List of Electrical Practical (Basic Practical)-Electrical Trade

Name	
RTO	
Enrolment Date	

Practical	Number	Practical Name	Remark	Complete
PR	1	Fixing conduit, switch, outlet based on timber board	Students do themselves	
PR	2	Conduit wiring on board	Students do themselves	
PR	3	Surface wiring on board	Students do themselves	
PR	4	Wiring behind timber wall sheet	Students do themselves	
PR	5	Polarity test of long wiring circuit using three resistors	Students do themselves	
PR	6	Earth ,Active,Neutral Continuity,Polarity, Insulation resistance test of Wiring system	Students do themselves	
PR	7	Earth fault loop impedance measurement	Students do themselves	
PR	8	Test and Tag Practice	Students do themselves	
PR	9	Three phase motor LOTO Practice	Students do themselves	
PR	10	Metallic conduit , PVC Rigid Conduit, Corraguated coduit, water proof and three phase socket outlet installation	Students do themselves	
PR	11	Two ways, three ways Intermediate switch and light installation on timber board	Students do themselves	
PR	12	Loop at the switch fixture on table	Students do themselves	
PR	13	Loop at the light fixture on table	Students do themselves	
PR	14	3 ways switch fixture on table	Students do themselves	
PR	15	Fault finding board	Students do themselves	
PR	16	RCD, RCBO Connection	Students do themselves	
PR	17	Wiring , pulling cable with snake	Students do themselves	
PR	18	Water heater connection	Teacher Demonstration	
PR	19	Observation of thermostat operation	Teacher Demonstration	
PR	20	Illumination study	Students do themselves	
PR	21	Series parallel resistor (Physical and Virtual Lab)	Students do themselves	
PR	22	Series parallel capacitor (Physical and Virtual Lab)	Students do themselves	
PR	23	Magnetic and Relay (Physical+Virtual lab)	Teacher Demonstration + Students do themselves	
PR	24	DOL Starter	Teacher Demonstration + Students do themselves	
PR	25	Single phase motor forward and reverse connection	Teacher Demonstration + Students do themselves	
PR	26	Motor circuit study and virtual lab	Teacher Demonstration + Students do only online themselves	
PR	27	Vernier / Micrometer	Students do themselves	
PR	28	Threading	Students do themselves	
PR	29	Table fan assembly	Students do themselves	
PR	30	Volt meter Ammeter connection	Students do themselves	
PR	31	Transformer practical (Physical+Virtual Lab)	Teacher Demonstration + Students do only online themselves	
PR	32	LOTO Practice	Students do themselves	
PR	33	Fault finding of electrical apparatus	Teacher Demonstration + Students do themselves	

Practical	Number	Practical Name	Remark	Complete
PR	34	AC RLC Circuit (Physical+Virtual Lab)	Teacher Demonstration + Students do themselves	
PR	35	DC Motor prime mover, three phase alternator , transformer connection and operation	Teacher Demonstration	
PR	36	Programmable Logic Controller (Physical+Software operation)	Teacher Demonstration + Students do only online themselves	
PR	37	Jogging (Physical+Software operation)	Teacher Demonstration + Students do only online themselves	
PR	38	Alternative power supply LOTO	Students do themselves	
PR	39	Single phase synchronous motor Circuit board	Teacher Demonstration	
PR	40	Earthing connection	Students do themselves	
PR	41	Solar module/ inverter connection	Teacher Demonstration	
PR	42	Nail finder, Illumination Test in different parts of building rooms	Students do themselves	
PR	43	Electronic circuit board studies and sketches	Students do themselves	
PR	44	Panel board PTLO CPO1 study and sketches	Students do themselves	
PR	45	Telecom cable testing	Students do themselves	
PR	46	Joining telecom terminal	Students do themselves	
PR	47	Making RJ11,12 45 plugs	Students do themselves	
PR	48	Flexible cable termination, socket plug connection	Students do themselves	
PR	49	Cable joining, soldering,crimping,flexible cable	Students do themselves	
PR	50	Materials requirement planning,equipment,material purchase order form, I/N number , cost quotation Bunnings	Students do themselves	
PR	51	Study and testing of light tube fixture with choke	Students do themselves	
PR	52	Ten points testing practical for three phase circuit	Students do themselves	

Note

One practical / week over 52 weeks

List of further practical to develop

Practical Number	Practical Name	Remark	Complete
PR 53	Smoke detector connection	Teacher Demonstration + Students do only online themselves	
PR 54	Emergency light connection	Teacher Demonstration + Students do only online themselves	
PR 55	Three phase circuit study with Single phase to three phase converter	Teacher Demonstration + Students do only online themselves	
PR 56	DC Motor Test	Teacher Demonstration + Students do only online themselves	
PR 57	Three phase AC Motor Test	Teacher Demonstration + Students do only online themselves	
PR 58	Polarity Testing of transformer	Teacher Demonstration + Students do only online themselves	
PR 59	Star and delta connection of three transformers	Teacher Demonstration + Students do only online themselves	
PR 60	Current divider and potential divider theorem	Teacher Demonstration + Students do only online themselves	
PR 61	Conduit cutting ,bending and threading	Students do themselves	
PR 62	Installation of various lights	Teacher Demonstration + Students do only online themselves	
PR 63	Connection of water heater circuit and components	Teacher Demonstration + Students do only online themselves	
PR 64	Connection of electric range circuit and components	Teacher Demonstration + Students do only online themselves	

