

TC - 5386



ISO 9001 : 2015
Cert. No. IN9074A



CORE ENGINEERS & CONSULTANCY SERVICES

We are made for quality....

**Mechanical, NDT, Chemical, Structural Audit &
Repairs, Geotechnical Investigation**

**NABL ACCREDITED AS PER ISO : IEC 17025 : 2017
An ISO 9001 : 2015 Certified Company**

MCGM, CIDCO, MMRDA, AIRPORT AUTHORITY, MSRDC, PWD, NHA
APPROVED LAB

MSME
MICRO, SMALL & MEDIUM ENTERPRISES
सूक्ष्म, लघु एवं मध्यम उद्यम
Regn. No. MH19E0013751



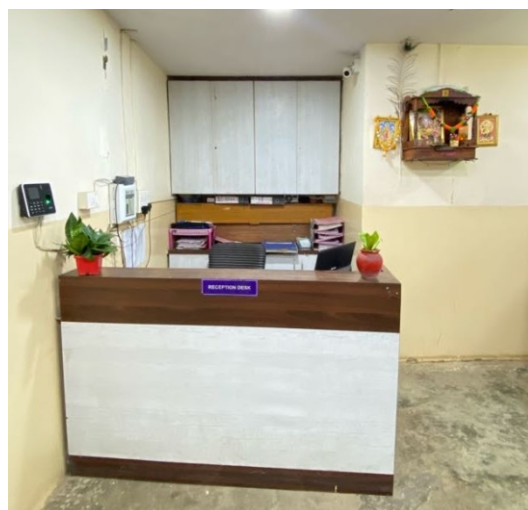
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ABOUT US

Since March 2012, Core Engineers & Consultancy Services has acquired a reliable name in the sphere of the Civil Engineering Consultancy Services, Material Testing Laboratory, Structural Audit & Geotechnical Investigation.

We have been creating values for our clients by delivering material testing services. Our dynamic approach to problem solving enable us to deliver quality Services on time coupled with consistent performance.

We are NABL accredited & ISO 9001-2015 Certified Company in Construction & Building material testing, Mechanical, NDT, as well as Chemical testing. We endeavour to maintain standards & consistently improving our services day by day. At CECS, we strive to achieve strong market positions by providing cost efficient, quality & timely Services.



OUR SERVICES



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MATERIAL TESTING

MECHANICAL	CHEMICAL	NDT
Steel, Structural Steel	Water	Rebound Hammer
AAC block, Solid block, Paver block	Steel	UPV Test
Concrete Cube, Brick	Admixture	Cover Meter Test
Soil	Cement	Half Cell Potential
Rock	Microsilica	Depth of Carbonation
Bitumen, Mastic	Fly ash	
GSB/WMM/WBM	GGBS	
Cement, Microsilica, GGBS	Soil	
Fly ash	Rock	
Admixture	Hardened Concrete	
Aggregate	Aggregate	
Concrete & Mix design & Job Mix		
DBM/BC/BM		

SPECIAL TESTS

- Petrography Tests of Aggregates
- Pull out test of Anchor bolts-tunnels
- Bipolar Concrete penetrating Corrosion Inhibiting Admixture.

CONSULTANCY

- Structural Audit & Repairs
- Geotechnical Investigation
- Calibration of Equipments
- Trading & Repairing

MECHANICAL TESTING

- ◀ **Weight Per Meter length**
IS 1786 : 2018
- ◀ **Ultimate Tensile Strength**
IS 1608 (Part I) :2018
- ◀ **Yield Strength**
IS 1608 (Part I) :2018
- ◀ **Elongation**
IS 1608 Part I:2018
- ◀ **Bend Test**
IS 1599: 2019
- ◀ **Re-bend Test**
IS 1786: 2018



CHEMICAL TEST

- ◀ **Carbon Content**
IS 228 Part- I:2018
- ◀ **Sulphur Content**
IS 228 Part-9:2019
- ◀ **Phosphorous Content**
IS 228 Part-3:2018
- ◀ **Sulphur + Phosphorous**
IS-1786: 2018



STAINLESS STEEL

MECHANICAL TEST

- ◀ **Weight Per Meter length**
IS 1786 : 2018
- ◀ **Ultimate Tensile Strength**
IS 1608 (Part 1) : 2018
- ◀ **Yield Strength**
IS 1608 (Part 1) : 2018
- ◀ **Elongation**
IS 1608 (Part 1) 2018
- ◀ **Bend Test**
IS 1599 : 2019
- ◀ **Re-bend Test**
IS 1786 : 2018



