

**Khulna University of Engineering & Technology**  
**Department of Mechanical Engineering**  
**Consultancy, Research and Testing Services (CRTS)**  
**Available Testing and Consultancy Facilities**  
(Effective from 01-03-2019)

Sl. No.	Name of the Test	Description	Rate in Taka (Per Sample)
1	<b>Material Tests</b> MS rod, Flat Bar, MS Plate, MS Sheet, Drawing Roller, Steel, High Carbon Steel Wire, rubber. Ferrous and Nonferrous Alloys etc, Concrete Cube or Cylinder. Root bend, Face Bend	Tensile Strength, Compressive Strength, Ultimate Strength, Impact strength (Each test)	3,500.00
		Mechanical Properties of Plastic Materials, Hardness, Elongation Springs(coil, flat, leaf etc)(Each test)	
2	<b>Metallurgical Tests</b> Pig Iron, Cast Iron, Brass, White Materials, Babbit Materials, Ferrous and Nonferrous alloys etc.	Chemical Composition (Each element)	2,500.00
		Microstructure test	6,000.00
3	<b>Fuels and Oil Tests</b> Coal, Crude Oil, Lubricating Oil, Grease, Furnace Oil, Castor Oil, Stand Oil, Coal ash, Carbon Black etc.	Specific gravity, Flash point, Boiling point, Melting Point, Pour point (Each test)	4,500.00
		Density Test: At room Temperature	3,500.00
		At specific Temperature	4,500.00
		Viscosity Test (0 °C -50°C)	5,000.00
		Viscosity Test (50°C-100 °C)	6,000.00
		Viscosity Test (Above 100°C)	7,000.00
		Calorific value	3,500.00
		Insoluble percentages (w/w), Water percentage (v/v) (Each test)	3,000.00
		Proximate Analysis of Fuels	6,000.00
		Exhaust Gas Analysis (Orsat)	6,500.00
		Exhaust Gas Analysis (Chromatograph)	15,000.00
4	<b>Solid Fuel Test</b>	Abrasion Test	3,500.00
		Water Penetration	4,000.00
		Impact Test	4,000.00
		Crashing Test	6,000.00
5	<b>Refrigeration and Air Conditioning equipments</b>	Compressor, Evaporator, Condenser, Refrigerants Expansion Valve, Thermostatic Switch, Filters etc. (Each test)	6,000.00
6	<b>Air Pollution Test</b>	Different pollutants in air (SO <sub>2</sub> , NO <sub>x</sub> , PM, SPM etc.)	40,000.00
7	<b>Dyes, Paints and Varnishes</b>	Textiles, Leather, Ceramics, Plastics, Printing Inks etc.	2,500.00
8	<b>Chemical Test</b>	Alum, Resin, Rubber, Gaure Gum, Natural Gum, Adhesive, Anti-freezing Chemicals, Glacial Acetic Acid, Insulating Materials, Thinner Oil, Bleaching Powder, Optical Whitener, Dying Chemicals, Lather Tanning and Finishing Chemicals etc	2,500.00
9	<b>Cement Tests</b>	Composition of Cement and Clinker	2,500.00
10	<b>Clay</b>	China Clay, Fire Clay, Kaolin Clay etc.	2,500.00

Sl. No.	Name of the Test	Description	Rate in Taka (Per Sample)	
11	<b>Poultry Feed</b>	Fish Meal, Animal Feed, Samuk Gura etc.	2,000.00	
12	<b>Belts</b>	All types of Belts such as V-belt, flat belt	2,500.00	
13	<b>Paper</b>	Kraft paper , Paper board, Tissue Paper, Art Paper, Emery Cloth, Filter Paper, Graphite Paper, Transfer Paper, Transparent Paper etc	2,500.00	
14	<b>Ceramics</b>	Quartz Powder, Marble, Tiles, Dolomite, Limestone, Field Spar, Mica etc	3,000.00	
15	<b>Automobile Spares</b>	Nozzle test and Fuel Pump Test.	4,500.00	
16	<b>PVC Pipes</b> ( If Impact test is done then add 2,500/- with the rate mentioned right side) then calculate the vat based on total rate.	Dimensions, Hydrostatic, Pressure, Acetone test.	38mm dia	3,000.00
			50 mm dia	3,500.00
			75 mm dia	3,750.00
			100 mm dia	4,500.00
			110mm dia	5,500.00
			125 mm dia	4,000.00
			150 mm dia	4,500.00
			160 mm dia	4,500.00
			180 mm dia	4,500.00
			200 mm dia	4,500.00
			225 mm dia	5,500.00
			250 mm dia	5,500.00
			260 mm dia	5,500.00
			280 mm dai	6,000.00
		400 mm dia	8,000.00	
400 mm dia	9,000.00			
		Heat Reversion Test	All sizes	3,500.00
		Modulus of Elasticity		3,500.00
17	<b>PVC Strainer (Robo Screen)</b>	Slot dimensions, Rib dimensions and Number of ribs	38 mm dia	3,500.00
			50 mm dia	4,000.00
			75 mm dia	4,000.00
			100 mm dia	4,500.00
			110mm dia	5,500.00
			125 mm dia	4,500.00
			150 mm dia	4,500.00
			160mm dia	5,500.00
			180 mm dia	4,500.00
			200mm dia	5,500.00
			225mm dia	5,500.00
			250 mm dia	5,500.00
			260mm dia	5,500.00
			280mm dia	6,000.00
			300 mm dia	6,500.00
350 mm dia	7,500.00			
400 mm dia	8,000.00			
500 mm dia	9,000.00			
18	<b>PVC Fittings</b>	<b>Bend</b> Dimensions, Hydrostatic pressure, Acetone test.	38 - 75 mm	4,500.00
			100 - 125 mm	4,500.00
			160 - 180 mm	5,000.00

