

TENDER SCHEDULE NO:- F

Bill of Quantities/ Schedule of Requirements for TRADE : " REFRIGERATION AND AIR-CONDITIONING MECHANIC"

LIST OF MACHINERY

DELIVERY POINTS:- 1) Satish Chandra,I.T.C., Kalanabagram, Dist. -Burdwan, PIN :- 713124

SI.No.	Description of Item with Specification	QtyRequired	UNIT	RATE (Rs)	TOTAL AMOUNT (Rs)	
					In figures	In words
1	<p>Inclined Tube Manometer Precision Measurement of Pressure, vacuum, & differential pressure. Construction Details Casing: Aluminium / M.S. Casing from three side and aluminium cover with transparent acrylic front. Metering Tube : Special uniform bore thick walled borosilicate glass tube. Finishing : Meter Body painted with Industrial Grade Paint / Powder. Coated. Scale : Scale engraved on milky white acrylic plastic filled with black colour. Wetted Parts : S.S. 304. End Connection: ¼" BSP / NPT (F) or Nozle type Mounting : Wall Panel Mounting Arrangement : Drain plug, filling plug, Zero Adjusting Knob Level Bulb. Accuracy : + / - 0.1% of F.S.D. or Better. Range : 0 – 500 MM Scale Length : 1000 MM MIN.DIVN : 0.5 MM</p>	2Nos.	Each			
2	<p>Refractometer Digital Measurement Range : Brix 0.0 to 32.0% Minimum Indication : Brix 0.1% Measurement Accuracy : Brix 0.1% Measurement Temperature : 5 to 40 °C (Automatic Temperature Compensation) Ambient Temperature : 5 to 40 °C Measurement Time : 3 sec. International Protection Class : IP 64 Water Resistant Power Supply : 006P Dry Battery (9V) Dimension : 17 x 9 x 4cm.</p>	1No.	Each			
3	<p>Thermometer (Non-Contact Digital) General Specifications Non-contact infrared thermometer with laser pointer measures from -20 °C to 270 °C / -4 °F to 518 °F Resolution: 1 °C or 1 °F Accuracy: ± 2% Easy to use with measuring temperature of hot or moving objects from a safe distance Fixed emissivity (0.95) covers 90% of surface applications Narrow 8:1 field of view (at 8" distance, measure 1" target) Built-in laser pointer to improve aim Fast sampling time °C / °F switchable and auto power off Super large 3-1/2 digit (1999 count) multifunction backlit LCD with data</p>	2Nos.	Each			

	<p>hold Auto-hold after releasing the measure button Complete with 9V battery Dimensions / Wt.: 159x 79 x 57.2mm / 180g</p>					
4	<p>Reciprocating compressor with provision of capacity control etc. for demonstration , capacity 9000 kcal /hr consist of : Compressor : Reputed make open type Reciprocating compressor, flywheel : Motor 3 HP 1 Drive set 1 Variable frequency drive 1 MCB - compressor Siemens OLR - compressor Siemens SPP - compressor Minilec Switch – compressor Teknik Lamp – compressor on Apexa /equip. Lamp – R Y B Apexa / equip.</p>	1No.	Each			
5	<p>Condensing Unit with Open type compressor evaporative condenser controls etc. capacity 3000k cal/hr. Consist of : Compressor Open type compressor (1 TR capacity) Motor Condenser Air cooled, Aluminium finned copper pipe with fan Condenser fan Receiver Pressure relief valve Swidgelog / Brasomatic Solenoid valve Danfoss / Alco / Equivalent Liquid line drier Danfoss / Alco / Equivalent Sight glass Danfoss / Alco / Equivalent Cellulose pad S. S. tank 100 lit. Pump KBL / Crompton Electrical & Mechanical MCB - compressor Siemens OLR - compressor Siemens Contactor – compressor Siemens SPP - compressor Minilec Switch – compressor Teknik Lamp – compressor on Apexa / equivalent Lamp – R Y B Apexa / equivalent</p>	1No.	Each			
6	<p>Condensing Unit with Open type compressor Air Cooled condenser controls etc. capacity 3000k cal/hr. Consist of : Compressor Open type compressor (1 TR capacity) Motor Condenser Air cooled, Aluminium finned copper pipe with fan Condenser fan Receiver Pressure relief valve Swidgelog / Brasomatic Solenoid valve Danfoss / Alco / Equivalent Liquid line drier Danfoss / Alco / Equivalent Sight glass Danfoss / Alco / Equivalent Electrical & Mechanical MCB - compressor Siemens OLR - compressor Siemens</p>	1No.	Each			

	<p>Contactor - compressor Siemens SPP - compressor Minilec Switch – compressor Teknik Lamp – compressor on Apexa / equivalent Lamp – R Y B Apexa / equivalent</p>					
7	<p>Air Conditioning Plant , Direct and Indirect Water Chiller , complete with controls including humidity control etc. Capacity 15000k cal/hr or working trainer model simulator. Compressor Kirloskar make CR 30 compressor (1 TR nominal capacity) Condenser Air cooled, Aluminium finned copper pipe with fan Condenser fan 15" size, 900 RPM, 500 W Expansion device Thermostatic – Danfoss / Alco Orifice Danfoss make Evaporator Copper coil immersed into tank Refrigerant R22 Dual pressure cutout Ranco / equivalent Liquid line drier Danfoss / Alco / Equivalent Dual pressure cutout Ranco / equivalent Sight glass Danfoss / Alco / Equivalent Accumulator Emerson Copeland make Solenoid valve Danfoss / Alco / Equivalent Pressure Guages Wika AHU M. S. powder coate Heater Humidifier Receiver Controller Thermocouple 20 feet Temperature indicator Radix / Subzero Electrical & Mechanical MCB - compressor Siemens OLR - compressor Siemens Contactor - compressor Siemens SPP - compressor Minilec Switch – compressor Teknik Lamp – compressor on Apexa / equivalent Lamp – R Y B Apexa / equivalent</p>	1No.	Each			
8	<p>Cold Storage Plant Complete with all controls and accessories including cooling tower and water treatment plant capacity 15000k. cal/hr or working trainer model / simulator Specifications Cold room size, L x W x H, M 2 x 2 x 2 Temperature required to be maintained, °C 4 Insulation 80 mm PUF Required capacity, TR 1.5 TR Electrical supply 415 ±10% 50 HZ Three Phase Connected Power, KW 4 Room Specification Walls 80 mm Puf panel with M.S sheet 0.5 mm thick from inside & outside Floor 0.5 mm from outside & 12 mm marine ply + 1.6 mm checkered aluminum from inside Door 1 No hinged door With hardware such as handle & lock</p>	1No.	Each			

