • Properties of refrigerant • Types of refrigerant • Safety • Effect on environment • Measurement of pressure	3	• How to fill the refrigerant in refrigerator and air conditioner? • Identification of leakage of refrigerant • Measurement of pressure	• Practice should be done on filling the refrigerant and checking the machine for proper filling.	Learner would be able to -: • identify the specifications of a refrigerant. • carry out filling/refilling of the refrigerant. • estimate cost of different refrigerant. • measure the pressure.
	Tools and equipments required in RAC	Day 2	2	• Introduction to tools used in refrigeration & air conditioning • Function and application of tools. • Equipments and there use • Safety precautions • First Aid.	4	• Identify the tools and equipment • Identify the material required. • Specification of tools and materials. • Application of each tool and each special tool • Demonstration of equipments. • Mock drill for safety & First-Aid	• Mock drill for safety & First-Aid should be conducted by performing dummy situations.	Learner would be able to-: • identify the tools and equipments for RAC. • select appropriate tool according to their use. • purchase the tools and materials. • perform First-Aid for himself and his colleague at work place.

Week 6	Gasket making & Door Gasket	Day 1	1	• Introduction to gasket • Types of gasket • Methods of making perfect joint.	3	• Perform practical for perfect gasket.	• Practice should be done to install gasket. • Various type of gasket must be demonstrated physically or in ppt/video and their properties must be discussed.	Learner would be able to -: • identify the various types of gasket. • identify when to change gasket • adopt appropriate procedure for fitting gasket.
	A.C Electric Motors	Day 2	2	• Introduction to A.C Electric Motors • Types of electric motors • Function of Electric Motors • Principle of Electric Motors • Single phase Induction motor. • Types of single phase induction motor. • Relays and their use • Circuits • Power of electric motor.	3	• Identification of various types of Electric Motors. • Use of electric motors in RAC. • Use of Relays	• Use of videos must be done for demonstrating function and type of electric motors. • Physical display of electric motor for showing parts must be done.	Learner would be able to-: • define the specifications of various electric motor. • choose the appropriate electric motor according to power of RAC unit. • operate an Electric motor for an RAC. • demonstrate the use of relays.
Week 7	Starting relay	Day 1	2	• Introduction to starting relay. • Purpose and function of starting relay. • Various types of relay.	3	• Identification of relays • Perform testing of relays • Draw wiring diagram of	• Testing of relays should be performed.	Learner would be able to • identify starting relays. • differentiate between various

						refrigerator.		type of relays. • draw and interpret the symbols in wiring diagram of a refrigerator.
	Starting relay	Day 2	2	• Checking /testing of current type relay. • Checking /testing of voltage type relay	3	• Performing testing of current type relay • Performing testing of voltage type relay • Performing connection of relays with RAC equipment.	• Testing of relays should be practiced. • Explain the procedure for making connection of relay with RAC equipment and practice for making connection.	Learner would be able to-: • carry out relay test. • make connections of relay with RAC equipment.
Week 8	Temperature control	Day 1	2	• Introduction to temperature control in RAC. • Various equipments used for temperature control in RAC.	3	• Identification of temperature control device. • Understanding of parts of temperature control device.	• Physical demonstration of various temperature control devices and their internal parts must be done.	Learner would be able to -: • identify various temperature control devices. • identify different parts of temperature control devices. • Use these devices for temperature control in RAC.
	Temperature control	Day 2	2	• Working of thermostat in RAC. • Installation of thermostat • Adjustment of thermostat	3	• Installation of thermostat. • Adjustment of thermostat	• Installation and adjustment of thermostat must be practiced and also checking should be done.	Learner would be able to -: • define the utility of the thermostat in RAC. • install and adjust the

