

# N.E.D University of Engineering and Technology Department Of Civil Engineering



#### Rates of Standard Tests Performed on Commercial Basis Effective from July 2024

#### **Asphalt Testing**

S.No	Test Description	Charges Per Test Exclusive of All Taxes (Rs)
1	Asphalt Penetration Test	6000
2	Asphalt Ductility Test	6000
3	Determination of Softening point of Asphalt	4500
4	Quantitative extraction of bitumen	7500
5	Specific Gravity	4800
6	Flash and Fire Point	5400
7	Viscosity at 60 °C	7500

#### **Aggregate Testing**

S.No	Test Description	Charges Per Test Exclusive of All Taxes (Rs)
1	Specific Gravity and Absorption of Coarse Aggregate	7500
2	Specific Gravity and Absorption of Fine Aggregate	7500
3	Los Angles Abrasion Test at 500 rev	6000
4	Los Angles Abrasion Test at 1000 rev	7000
5	Aggregate Impact Value	6000
6	Aggregate Crushing Value	6000
7	Sieve Analysis of Coarse Aggregates	4500
8	Sieve Analysis and Fineness modulus of Fine Aggregates	4500
9	Flakiness & Elongation Index of Coarse Aggregates	12000
10	Elongation Index of Coarse Aggregates	6000
11	Soundness of Aggregates by Use of Sodium Sulfate	15000
12	Soundness of Aggregates by Use of Magnesium Sulfate	18000
13	Unit Weight /Density of Fine and Coarse Aggregates	3000

14	Clay Lumps and friable Particles	4000
15	Organic Impurities in Coarse and Fine Aggregates	6000
16	Clay Silt and Dust Passing/Sieve	3000
17	Light Weight Particles Coarse/fine Aggregates	4000
18	Aggregates/Boulders Crushing/Sample Preparation	4000

## **Cement Testing**

S.No	Test Description	Charges Per Test Exclusive of All Taxes (Rs)
1	Consistency, Initial and final Setting time of Cement	5000
2	Compressive Strength of Cement Mortars/other materials Per set of 3 cubes (with preparation)	5000
3	Tensile Strength of Cement Mortars/other Materials Per set of 3 Brackets(with preparation)	5000
4	Fineness of Cement by Blaine Apparatus	3500
5	Expansion of Cement by Autoclave Method (Per set of 3 Specimen)	8000
6	Adhesion test for Polymer–Modified Cement Mortar(Bond Test)	5000
7	Flexural Strength of Hydraulic Cement Mortars	6000
8	Early Stiffening of Portland Cement (Mortar Method)	3500
9	Drying Shrinkage of Mortar Containing Portland Cement (Per set of 3 Specimen)	10000

# **Concrete Testing**

S.No	Test Description	Charges Per Test Exclusive of All Taxes (Rs)
1	Concrete Mix Design Including testing of aggregates	i) First mix 35,000 ii) Second 32,000
2	Three-edge bearing test for drainage and sewer pipes (Concrete and Asbestos), up to 12inches diameter	5000
3	Three-edge bearing test for drainage and sewer pipes (Concrete and Asbestos), above 12inches to 24inches diameter	7000
4	Three-edge bearing test for drainage and sewer pipes (Concrete and Asbestos), above 24inches to 36inches diameter	8500
5	Three-edge bearing test for drainage and sewer pipes (Concrete and Asbestos), above 36inches to 48inches diameter	10,000
6	Flexural strength test for drainage and sewer pipes (Concrete and Asbestos), up to 12inches diameter	6500

7	Flexural strength test for drainage and sewer pipes (Concrete and Asbestos), above 12inches to 24inches	8000
8	Flexural strength test for drainage and sewer pipes (Concrete and Asbestos), above 24inches to 36inches	9000
9	Compressive Strength of Concrete Standard Cube/Cylinder/Cores/Pavers	600
10	Compressive Strength of Concrete large Specimens of size upto 12 inches	1800
11	Compressive Strength of Stone Blocks	2500
12	Compressive Strength of Concrete masonry Blocks	900
13	Capping of Concrete Specimens each side	350
14	Concrete Cutting and grinding of Cores	600
15	Pullout Strength of Hardened Concrete	2500
16	Flexural Testing of Concrete Panels upto 12 inches	3500
17	Flexural Testing of Concrete Panels above 12inches	5000
18	Length Change of Drilled or Sawed Specimens	4000
19	Obtaining of Drilled Cores in Laboratory	4500
20	Static Modulus of Elasticity and Poisson's Ratio of Concrete in Compression	6000
21	Splitting Tensile Strength of Cylindrical Concrete Specimens	3500
22	Pulse Velocities and Ultrasonic Elastic Constants	3000
23	Permeability of Concrete cube/Cylinder/Core	8000
24	Concrete Pavers of irregular Shapes	1800
25	Tensile Splitting Strength & Breaking Load of Concrete Pavers	4000

### **Rock Testing**

S. No.	Test Description	Charges Per Test Exclusive of All Taxes (Rs)
1	Rock core preparation (Cutting)	1200
2	Rock core capping	350
3	Crushing of stones	4000
4	Mounting of strain gauges on specimens	2000
5	Specific Gravity and Absorption of Rock	7500
6	Porosity /void ratio	7500
7	The density of rock core	800
8	Uniaxial/ Unconfined Compressive Strength test	3000
9	Uniaxial/ Unconfined Compressive Strength test with elastic modulus	6000
10	Laboratory Direct Shear Strength Tests of Rock Specimens	10000