	<p>Part List - Refrigeration Compressor Kirloskar compressor, CR-36 1 Condenser Water cooled, Shell & tube Valve For condenser outlet Expansion device Thermostatic – Danfoss / Alco Orifice Danfoss make 1 Evaporator Aluminum finned copper pipe with fan Evaporator fan 16" size, 900 RPM, 500 W Refrigerant R22 1 Lot Liquid line drier Danfoss / Alco / Equivalent Dual pressure cutout Ranco / equivalent Sight glass Danfoss / Alco / Equivalent Pressure relief valve Swidgelog / Brasomatic Accumulator Emerson Copeland make Solenoid valve Danfoss / Alco / Equivalent Pressure Guages Wika 2 Thermocouple 20 feet 1 Temperature indicator Radix / Subzero 4</p> <p>Electrical & Mechanical MCB - compressor Siemens 1 OLR - compressor Siemens 1 Contactor - compressor Siemens 1 SPP - compressor Minilec 1 Switch – compressor Teknik 1 Lamp – compressor on Apexa / equivalent Lamp – R Y B Apexa / equivalent</p> <p>Condenser Water Circuit Cooling tower Advance make 1 Cooling tower pump 1 Water strainer 1 Water valve Ball valve at inlet 1 Globe valve at outlet 1 MCB-pump Siemens OLR-pump Siemens 1 SPP-pump Minilec 1 Contactor - pump Siemens Switch-pump Teknik 1 Lamp-pump Apexa / equivalent 1 Water treatment plant</p>					
9	Water Cooler , Storage type Storage Capacity : 40 Ltrs. Cooling Capacity : 20 ltrs/hr No. of Faucets : 1 Glasses at Comfort Level : 100 Refrigerant : R-134a Dimension : 450 x 450 x 1235 appx Weight : 45 Kgs.	1No.	Each			
10	Ice Candy Unit Complete with SS tank, mould box thermocole insulated sunmica body, agitator compressor, motor etc. Temperature pressure refrigerant control gauges, motor pipe fitting etc. 3000 k Cal/hr or working trainer model / simulator Specifications Brine temperature, °C -10 Required actual capacity at -20°C evaporating & 55°C condensing temp., TR3000 Kcal / hr	1No.	Each			

	<p>Electrical supply 415 +10% 50 HZ Three Phase</p> <p>Part List - Refrigeration</p> <p>Compressor Open type compressor</p> <p>Condenser Air cooled, Aluminium finned copper pipe with fan</p> <p>Condenser fan</p> <p>Expansion device Capillary tube</p> <p>Orifice Danfoss make</p> <p>Evaporator Copper coil immersed into tank</p> <p>Refrigerant R22 Lot</p> <p>Dual pressure cutout Ranco / equivalent Pressure Guages Wika</p> <p>Liquid line drier Danfoss / Alco / Equivalent Dual pressure cutout Ranco / equivalent</p> <p>Sight glass Danfoss / Alco / Equivalent Pressure relief valve Swidgelog / Brasomatic</p> <p>Accumulator Emerson Copeland make Solenoid valve Danfoss / Alco / Equivalent</p> <p>Thermocouple 20 feet</p> <p>Temperature indicator Radix / Subzero</p> <p>Tank, S. S. 800 mm x 600 mm 600 mm</p> <p>Moulds S. S.</p> <p>Receiver</p> <p>Agitator Sunmica body 00 mm EPS insulated</p> <p>Electrical & Mechanical</p> <p>MCB - compressor Siemens</p> <p>OLR - compressor Siemens</p> <p>Contactora - compressor Siemens</p> <p>SPP - compressor Minilec</p> <p>Switch – compressor Teknik</p> <p>Lamp – compressor on Apexa / equivalent</p> <p>Lamp – R Y B Apexa / equivalent</p>					
11	<p>Anemometer</p> <p>Measurement m/s (meters per second)</p> <p>km/h (Kilometers per hour)</p> <p>f/min (feet per minute)</p> <p>knots (nautical miles per hour)</p> <p>Data Hold</p> <p>Operating Temperature 0°C - 50°C (32°F to 122 °F)</p> <p>Operating Humidity less than 80%, max 90% RH (0°C to 35°C)</p> <p>Air Velocity Sensor</p> <p>Structure</p> <p>Conventional twisted vane arms and low-friction ball bearing design</p> <p>Power Supply 4 x 1.55 V AA size battery</p> <p>Power Consumption Approx DC 25 mA</p> <p>Weight 325 g/0.72 lb (including battery)</p> <p>Dimension Main Instrument: 168 x 80 x 35 mm (6.6 x 3.2 x 1.2 inch)</p> <p>Sensor Head: Round, 72 mm dia</p> <p>Standard Accessories Instruction manual, sensor probe, carrying case</p> <p>Electrical Specification :</p> <p>Measurement Range Resolution Accuracy</p> <p>m/s 0.4 - 30.0 m/s 0.1 m/s ± (2% + 1d)</p> <p>km/h 1.4 - 108.0 km/h 0.1 km/h ± (2% + 3d)</p> <p>f/min 80 - 5910 f/min 1 f/min ± (2% + 2d)</p> <p>knots 0.8 - 58.3 knots 0.1 knots ± (2% + 2d)</p>	2Sets	sets			