				• Parts of thermostat				thermostat in RAC.
Week 9	Capacitor	Day 1	2	• Introduction to capacitor. • Capacity of capacitor. • Working of a capacitor.	3	• Demonstration of capacitor. • Demonstration working of a capacitor in RAC.	Physical demonstration of capacitor and its working must be done and/or video/ppt can be used.	Learner would be able to-: • identify the capacitor. • choose capacitor of relevant capacity for connecting in a RAC unit.
	Capacitor	Day 2	2	• Types of capacitor. • Working of capacitor. • Function of capacitor. • Connection of capacitors. • Why capacitor is required.	3	• Demonstration of capacitor and its part. • How to connect or disconnect capacitor.	• Dismantle capacitor should be used for demonstration. • Learner should practice for connecting and disconnecting the capacitor.	Learner would be able to-: • choose the capacitor according to the specifications. • connect the capacitor in the RAC unit.
Week 10	Safety devices	Day 1	2	• Introduction to safety devices. • Requirement for safety devices. • What are the various types of safety devices? • Reasons for tripping of OLP	3	• Demonstration of safety devices. • Demonstration of OLP. • Connection of OLP	• Physical demonstration of the safety devices should be done. • Working of OLP should be demonstrated.	Learner would be able to -: • identify and use various safety devices in a RAC unit. • operate and make connections of OLP.
	Efficiency of compress	Day 2	2	• Introduction to compressor and its efficiency. • Causes of in-	4	• Demonstration of compressor & its parts.	• Dismantle compressor should be available at	Learner would be able to-: • Calculate the

	or			efficiency o a compressor in RAC. • Methods of checking efficiency of a sealed compressor		• Understanding of function of each part. • Demonstration of compressor in running condition. • Checking of efficiency of a sealed compressor	workshop. • Fully functioning compressor should be shown. • Procedure for checking the efficiency must be practiced by the learner.	efficiency of compressor. • Identify parts of a compressor. • locate the causes of in-efficiency of a compressor. • Carry out efficiency check in a compressor.
Week 11	Compressor oil and lubricating system	Day 1	1	• Introduction to lubrication and its requirement. • Application of lubricating oil.	3	• Understanding the viscosity of lubricating oil. • Demonstration of lubrication.	• Different specification lubricating oil must be available in the workshop for physical identification and demonstration of specifications.	Learner would be able to-: • identify & define the specification of lubricating oil. • Locate the lubrication related faults.
	Compressor oil and lubricating system	Day 2	2	• Introduction to properties of oil. • Types of oil. • Methods of lubrication.	3	• Demonstration of various properties of oil. • Demonstration of method of lubrication.	• Practice for lubricating the compressor.	Learner would be able to-: • identify when lubrication is required in a compressor. • apply lubricant in compressor.
Week 12	Wiring of refrigerator	Day 1	2	• Introduction to wiring system in different refrigerators. • Method of wiring.	3	• Read and draw the wiring diagrams of a refrigerator	• Learner should perform the activity of drawing a proper wiring diagram of a refrigerator.	Learner would be able to-: • identify the symbols used in wiring diagram. • draw the wiring diagram.
		Day 2	1	• Introduction to all electrical parts of a	3	• Wiring of refrigerator	• Learner should practice to do	• make wiring of refrigerator as per

	Wiring of refrigerator			refrigerator. • Safety precaution while wiring.		as per the wiring diagram.	wiring of refrigerator, proper safety precautions must be taken care of.	the wiring diagram while using adequate safety precautions. • identify and demonstrate electrical parts of a refrigerator.
Week 13	Gas charging	Day 1	1	• Introduction to gas charging. • Requirement for gas charging.	3	• Testing for gas leak. • Safety precaution in gas leakage.	Safety precaution are important while gas charging therefore must be taken care of sincerely while doing this practical	• Learner would be able to test the machine for gas leakage using adequate equipment and safety precautions.
	Gas charging	Day 2	1	• Methods of pressure drop/gas leak testing. • Methods of gas charging in sealed unit	3	• Procedure to remove air from the system. • Use of different methods for gas charging.	Practice for charging the Gas in a refrigeration unit.	• Learner would be the able to charge the gas in a sealed unit.
Week 14	Safety precautio n	Day 1	1	• Introduction to safety precautions. • Possible causes of fire. • Steps to prevent fire.	3	• Demonstration of RAC unit. • To show safety precautions.	• Video/ppt should be shown.	• Learner would be able to identify causes of fire in a RAC unit and will be able to adopt appropriate steps to prevent fire.
	Safety precautio n	Day 2	2	• General safety rules in RAC. • Precaution while handling refrigerant cylinder. • Precaution to avoid electric shock	3	• To understand handling method of refrigerants.	• All general safety rules must be demonstrated physically. • Practice should be done for	Learner would be able to-: • adopt adequate safety precaution while working in a workshop.