CONCRETE TESTING

SOLID CONCRETE BLOCK

Mechanical Testing

- ◀ **Measurement of Dimensions**
IS- 2185 (Part-1) : 2015
- ◀ **Density**
IS-2185(Part-I) : 2015
- ◀ **Compressive Strength**
IS - 2185 (Part-1) : 2015
- ◀ **Water Absorption**
IS- 2185 (Part -1) : 2015



CONCRETE CUBE/BEAM

Mechanical Testing

- ◀ **Compressive Strength of Concrete Cube**
IS -516 : 2018
- ◀ **Compressive Strength Of Concrete Cube by ACT**
IS- 9013 : 2018
- ◀ **Flexural Strength of Concrete Beam**
IS - 516 : 2018
- ◀ **RCPT**
ASTM - C1202-05
- ◀ **Water Permeability**
IS- 3085 : 2021
- ◀ **Surface Pull out**
IS : 8539



CONCRETE CORE

Mechanical Test

- ◀ **Cutting, Dressing, Capping & Testing**
IS - 516 : 2018
- ◀ **Compressive Strength of Cylindrical Specimen**
IS - 516 : 2018



AAC BLOCK

Mechanical Test

- ◀ **Compressive Strength**
IS : 6441 (Part-5) : 2017
- ◀ **Dry Density**
IS : 6441 (Part-1) : 2017
- ◀ **Moisture Content**
IS - 6441 (Part-1) : 2017
- ◀ **Drying Shrinkage**
IS- 6441 (Part-2) : 2017



PAVER BLOCK

Mechanical Test

- ◀ **Water Absorption**
IS- 15658 : 2021
- ◀ **Compressive Strength**
IS - 15658 : 2021
- ◀ **Abrasion Value**
IS - 15658 : 2021
- ◀ **Tensile Splitting**
IS - 15658 : 2021
- ◀ **Surface Area**
IS- 15658 : 2021
- ◀ **Thickness of wearing layer**
IS - 15658 : 2021

AGGREGATE TEST



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COARSE AGGREGATE

Mechanical Test

- **Gradation**
IS 2386 (Part-1) : 2021
- **Bulk Density**
IS 2386 (Part-3) : 2021
- **Specific Gravity**
IS 2386 (Part-3) : 2021
- **Water Absorption**
IS 2386 (Part 3) : 2021
- **Elongation & Flakiness Index**
IS- 2386 (Part-1) : 2021
- **Impact Value**
IS 2386 (Part-4) : 2021
- **Crushing Value**
IS 2386 (Part -4) : 2021
- **Abrasion Value**
IS 2386 (Part-3) : 2021
- **Deleterious Material Light Weight**
IS 2386 (Part-2) : 2021
- **Deleterious Material - Clay lumps**
IS 2386 (Part - 2) : 2021



FINE AGGREGATE

Mechanical Test

- **Sieve Analysis**
IS- 2386 (Part-1) : 2021
- **Material Finer Than 75 μm**
IS -2386 (Part 1) : 2021
- **Bulk Density**
IS-2386 (Part-3) : 2021
- **Specific Gravity-**
IS-2386 (Part-3) : 2021
- **Water Absorption**
IS- 2386 (Part-3) : 2021
- **% Of Silt by Volume**
IS 2386 (Part-1) : 2021



CHEMICAL TEST

- **pH**
IS 2386 (Part-2) : 2021
- **Chloride**
IS 2720 (Part-26) : 2016
- **Sulphate**
IS 14959 (Part-1) : 2021
- **Dissolved Silica**
IS 2386 (Part 7) : 2021
- **Reduction in Alkalinity**
IS 2386 (Part-7) : 2021
- **Organic Impurities**
IS 2386 (Part-2) : 2021



CEMENT & GGBS TEST

MECHANICAL TEST

- **Compressive Strength (3 Days, 7days, 28 days)**
IS 4031 (Part-6) : 2019
- **Consistency**
IS 4031 (Part-4) : 2019
- **Density**
IS 4031 (Part- 11) : 2019
- **Initial Setting time**
IS 4031 (Part-5) : 2019
- **Final Setting time**
IS 4031 (Part-5) : 2019
- **Fineness by dry Sieving**
IS 4031 (Part-1) : 2021
- **Soundness by Le-chatelier's Apparatus**
IS 4031 (Part-3) : 2019
- **Specific Gravity**
IS 4031 (Part-11) : 2019
- **Specific Surface**
IS 4031: (Part-2) : 2018
- **Fineness by Blaine Air Permeability Method**
IS 4031: (Part-2) : 2018