	<p>Temperature Measurement</p> <p>Temp.measuring range: 0°C to 60°C / 32°F to 140°F</p> <p>Temp.measuring range: 0.1°C / 0.1°F</p> <p>Temp.measuring range: ± 0.5°C / 0.9°F</p>					
12	<p>I) Evacuating & Refrigerant Charging Station Comprising</p> <p>a) Rotary Two Stage Vacuum Pump and Motor (with gas ballest & anti back) Manifold with gauges & valves and capable of pulling vacuum upto 50 microns of Hg and with provision of connecting to a micron level vacuum gauge.</p> <p>b) Graduted charging cylinder with provisions for temperature corrections and all necessary isolation valves.</p> <p>II) Evacuation & Charging station as above but fitted with weighing scale (upto 2Kg. in lieu of (b) above and with accuracy ± 1 gram, for temperature correction hydrometers.</p>	1No.	Each			
13	<p>Digital Thermometer</p> <p>General Specifications</p> <p>Display: 3 1/2 digital LCD with max. reading of 1999.</p> <p>Sampling Rate: 2.5 times per. second</p> <p>Over range indication: The MSD "1" or "-1" displays.</p> <p>Low battery indication: :The " " displays</p> <p>Operation environment: Temperature 0°C~40°C, humidity <90%.</p> <p>Storage environment: Temperature -20°C~40°C, humidity <90%.</p> <p>Power supply: Single, standard 9 volt battery.NEDA1604IEC6F22.</p> <p>Battery Life: Basicity type approx.200 hours, Zinc-Carbon type approx. 100 hours.</p> <p>Dimensions: 133mm(H) x 72mm(W)x 31mm(D)</p> <p>Weight: Approx.130g</p> <p>Electrical Specifications</p> <p>Accuracy is ±(a% reading + number of digit)</p> <p>Accuracy calibrate environment temperature: 23°C±5°C</p> <p>Measuring range : -50°C~1300°C, -50°F ~1999°F</p> <p>Temperature coefficient : 28°C < 0.1x Accuracy/°C< 18°C</p> <p>Resolution Range Accuracy</p> <p>0.1°C -50.0°C~199.9°C -20.0°C~199.9°C : ±(0.2%+1°C)</p> <p>0.1°F -50.0°F ~199.9°F -20.0°F ~199.9°F ±(0.2%+1°F)</p> <p>1°C -50°C~1300°C -50.0°C~1000°C ±(0.3%+2°C)</p> <p>1000°C~1300°C ±(0.5%+2°C)</p> <p>1°F -50°F ~1999°F -50.0°F ~1000°F ±(0.3%+2°F)</p> <p>1000°F ~1999°F ±(0.5%+2°F)</p>	2Nos.	Each			
14	<p>LCR Meter</p> <p>Electrical Specifications</p> <p>Accuracy is + (percentage of reading + number of digit) at 23 + 5oC<75%</p> <p>RH</p> <p>DC Volts Range Accuracy Resolution</p> <p>200mV +(0.5%+4d) 0.1mV</p> <p>2V +(0.5%+4d) 1mV</p> <p>20V +(0.5%+4d) 10mV</p> <p>200V +(0.5%+4d) 100mV</p>	2Nos.	Each			

1000V $+(0.8\%+5d)$ 1V
Impedance:10 M Ω
Overload Protection: 1000V DC/700V AC
AC Volts Range Accuracy Resolution
200mV $+(1.2\%+4d)$ 100 μ V
2V $+(1.0\%+4d)$ 1mV
20V $+(1.0\%+4d)$ 10mV
200V $+(1.0\%+4d)$ 100mV
750V $+(1.5\%+4d)$ 1V
Impedance:10 M Ω
Overload Protection: 1000V DC/700V AC
Frequency Response: 40-400Hz
DC Current Range Accuracy Resolution
2mA $+(1.2\%+4d)$ 1 μ A
20mA $+(1.2\%+4d)$ 10 μ A
200mA $+(2.0\%+4d)$ 100 μ A
20A* $+(3.0\%+5d)$ 10mA
Overload Protection: Fast 200mA/250V fuse, 20A ranges unfused
Max. input: 20A (upto 15 seconds)
AC Current Range Accuracy Resolution
2mA $+(1.2\%+4d)$ 1 μ A
20mA $+(1.2\%+4d)$ 10 μ A
200mA $+(2.0\%+4d)$ 100 μ A
20A $+(3.0\%+5d)$ 10mA
Overload Protection: Fast 200mA/250V fuse, 20A ranges unfused
Max. input: 20A (upto 15 seconds)
Frequency Response: 40-400Hz
Resistance Range Accuracy Resolution
200 Ω $+(1.0\%+4d)$ 0.1 Ω
2K Ω $+(0.8\%+4d)$ 1 Ω
20K Ω $+(0.8\%+4d)$ 10 Ω
200K Ω $+(0.8\%+4d)$ 100 Ω
2M Ω $+(0.8\%+4d)$ 1K Ω
20M Ω $+(2.0\%+4d)$ 10K Ω
2000M Ω $+(5.0\%+4d)$ 1M Ω
Overload Protection: 250V DC/AC RMS
Capacitance Range Accuracy Resolution
20nF $+(2.5\%+5d)$ 10pF
200nF $+(2.5\%+5d)$ 100pF
2 μ F $+(2.5\%+5d)$ 1nF
20 μ F $+(2.5\%+5d)$ 10nF
200 μ F $+(5.0\%+4d)$ 100nF
Diode Test Range Description Test Condition
Display read approx. forward voltage of diode
Forward DC Current approx. 1mA
Reversed DC Voltage approx. 3V
Buzzer sounds if resistance between terminals V/ Ω and COM is less than about 30 Ω
Overload Protection: 250V DC/AC RMS max. 10 seconds
Transistor hFE Test Range Description Test Condition
hFE Display read approx. forward voltage (0-1000) of transistor under type (ALL TYPE)
Base Current approx. 10 μ A
Vce approx. 2.8V

	<p>Inductance (L) Range Accuracy Resolution 2mH +(2.5%+5d) 1uH 20mH +(2.5%+5d) 10uH 200mH +(2.5%+5d) 100uH 2H +(2.5%+5d) 1mH 20H +(5.0%+4d) 10mH Frequency Range Accuracy Resolution 2KHz +(0.5%+4d) 1Hz 20KHz +(0.5%+4d) 10Hz 200KHz +(0.5%+4d) 100Hz 2000KHz +(0.5%+4d) 1kHz 20MHz +(0.5%+4d) 10kHz Overload Protection: 250V DC/AC RMS max. 10 seconds Temperature Range Accuracy Resolution - 40oC~400oC +(0.8%+4d) 400oC~1000oC +(1.5%+15d) 1oC</p>					
15	<p>Tong Tester General Specifications Incorporates CMOS LSI Circuit for automatic transfer of measuring range. 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 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</p>	4Nos.	EACH			

	<p>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</p> <p>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</p> <p>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</p> <p>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.</p> <p>Continuity Test</p>					
16	<p>Gas Leak Detector Specification : Housing : Molded, three piece ABS plastic in bright yellow color, includes carrying strap Power : Five alkaline C-cells, not provided 30 hours typical life for continuous operation Warm-up Time : Automatic, self check, about ten seconds to operati</p>	2Nos.	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

TENDER SCHEDULE NO:- G

Bill of Quantities/ Schedule of Requirements for TRADE : " MECHANIC MOTOR VEHICLE"

LIST OF MACHINERY

DELIVERY POINTS:- 1) Satish Chandra,I.T.C., Kalanabagram, Dist. -Burdwan, PIN :- 713124