								• safely handle the refrigerant.
Week 15	Faults & remedies in refrigeration (poor refrigeration effect)	Day 1	1	• Introduction to faults in refrigeration units. • Causes for faults of poor refrigeration or no refrigeration effect in refrigeration unit.	3	• Differentiate between faulty refrigeration unit and correct refrigeration unit.	• Physical display of faulty and functional refrigeration unit to describe the faults must be available at workshop.	Learner would be able to-: • differentiate between faulty refrigeration unit and correct refrigeration unit. • identify the cause of poor refrigeration or no refrigeration effect in a refrigeration unit.
	Faults & remedies in refrigeration (poor refrigeration effect)	Day 2	1	• Possible remedies for faults like-: Poor refrigeration or no refrigeration effect in refrigeration unit.	4	For rectifying mentioned faults demonstrate procedure like-: • Charging refrigerant • Removing oil from evaporator • Checking efficiency of compressor • Changing gasket • Cleaning/replacing the condenser	• All procedure for rectification must be practiced, while taking required safety precautions. • Tools and consumables should be made available for practical activity.	Learner would be able to-: • test &locate the faults in a refrigeration unit for poor refrigeration or no refrigeration effect. • carry out rectification procedure for fault of poor refrigeration or no refrigeration effect.
Week 16	Faults & remedies in refrigeration (food spoilage	Day 1	2	• Introduction to faults like -: Food spoils but ice freezes, odour in cabinet of a refrigeration units. • Introduce to causes for above mentioned	4	Demonstrate methods for testing and locating the faults and providing remedies for food spoils while unit running & foul odors in refrigeration unit like-: • Method for defrost	• All procedure for rectification must be practiced, while taking required safety precautions	Learner would be able to -: • test and locate the faults in a refrigeration unit for food spoilage & odour. • carry out rectification

	& odour)			faults.		• Checking the air circulation. • Necessary instruction needed for proper use • Checking the leakage		procedure for fault of food spoilage & odour.
	Faults & remedies in refrigeration (short cycling & noisy unit)	Day 2	2	• Introduction to faults like -: short cycling & noisy refrigeration units. • Introduce to causes for above mentioned faults	4	For rectifying mentioned faults demonstrate procedure like-: • Adjusting, checking or replacing the thermostat switch • Checking/repairing fan blade and/or bearings. • Checking and tightening of loose parts of condensing unit.	• All procedure for rectification must be practiced, while taking required safety precautions	Learner would be able to -: • test and locate the faults in a refrigeration unit for short cycling & noisy refrigeration units. • carry out rectification procedure for short cycling & noisy refrigeration units.
Week 17	Faults & remedies in refrigeration (faults in compressor)	Day 1	2	• Introduction to faults like -: Compressor will not start, overloading of cycle, immediate cut off of compressor on overloading in refrigeration units. • Introduce to causes	4	Demonstrate methods for testing and locating the faults and providing remedies for improper functioning of compressor in refrigeration unit like-: • Checking voltage • Checking/repairing wiring. • Replacing relay,	• All procedure for rectification must be practiced, while taking required safety precautions	Learner would be able to-: • test and locate the faults in a compressor. • carry out rectification procedure of a compressor.

				for above mentioned faults		starting capacitor • Checking compressor motor. • Check condenser for proper oil charge. • Check & replace OLP		
	Faults & remedies in refrigeration (high operating cost)	Day 2	2	• Introduction to faults like high operating cost of refrigeration unit. • Introduce to causes for high operating cost of refrigeration unit.	4	For rectifying high operating cost demonstrate procedure like-: • Checking and repairing/replacing the door gasket • Checking installation • Instruction to owner for proper use of refrigeration	• All procedure for rectification must be practiced, while taking required safety precautions	Learner would be able to -: • locate the faults for high operating cost of a refrigeration unit. • Carry out rectification procedure like continuously running check /repair door gasket and checking installation.
Week 18	Water Coolers	Day 1	2	• Introduction to water cooler. • • Description of parts of a water cooler	3	• Demonstration of a water cooler. • Demonstration of each part of water cooler.	• Physical demonstration of different models of a water cooler. • Dismantled model should be available in the workshop.	Learner would be able to -: • demonstrate all the parts of a water cooler. • read the specification of each part of water cooler including power required to run water cooler.

