

## Delhi Zone

SI No.	Lab Name	Details of Test Facilities
1	ADRDE	(i) Bursting Strength Tester
		(ii) Computer Controlled Zwick UTM Machine Capacity 100kN
		(iii) Computer Controlled Zwick UTM Machine Capacity 150kN
		(iv) Direct Reading Emission Spectrometer
		(v) Electronic Air Permeability Tester Model M021A
		(vi) Fabric Inspection Machine
		(vii) Flex Tester
		(viii) Gas Permeability Tester
		(ix) Horizontal Tensile Testing Machine Capacity 10 kN
		(x) Programmable Washing Fastness Tester
		(xi) Servo Salt Spray
		(xii) Twist Tester Model FY 16
		(xiii) XENO test equipment beta +
2	CFEES	(i) Surface Area Analyser Model No. ASAP 2010
		(ii) Autochem Chemisorb Analyser
		(iii) Surface area and porosity analyser
		(iv) Gas chromatograph
		(v) Scanning Electron Microscope
		(vi) Izod /Charpy Impact tester with notch cutter
		(vii) Universal testing machine
		(viii) Gas Chromatograph (GC)
		(ix) Gas Chromatograph Triple Quadruple Mass Spectrometer (GC - MSMS)
		(x) UV - Spectrophotometer
		(xi) Zeta Particle Size Analyzer
		(xii) Atomic Absorption Spectrophotometer
		(xiii) Spraytec Particle Sizer
		(xiv) Test Facility for characterization of Nozzle
		(xv) Salt Spray Test Chamber
		(xvi) External cavity diode Laser
		(xvii) Thermal Camera
		(xviii) 1m <sup>3</sup> fire Test Chamber
		(xix) Tank millisecond fire suppression facility
		(xx) Extinguishers & Hoses test facility
		(xxi) Testing of fire extinguishing chemicals
		(xxii) Dry Chemical Powder test facility

		(xxiii) Fire fighting foam testing facility
		(xxiv) Fire protective clothing test & evaluation facility
		(xxv) Small Scale MEC determination system
		(xxvi) FTIR
		(xxvii) Dynamic Pressure Calibrator
		(xxviii) Commercial Automated Accelerometer Calibration System
		(xxix) Shock Tube Test Facility
		(xxx) Testing apparatus for fire retardant paint
3	DLJ	(i) Accelerated desert environmental test facility (Solar Simulation)
		(ii) Acoustic Emission Monitoring System
		(iii) Advanced Gamma Ray based Computed Tomography System (AGRCTS)
		(iv) All Gear Head S. S & SC
		(v) Alpha Counting System
		(vi) Alpha Spectrometer
		(vii) Analytical Balance
		(viii) Andrex Directional Beam Industrial X ray Tube
		(ix) Atomic Absorption Spectrometer (AAS)
		(x) Atomic Absorption Spectrophotometer (AAS)
		(xi) Atomic Force Microscopy
		(xii) ATR-FTIR Spectrophotometer
		(xiii) Automatic Compression Testing Machine
		(xiv) Beta Counting System
		(xv) Beta, Gamma hand, foot and clothing monitor
		(xvi) Climate Test Chamber
		(xvii) Cobalt Therapy Machine along with Co -60 source of 250 RMM and accessories.
		(xviii) Dielectric Relaxation Spectroscopy System (DRS)
		(xix) Differential Scanning Calorimeter (DSC)
		(xx) Digital Gamma Spectroscopy System using NaI detector
		(xxi) Digital Goniometer
		(xxii) Digital Visible Spectrophotometer
		(xxiii) Dust Exposure Chamber
		(xxiv) Dynamic Light Scattering with Zeta Potential
		(xxv) Dynamic Mechanical Analyzer (DMA)
		(xxvi) Electronic Analytical Single Pan Balance Capacity 210 gm
		(xxvii) Emission, Absorption, Reflection, Fluorescence optical spectrometer
		(xxviii) Emisometer