SI.No.	Description of Item with Specification	QtyRequired	UNIT	RATE (Rs)	TOTAL AMOUNT (Rs)	
					In figures	In words
1	Pedestal Grinder , Double ended wheel dia 200mm 3000rpm Double Ended Pedestal Grinder Double Ended Pedestal Grinder of 1HP Motor AC 440V, 3-Phase , 3000 RPM , Fitted with 2Nos. 8" x 1" x 5/8", size Grinding wheels (one fine and one coarse) with guards, Tool Rests , Rotary Switch / Push Button starter, eye shields & machine mounted on CI pedestal Stand.	2Nos.	each			
2	Arbour Press Max. Pressure : 1 ½ Ton Centre to Back : 7. ½" Max. Height from base to Guide : 15" Max. Height : Arbour Plate to Guide : 13. ½" Size of Arbour Round / Square : 1. ¾" Appx. Weight : 80Kg	4Nos.	each			
3	Light Commercial Vehicle in Running Conditions (Diesel Heavy)	1No.	each			
4	Motor Car Running Condition (Petrol)	1No.	each			
5	Light Commercial Vehicle 3 ton	1No.	each			
6	Heavy Commercial Vehicle (One should be 4x4)	1No.	each			
7	Petrol Engine Running condition MPFI type	2Nos.	each			
8	Petrol Engine Running Condition carburetor type	4Nos.	each			
9	Diesel Engine Running Condition Vehicle type	4Nos.	each			
10	Petrol Engine Vertical (2 Stroke) Motor cycle / scooter	2Nos.	each			
11	Spark Plug Cleaning and Testing Equipment Spark Plug Tester For Cleaning & Testing Part 03A1 – EEKE 2K	2Nos.	each			
12	Air Compressor – 2 Stage – 500 ltrs with 5HP Motor & Air Receiver.	1No.	each			
13	Mechanical Hoist Closed chain drive for power transmission Electrical limit switches for stopping at maximum / minimum heights Telescopic type lifting arms Extra safety nuts Safety mechanism to prevent uneven lifting Automatic arms locking and releasing device while lifting and lowering. Single phase and polarity reversal preventor Extender adapter for SUVs Asymmetric angle set post for easy door opening Chemical injection anchoring bolts (optional) Lifting Capacity 3 Ton	1No.	each			

	<p>Load distribution (Front : Rear) 3:2 Lifting time 60 Seconds Drive through clearance 2172 mm Maximum lifting height 1875 mm Minimum lowering height 150 mm Front lifting arm adjustments Minimum length 940 mm Maximum length 1490 mm Rear lifting arm adjustments Minimum length 665 mm Maximum length 980 mm Electric motor 4 HP, 960 RPM Power supply 3 phase, 440V AC, 50 Hz. Optional Accessories: Special Adapters available for Tata Safari, Tata ACE, Ford Fusion</p>					
14	<p>Exhaust Gas Analyzer Features : Four Gas Analyzer Capable of Measuring Co, HC, CO2, O2 NDIR Technology RPM Measurement Facility using Inductive Pickup 7 Segment LED Display Automatic Condensate Discharge Automatic Zero Calibration Digital Span Calibration RS232C Serial Port for PC Interface. Measurement Parameters Range Resolution CO (Carbon Monoxide) 0 - 9.99% 0.01% CO2 (Carbon Dioxide) 0 - 19.9% 0.1% HC (Hydro Carbon) 0 - 15000 PPM 1 PPM • O2 (Oxygen) 0 - 25% 0.01% NOx (Oxide of Nitorgen) 0 – 5000 PPM AFR 7 – 23% 0.01% Lambda 0.50 – 1.50 0.001 Engine RPM 400 – 9990 RPM 10 RPM •• Operating Temperature + 5° to + 45° C •• Measuring gas intake 3 Litres / Minute •• Leak test Electronic • Engine Oil Temperature 0 – 150 °C Condensate discharge Automatic •• Response time < 15 Sec. (For sample probe length of 3m) Warm-up time < 3 minutes •• Zero calibration Automatic •• Span calibration Digital •• Printer (Optional) 24 Column Dot Matrix •• Power Supply 12V DC (or) 230V AC ±10%,50Hz Power Consumption 20 Watts</p>	1No.	each			
15	<p>Smoke Meter Specification : Measurement Parameters Range Resolution</p>	1No.	each			

	Opacity	0 – 99.9 %	0.10 %			
	K-value	0 – 9.99 m -1	0.01 m -1			
	Linearity	± 0.1 m -1				
	Repeatability	± 0.1 m-1				
	Zero & Span drift	± 0.1 m-1				
	Response time – Physical	< 0.4 seconds				
	Response time – Electrical	< 1 milli second				
	Warm up time	< 3 minutes				
	Engine RPM	200 - 9999 RPM	10 RPM			
	Oil Temperature	0 - 150° C	1° C			
	Smoke measuring cell length	215 mm				
	Printer	24 Column				
	Power Supply	230V ± 10% AC Single Phase, 50Hz (or) 12V DC				
	Power Consumption	300 Watts in AC / 100 Watts in DC				
	Operating Temperature	+ 5° C to + 50° C				
16	Car Washer with Detergent and Steam Mixed Facility			1No.	each	
17	V.C.R. / V.C.P. alongwith the Video Cassettes in the Field of Machine Motor Vehicle.			1No.	each	
18	Engine Running Equipment , such as Dual Angle Tester etc.			1No.	each	
19	Car Air Conditioning Model			1No.	each	
20	Disc Brake Model			1No.	each	
21	Engine Model with Petrol Injection			1No.	each	
22	Engine Model Equipped with Electronic Ignition System			1No.	each	
23	Car Scanner			1No.	each	
24	Illuminated Magnifier 10 x			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

TENDER SCHEDULE NO:- H

Bill of Quantities/ Schedule of Requirements for TRADE : " Mech. (Diesel/ Marine Diesel)

LIST OF MACHENARY

DELEVERY POINTS:- 1) ITC, Kaliyaganj P.O. Kaliyaganj, PIN :- 733129, Dist. Uttar Dinajpur

Sl.No.	Description of Item with Specification	QtyRequired	UNIT	RATE (Rs)	TOTAL AMOUNT (Rs)
--------	--	-------------	------	-----------	-------------------