Sl. No.	Name of the Test	Description	Rate in Taka (Per Sample)
		200 - 225 mm	6,000.00
		≥ 250 mm	6,500.00
	Heat Reversion Test	All sizes	3,000.00
	Modulus of Elasticity		2,500.00
	<b>Reducer</b> Dimensions, Hydrostatic pressure, Acetone test.	≤ 100 mm	4,500.00
		125 - 180 mm	5,000.00
		200 - 225 mm	5,500.00
		≥ 250 mm	6,000.00
	<b>Tee</b> Dimensions, Hydrostatic pressure, Acetone test.	≤ 50 mm	5,500.00
		75 - 125 mm	6,000.00
		160 - 180 mm	6,500.00
		200 - 225 mm	12,000.00
		≥ 250 mm	12,000.00
	Heat Reversion Test	All sizes	2,000.00
	Modulus of Elasticity		2,500.00
19	<b>GI Pipe and Strainer</b>	Dimensions and strength test	≤38 mm
			50 mm
			75mm
			100mm
			125 mm
			150mm
			200mm
			≥ 250 mm
20	<b>MS Pipe and Strainer</b>	Dimension and strength test	25 - 50 mm
			75 - 100 mm
			100 - 180 mm
			> 180 mm
21	<b>SS Pipe and Strainer</b>	Dimension and tensile test	Any size
22	<b>Ductile CI Pipe</b>	Dimension and strength test	≤ 100 mm
			125 - 160 mm
			180 - 300 mm
			325 - 500 mm
			≥ 600 mm
23	<b>Calibration of meter</b>	Pressure Gauge, Thermometer etc. (Each test)	
24	<b>Tools Calibration</b>	Pressure gauge	10 kg/cm <sup>2</sup>
		Digital multimeter	Type- 87 Δ
		Pressure gauge	10 kg/cm <sup>2</sup>
		Digital multimeter	Type- 87 Δ
		Digital clamp meter	Type- 376 True RMS
		Torque wrench	Range: 6-30 NM
		Torque wrench	Range : 6-50 NM
		Torque wrench	Range: 19-110 NM
		Torque wrench	Range : 40-210 NM
		Torque wrench	Range : 50-300 NM
		Torque wrench	Range : 40-200 NM

	Torque wrench	Range : 70-350 NM	7000.00
	Torque wrench	Range : 140-760 NM	4000.00
	Torque wrench	Range : 520-1000 NM	4000.00
	Torque multiplier (5:1)	Range: Up to 2000 NM	5000.00
	Inside micro meter (Grove height)	Range: 5-30mm	3000.00
	Inside micro meter	Range: 50-988mm	3000.00
	Outside micro meter	Range : 0-150mm	3000.00
	Outside micro meter	Range : 150-300mm	3000.00
	Outside micro meter	Range : 300-400mm	3000.00
	Outside micro meter	Range : 400-500mm	3000.00
	Outside micro meter	Range : 500-600mm	3000.00
	Outside micro meter	Range : 600-700mm	3000.00
	Outside micro meter	Range : 900-1000mm	3000.00
	Bore gauge	Range: 10-18.5mm	3000.00
	Bore gauge	Range: 18-35mm	3000.00
	Bore gauge	Range: 35-60mm	3000.00
	Bore gauge	Range 50-100mm	3000.00
	Bore gauge	Range: 280-340mm	3000.00
	Dial Gauge		3000.00
	Outside micro meter (Digimatic)	Range: 0-25mm	3000.00
	Outside micro meter (Digimatic)	Range: 0-1"	3000.00
	Outside micro meter (Digimatic)	Range: 1-2"	3000.00
	Outside micro meter (Digimatic)	Range: 2-3"	3000.00
	Nozzle depth gauge	Indicator :0.01 mm	3500.00
	Surface roughness meter	HOMMEL Tester T500	3000.00
	Dial indicator	Indicator :0.01 mm	6000.00
	Simulator (Temp. transducer)	Range: 20-200 <sup>o</sup> C	3000.00
	Thermo hunter (Fluke)	Type: 63 IR	3000.00
	Pressure Indicator / Cyl. Gauge	MT-31	2500.00
	Outside micrometer	0-25 mm	3000.00
	Outside micrometer	25-50 mm	3000.00
	Outside micrometer	50-75 mm	3000.00
	Outside micrometer	75-100 mm	3000.00
	Outside micrometer	100-125 mm	3000.00
	Outside micrometer	125-150 mm	3000.00
	Inside micrometer	50-500 mm	3000.00
	Bore gauge	50-150 mm	3000.00
	Bore gauge	160-250 mm	3000.00
	Bore gauge	250-450 mm	3000.00
	Dial Gauge-Baker	0-10 mm	3000.00
	Vernier Caliper	0-250 mm	3000.00