(xxix)	Environmental chamber
(xxx)	Extended Area High temperature blackbody
(xxx1)	Field Spectroradiometer
(xxxii)	FT-IR
(xxxiii)	Gamma Beta Radiation Spectrometer
(xxxiv)	Gamma Chamber- 5000
(xxxv)	Gamma Chamber- 900
(xxxvi)	Gamma Spectrometry System
(xxxvii)	Gamma Volt 54100 Camera
(xxxviii)	Gloss Meter
(xxxix)	Hall Effect Measurement System
(xl)	Heavy duty rotary shaker
(xli)	High resolution ultraphoto fluorescence microscope
(xlii)	High Resolution X-ray based Computed Tomography Facility (HRX-CTF)
(xliii)	High Temperature Cavity Blackbody Source
(xliv)	High Turbidity Water Purification System
(xlv)	Highly Stabilized X-Ray Machine
(xlvi)	HP4145B Semiconductor Parameter Analyzer
(xlvii)	Laminar Airflow Floor Model
(xlviii)	Langmuir-Blodgett Film Deposition System
(xlix)	LASER Scriber System
(l)	LF Impedance Analyzer
(li)	Liquid Scintillation Counting System
(lii)	Logic Analyzer
(liii)	LRF with Digital Goniometer
(liv)	Micro hardness tester
(lv)	Microcentrifuge Timer 12-30 min
(lvi)	Mini Gel Proteian li Cell 10 Well Combs 0.75 MM
(lvii)	Mobile Microspec with Digital Map Overlay
(lviii)	Multi Detector Tomography Facility
(lix)	Multi parameter Water Quality meter
(lx)	Neutron Radiography Camera for Cf-252
(lxi)	Particle Size Analyser
(lxii)	Photodiode Array Spectrophotometer
(lxiii)	Photolithography Facility
(lxiv)	Portable Flat Panel X- Ray Inspection System
(lxv)	Portable X Ray System
(lxvi)	Portable X-ray Imaging System
(lxvii)	Positioner System for Radiation Monitors
(lxviii)	Potential Galvano stat with Electrochemical Impedance Spectroscopy

		(Ixxix) Radioisotope Calibrator (Model L981108)
		(Ixxx) Rain Test Chamber
		(Ixxxi) Raksha Anusandhan And Vikas Irradiator (RAVI) - Gamma Irradiator Facility
		(Ixxxii) Raman Spectroscopy System (Raman Station R3)
		(Ixxxiii) Sand Saw Machine
		(Ixxxiv) Sanding Machine Vertical
		(Ixxxv) Scanning Electron Microscope with EDS
		(Ixxxvi) Scanning Kelvin Probe system
		(Ixxxvii) Semiconductor Characterization System
		(Ixxxviii) Semiconductor Characterization System (Keithley Model 4200)
		(Ixxxix) Semiconductor Characterization System (Keithley Model 4200) 1
		(Ixxxx) Spectral Loss Measurement System (SLMS)
		(Ixxxxi) Spectrofluorometer
		(Ixxxxii) Spectroscopic Ellipsometer
		(Ixxxxiii) Spectrum Analyzer
		(Ixxxxiv) Thermal Imaging Systems Facility
		(Ixxxxv) Thermal Shock Test Chamber
		(Ixxxxvi) Thermogravimetric Analyzer (TGA)
		(Ixxxxvii) Thermoluminescence (TL) Reader
		(Ixxxxviii) Thermoluminescence (TL) Reader (TL 1009I)
		(Ixxxxix) TLD Personnel Monitoring Services, TLD cards, Cassettes and Automatic Reader
		(xc) Total Organic Carbon Analyzer
		(xci) Universal Testing Machine 100 KN
		(xcii) UV-VIS Spectrophotometer
		(xciii) UV-VIS-NIR Spectrophotometer
		(xciv) Walk-in Environmental Test Chamber
		(xcv) X-Ray Linear Detector
4	DMSRDE	(i) Chary Izod tester
		(ii) Chnso Analyser
		(iii) Cryo Ultra Microtome
		(iv) Dielectric Thermal Analyzer (DETA)
		(v) Differential scanning calorimeter DSC Q 200
		(vi) Dynamic Mechanical Thermal Analyzer
		(vii) Floor standing Twin Bore Capillary Rheometer
		(viii) Hardness Tester
		(ix) Low-Vacuum Scanning Electron Microscope
		(x) Melt Flow Index Tester

		(xi) Modulated Differential Scanning Calorimeter
		(xii) Radiant Precision Premier II system
		(xiii) Spectroscopic phase modulated ellipsometer,
		(xiv) Thermo gravimetric Analyzer TGAQ 500
		(xv) Thermo mechanical analyzer TMA EM 400
		(xvi) Universal Testing Machine
		(xvii) UV-VIS-NIR Spectrophotometer
		(xviii) Vision measurement system
5	DRDE	(i) 600 MHz NMR Spectrometer
		(ii) Air Permeability Tester
		(iii) Atomic Absorption Spectrophotometer
		(iv) Automated DNA Sequencer
		(v) Automatic Surface Area Analyzer, Autosorb IQ
		(vi) Automatic Surface Area Analyzer
		(vii) Bursting Strength Tester
		(viii) CCl4 BTT Test Rig & CTC Test Rig
		(ix) Chns-o-analyzer
		(x) CNCI Test Facility
		(xi) CO Test Facility
		(xii) COCl2 Test Facility
		(xiii) Combined Temperature and Vibration shaker system
		(xiv) DOP Test Facility
		(xv) Dry chemical contamination clearance chamber
		(xvi) Flammability Tester
		(xvii) Flash Chromatography System
		(xviii) Four Component Gas Blender mixer
		(xix) Fourier Transform Infra Red Spectrometer
		(xx) Gas chromaograph
		(xxi) Gas Chromatograph- Mass Spectrometer
		(xxii) Gas Chromatograph-coupled- Electroantennogram Detector
		(xxiii) Gas Chromatography -Mass Spectrometer
		(xxiv) Gas Chromatography Mass Spectrometer
		(xxv) Gas Vapor Generator
		(xxvi) Gas-Chromatograph Fourier Transform Infrared Spectrometer
		(xxvii) GC-MS
		(xxviii) HCN test facility
		(xxix) HD BTT Test Facility for Impermeable Samples.
		(xxx) HD BTT Test Facility for Permeable Samples.
		(xxxi) High performance Liquid Chromatography