					In figures	In words
1	Hydraulic Press 5 Ton Hydraulic Press (Hand type), Cap 5 Ton Pillar type Steel Construction Pump Hydraulic Press (Hand Operated) Capacity 5 Ton.	1 No.	each			
2	Smoke Tester Measurement Parameters Range Resolution Opacity 0 – 99.9 % 0.10 % K-value 0 – 9.99 m -1 0.01 m -1 Linearity ± 0.1 m -1 Repeatability ± 0.1 m-1 Zero & Span drift ± 0.1 m-1 Response time – Physical < 0.4 seconds Response time – Electrical < 1 milli second Warm up time < 3 minutes Engine RPM 200 - 9999 RPM 10 RPM Oil Temperature 0 - 150° C 1° C Smoke measuring cell length 215 mm Printer 24 Column Power Supply 230V ± 10% AC Single Phase, 50Hz (or) 12V DC Power Consumption 300 Watts in AC / 100 Watts in DC Operating Temperature + 5° C to + 50° C	1 No.	each			
3	Trolley type Portable Air Compressor 1 Single Cylinder accessories and with working pressure 6.5 kg / sq. cm2 The Compressor is suitable for low and medium pressure applications and are used. Heat is dissipated through very deep finned cylinders cast by shell molding process and cooled by specially designed flywheel having fan effect through fan blades. Easily m Lit/min : 235 / Cfm : 8.3 Pressure : 10 Kg/cm2g Motor : 2 HP , 1.5 Kw Input : Single Phase 230V AC , ±10% , 50 Hz.	2 Nos.	each			
4	Washing Pump – Reciprocating type Electrically Operated 1000 ltrs. Tank. No. of Plungers 1 6 mtr. Hose with Gun 2 Discharge per Gun LPM 13.5 Operating pressure 22 kgs/cm2 Motor 3 HP / 1420 RPM Pump speed 350 RPM Type of mounting Base (fabricated)	1 No.	each			
5	Diesel engine 4 Stroke Multi cylinder, car type 4/6 vehicular type.	4Nos	each			
6	Petrol Engine (Running condition, car type) Indian make Contemporary model.	2 Nos.	each			
7	Diesel Engine (Running Condition) stationary type	4 Nos.	each			
8	Petrol Engine Vertical (2 Stroke) Motor cycle / scooter Type 1.5 HP Indian make contemporary model.	1 No.	each			
9	Arbor Press Hand Operated 2 Ton Capacity Study cast iron construction Removable machined steel anvil provides accurate work support in four slot positions Rugged steel ram is driven by machined pinion.	2 Nos.	each			
10	Motor Lorry in Running condition (Diesel)	1 No.	each			
11	Starter Test Benches Auto Electrical Test Benches for Testing Starter , Motors and Alternators , Table Top Model, Capable of Testing Free Running Current up to 150Amps, 12/24 volt systems , Drive Motor 2.2KW , Three Phase , 415V	1Set	set			
12	High Rate Discharge Tester	1 No.	each			

	<p>Input supply to cabinet : 240VAC, 50Hz, single phase, 2 wire, +/-10%</p> <p>Current Rating : Continuous 600ampsDC 1000amps for 5 minutes with 5 min. rest.</p> <p>Discharge Voltage range : 15-5Vdc</p> <p>Controls : Digital controller with dedicated software-BTS600</p> <p>Operation : CC, CV, CP along with BTS600 software</p> <p>Control Variables : Current, Voltage, Power, Resistance</p> <p>Termination variables: Time, Voltage, Ah, Wh, delta gradients.</p> <p>Functions : Charge, Discharge, Pause, Cycles .</p> <p>Programs : With Host Computer</p> <p>Program Length : UPTO 3000 steps</p> <p>Display measured value : Permanently on</p> <p>Computer screen, printout is possible from the test file accumulated in host computer data.</p> <p>Ambient Temperature : 45 Deg C</p> <p>Humidity : 90%</p> <p>Installation environment : Indoor, clean, dust & acidic fume free environment.</p> <p>Degree of protection : IP-20.</p> <p>Microprocessor based controller operating on dedicated software.</p>					
13	<p>A.V.O. Meter</p> <p>Digital Multimeter</p> <p>This is a compact, rugged, battery operated, hand held, 3-1/2 Digital Multimeter with Large LCD Display. This can be used to measure DC Voltage and Current, AC Voltage and Current, resistance, Diode Forward Voltage, Transistor hFE and open circuit testing</p> <p>DC basic accuracy: ±0.5%</p> <p>Max. display value: 1999 (3 1/2 digits)</p> <p>Display frequencies: 2-3 times per second</p> <p>Max. common jack voltage: 500V DC or AC RMS</p> <p>Temperature for accurate guarantee: 23 °C ±5 °C</p> <p>Temperature range:</p> <p>Working temperature : 0 °C to 40 °C (32 °C to 104 °C)</p> <p>Storage temperature : -10 °C to 50 °C (14 °F to 122 °F)</p> <p>Battery: One 9V battery.</p> <p>Low battery indication: The signal of battery will be shown on the left bottom of LCD. Size: 162x86x33mm Weight: approx. 260g (including battery)</p>	5Nos.	each			
14	<p>Injection Testing Set (Hand Operated)</p> <p>One Complete Set For Cleaning and Testing. Set checks fuel pressure on most Port Fuel Injection (PFI) and Throttle Body Injection (TBI) systems Tests GM, Ford, Chrysler, Honda/Acura, Toyota, Bosch CIS and L-Jetronic Also cleans injectors using pressurized</p>	2sets	set			
15	<p>Tachometer</p> <p>A Rugged Centrifugal Tachometer with several ranges. Extremely stable and accurate indication because of the large dimensions of centrifugal pendulum and its relatively high speed range. Accuracy is independent of the position of the Tachometer. A built i</p> <p>Specification :</p> <p>Five Ranges for the same overall measuring range of 30 to 12000 with an R.P.M</p> <p>Range No.</p> <p>VI. 30-120 R.P.M</p> <p>VII. 100-400 R.P.M</p> <p>VIII. 300-1200 R.P.M</p> <p>IX. 1000-4000 R.P.M</p> <p>X. 3000-12000 R.P.M</p> <p>Standard Accessories :</p> <p>Triangular Tip</p> <p>Extension Shank</p>	4 Nos.	each			

	Inner conical head Big conical head Small conical head Linear speed test disc. Bottle of lubricating oil.					
16	Pedestal Grinder , Double ended wheel dia 200mm 3000rpm Double Ended Pedestal Grinder Double Ended Pedestal Grinder of 1HP Motor AC 440V, 3-Phase , 3000 RPM , Fitted with 2Nos. 8" x 1" x 5/8", size Grinding wheels (one fine and one course) with guards, Tool Rests , Rotary Switch / Push Button starter, eye shields & machine mounted on CI pedestal Stand.	2Nos.	each			
17	Diesel Engine Cut way model to show working parts for demonstration. a) One two stroke b) One 4 stroke. All parts in aluminum alloy and metal. Ignition is shown by means of miniature bulb. Fuel supply is also sectioned. With crank handle for manual operation. Fitted on a polished wooden base with printed diagram.	2Nos.	each			
18	Growler	1No.	each			
19	Battery Charger Power Input : 330V Mains Voltage : 230V / 50-60Hz Nominal Current : At 12V arithm / 22.5A effective At 24V 10A arithm / 15A effective Charger Characteristics : Constant Voltage Voltage Limitation : At 12V 13.8 / 14.4V At 24V 27.6 / 28.8V Weight : 7.5Kg	1No.	each			
20	Timing Lighter	2Nos.	each			
21	Hydrometer (consumable tool)	6Nos.	each			
22	Portable Lifting Crane one ton capacity with chain block & tackle arrangement.	1No.	each			
23	Cell Tester Centre zero dial of 65mm diameter , a terminal spoike fitted on the top at the instruments , range 3 – 0 – 3 , accuracy $\pm 2.5\%$ of FSD , sensitivity 1000 Ohms per volt, weight 200gms.	2Nos.	each			
24	Hydraulic Press 5 Ton Hydraulic Press (Hand type), Cap 5 Ton Pillar type Steel Construction Pump Hydraulic Press (Hand Operated) Capacity 5 Ton.	1set	set			
25	Engine with P.T. System	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