CHEMICAL TEST

- **Loss on Ignition**
IS 4032 : 2019
- **Insoluble Residue**
IS 4032 : 2019
- **Silica Content (SiO₂)**
IS 4032 : 2019
- **Alumina (Al₂O₃)**
IS 4032 : 2019
- **Ferric Oxide (Fe₂O₃)**
IS 4032 : 2019
- **Calcium Oxide (cao)**
IS 4032 : 2019
- **Sulphuric Anhydride (So₃)**
IS 4032 : 2019
- **Magnesia (Mgo)**
IS 4032 : 2019
- **Chloride**
IS 4032 : 2019

MICRO SILICA & FLY ASH TEST

MECHANICAL TEST

- **Retained on 45 micron Is Sieve**
IS 1727 : 2018
- **Fineness**
IS 1727 : 2018
- **Finess by Blaine Air Permeability Method**
IS 1727 : 2018
- **Initial & Final Setting Time**
IS 1727 : 2018
- **Specific Gravity**
IS 1727 : 2018
- **Compressive Strength**
IS 1727 : 2018
- **Soundness**
IS 1727 : 2018
- **Lime Reactivity**
IS 1727 : 2018



CHEMICAL TEST

- **Silica Content (SiO₂)**
IS- 1727 : 2018
- **Iron Oxide (Fe₂O₃)**
IS- 1727 : 2018
- **Calcium Oxide (CaO)**
IS- 1727 : 2018
- **Magnesium Oxide (Mgo)**
IS- 1727 : 2018
- **Sulphuric Anhydride (SO₃)**
IS- 1727 : 2018
- **Loss of ignition**
IS- 1727 : 2018
- **Alkalies as Na₂O**
IS- 1727 : 2018
- **Chloride**
IS- 1727 : 2018

GYPSUM POWDER

Mechanical Test

- **Consistency**
IS -2542 (Part-1) : 2017
- **Dry Density**
IS -2542 (Part-1) : 2017
- **Setting Time**
IS -2542 (Part-1) : 2017
- **Compressive Strength**
IS -2542 (Part-1) : 2017
- **Transvers Strength**
IS -2542 (Part-1) : 2017
- **Soundness**
IS -2542 (Part-1) : 2017



Chemical Test

- **Soluble Sodium**
IS- 1288: 2016
- **Soluble Magnesium**
IS- 1288: 2016
- **Free Lime**
IS- 1288: 2016
- **Sulphate**
IS- 1288: 2016
- **Calcium Oxide**
IS- 1288: 2016

CHEMICAL TEST

- **pH**
IS - 3025 (Part-11) : 2019
- **Chloride**
IS - 3025 (Part-32) : 2019
- **Sulphate**
IS - 3025 (Part-24) : 2019
- **Total Dissolved Solid**
IS - 3025 (Part-16) : 2017
- **Total Suspended Solid**
IS - 3025 (Part-17) : 2019
- **Total Hardness**
IS - 3025 (Part-21) : 2019
- **Total Alkalinity**
IS - 3025 (Part-23) : 2019
- **Total Acidity**
IS - 3025 (Part-23) : 2019
- **Organic & Inorganic Residue**
IS - 3025 (Part-18) : 2017
- **Aluminium**
IS - 3025 (Part-55) : 2019



- **Ammonia**
IS - 3025 (Part-34) : 2019
- **Calcium**
IS - 3025 (Part-40) : 2019
- **Conductivity**
IS - 3025 (Part-14) : 2019
- **Iron**
IS - 3025 (Part-53) : 2019
- **Magnesium**
IS - 3025 (Part-46) : 2019
- **Nitrate**
IS - 3025 (Part-34) : 2019
- **Phosphate**
IS - 3025 (Part-31) : 2019
- **Potassium**
IS - 3025 (Part-45) : 2019
- **Silica**
IS - 3025 (Part-35) : 2019
- **Sodium**
IS - 3025 (Part-45) : 2019
- **Turbidity**
IS - 3025 (Part-10) : 2017