		Day 2	2	• Description of working of a water cooler • Wiring diagram of water cooler • Explanation of working of each part	4	• Demonstration of working of a water cooler • Demonstration of working of each part • To make connection from power supply	• Physical demonstration of working of a water cooler.	Learner would be able to • operate a water cooler • make connection of water cooler from power supply • identify each part of a water cooler.
Week 19	Water Coolers	Day 1	2	• Introduction to possible faults in water cooler. • Description of each fault of a water cooler	4	• Demonstration of a faulty water cooler Description and identification of each fault.	• Physical Demonstration of a faulty water cooler.	• Learner would be able to locate all the faults of a faulty water cooler by using appropriate testing methods.
		Day 2	2	• Introduction to possible causes of faults in water cooler. • Description of tools used for locating fault and its cause	4	• Locating fault in water cooler • Disassembly of water cooler	• All tools should be made available for fault finding.	• Learner would be competent in using tools for rectifying the faults in a water cooler.
Week 20	Selector Switch	Day 1	2	• Introduction to working of selector switch. • Description of each type of elector switch • Wiring diagram of a selector switch.	4	• Demonstration of a working of selector switch • Demonstration of working of selector switch	• Physical demonstration of functioning of selector switch.	Learner would be able to - : • operate a selector switch. • connect a selector switch to a RAC unit. • read the specification of a selector switch.

		Day 2	2	• Introduction to possible faults in selector switch. • Description of each fault in selector switch	3	• Demonstration of a faulty selector switch	• Demonstration of faults in selector switch.	• Learner would be able to locate the fault in a faulty selector switch.
Week 21	Wiring of Air Conditioner	Day 1	2	• Introduction to each part of an air conditioner • Description of each electrical part of air conditioner	3	• Demonstration of a working of air conditioner • Demonstration of working of each part	• Physical demonstration of functioning of Air – conditioner.	• Learner would be able to identify and demonstrate the working of electrical parts of an Air conditioner.
	Wiring of Air Conditioner	Day 2	1	• Wiring diagram of a air conditioner	4	• Demonstration for making connections for each part.	• Drawing of wiring diagram should be shown. • Learner should practice for making connections.	• Learner would be able to make wiring of air conditioner as per the wiring diagram while using adequate safety precautions.
Week 22	Blower Motor	Day 1	2	• Introduction to blower motor in air conditioner • Description of each type of blower motor	3	• Demonstration of a blower motor • Demonstration of working of blower motor	• Physical demonstration as well as demonstration through videos/ppt must be done for showing types of blower motor.	Learner would be able to -: • state the specifications of blower motor. • operate a blower motor. • make connection of a blower motor in a air conditioning unit.
	Blower Motor	Day 2	2	• Wiring diagram of a blower motor in air conditioner	3	• Demonstration of a making connection for blower motor	• Charts/ppts/videos must be used for demonstrating the connections of a blower motor.	• Learner would be able to apply the knowledge of wiring diagram for making connection as per wiring diagram for a

								blower motor.
Week 23	Gas Charging in Window & Split AC	Day 1	2	• Introduction to Gas Charging in air conditioner • Introduction of tools required for gas charging	3	• Demonstration of a gas charging • Gas charging the by the learner	• Ppts/video must be used for demonstration of procedure for gas charging. • Gas cylinders must be available for charging in work shop. • Proper precautions must be given to learner before practicing gas charging.	Learner would be able to-: • describe the specification of gas. • demonstrate the application of tools used for charging the gas. • quantify the requirements of charging the gas in a window & split AC.
	Faults and remedies in Air conditioning (capacitor and blower motor)	Day 2	2	• Introduction of faults in air conditioning units like faults in capacitor and blower motor. • Causes for faults.	3	• Demonstrate Methods for testing and locating the faults of capacitor. • Demonstrate Methods for testing Fan/ Blower motor	All possible faults of capacitor and blower motor must be demonstrated physically or ppts or videos can also be used.	• Learner would be able to locate the faults of capacitor and blower in Air Conditioning unit and identify their causes and carry out proper rectification procedure.

