

**TENDER SCHEDULE NO:- Y/1**

Bill of Quantities/ Schedule of Requirements for TRADE : "ELECTRICIAN "

**LIST OF SHORTFALL MACHINERY**

DELEVERY POINTS:- ITC Rupnarainpur, P.O. Hindustan Cables, Dist. Burdwan

Sl.No.	Description of Item with Specification	QtyRequired	UNIT	RATE (Rs)	TOTAL AMOUNT (Rs)	
					In figures	In words
1	<p>Tong Tester General Specifications Incorporates CMOS LSI Circuit for automatic transfer of measuring range.</p> <p>3-3/4 digits - 3999 counts, LCD Display AC/DC flow 40 mA / 100 mA AC/DC (Measurement of AC/DC mA, current with test leads) Maximum Clamp Dia: 52mm DATA HOLD facility Low Battery indication Auto Power Off Power Supply 3V battery (2 pcs 1.5V batteries) Weight approx: 360 gms Accessories: Leads, Manual, Battery, carrying case Audible continuity Frequency and capacitive measurement An ideal tool for electrical measurement made in accordance with IEC - 1010 -1 Safety Standards. DC Voltage Range Accuracy Resolution Overload Protection 400mV +(0.8%+2d) 0.1mV 1000V 4V +(0.8%+2d) 1mV 1000V 40V +(0.8%+2d) 10mV 1000V 400V +(0.8%+2d) 100mV 1000V 1000V +(1%+3d) 1V 1000V AC Voltage Range Accuracy Resolution Frequency Range Overload Protection 400mV +(1.2%+5d) 0.1mV 50~60 Hz 1000V</p>	1No.	each			

4V +(1.2%+5d) 1mV 50~60 Hz 1000V  
 40V +(1.2%+5d) 10mV 50~60 Hz 1000V  
 400V +(1.2%+5d) 100mV 50~60 Hz 1000V  
 600V +(1.5%+5d) 1V 50~60 Hz 1000V  
 AC Current (mA From Input Terminals)  
 Range Accuracy Resolution Frequency Range Overload Protection  
 4 A +(1.5%+5d) 1mA 50~60 Hz 100 A  
 40 A +(1.5%+5d) 10mA 50~60 Hz 100 A  
 400 A +(1.5%+5d) 100mA 50~60 Hz 1500 A  
 1000 A +(1.5%+5d) 1A 50~60 Hz 1500 A  
 Resistance  
 Range Accuracy Resolution Overload Protection  
 400Ω +(1%+3d) 0.1Ω 220 V  
 4kΩ +(1%+3d) 1Ω 220 V  
 40kΩ +(1%+3d) 10Ω 220 V  
 400kΩ +(1%+3d) 100Ω 220 V  
 4MΩ +(1%+3d) 1KΩ 220 V  
 400MΩ +(1.2%+5d) 10KΩ 220 V  
 Capacitance  
 Range Accuracy Resolution Overload Protection  
 40nF +(3%+5d) 0.01 nF 100 V  
 400nF +(3%+5d) 0.1 nF 100 V  
 4uF +(3%+5d) 1 nF 100 V  
 40uF +(3%+5d) 10 nF 100 V  
 100uF +(3%+5d) 100 nF 100 V  
 Frequency  
 Range Accuracy Resolution Overload Protection  
 40 Hz +(0.5%+3d) 0.01Hz 100 V  
 400 Hz +(0.5%+3d) 0.1Hz 100 V  
 4 KHz +(0.5%+3d) 1Hz 100 V  
 40 KHz +(0.5%+3d) 10 Hz 100 V  
 400 KHz +(0.5%+3d) 100 Hz 100 V  
 4 MHz +(0.5%+3d) 1KHz 100 V  
 20 MHz +(0.5%+3d) 10 KHz 100 V  
 Diode Test  
 Indicates the approximate value of forward direction voltage decrease of

