

BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY, DHAKA – 1000

DEPARTMENT OF ELECTRICAL AND ELECTRONIC ENGINEERING

SERVING THE COUNTRY WITH INNOVATION AND QUALITY IN TESTING & CONSULTANCY



PARTIAL LIST OF APPROVED RATES FOR TESTING SERVICES

Rates exclude VAT(15%)

Department of EEE reserves the right to change the rates at any time without any prior notice

BRTC-EEE

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BRTC Office Time : Sat to Wed 9:00 AM to 5:00 PM, Thursday 9:00 AM to 2:00 PM

PARTIAL LIST OF APPROVED RATES FOR TESTING SERVICES

Name of Test and Test rate			
Transformer Test			
Test Items	Rating	Combined Test Fee (Tk)	Itemwise Test Fee (Tk)
1. Measurement of Turns Ratio	3 phase, Upto 100 kVA, 11/0.415 kV	50000~80000	
2. Vector Group Test			
3. Measurement of Winding Resistance at 75°C			
4. Measurement of Insulation Resistance			
5. Measurement of No-load Loss and No-Load Current			
6. Measurement of Impedance Voltage and Load Loss at 75°C	3 phase, 100 < kVA ≤ 250, 11/0.415 kV	175000	
7. Power Frequency High Voltage Test	3 phase, 250 < kVA ≤ 500, 11/0.415 kV	175000	
8. Test of Transformer Oil	3 phase, 500 < kVA ≤ 1000 11/0.415 kV	175000	
9. Temperature Rise Test	3 phase, 1 < MVA ≤ 5 11/0.415 kV	230000	
	3 phase, 10-13 MVA 11/0.415 kV or 33/0.415 kV at supplier lab	345000	

	3 phase, 10-26 MVA 11/0.415 kV or 33/0.415 kV at supplier lab	345000
	single phase, 10-20 kVA 11/0.415 kV	115000
Cable Test		
Test Items	Rating	Test Fee (Tk)
1. Dimensional Test 2. DC Resistance Test 3. Insulation Resistance Test 4. Current carrying capacity Test 5. AC high voltage withstand test	1.0 rm-10 rm BYA/NYY XLPE	1x 20000
		2x 30000
		3x40000
		4x50000
	10 rm-20 rm BYA/NYY XLPE	1x → 30000 2x → 40000 3x → 50000 4x → 60000
	20 rm-50 rm BYA/NYY XLPE	1x → 35000 2x → 45000 3x → 55000 4x → 65000
	50 rm-120 rm BYA/NYY XLPE	1x → 40000 2x → 50000 3x → 60000 4x → 65000
	120 rm-240 rm BYA/NYY XLPE	1x → 45000 2x → 55000 3x → 65000 4x → 75000
	240 rm-400 rm BYA/NYY XLPE	1x → 50000 2x → 60000 3x → 70000 4x → 80000
	400 rm-630 rm BYA/NYY XLPE	1x → 60000 2x → 70000 3x → 80000 4x → 90000
• For HT cables Tk 10000 should be added • For FRLS test Tk 10000 should be added		
Circuit Breaker (MCCB/MCB) Test		
Test Items	Rating	Test Fee (Tk)

1. Mechanical operation test 2. Insulation resistance test 3. High voltage test 4. Impulse voltage 5. Tripping test 6. Temperature rise	Depending upon rating	30000-80000
Circuit Breaker (VCB/ACB) Test		
Test Items	Rating	Test Fee (Tk)
1. Mechanical operation test 2. Insulation resistance test 3. High voltage test 4. Impulse voltage 5. Tripping test 6. Temperature rise	Depending upon rating	70000-100000
Instrument Transformer (CT/PT) Test		
Test Items	Rating	Test Fee (Tk)
1. Mechanical operation test 2. Insulation resistance test 3. High voltage test 4. Ratio Test 6. Temperature rise	Depending upon rating	50000
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Overhead conductor		
Test Items	Rating	Test Fee (Tk)
1. Dimensional Test 2. DC Resistance Test 3. Insulation Resistance Test (if insulated) 4. Current carrying capacity Test 5. AC high voltage withstand test (if insulated)	Depending upon rating	Same as Cables
HT panel		

