

# SINDH TECHNICAL EDUCATION & VOCATIONAL TRAINING AUTHORITY

**Consignee:** Government College of Technology, Hyderabad  
 "Rate including all Taxes and Free Delivery at Consignee End"

**Tender No: 14 (Electrical Technology)**

**Package No.01 (Wiring Lab)**

**Estimated Cost: 0.0716 M**

S. #	Description of Equipment	Quantity
1	2	3
1	<b>Student Tool Box Kit (China) or equivalent</b> Screw driver small 2" & 4" Screw driver medium 6" Plastic handle. Screw driver heavy duty 10" plastic handle Combination pliers insulated 6" Flat nose pliers 4" Long nose pliers 4" Round nose pliers 4" Cutter pliers 4" Soldering iron 45/100 Watts. Mallet wooden Ball pen hammer 1/8 Kg. Hand drill Machine 1/2" capacity Twist drill bit set of 6 drill. Measuring Tape 3 meter Bastered File 10 inch. Rough File round 10 inch Concrete Drill 1/4, 3/8, (6 each) Chisels for concrete work flat 6,8,10 inch (6 each) Chisels for concrete work round Pocker 6" Hand saw 16" Hack Saw 12"	2 Nos.
2	Electrical hand Drill Machine 3/4" (Local) or equivalent double speed	1 No.
3	Soldering gun 220 V, 100/45 watts (Local) or equivalent	3 Nos.
4	Pipe die portable with stand (Local) or equivalent	1 No.
5	Pipe die set with adjustable die holder (Local) or equivalent	2 Nos.
6	Bearing Puller 6",8",10" inch (1 each) (Japan) or equivalent	1 No.
8	Philips screw driver (set of 6) (Local) or equivalent	3 Nos.
10	Volts meter A.C (Range300, 500V) (Local) or equivalent	3 Nos.
11	A.C. Ammeter moving Iron type (Local) or equivalent range 0-1-0-2-0-5 & 10 Amps.(Local) or equivalent	3 Nos.
12	Watt meter single phase (10) Amps, , 240 Volts) ±0.5% (Local) or equivalent	1 No.
13	Watt meter single phase (20) (Local) or equivalent	1 No.

S. #	Description of Equipment	Quantity
1	2	3
14	Amps, 240 Volts)±0.5% Multi Range Clamp on meter (Hiek)3120 Test (Local) or equivalent 0-500 A.V.O	1 No.
15	Wiring wooden boards 4' 2' 30mm (Local) or equivalent Partal wood.	2 Nos.
16	Wiring Cabinet (6'* 8'* 3'ft) Partal wood (Local) or equivalent	1 No.
17	Multi meter "Sanwa" (Local) or equivalent	1 No.

**Package No.02 (Electrical & Instrument Lab)**

**Estimated Cost: 0.358 M**

S. #	Description	Quantity
1	2	3
1	Galvanometer Max.sensivity 0.9 uA/ division 540 uV/division response time 1.95,internal resistance 450 ohms With manual instructions. (China) or equivalent	1 No.
2	Temperature Recorder with circular chart (Humidity /Dew point) Two pens. 30 C to 70 C circular charts, 7 days chart. Accuracy +- 1.5% Relative humidity 0 to 100% Dew range 32 to 120 F chart drive 220V/50Hz. With manual instructions. (UK/USA) or equivalent	1 No.
3	PH meter (portable) range 0 to 14 pH ,0 to 70 C pH,accuracy 0.01 pH. With manual instructions. Transcat make or equivalent	1 No.
4	Automatic stabilizer servo type 220 V,1000W with 20% voltage regulations. With manual instructions. (Local) or equivalent	1 No.
5	Power factor meter (Cos φ),model-MX98,range 1 to .4(inductive and capacitive),voltage 100-220-380-500 with a current of 10A.With manual instructions. (UK) or equivalent	1 No.
6	Paperless Recorder, TRANSCAT make. Model-data chart 5000/TDDCS-600-M-IST-1-0-1-1, Vibrographic 6 channel recorder, 6 to 12 direct Universal inputs plus math channels; DC Voltage, current ,Thermocouple and RTDs.and ascccsories.With manual instructions. (China) or equivalent	01 set.