CHEQUERED TILES / VITRIFIED TILES / GLAZED TILES & CERAMIC TILES TEST

Mechanical Test

- **Dimensions**
IS-13630 (Part-1) : 2018
- **Abrasion Value**
IS-13801 : 2018
- **Water Absorption**
IS-13630 (Part-1) : 2018
- **Wet transverse strength**
IS-13801 : 2018
- **Rectangularity**
IS-13630 (Part-1) 2019
- **Straightness**
IS-13630 (Part-1) 2019
- **Modulus of rupture**
IS-13630 (Part-1) 2019
- **Breaking Strength**
IS-13630 (Part-1) 2019

SOIL TEST

MECHANICAL TEST

- **Gradation (Sand)**
IS- 2720 (Part- 4) : 2015
- **Gradation (Slit & Clay)**
IS- 2720 (Part- 4) : 2015
- **Maximum Dry density by heavy compaction**
IS- 2720 (Part- 8) : 2015
- **Optimum Moisture content**
IS- 2720 (Part- 8) : 2015
- **Liquid limit & Plastic Limit**
IS- 2720 (Part- 5) : 2015
- **Free Swell Index**
IS- 2720 (Part- 40) : 2016
- **Lab California Bearing Ratio (Soaked & Unsoaked)**
IS- 2720 (Part-16) : 2016
- **Field California bearing ratio**
IS- 2720 (Part- 31) : 2015
- **Dry Density by Sand Replacement Method**
IS- 2720 (Part- 28) : 2015
- **Field Dry Density by Core Cutter Method**
IS- 2720 (Part- 29) : 2015
- **Direct Shear**
IS- 2720 (Part- 13) : 2016



CHEMICAL TEST

- **pH**
IS- 2720 (Part- 26) : 2016
- **Iron Oxide**
IS- 2720 (Part- 25) : 2015
- **Total Soluble Sulphate**
IS- 2720 (Part- 27) : 2015
- **Chloride Content**
IS- 3025 (Part- 32) : 2019
- **Organic Matter**
IS- 2720 (Part- 22) : 2015
- **Soluble Solid**
IS- 2720 (Part- 21) : 2015
- **Silica Content**
IS- 2720 (Part- 25) : 2015
- **Calcium Carbonate**
IS- 2720 (Part- 23) : 2015



BITUMEN & BITUMINEOUS MATERIAL TEST

Bitumen/PMB/CRMB Test

Mechanical Test

- **Ductility**
IS- 1208 : 2014
- **Penetration**
IS- 1203 : 2018
- **Softening Point**
IS- 1205 : 2014
- **Specific Gravity**
IS- 1202 : 2018
- **Absolute Viscosity @ 60°C**
IS- 1206 (Part-2) : 2014
- **Kinematic Viscosity @135°C**
IS- 1206 (Part-3) : 2014
- **Gradation**
IS- 2386 (Part-1) : 2021
- **Binder Content**
IS-IRC-SP 11:1984
- **Marshall Stability**
IS - ASTM D.6927:2015
- **Flow**
IS-ASTM D 6927: 2015



BM/DBM/BC Test

Mechanical Test

- **Gradation**
IS- 2386 (Part-1) : 2016
- **Binder Content**
IS- IRC-SP 11:1984
- **Marshall Stability**
IS - ASTM D 6927 : 2015
- **Flow**
IS-ASTM D 6927: 2015



Mastic Asphalt Test

- **Hardness Number**
IS-1195 : 2017



ROCK TEST



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MECHANICAL TEST

- **Density**
IS -13030 : 2016
- **Specific Gravity**
IS -1124 : 2017
- **Unconfined Compressive Strength**
IS -9143: 2016
- **Water Absorption**
IS -1124: 2017
- **Porosity**
IS-13030: 2016



CHEMICAL TEST

- **pH**
IS-3025 (Part 11) : 2017
- **Sulphate**
IS-3025 (Part 24) : 2019
- **Chloride**
IS-3025 (32) : 2019

ADMIXTURE TEST

Mechanical Test

- **Bleeding**
IS- 9103 : 2018
- **Slump**
IS- : 1199 : 2018
- **Water Content**
IS- 9103: 2018
- **Setting time of Concrete by Penetration resistance**
IS- 8142 : 2016
- **Compressive Strength**
IS-516: 2018
- **Flexural Strength**
IS- 516 : 2018