1. Dimensional 2. Fitment & Alignment 3. Physical Test (Sample) 4. Measurement of IR Value a) Before HV Test b) After HV Test 5. High Voltage test/Dielectric 6. Impulse Test 7. Partial Discharge Test 8. Heat run / Temperature rise test 9. Enclosure Protection Test / Ingress Protection (IP) 10. Calibration 11. Noise & Vibration 12. Operational & functional check 13. Clearance and creepage Distance	Depending upon rating	100000-
LT panel		
Test Items	Rating	Test Fee (Tk)
1.Mechanism Operation Test 2.Rated Current Test 3.Temperature Rise Test 4.Thermal Overload Test 5.Magnetic Trip Test 6.Insulation Resistance Measurement Test 7.Power Frequency High Voltage Test	Depending upon rating	100000-
PFI plant		
1.Discharge rate of the capacitor bank 2.AC voltage test of the capacitor bank between terminals and the casing. 3.Insulation test 4.Performance test at rated voltage of the capacitor banks 5.Operations of the PFI controller, digital display, contactor, fuse and ON/OFF indicators. 6.Auto Mode Operation Sequence and Manual Mode Sequences 7.MCCB test.	Depending upon rating	100000-

ATS		
Test Items	Rating	Test Fee (Tk)
1. Mechanical Operation Test Satisfactory 2. Functionality Test Satisfactory 3. Rated Current and Temperature Rise Test Satisfactory 4. Insulation Resistance Test Satisfactory 5. Power Frequency High Voltage Test	Depending upon rating	80000-
Drop out fuse		
Test Items	Rating	Test Fee (Tk)
1. Dimension Test 2. Dry Flashover 3. Wet Flashover 4. Continuous Current Test 5. Mechanical Operation Test		40000-
Busbar		
Test Items	Rating	Test Fee (Tk)
1. Dimensional Test 2. DC Resistance Test 3. Insulation Resistance Test (if insulated) 4. Current carrying capacity Test 5. AC high voltage withstand test (if insulated)		60,000-100000
BBT system		
Test Items	Rating	Test Fee (Tk)
1. Dimensional Test 2. DC Resistance Test 3. Insulation Resistance Test (if insulated) 4. Current carrying capacity Test 5. AC high voltage withstand test (if insulated)		60000-100000
AVR		
Test Items	Rating	Test Fee (Tk)

1. Performance of AVR under no-load condition 2. Performance of AVR under resistive full load condition		70,000-150,000
UPS		
Test Items	Rating	Test Fee (Tk)
1. kVA rating test 2. AC high voltage withstand test 3. Current rating test		50,000-
Motor		
Test Items	Rating	Test Fee (Tk)
1. Insulation resistance test 2. No load and blocked rotor test 3. Efficiency test 4. Wire damage test 5. Electrical current leakage test		40000-
Motor starter		
Test Items	Rating	Test Fee (Tk)
1. Testing of Wye-Delta starter		40000
Capacitor bank		
Test Items	Rating	Test Fee (Tk)
1. Discharge rate of the capacitor bank 2. AC voltage withstand test 3. Insulation test 4. Performance test at rated voltage of the capacitor banks		40000
High voltage insulator test		
Test Items	Rating	Test Fee (Tk)
1. Dimension Test 2. Dry Flashover 3. Wet Flashover		15000-20000
Test and calibration of meters		