PR 65	Catenary cable and consumer main connection	Teacher Demonstration + Students do only online themselves	
PR 66	Analogue meter readings and variable DC Power supply	Teacher Demonstration + Students do only online themselves	
PR 67	Variable frequency supply and inductance	Teacher Demonstration + Students do only online themselves	
PR 68	Variable frequency supply and capacitance	Teacher Demonstration + Students do only online themselves	
PR 69	Timer and relay	Teacher Demonstration + Students do only online themselves	
PR 70	Guillotine and sheet metal work	Students do themselves	
PR 71	Single phase AC Motor Test	Teacher Demonstration + Students do only online themselves	
PR 72	Assembling the structure	Students do themselves	

List of Electrical Practical (Advanced Practical)-Electrical Engineering

		COMPULSORY PRACTICAL		
Practical	Number	Practical Name	Remark	Complete
PR	73	DC Variable speed drive	Teacher Demonstration + Students do only online themselves	
PR	74	Amplifier gain	Teacher Demonstration + Students do only online themselves	
PR	75	SCR	Teacher Demonstration + Students do only online themselves	
PR	76	Three phase rectification	Teacher Demonstration + Students do only online themselves	
PR	77	Three terminals regulator	Teacher Demonstration + Students do only online themselves	
PR	78	Current to voltage transducer	Teacher Demonstration + Students do only online themselves	
PR	79	Effect of transformer on power line	Teacher Demonstration + Students do only online themselves	
PR	80	Tee and Pi equivalent line	Teacher Demonstration + Students do only online themselves	
PR	81	Variable DC Drive	Teacher Demonstration + Students do only online themselves	
PR	82	Three phase power measurement	Teacher Demonstration + Students do only online themselves	

	POWER SYSTEM PRACTICAL		
PR 83	CT PT Ratio	Teacher Demonstration + Students do only online themselves	
PR 84	Real, Reactive and Apparent Power	Teacher Demonstration + Students do only online themselves	
PR 85	Line air capacitance	Teacher Demonstration + Students do only online themselves	
PR 86	Inductance reactance of series coil	Teacher Demonstration + Students do only online themselves	
PR 87	Line insulator capacitance	Teacher Demonstration + Students do only online themselves	
PR 88	Load centre	Teacher Demonstration + Students do only online themselves	
PR 89	Over current relay	Teacher Demonstration + Students do only online themselves	
PR 90	UG Capacitor capacitance	Teacher Demonstration + Students do only online themselves	
PR 91	Single phase AC Motor Test	Teacher Demonstration + Students do only online themselves	
PR 92	Voltage profile chart	Teacher Demonstration + Students do only online themselves	
PR 93	Pi and Tee Network	Teacher Demonstration + Students do only online themselves	

PR 94	Transformer effect on line losses	Teacher Demonstration + Students do only online themselves	
PR 95	Transformer OCT SCT Test	Teacher Demonstration + Students do only online themselves	
PR 96	Transformer Polarity Test	Teacher Demonstration + Students do only online themselves	
	ELECTRICAL MACHINES PRACTICAL		
PR 97	Motor winding impedance	Teacher Demonstration + Students do only online themselves	
PR 98	Motor polarity	Teacher Demonstration + Students do only online themselves	
PR 99	DC Generator characteristics test	Teacher Demonstration + Students do only online themselves	
PR 100	Three phase motor speed measurement	Teacher Demonstration + Students do only online themselves	
PR 101	Coil inductance	Teacher Demonstration + Students do only online themselves	
PR 102	Mutual inductance	Teacher Demonstration + Students do only online themselves	
PR 103	CT PT Power system instrumentation	Teacher Demonstration + Students do only online themselves	
PR 104	Power transformer regulation	Teacher Demonstration + Students do only online themselves	
PR 105	Transformer connection	Teacher Demonstration +	

		Students do only online themselves	
PR 106	Variable Speed Drive	Teacher Demonstration + Students do only online themselves	
	POWER ELECTRONICS+PROCESS CONTROL PRACTICAL		
PR 107	Class A/B Amplifier	Teacher Demonstration + Students do only online themselves	
PR 108	Inverting and non inverting amplifier	Teacher Demonstration + Students do only online themselves	
PR 109	SCR Phase Control	Teacher Demonstration + Students do only online themselves	
PR 110	Inverting Amplifier	Teacher Demonstration + Students do only online themselves	
PR 111	OP Amp Comparator	Teacher Demonstration + Students do only online themselves	
PR 112	Precision half wave rectifier	Teacher Demonstration + Students do only online themselves	
PR113	Variable Frequency Drive	Teacher Demonstration + Students do only online themselves	
PR 114	Three phase rectifier	Teacher Demonstration + Students do only online themselves	
PR 115	Three terminals regulator	Teacher Demonstration + Students do only online themselves	
PR 116	PWM	Teacher Demonstration + Students do only online themselves	
PR 117	Mini Lab	Teacher Demonstration + Students do only online themselves	
PR 118	Variable drive system	Teacher Demonstration + Students do only online themselves	
PR 119	Process Control PLC	Teacher Demonstration +	

		Students do only online themselves	
	RENEWABLE ENERGY		
PR 120	Renewable Energy-Solar Electrical System Solar Inverter, Grid model	Teacher Demonstration + Students do only online themselves	
	ELECTRICAL FUNDAMENTAL		
PR 121	Power Factor Measurement	Teacher Demonstration + Students do only online themselves	
PR 122	Three phase unbalanced load	Teacher Demonstration + Students do only online themselves	
PR 123	Maximum power transfer theorem	Teacher Demonstration + Students do only online themselves	
PR 124	Superposition theorem	Teacher Demonstration + Students do only online themselves	
PR 125	Star Delta Load	Teacher Demonstration + Students do only online themselves	