CHEMICAL TEST

- **pH**
IS 9103 : 2018
- **Chloride Content**
IS 6925 : 2018
- **Dry Material Content**
IS - 9103 : 2018
- **Relative Density**
IS- 9103 : 2018

BUILDING MATERIAL

BUILDING STONE

Mechanical Test

- **Specific Gravity**
IS- 1124 : 2017
- **Water Absorption**
IS- 1124 : 2017
- **Porosity**
IS- 1124 : 2017
- **Compressive Strength (Unconfined & Point load)**
IS-9143 : 2016, 8764 : 2019
- **Absolute Density**
IS - 13030 : 2021



BRICKS

Mechanical Test

- **Measurement of Dimensions**
IS- 3495:2019
- **Density**
IS- 3495:2019
- **Water Absorption**
IS- 3495:2019
- **Compressive Strength**
IS- 3495:2019
- **Efflorescence**
IS- 3495:2019



WOOD TIMBER TEST / PLYWOOD

- **Moisture Content**
IS - 11215: 2015
- **Specific Gravity**
IS- 1708 (Part-2) : 2015
- **Tensile Strength**
IS- 1708 (Part-12 & 13) : 2015
- **Neil & Screw Holding Power**
IS - 1708 (Part-15) : 2015

H.T. WIRE STRAND

Mechanical Test

- **Diameter of Wire Strand**
IS- 14268 : 2017
- **% Difference in diameter of centre to outer wire**
IS- 14268 : 2017
- **Lay Length**
IS-14268 : 2017
- **Weight**
IS-14268 : 2017
- **Breaking Strength**
IS- 1608 : 2017
- **0.2% Proof Stress/Yield Stress**
IS-1608 : 2017
- **% Elongation**
IS-14268 & 1608 : 2017



NDT TEST

Reinforce Concrete Structure

- **Rebound Hammer**
IS-13311 (Part-2) : 2018
- **Ultrasonic Pulse Velocity**
IS-13311 (Part-1) : 2018
- **Depth of Carbonation**
BS EN 14630:2006
- **Cover Meter**
BS:1881 (Part-204)
- **Half Cell Potential**
IS ASTM C 876:2015
- **Crack depth Measurement**
IS - 13311 (Part-1) 2018
- **Pile Integrity**
IS - 14893: 2015
- **Dynamic Pile & Static Pile load test**
IS - 9716: 2016, IS 2911 (Part-4) 2018



MIX DESIGN

- **Concrete Mix Design**
IS-10262: 2019, 456: 2021
- **Mix Design by Accelerated Curing Tank**
IS- 10262:2019
IS- 456 : 2021
IS- 1199 :2018

Manhole Frame & Cover (Steel and FRP)

Mechanical Test

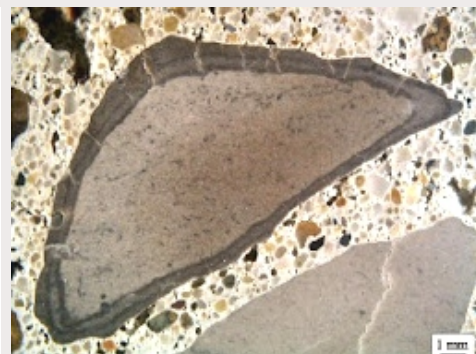
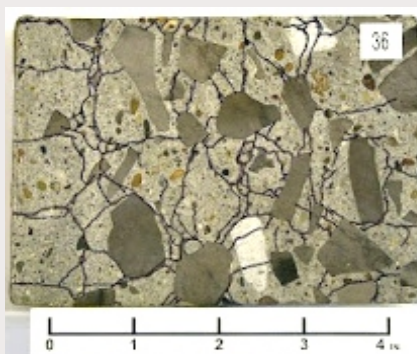
- **Load Test**
IS-1726 : 2017
IS-12592 : 2018



SPECIAL TEST

Aggregate For Concrete

- **Petrographic Examination**
IS- 2386 : 2021



BIPOLAR CONCRETE PENETRATING CORROSION INHIBITING ADMIXTURE



Chemical Test

- **Appearance**
MCM-1706:2009
- **Odour**
MCM-1706:1999
- **Specific Gravity**
IS-1448:1967
- **Viscosity**
IS- 101-1-5:1989
- **Skin Irritation**
Ref-MCM-1706:2002
- **pH**
IS- 9103 : 2018

PULL OUT TESTS OF ANCHOR BOLT - TUNNELS



CORE CUTTING



STRUCTURAL AUDIT & GEOTECHNICAL INVESTIGATION

ABOUT

We are one of the leading organisations for Geotechnical Investigations, structural Audit & Repair, Material Testing and Manpower outsourcing services over the years.