Test Items	Rating	Test Fee (Tk)
Ammeter		15000
Voltmeter		15000
Energy meter		15000
Power meter		15000
Multimeter		15000
Analog/digital insulation resistance meter		15000
Eearh resistance meter		15000
Lux meter		15000
Variac, current injector		
Test Items	Rating	Test Fee (Tk)
1. Voltage, current and kVA rating test 2. AC high voltage withstand test 3. Heat run 4. Efficiency test 5. Load test		40000-
Copper terminals lugs and service ball tests		
Test Items	Rating	Test Fee (Tk)
1. Current rating test		25000-
Earth resistivity test		
Test Items	Rating	Test Fee (Tk)
		15000-
Surge arrestor test		
Test Items	Rating	Test Fee (Tk)
1. Operation test 2. Current rating test		30000-
Transformer sound level (dB) test		
Test Items	Rating	Test Fee (Tk)
		10000
Battery		
Test Items	Rating	Test Fee (Tk)
Industrial 2V Battery Block		65000

Battery (Pb-acid)		40000
Battery (Li-based)		50000
Solar PV Panel		
Test Items	Rating	Test Fee (Tk)
1. Rated Power/Maximum Power under STC, Pmax (Watts) 2. Open circuit voltage under STC, Voc (Volts) 3. Short circuit current under STC, Isc (Amps) 4. Maximum working voltage at Pmax under STC, Vmp (Volts) 5. Maximum working current at Pmax under STC, Imp (Amps) 6. Cell efficiency 7. Module efficiency 8. Fill factor, FF	NA	30000-
Street Light System consisting of Light, battery, charge controller		
Test Items	Rating	Test Fee (Tk)
1. Testing of light 2. Testing of battery 3. Testing of charge controller	NA	70000-
LED Light		
1. LED Input Power(W) 2. Color Rendering Index (CRI) 3. Lumen 4. Lumen per Watt 5. PF 6. Correlated Color Temperature (CCT)		30000-
Ingress protection test		
Test Items	Rating	Test Fee (Tk)
IP 55, IP 65		15000-25000
IK		10000
Charge Controller		

Test Items	Rating	Test Fee (Tk)	
1. MPPT mechanism 2. Labeling on charge controller casing 3. Rated Voltage 4. High voltage disconnect 5. Low voltage disconnect 6. Low voltage reconnect 7. Maximum current handling capacity 8. Maximum self current drawn 9. Reverse current leakage protection 10. Short-circuit protection 11. Reverse polarity protection 12. Efficiency of the Charge Controller 13. Charging indicator	NA	30000-	
Inverter			
Test Items : (i) insulation Resistance Test (ii) Dielectric withstand Test (iii) Protective Bonding Test (iv) DC Injection Test (v) Islanding Protection and Reconnection Test (vi) Power Ratings (vii) Conversion Efficiency Test			
Inverter Size (KW)	EEE Lab-On grid (single)	EEE Lab-On grid (multiple)	EEE lab-Hybrid (multiple)
1 to 10	50000	30000	90000
11 to 20		40000	120000
21 to 30		50000	150000
31 to 50		60000	180000
50-		90000	270000
DC - DC Converter with charge controller			
1. Voltage ratio 2. Conversion efficiency 3. Current rating	<5 kVA	30000	

Solar Pump Controller		
Test Items	Rating	Test Fee (Tk)
Inverter efficiency at different frequency	NA	25000
Inverter efficiency at different frequency with Solar panel		25000 + 30000
Inverter efficiency at different frequency with combiner box		25000+ 15000
Switch/Socket		
Test Items	Rating	Test Fee (Tk)
1. Mechanical operation test 2. Insulation resistance test 3. High voltage test 4. Temperature rise	NA	20000-
Fan		
Test Items	Rating	Test Fee (Tk)
1. Speed at rated condition 2. Input power 3. Rated current 4. Power factor at rated Condition 5. Air Delivery 6. Service Value 7. Temperature rise test	NA	50000-
Fan Dimmer		
Test Items	Rating	Test Fee (Tk)
1. Insulation resistance test 2. Power frequency High Voltage test 3. Temperature rise test 4. Leakage current test 5. Voltage Drop test 6. Uniformity Test	NA	8000-
Generator		
Test Items	Rating	Test Fee (Tk)
1. Rated output 2. Maximum output 3. Power factor 4. Rated voltage		50000-