TENDER SCHEDULE NO:- I

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

LIST OF MACHENARY

DELEVERY POINTS:-1) ITC, Kaliyaganj P.O. Kaliyaganj, PIN :- 733129, Dist. Uttar Dinajpur, 2)ITC, Jalpaiguri P.O. & Dist. Jalpaiguri,
3)ITC, Rupnarainpur, P.O. Hindustan Cables, Dist. Burdwan

SI.No.	Description of Item with Specification	QtyRequired per institution	UNIT	RATE (Rs)	TOTAL AMOUNT (Rs)	
					In figures	In words
1	Pipe Bending Machine , Manually Operated Hand Operated having capacity ½" to 2" dia, C class pipes, complete with 2Nos. dolly block with pins and a set of 6Nos. CI formers, duly mounted on MS fabricated tripod stand.	2 Nos.	Each			
2	Drill Machine Hand Operated 6mm Capacity : 6mm Watts input : 235 Watts No Load Speed : 2800 rpm Approx Weight : 1.975Kg.	5 Nos.	Each			
3	Hand Blower Capacity : 1.5mm / min Watt : 350 Nozzle air Velocity : 308 Kmph Appx. 4.6Kg	5 Nos.	Each			
4	Water Analyzer Kit DISPLAY 3 ½ DIGIT LCD pH RANGE 0 TO 14 PH RESOLUTION 0.01 PH ACCURACY 0.01± 1 DIGIT TEMP. COMP. 0 TO 100°C (manual) CONDUCTIVITY (EC) RANGE 0-200µs 0-2,0-20,0-200mS RESOLUTION 0.1 µs RANGE SELECTION MANUAL ACCURACY ±0.5%FS±1 DIGIT CELL CONSTANT ADJUSTABLE (0.4 TO 1.5) TEMP.COEFFICIENT 2% TEMP.COMP. 0 to 100° C (Manual) REFERENCE TEMP. 25°C TEMPERATURE RANGE 0-100°C RESOLUTION 0.1°C ACCURACY ±0.1°C± 1Digit SENSOR Semi Conductor Type TDS RANGE 0-200 ppm 0-2,0-20,0-200 ppt RANGE SELECTION Manual RESOLUTION 0.1 ppm ACCURACY ±0.5%FS±1 DIGIT CELL CONSTANT 0.4 to 1.5 on display	2 Nos.	Each			

	<p>DO RANGE 0-20 ppm RESOLUTION 0.1 ppm ACCURACY 0.5 ppm ± 1 Digit TEMP.COMP. Manual(5°Cto 55°C) DO SENSOR Gold/ Silver Amperometric probe MV (ORP) RANGE 0 to ± 1999 mV RESOLUTION 1 mV ACCURACY 1 mV ± 1 digit RANGE 0-50 ppt RESOLUTION 0.1 ppt ACCURACY ± 0.5%FS ± 1Digit POWER SUPPLY 1.5V X 6 Dry cells or 230V±10%AC,50Hz SALINITY RANGE 0-50 ppt RESOLUTION 0.1 ppt ACCURACY ±0.5% FS ±1 Digit STANDARD ACCESSORIES pH Electrode, cond./TDS/Salinity cell, temp. Probe, Do Probe, Dry cell container, Main lead operation manual, Bottles for pH solution & pH Tablets Bottles, Turbidity Test Tube Set</p>					
5	PVC welding plant	1 No.	Each			
6	Electric pump 1 HP	1 No.	Each			
7	<p>Pedestal Grinder , Double ended wheel dia 200mm 3000rpm Double Ended Pedestal Grinder Double Ended Pedestal Grinder of 1HP Motor AC 440V, 3-Phase , 3000 RPM , Fitted with 2Nos. 8" x 1" x 5/8", size Grinding wheels (one fine and one coarse) with guards, Tool Rests , Rotary Switch / Push Button starter, eye shields & machine mounted on CI pedestal Stand.</p>	2 Nos.	Each			
8	<p>Hydraulic pressure machines for testing leackage in GI pipe fittings</p>	1 No.	Each			
9	<p>Bench Drilling Machine 13mm Drilling Capacity in MS : 13mm Max. Distance from Spindle Centre to Column Centre : 205mm Max. Distance from Spindle to and Base Plate : 610mm Max. Distance from Spindle Nose to Working Table : 275mm Spindle Travel : 110mm No. of Spindle Speeds : 5 Range of Spindle Speeds RPM : 5 Round Table Working Surface : 230mm Main Drive Motor : 1HP</p>	2 Nos.	Each			
10	<p>Pipe Bending Machine (Hydraulic Type) Hand Operated having capacity ½" to 3" dia, C class pipes, complete with 2Nos. dolly block with pins and a set of 6Nos. CI formers, duly mounted on MS fabricated tripod stand.</p>	2 Nos.	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

TENDER SCHEDULE NO:- J

Bill of Quantities/ Schedule of Requirements for TRADE : "Dress Making"

LIST OF MACHENARY

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

SI.No.	Description of Item with Specification	QtyRequired	UNIT	RATE (Rs)	TOTAL AMOUNT (Rs)	
					In figures	In words
1	Commercial type sewing machine with treadle and motor mounted suitably on a table having a drawer (Motorised 1/8 HP)	20 Nos. each	Each			
2	Fashion maker machine(Motorised 1/8 HP)	2 Nos. each	Each			
3	Overlock machine-single needle 3 thread(Motorised 1/8 HP)	1No. Each	Each			
4	Button hole machine	1No. Each	Each			
5	Machine attachment (a) Narrow hammer (b) Pintuck Foot (c) Gahtering Foot (d) Overedge Foot (e) Ruffler attachment (f) Suam gauge	02 Sets	set			
6	Overhead Projector with trolley and screen Overhead Projector 3 – element lens Twin lamp 2500 lumen Features like easy set up & manipulation, silent cooling system, elegant transportation and perfect picture due to the top optical elements (3- element vario projection lens & condenser) have made this OHP one of the best selling flatbed portables in many Specification : Lamp (W/V) 250/24, Lamp Changer Yes Power Supply Transformer Projection Lenses (elements) 3-vario	1 Set	set			