		Vernier Caliper	0-190 mm	3000.00
		Dial Gauge	0-50 mm	3500.00
		Digital Depth gauge	0-150 mm	3000.00
		Manual depth Gauge	0-200 mm	3000.00
		Digital verniar caliper	0-300 mm	3000.00
		Digital vernier caliper	0-150 mm	3000.00
		Micrometer for Piston ring groove	0-30 mm	3000.00
		Temperature	100@1000 °C	3000.00
		Long stem dial gauge for Piston skirt measurement tool		4000.00
		Telescopic Gauge	0-94 mm	3000.00
		Micrometer for bore dimension	100-125 mm	3000.00
		Thermometer		2000.00
		Pressure Gauge	1000 Bar	2000.00
		Roughness Tester	SI02	3000.00
		Hardness Tester	SI03	3000.00
		Laser Alignment Tools	SI05	3500.00
		Vibration Analyzer -Digital	SI06	5000.00
		Peak pressure meter (Digital)	SI11	3000.00
		Crank shaft deflection indicator	SI19	5000.00
		Multi-meter		3000.00
25	<b>Pumps and Flow-meter Test</b>			
		Water Flow Meter	≤ 38 mm	5,000.00
			50 - 75 mm	5,000.00
			≥ 100 mm	5,000.00
		Centrifugal Pump (Discharge measurement)		5,000.00
		Centrifugal Pump (Discharge, Head, Output Power, Input Power, Efficiency measurement,)		20,000.00
		Hand Pump No-6 (Dimensions and weight test of various parts)		3,000.00
		Switch Valve/Gate Valve		5,500.00
26	<b>Wood Test</b>			
		Identification of wood		2,500.00
		Strength test		2,500.00
		Treatment (per cft)		500.00
27	<b>Consultancy</b>			
		New Car Inspection (Each):		20,000.00
		1. Minimum Two Cars of One Company (Each)		40,000.00
		2. One Car of One Company		50,000.00
		Engine Capacity Determination		200,000.00
		Dredger		200,000.00
		Lift/Crane/Escalator etc. Calibration		50,000.00-
				200,000.00

		(Depends on range)
	Batteries (Applications and Rating)	50,000.00

**Consultancy Facilities:**

(A) Installation, Repairing, Maintenance and Commissioning of the followings:

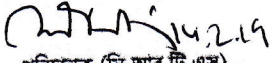
1.	Cold Storage	9.	Iodine Mixing Plant
2.	Refrigeration Plant	10.	Jute Mill Machinery
3.	Air Conditioning Systems (Central A/C, Window, Box Type)	11.	Water Treatment Plant
4.	Air-Craft	12.	Auto Rice Mill Industry
5.	Briquetting plant	13.	LPG Plant
6.	Power Loom	14.	Die Design Cutting using CNC
7.	Power Plant	15.	3D Model Printing
8.	Auto CAD Design	16.	Any type of Industry, etc


(B) New Design of any Mechanical Structure or System.

(C) Modification and/or improvement of any existing Mechanical system and Machinery with a view to improve or for special use.

  
7-2-19

(Prof. Md. Golam Kader)  
Chairman, CRTS  
Department of Mechanical Engineering  
Khulna University of Engineering & Technology

  
14.2.19  
পরিচালক (সি আর টি এস)  
খুলনা প্রকৌশল ও প্রযুক্তি বিশ্ববিদ্যালয়

  
14.2.19  
CHAIRMAN  
CENTRAL CRTS  
Khulna University of Engineering & Technology