11	Determination of the Point Load Strength Index of Rock	2500
12	Splitting Tensile Strength of Intact Rock Core Specimens	3500
13	Determination of Rock Hardness by Rebound Hammer Method	1000
14	Slake Durability of Shales and Similar Weak Rocks	6000
15	Evaluation of Durability of Rock for Erosion Control Using Sodium Sulfate	15000
16	Evaluation of Durability of Rock for Erosion Control Using Magnesium Sulfate	18000
17	Loose stack porosity of crushed stones	2500
18	Determination of Pulse Velocities and Ultrasonic Elastic Constants of Rock	3000
19	Standard Test Method for Elastic Moduli of Intact Rock Core Specimens in Uniaxial Compression	4000
21	Shear strength of rock cores	7000
21	The joint shear strength of rock cores	5000
22	Hardness Mohs	2500
23	Thermal conductivity test of rock cores	6000
24	Petrographic Analysis of Rock Samples	15000
25	Excavability Analysis of a Site/Sample	25000

#### **Steel/Metals Testing**

S.No	Test Description	Charges Per Test Exclusive of All Taxes (Rs)
1	Tensile strength test of Steel reinforcing bars including Bend tests up to 40 mm diameter	2500
2	Tensile strength test with 0.2% proof stress and modulus of elasticity with Electronic Extensometer Graph	5000
3	Seven-Wire Pre stressing Steel Strands Complete test with Electronic Extensometer Graph	7000
4	Compression and Shear Tests of Steel Products	2500
5	Impact Testing of Metallic Specimen	800
6	Tensile strength test of Steel Fasteners	2100
7	Stress/stroke/Time Graphs	500
8	Verification of Test Report	600
9	Unit Weight of steel Rebars	500
10	Bend Test only	1000
11	Re-bend Test	3000
12	Tensile testing of Wire/Rope	3000
13	Force Verification/Calibration inside lab	18,000
14	Force Verification/Calibration outside with in Karachi	40,000

### **Soil Testing**

S.No.	Test Description	Charges Per Test Exclusive of All Taxes (Rs)
1	Standard Practice for Specifying Color by the Munsell System	2000
2	The natural moisture content of the soil	1500
3	Determination of Liquid Limits and Plastic Limits and plasticity index	3000
4	Determination of Shrinkage Limit of Soil	3000
5	Determination of Grain size distribution by Hydrometer Analysis	3000
6	Determination of Grain size distribution by Hydrometer Analysis For Colloidal Suspensions	6000
7	Sphericity and Roundness test of soil	10,000
8	Classification of Soil (LL+PL+PSD)	5000
9	Specific Gravity of soil	2000
10	Compaction (Standard Proctor Test)	3000
11	Compaction (Modified Proctor Test)	5000
12	The density of an undisturbed soil sample	100
13	Field density test (Sand Cone Method) with in Karachi, 3 Tests Min.	8000
14	The relative density of cohesionless soil	10000
15	Determination of Soil Permeability (coarse-grained soils)	5000
16	Determination of Soil Permeability (fine-grained soils)	500
17	One dimensional Consolidation of Soil	15000
18	One-Dimensional Swell or Collapse of Soils (ASTM D4546 – 14)	20000
19	Determination of free swell index of soils (IS 2720-41 (1977))	4000
20	Unconfined Compression Test	2000
21	Direct Shear Test of Soil	6000
22	Vane Shear Test (for Soft and sensitive soils)	3000
23	Un-soaked CBR Complete	6000
24	Soaked CBR Complete	10000
25	Triaxial Test (UU-Test)	10000
26	Triaxial Test (CU-Test) with pore pressure measurement	20000
27	Triaxial Test (CD-Test) with pore pressure measurement	25000
28	Sensitivity index test of soil	10000
29	Standard Test Methods for Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter	10000

30	Sand Duggedness	3000
31	Sand Ruggedness	3000
	Mica content	5000
32	Thermal Conductivity test of soil	10000
33	Particle Size Distribution (Dry Sieve Analysis)	4500
34	Particle Size Distribution (Wet Sieve Analysis)	5000
35	Soil pH and Electrical Conductivity	3000
36	Organic Content	4000
37	Sulphate Content of Soil	5000
38	Chloride Content of Soil	5000
39	Dispersivity Test (Crumb Test)	3000
40	Dispersivity Test (Pinhole Test)	7000
41	Dispersivity Test (Double Hydrometer Test)	8000
42	Electrical Conductivity of Soil	4000
43	PH value test of Water	1000
44	Sulfate content test of Water	3000
45	Chloride content test of Water	3000
46	Electrical conductivity test of Water	2000
47	Total Dissolved Solids (TDS) of Water	2000
48	Hardness test of water	2000
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#### Note:

Any other test or detailed test report with analysis is not included in the list, it may also be planned and performed according to the requirements of the client and the test charges of which will be decided by the Department of Civil Engineering on request by the client.

The payment is to be made in advance only by Pay-order or cash deposited into bank through payment challah in the name of "Commercial Testing & Other Related Services at NEDUET D-CPL"

#### **For Further Details Please Contact:**

**Material Testing Laboratory** 

**Department of Civil Engineering** 

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