Focal Length (f=mm) 280-320
 Picture Width (cm) min-max 90-425
 Projection Distance (cm) min-max 120-450
 Condenser Yes
 Working Surface (mm) 285x285
 Foldable Post Yes
 Thermo-Cut off Yes
 Light Output (Lumens) 2700
 Net Dimensions (mm) LxWxH 440x305x450
 Net Dimensions folded (mm) 490x305x130
 Weight (Kg.) Net/Gross (Packed) 7,5/10,5

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

TENDER SCHEDULE NO:- K

Bill of Quantities/ Schedule of Requirements for TRADE : " Surveyor"
 LIST OF MACHENARY

DELEVERY POINTS:- ITC, Jalpaiguri, P.O. & Dist. Jalpaiguri

SI.No.	Description of Item with Specification	QtyRequired	UNIT	RATE (Rs)	TOTAL AMOUNT (Rs)	
					In figures	In words
1	Drawing machine (Horizontal)	4 Nos	Each			
2	Total Station, with one side display and fixed tribrach consists of the following. Accessories Data Transfer Cable : 1 no.	1No. each	Each			

Data Transfer Software DL-01: 1 no.

Battery MB08: 1 no.

Battery Charger MC05: 1 no.

Plumb Bob : 1 no.

Screw Driver: 1 no.

Tommy Pin : 1 no.

Rain Cover: 1 no.

CD containing instruction manual : 1 no.

Carrying Case: 1 no.

Heavy duty wooden stand : 1 no.

Features

Fast Measurement in quick mode less than equal to 1.5 sec.

Three focussing modes = Auto Focus; Power Focus; and Manual Focus.

Visible Laser Pointer.

Graph of entire survey displayed on screen of Total Station.

Dual Axis compensator.

On Board pre-loaded graphical software including Area, Perimeter,

Volume{Cut/Fill}.

16000 points on board memory.

Range under Normal Conditions

Single Prism : 3000 m (PRISM NOT INCLUDED IN SCOPE
OF SUPPLY).

Three Prism : 4000 m.

Angle Accuracy 5".

Distance accuracy to one Prism : $\pm(2 \text{ mm} + 2\text{ppmXD})$ mm.

Distance Least count : 0.1mm.

Stake out programme will calculate the co-ordinate in 0.1 mm. unit-

Temperature Pressure Sensors in-built.

Large LCD display screen, 8 lines 20 characters.

Battery 4/5 hrs. continuous use.

Charger with graphic display & discharge function.

Laser Plummet in alidade rotating through 360° .

A small bull's eye bubble on alidade.

Two Electronic bubbles 20"/30" sensitivity at right angles to each other on
display panel.

Alpha Numeric Keyboard (one side only, second side Keyboard &

Display not possible).

Maximum Number of files that can be created = 20.

Maximum number of points that can be stored in

each file = 1500 subject to maximum number of points storage, i.e 16000.

Single Prism Assembly
 Single Prism Assembly consisting of :
 1 no. Prism.
 1 no. Target Plate.
 1 no. Single Prism Holder.
 1 no. Range Pole 2 mtrs x 2 sections with
 bipod stand

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

TENDER SCHEDULE NO:- L

Bill of Quantities/ Schedule of Requirements for TRADE : " FITTER"
 LIST OF MACHENARY

DELEVERY POINTS:- Satish Chandra, ITC, Kalanabagram, Burdwan, PIN :- 713124

Sl.No.	Description of Item with Specification	QtyRequired	UNIT	RATE (Rs)	TOTAL AMOUNT (Rs)	
					In figures	In words
1	Anvil 50 kg. On stand	1 no.	Each			
2	Drilling machine pillar sensitive 0-20 mm cap with swivel table motorised with chuck & key.	1 no.	Each			
3	Drilling machine bench sensitive 0-12 mm cap motorised with chuck and key.	2 nos.	Each			
4	Forge portable hand blower 38 cm to 45 cm	1 no.	Each			
5	Grinding machine (General purpose) D.E. pedestal with 20 cm dia wheels rough and smooth with twist drill grinding attachment.	1 no.	Each			
6	Electric Furnace with Capacity 600 oC to 1400 oC	1 no.	Each			
7	Lathe all geared head stock S.S. and S.C. height of centre over bed 15 cm gap head, 120 cm between Centres complete with accessories e.g.pump, all fittings and splash guard driving plate with drives face plate 3 jaw and 4 jaw chucks fixed and travelling steady compound turret tool post tapeturning attachment fixed and running centres, driving dogs straight and bent tails.	2 nos.	Each			

8	Transformer welding set 300 amps-continuous welding current with all accessories and electrode holder.	1 set	Set	
---	--	-------	-----	--

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

TENDER SCHEDULE NO:- M

Bill of Quantities/ Schedule of Requirements for TRADE : " DRAUGHTSMAN (CIVIL)"
LIST OF HAND TOOLS, INSTRUMENTS AND EQUIPMENT

DELEVERY POINTS:- 1)ITC Kaliyaganj, P.O. Kaliyaganj, PIN :- 733129, Dist. Uttar Dinajpur, 2)ITC Rupnarainpur, P.O. Hindustan Cables, Dist. Burdwan

SI.No.	Description of Item with Specification	QtyRequired per institution	UNIT	RATE (Rs)	TOTAL AMOUNT (Rs)	
					In figures	In words
1	PROTRACTOR CELLULOID 15 CM SEMI-CIRCULAR	16 Nos.	Each			
2	DRAFTING MACHINES- VERTICAL TYPE COMPLETES WITH DRAWING BOARD ADJUSTABLE TABLE AND PAIR OF METRIC SCALES 30 CM AND 40 CM LONG.	4 Nos.	Each			
3	DRAFTING MACHINES-HORIZONTAL TYPE COMPLETE WITH DRAWING BOARD SIZE ADJUSTABLE TABLE WITH PAIR OF METRIC SCALES 30 CMS AND 40 CMS.	4 Nos.	Each			
4	PC-AT FOR AUTO CAD WITH PLOTTER & DOT-MATRIX PRINTER. A) Branded Desktop Computer having the following regular configuration on 3 years warranty. Perepherials, with additional units /software as below:- Intel Core 2 DUO Configuratrion a. CPU : Intel Core 2 Duo /E 7300, 2.66 GHz, 3 MB L2 cache and 1066 MHz FSB. b. Motherboard : Intel Q 965/NVidia chipset 7025 or better on OEM Motherboard. c. Bus Architecture : Integrated Graphics, 2 PCI,1 PCI Express x 1 and 1 PCI Bxpress x 16. d. Memory : 2 GB 800 MHz DDR2 SDRAM with minimum 4 total DIMM slots. e. Hard Disk Drive : 160 GB 7200 rpm Serial ATA HDD. f. Monitor : 18.5" TFT. g. PS/2 Keyboard : 104 keys (Same make as PC). h. Mouse : PS/ 2 2 Button Optical (Same make as PC). i. Bays : 6 Nos.(2 Nos. 5.25 inches for Optical Media Drives and 2 Nos. 3.5 inches for Hard Disk Drives). j. Ports : 6 USB Ports (with at least 2 in front), 1 Serial Port, 1 Parallel port, 1 PS/2 Keyboard and 1 PS2 Mouse Port, audio ports for microphone and headphone in front. k. Cabinet : Micro tower. l. DMI : DMI 2.0 Compliance and Support. m. DVD Drive : DVD 8X Rewriter.	2 NOS.	EACH			