	diode, measuring condition forward direction direct current flow approximately 0.5 mA, backward direction direct voltage approximately 1.5V. Continuity Test					
2	Starters for 3 phase , 400v , 50 cycles , 2 to HP AC motor a) Auto Transformer type starter b) Star delta starter with manual , semi auto and automatic c) Direct on line starter	1No.	each			
3	Electrical Machine Trainer (Basic Unit) with flat Demo panel table top rack with set of panels. Essential accessories and following 300W chasis mounted machines (7Nos.) DC machine with swinging stator has torque speed sensor mounted to measure shaft power. a] Integrated DC m/c mounted as Dynamometer & with speed/torque sensor. b] Integrated 3 phase AC 300W m/c chasis mounted c] Integrated 1 phase AC 300W motor chasis mounted d] Integrated 1 phase AC generator & Sync.300W M e] Universal Motor AC/DC, 300W, Chasis mounted f] Repulsion motor chasis mounted g] Squirrel cage 3 phase AC 300W, 2 speed chasis mounted motor.	1Set.	set			
4	MG Set Consisting of Squirrel Case Induction Motor 7HP 400V, 50 cycles with directly coupled DC shunt generator 5 KW 250V with built in panel board laboratory type MG Set should be mounted on a base plate. The Panel Board Consist of : 3-Phase Circuit Breakers Star Delta Starter (Contact type & points) Shuck Field Regulator DC Circuit Breaker Suitable voltmeter on AC & DC side Suitable line ammeters on AC & DC side Field Circuit ammeter Indicating lamps on both the sides (AC & DC)	1Set	set			

	Accessories: • Tachometer for Speed Measurement. • The circuit diagram will be supplied with the Motor. • Instruction Manual					
5	Motor Series DC , 220 volt , 0.5 to 2 HP , coupled with mechanical load.	1No.	each			
6	DC Shunt Motor 3HP 250V with 3 point starter and speed regulator Laboratory type Motor should be mounted on a base plate. The Panel Board Consist of : • 3 Point DC Starter. • Speed Regulator. • Suitable Analog Voltmeter. • Suitable Analog Ammeter. Accessories: • Tachometer for Speed Measurement. • The circuit diagram will be supplied with the Motor. • Instruction Manual	2Nos.	each			
7	DC Compound 3HP 250V with 4 Point Starter and Laboratory type Motor should be mounted on a base plate. The Panel Board Consist of : • 4 Point DC Starter. • Field Regulator • Suitable Analog Voltmeter. • Suitable Analog Ammeter. Accessories: • Tachometer for Speed Measurement. • The circuit diagram will be supplied with the Motor. • Instruction Manual	2Nos.	each			
8	Motor AC Single Phase, 230Volt, 1HP Repulsion type complete with starter and switch.	1No.	each			
9	Motor AC Single Phase 230volt 50 cycles ¼ HP with starter / switch	1No.	each			
10	Motor AC Single Phase 230 volt 50cycles 1 HP capacitor type with starter switch 1 HP	1No.	each			
11	Universal Motor 750W AC/DC 250V Laboratory type Motor should be mounted on a base plate. The Panel Board Consist of : • Suitable Analog Voltmeter. • Suitable Analog Ammeter. Accessories: • Tachometer for Speed Measurement. • The circuit	1No.	each			

12	<p>diagram will be supplied with the Motor. • Instruction Manual  DC Shunt Motor 3HP 250V with 3 point starter and speed regulator  Laboratory type Motor should be mounted on a base plate.  The Panel Board Consist of :</p> <ul style="list-style-type: none"> <li>• 3 Point DC Starter.</li> <li>• Speed Regulator.</li> <li>• Suitable Analog Voltmeter.</li> <li>• Suitable Analog Ammeter.</li> </ul> <p>Accessories: • Tachometer for Speed Measurement. • The circuit diagram will be supplied with the Motor. • Instruction Manual</p>	1No.	each			
13	<p>DC Compound 3HP 250V with 4 Point Starter and  Laboratory type Motor should be mounted on a base plate.  The Panel Board Consist of :</p> <ul style="list-style-type: none"> <li>• 4 Point DC Starter.</li> <li>• Field Regulator</li> <li>• Suitable Analog Voltmeter.</li> <li>• Suitable Analog Ammeter.</li> </ul> <p>Accessories: • Tachometer for Speed Measurement. • The circuit diagram will be supplied with the Motor. • Instruction Manual</p>	1No.	each			

We agree to supply the above goods in accordance with the technical specification as per terms and conditions specified in Tender Notice.

We also confirm that the normal commercial Warrantee/Gurantee of 12 months shall apply to all the offered goods.

We also confirm that we have taken steps to ensure that no person acting for us or on our behalf will engage in corrupt, fraudulent, collusive, coercive or obstructive practice.

We agree to make necessary arrangements of Inspection and Testing of all the above items at places within Kolkata Metropolitan area before dispatch to the consignee.

Signature of Supplier