S. #	Description	Quantity
1	2	3
7	Air blower, 220 Volts/50Hz., 1000W. With manual instructions. (China) or equivalent	1 No.
8	Portable digital Transistor Tester, in tone, for PNP,NPN,FETSCR,N- & P Channels checker, battery operated, with probs. With manual . (Taiwan) or equivalent	1 No.
9	Digital vernier caliper -16E, measuring range- 0-150 mm, resolution 0,01 mm, accuracy 0.03 mm Max.measuring speed +- 1,5 ms. (Taiwan) or equivalent	1 No.
10	Universal measuring machine with digital read-out Range- 0 to 500 mm, resolution 0.1 um, accuracy of scale +-0,2 (Taiwan) or equivalent	1 No.
11	Decade resistance box range – 7 decade 11.1111 ohms to 11.11111 mega ohms. accuracy 0.01%, (Taiwan) or equivalent	1 No.
12	Decade capacitance box , 7 ranges from 1pf to 10uf +-5%. (Taiwan) or equivalent	1 No.
13	Digital earth/Insulation Tester,range-0 to 399.9 V, 50Hz.with probs. With manual instructions, (China) or equivalent	1 No.

**Package No.03 (Power & Machines Lab)**

**Estimated Cost: 0.235 M**

S. #	Description	Quantity
1	2	3
1	Set of Connection Cables. (Local) or equivalent	1 No.
2	Electromagnetic eddy-current brake for direct tests on motor up to 2 KW. (EV.Italy) or equivalent	1 No.
3	Ammeter Ampo Electric 0.5 EE.01 (Denmark) or equivalent)	1 No.
4	Ammeter AC Different Rang Bench Type 4 Rang in One, (Japan) or equivalent	1 No.
5	Ammeter DC Different Rang Bench Type 3 Rang in One (Japan) or equivalent	1 No.
6	Clamp on Meter. (Japan / Taiwan) or equivalent	1 No.
7	<b>Machine Tool Kit (China) or equivalent</b> - Screw Drive 4". 6", 10" - Screw Drive 4". 6", 10" - Combination Piller 8" - Cutter Piller 4"	1 No.

S. #	Description	Quantity
1	2	3
	<ul style="list-style-type: none"> <li>- Longnose 4"</li> <li>- Soldering Iron 100 w</li> <li>- Mallet Wooden</li> <li>- Ball Peom Hammer ½ kg</li> <li>- Claw Hammer 1/8 kg</li> <li>- Bearing Pull 3 Jaws 8"</li> <li>- Soldering Sukkur</li> <li>- Measure</li> <li>- Phase Tester</li> <li>- Double end Spanner set 6-22</li> <li>- Ring Spanner set 6-22</li> <li>- Adjustable Screw wages 6", 8", 12"</li> <li>- Box Spanner Set ELLORA</li> <li>- Combination Spanner Set</li> <li>- L-N Key set 6-22</li> </ul>	
8	<b><u>Winding (Local) or equivalent</u></b> Manual Coil Window Arc welder to weld electrical Machine Coil Transformer Construction, bench 3mm, 5mm, 15mm Coil Window Motor & Transformer Test bench Dielectric Strength & Insulation test equipment Electro Magnetic Eddy Current Brake Digital Multi Meter Digital Taco Meter 3-Phase induction machine kit Transformer Construction kit Assembly Motor kit	1 No.
9	Battery charger: 230 Volts AC 50 single phase capable of charging 6,12 volt batteries output for fast charging 12-V batteries 160 Amp, built in polarity protection, protect by automatic reset circuit braker, cooling fair rectifier, and transformer.(Japan) or equivalent	1 No.
10	Cell tester for checking 6 & 12 V batteries. (England) or equivalent	1 No.
11	Battery high discharge tester for 6 & 12 volts batteries. (England) or equivalent	1 No.
12	state. Plastic case unbreakable.(England) or equivalent.	
13	Battery cut away model for demonstration. (England) or equivalent	1 No.
	<b>Note: Makes &amp; Model of Equipment do not prevent from quoting  equipment made of any other Company in eligible Countries  havding nearest Specification, Standard and Performance to the  demanded description.</b>	