n. Internal 56 kbps (Fax/Data/Voice) Modem
o. Networking facility : 10/100/1000 on board integrated Network Port with remote booting facility remote system installation, remote wake up.
p. Operating System : Windows XP Professional (Service pack-2 or latest version) preloaded with Media and Documentation and Certificate of Authenticity.
q. OS Certifications : Windows XP Professional OS and Linux Certifications.
r. Power Management : Screen Blanking, Hard Disk and System Idle Mode in Power On, Set up Password, Power supply SMPS Surge protected.
s. Preloaded Software : Norton , McAfee, ETrust or equivalent Antivirus (Latest Version) with 60 days License.
t) MS Office 2007 Professional
u) Adobe Acrobat Standard 8.0 With v) Pen Drive(4G.B.)-2Nos.
B) AUTO CAD WITH IN (LATEST VERSION).
C) Branded Dot Matrix Printer having
24 pin 136 column, 150 CPS at 10 cpi with one Parallel English and one Serial.
D) PLOTTER with Stand & Bin
Sizes : 24" , Minimum Line Width : 0.002" , Line Accuracy : +/- 0.2 %.
Printing Speed : Fast- 90 Sec on A1/ D size line drawings.

2 NOS. EACH
2 NOS. EACH
2 NOS. 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

TENDER SCHEDULE NO:- N

Bill of Quantities/ Schedule of Requirements for TRADE : " WELDER"
LIST OF MACHENARY

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	Transformer welding continuous welding current with all accessories 300 A 400 A	2 sets	Set			

2	Arc welding set rectifier type 300-450 Amps amps continuous welding current with all accessories	1 set	Set			
3	Welding Generator DC rotary set 200-300 amps with all accessories	1 set	Set			
4	CO2 Welding Machine complete 400 amps Open Circuit Voltage 18-52. Maximum Continuous Welding Current. @60% Duty Cycle AMPS'. 400. @100% Duty Cycle AMPS'. 315. Input Supply Rating. 415/3PH,50HZ. @60% Duty D.C.KVA. 22.5 @100% Duty D.C.KVA. 17. Cooling . FORCED AIR. Insulation. F. Dimension (LxWxH)mm. 830x490x730. Weight KG. 200. Wire Size mm (steel) . 0.8,1.2,1.6. Wire Size mm (Aluminium) . 1.2,1.6. Speed Range.0-18. Drive Type. 2Roll. Roll. Spool Size.	1 set	Set			
5	TIG Welding set complete 300 amps AC / DC Supply Voltage: 380/415/440. Primary Current at max. output 40A. Open circuit Voltage 80. Max. continuous current at 100% duty cycle. 300. Max. continuous current at 60% duty cycle. 400. KVA-Max. Continuous. 20. KVA-Max. 26. Welding current range (in two ranges) 40-400A. Max. ambient temperature. 40° C. Class of Insulation . H. Type of Cooling (Forced). Air cooled. Approx Dimention (LxWxH)mm. 500x650x674. Approx. Weight (kg). 300.	1 set	Set			
6	D.E. grinder 30 cm wheel motorized Pedestal type	1 no.	Each			
7	AG 7 Grinder	1 no.	Each			
8	Portable drilling machine (Cap. 6 mm)	1 no.	Each			
9	Braze weld equipment Eraser which can be used with exiting welding transformer	1 no.	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

TENDER SCHEDULE NO:- 0

Bill of Quantities/ Schedule of Requirements for TRADE : "COMPUTER AIDED EMBROIDERY AND NEEDLE WORKER"

LIST OF MACHENARY

DELEVERY POINTS:- 1) ITC Jalpaiguri, P.O. & Dist. Jalpaiguri

SI.No.	Description of Item with Specification	QtyRequired	UNIT	RATE (Rs)	TOTAL AMOUNT (Rs)	
					In figures	In words
1	a) Model No. BDMN 12 – 12 Needle Multicolor OR b) The Super Economy Model – BDSN Power : 230 V/5011z Single Phase Total Volume : 11-1415 mm. B-690 mm, 1 – 925 mm Machine Floor area : 925 mm x 690 mm Processor : Intel micro controller Motors : X – Y – Pulse motor, Z axis DC servo Cartridge size : 1 MB i.e. 2,50,000 stitches Stitch Length : 0.1 – 12 .1 mm Speed : 800 – 600 Stitches per minute* Total Weight : 180 kg. Frame Area Maximum: 10" x 21"/254 mm x 530 mm	1 no	Each			
2	a)Audio Visual equipment room (for Theory class room) b)Over head projector with Trolley & screen Overhead Projector 3 – element lens Twin lamp 2500 lumen Features like easy set up & manipulation, silent cooling system, elegant transportation and perfect picture due to the top optical elements (3-element vario projection lens & condenser) have made this OHP one of the best selling flatbed portables in many Specification : Lamp (W/V) 250/24, Lamp Changer Yes Power Supply Transformer Projection Lenses (elements) 3-vario Focal Length (f=mm) 280-320 Picture Width (cm) min-max 90-425 Projection Distance (cm) min-max 120-450 Condenser Yes Working Surface (mm) 285x285	1 no.	Each			

	Foldable Post Yes				
	Thermo-Cut off Yes				
	Light Output (Lumens) 2700				
	Net Dimensions (mm) LxWxH 440x305x450				
	Net Dimensions folded (mm) 490x305x130				
	Weight (Kg.) Net/Gross (Packed) 7,5/10,5				
	c)TV/VCP with trolley	1 no.	Each		
3	Slide projector	1 no.	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