Week 24	Faults and remedies in Air conditioning (overload protection and faults of selector switch)	Day 1	2	• Introduction of faults in air conditioning units like faults due to overloading and faults of selector switch.	3	• Demonstrate Methods for overload protector testing. • Demonstrate Methods for locating the faults of selector switch	• Testing for overloading conditions must be practiced by learner. • Practical for faults of selector switch must also be practiced by learner. • Instructor should provide models or machines for these practices.	Learner would be able to-: • differentiate between faulty Air Conditioning unit and correct Air Conditioning unit. • identify and locate the faults due to overloading by various testing methods. • carry out rectification for overloading fault.
	Gas Charging in Water Cooler	Day 2	2	• Introduction to Gas Charging. • Introduction of tools required for gas charging	3	• Demonstration of a gas charging. • Gas charging by the learner	• Learner should be able to have ability to explain the requirement for gas charging. • Learner should be able to know the specification of gas • Learner should be able to know the use of tools	Learner would be able to -: • identify the specification of gas. • demonstrate the application of tools used for charging the gas. • quantify the requirements for charging the gas in a water cooler. • Adopt appropriate safety measure while charging the gas.

Week 25	Installation of Window AC	Day 1	2	• Introduction to installation • Tools required for installation • Prerequisite for installation	3	• Demonstration of a Installation • Installation by the learner using tools	• Step wise installation procedure must be practiced by the learner. • Instructor should check for correct installation.	Learner would be able to -: • Complies with prescribed installation procedure of an AC. • identify tools used for installation of a split AC. • identify the prerequisite for installation. • Carry out the installation of the unit.
	Installation of Split AC	Day 2	2	• Introduction to installation • Tools required for installation • Prerequisite for installation	3	• Demonstration of a Installation • Installation by the learner using tools	• Step wise installation procedure must be practiced by the learner. Instructor should check for correct installation	Learner would be able to -: • adopt appropriate installation procedure. • identify tools used for installation of a split AC. • identify the prerequisite for installation. • Carry out the installation of the unit.
Week 26	Installation of Water Cooler	Day 1	2	• Introduction to installation • Tools required for installation • Prerequisite for installation	3	• Demonstration of a Installation • Installation by the learner using proper tools	• All tools must be available that are required for installation. • Proper safety precautions must be taken care of while installing.	Learner would be able to-: • Complies with prescribed installation procedure. • identify tools used for installation of a water cooler. • identify the

								prerequisite for installation. • Carry out the installation of the unit.
	Installation of Domestic Refrigerator	Day 2	2	• Introduction to installation • Tools required for installation • Prerequisite for installation	3	• Demonstration of a Installation • Installation by the learner using tools	• All tools must be available that are required for installation. • Proper safety precautions must be taken care of while installing.	Learner would be able to -: • adopt appropriate installation procedure. • identify tools used for installation of a refrigerator. • identify the prerequisite for installation. • Carry out the installation of the unit.
Week 27	Installation of Machine by the learner	Day 1	1	Step wise procedure for Installation of AC	3	Installation of AC by the learner according to set procedure	Question answering and doubt clearing and quality check of installed AC.	Leaner would able to -: • install the AC unit according to set procedure. • Check for correct operation.
		Day 2	2	Step wise procedure for Installation of Refrigerator & water cooler	3	Installation of Refrigerator & water cooler by the learner according to set procedure	Question answering and doubt clearing and quality check of installed Refrigerator & water cooler	Leaner would able to -: • install the refrigeration and water cooling unit according to set procedure. • Check for correct operation.

Week 28	Visit to workshop of different brands	Day 1	---- ----	----------	6	• Demonstration of all tools used for checking/testing • Demonstration of specific part of same type of units of different brand	• Arrangement of visit to work shop must be planned before hand and learner should be asked to prepare a report of the visit.	Learner would be able to - : • identify the tools used for checking/testing or repairing the parts of machines • identify all parts of different type of refrigeration, air conditioning and water cooler unit.