We have diversified our service profile and offer comprehensive services to the Construction Industry. We endeavour consistently to make our services best suitable to our client's unique requirements. Sharing and learning has been our long standing trait which has helped us to better ourselves in whatever we do.

NEED TO EVALUATE HEALTH ASSESSMENT OF EXISTING STRUCTURE

- Assessing the load carrying capacity of building/Structure.
- Feasibility of change in occupancy.
- Feasibility of construction of additional floors.
- Assessment of earthquake resistance in old structures.
- Feasibility of structural modification.



NEED OF GEOTECHNICAL INVESTIGATION

- This mainly helps in knowing which type of foundation is required for the proposed project.
- Historic knowledge of general site conditions and building performance.
- Soil parameter testing for design purpose.



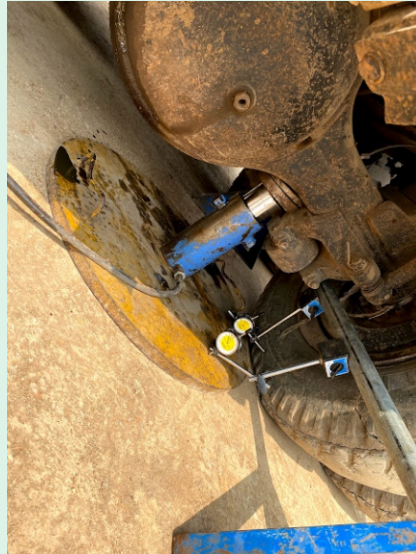
FIELD TEST



FIELD CBR



PLATE LOAD TEST



SOIL FIELD DRY DENSITY BY CORE CUTTING METHOD



SPECIAL SERVICES

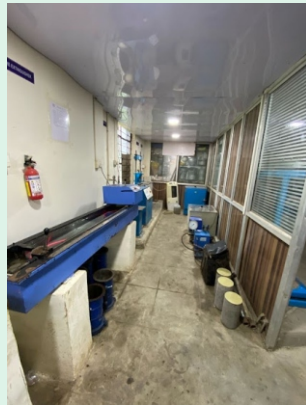
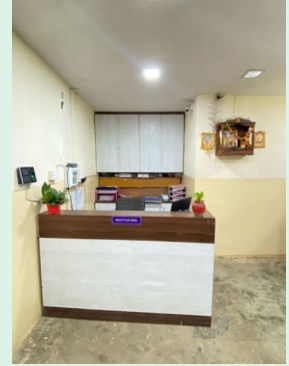
Temperature Controlled Curing Tank Service



Material Pick-up Service



LABORATORY OVERVIEW



OUR CLIENTS



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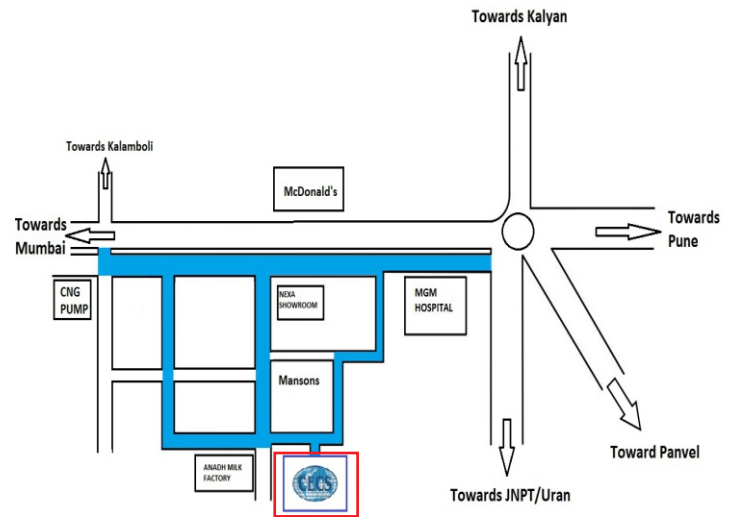
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