5.Voltage regulation 6.Frequency		
Firefighting generator		
Test Items	Rating	Test Fee (Tk)
1.Rated output 2.Maximum output 3.Power factor 4.Rated voltage 5.Voltage regulation 6.Frequency		50000-
Optical Fiber		
Test Items	Rating	Test Fee (Tk)
1.Dimensional test 2.Attenuation 3.Dispersion		50000-
Computer Hardware (motherboard, CPU, Speaker, microphone, power supply, webcam)		
Test Items	Rating	Test Fee (Tk)
As required		20000-
CCTV system		
Test Items	Rating	Test Fee (Tk)
As required		20000-
PA system		
Test Items	Rating	Test Fee (Tk)
As required		20000-
Incubator tests		
Test Items	Rating	Test Fee (Tk)

As required		20000-
Kitchen Appliances (Washing machine, grinder/blender/juicer, dish washer, rice cooker, microwave/electrical oven, kitchen hood etc)		
Test Items	Rating	Test Fee (Tk)
1. Earthing test 2. Insulation Resistance test 3. THD measurement test 4. Measurement of true power		15000
Data communication Cables (all electrical tests)		
Test Items	Rating	Test Fee (Tk)
		30000
Wireless Walkie Talkie/ VHF test (repeater test)		
Test Items	Rating	Test Fee (Tk)
		30000
Cable connector (all electrical tests)		
Test Items	Rating	Test Fee (Tk)
		15000-
Monitor/display (CRT, LED, LCD)		
Test Items	Rating	Test Fee (Tk)
1. Lumen test 2. Resolution test 3. Voltage, current, power, efficiency test		25000-
CFL		
Test Items	Rating	Test Fee (Tk)
1. Input Power(W) 2. Color Rendering Index (CRI) 3. Lumen 4. Lumen per Watt 5. PF 6. Correlated Color		30000-

Temperature (CCT) 7. Efficiency		
Fluorescent lamp (all electrical tests)		
Test Items	Rating	Test Fee (Tk)
1. Input Power(W) 2. Lumen 3. Lumen per Watt 4. Color Rendering Index (CRI) 5. Correlated Color Temperature (CCT) 6. PF 7. Efficiency		30000-
Fluorescent lamp		
Test Items	Rating	Test Fee (Tk)
1. Input Power(W) 2. Color Rendering Index (CRI) 3. Correlated Color Temperature (CCT) 4. Lumen 5. Lumen per Watt 6. PF 7. Correlated Color Temperature (CCT)		30000-
Personal computer and laptop (all electrical tests)		
Test Items	Rating	Test Fee (Tk)
1. Earthing test 2. Insulation Resistance test 3. THD measurement test 4. Measurement of true power 5. Testing of battery		30000-
Router/switch/modem (all electrical tests)		
Test Items	Rating	Test Fee (Tk)
1. Bandwidth test 2. Electrical properties (insulation resistance, earthing, true power)		25000-

measurement, measurement)	THD		
Power conditioning unit (PCU) (all electrical tests)			
Test Items	Rating	Test Fee (Tk)	
		30000-	
Room Air-conditioning Unit (all electrical tests)			
Test Items	Rating	Test Fee (Tk)	
1. Earthing test 2. Insulation Resistance test 3. THD measurement test 4. Measurement of true power 5. Testing of inverter efficiency and power saving		30000-	
Washing machine (all electrical tests)			
Test Items	Rating	Test Fee (Tk)	
1. Earthing test 2. Insulation Resistance test 3. THD measurement test 4. Measurement of true power 5. Testing of inverter efficiency and power saving		30000-	
Lift, Escalator, Moving platform			
Test Items	Rating	Test Fee (Tk)	
1. Control System test 2. Lift motor test 3. Motor Braking System test 4. Sensor and any other opto- electrical component test		30000-	
Biomedical Equipment			
Test Items	Rating	Test Fee (Tk)	
Test of all Biomedical Equipment related to Medical Imaging		20000-	
Electrical Safety Test of any kind of equipment and Machinery			
Test Items	Rating	Test Fee (Tk)	

		Based on Job Involvement
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