		(xxxii) High Performance Liquid Chromatography system
		(xxxiii) High Temperature and High Pressure reactor
		(xxxiv) LC-MS MS
		(xxxv) LC-Q-Toff Mass spectrometer
		(xxxvi) MALDI TOF based BioTyper for Bacterial Identification
		(xxxvii)MALDI-TOF MS
		(xxxviii) MALDI-TOF-TOF 4800
		(xxxix) Mandrel Test Facility
		(xl) Martindale Abrasion Tester
		(xli) Multi-gas break through time test rig
		(xlii) NBC Suit Fabric Vapour Challenge testing facility
		(xliii) Potentiostat Galvanostat with Electrochemical Electrochemical impedance spectroscopy (Autolab)
		(xliv) Preparative HPLC System
		(xlv) Renishaw Invia Raman Microscope
		(xlvi) Rudolph Polarimeter Autopol V
		(xlvii) Scanning Electron Microscope Quanta400 ESEM- EDAX with conductive coating units
		(xlviii) Standard CWA Vapour generation facility
		(xlix) Tear Strength Tester (Falling Pendulum, Elmendorf Type)
		(l) Tensile Strength Tester
		(li) TNO-GC Test Facility
		(lii) Ultra High Performance Liquid Chromatography Coupled with Quadruple Time -of-Flight Mass Spectrometer
		(liii) UV Visible Double Beam Spectrophotometer
		(liv) Water Repellency Tester
		(lv) Water Vapour Permeability Tester
		(lvi) Y-tube Olfactometer
6	SAG	(i) Experimental WAN setup
		(ii) High performance test facility
		(iii) Riscure Workstation (inspector tool)
7	SSPL	(i) Cryoprober
		(ii) Field Emission Scanning Electron Microscope
		(iii) Fourier Transform IR spectrophotometer with Microscope
		(iv) FPA Tester
		(v) High Resolution X-ray Diffraction
		(vi) Manual Load-pull measurement facility
		(vii) Micro Raman Spectrophotometer
		(viii) Multi-technique surface analysis system

		(ix) On-wafer S-parameter measurement facility
		(x) Pulsed I-V measurement System
		(xi) Scanning Probe Microscope
		(xii) Secondary Ion Mass Spectrometer
		(xiii) Shaker
		(xiv) Stress Measurement System
		(xv) Wafer Prober
		(xvi) Wafer Prober 1
8	TBRL	(i) Anechoic Chamber
		(ii) Arena trial layout
		(iii) Ballistics Test Facility
		(iv) BAM Fall Hammer Apparatus
		(v) CS02 test as per MIL STD 461C
		(vi) CS06 as per MIL STD 461C
		(vii) CS114 Test Setup as per MIL-STD 461E
		(viii) CS115 Test Setup
		(ix) Differential Scanning calorimeter
		(x) Dynamic Mechanical Analyzer
		(xi) EMI Receiver
		(xii) ESD Simulator
		(xiii) Evolve Gas Analyser
		(xiv) Facility for measurement of Blast Effect of Free Air Explosion
		(xv) Four Channel 480 KV Flash X-ray System
		(xvi) Friction Sensitivity Tester
		(xvii) FT-IR spectrometer
		(xviii) Gas Chromatography-Mass Spectroscopy
		(xix) HD Video camera Recorder with detachable lenses
		(xx) High Performance Computing Servers
		(xxi) High Performance Liquid Chromatography
		(xxii) High Sped Digital video camera
		(xxiii) High Speed Hi-G color Digital video camera system
		(xxiv) Image Analyzer (Optical Microscope)
		(xxv) LC-MS
		(xxvi) Measurement of Blast Effect of Underwater Explosion
		(xxvii) Measurement of Blast Effect of Underground trials
		(xxviii) Particle Size Analyzer
		(xxix) Performance Evaluation of Protective Systems
		(xxx) Rail Track Rocket Sled (RTRS) Test facility
		(xxxi) RS103 Test Setup as per MIL-STD 461E
		(xxxii) Sandpit trial layout

	(xxxiii) Scanning Electron Microscope (SEM)
	(xxxiv) Surface Area Analyzer
	(xxxv) Thermo Mechanical Analyzer
	(xxxvi) Under water trial layout
	(xxxvii) Vacuum Stability Tester
	(xxxviii) Vertical strawboard trial facility