

Pune Zone

SI No.	Lab Name	Details of Test Facilities
1	ARDE	(i) 1000 KGF Vibration Shaker
		(ii) 35GHz Doppler Radar
		(iii) 4000 KGF vibration shaker
		(iv) Bump Testing
		(v) Combined Vibration & Temperature System
		(vi) Environmental Stress Screening Chamber
		(vii) Environmental Test Chamber
		(viii) High Speed Video Camera
		(ix) Paradrop Tower
		(x) Rain Drive Test Machine
		(xi) Salt Spray Test Chamber
		(xii) Shock Testing
		(xiii) Standard Drop Test Facility
		(xiv) Table Top Environmental Test Chamber
		(xv) Table Top Environmental Test Chamber With Humidity
		(xvi) Tropical Test Chamber (diurnal)
		(xvii) Ultra Low Temperature Chamber
		(xviii) Vertical Two Zone Thermal Shock Chamber
		(xix) Walk-in type Tropical Test Chamber
		(xx) X-Band Doppler Radar
2	HEMRL	(i) Universal Testing Machine
		(ii) 320 kV X-Ray System
		(iii) 450 kV X-Ray System with Flat Panel Detector
		(iv) 450 kV (Mini Focus) X-Ray System with Flat Panel Detector
		(v) 4-MeV LINAC X-Ray with DIS (Digital Imaging System) facility
		(vi) 6-MeV LINAC X-Ray Facility
		(vii) Computer Radiography System
		(viii) Ultrasonic Flaw Detection System
		(ix) Low Frequency Ultrasonic Flaw Detection System
		(x) Ultra Low Frequency Ultrasonic Flaw Detection System
		(xi) Low Frequency Ultrasonic B-Scan System
		(xii) Differential Scanning Calorimeter
		(xiii) Simultaneous Thermogravimetric Analyser
		(xiv) Dispersive Raman Spectrometer
		(xv) Fourier Transform Spectrometer
		(xvi) Vapour Pressure Osmometer

(xvii)	Rheometer
(xviii)	UV-VIS Spectrometer
(xix)	Elemental Analyzer
(xx)	Particle Size Analyser (Cilas 1064 L)
(xxi)	Vapour Pressure Osmometer
(xxii)	Karl-Fischer Autotator
(xxiii)	Liquid Density Meter (Anton paar DMA 4100 M)
(xxiv)	Gas Pycnometer
(xxv)	Vacuum Stability Tester, (STABIL-21)
(xxvi)	High Performance Liquid Chromatography
(xxvii)	Ion Chromatography
(xxviii)	Accelerated Solvent Extractor
(xxix)	Dispersive Raman Spectrometer
(xxx)	Scanning Electron Microscope with EDX
(xxxi)	Thermogravimetric Analyser Coupled - Fourier Transform Infra Red Spectrophotometer
(xxxii)	Pyrolyzer Gas Chromatograph -Mass Spectrometer
(xxxiii)	Atomic Absorption Spectrophotometer
(xxxiv)	Inductively Coupled Plasma- Atomic Emission Spectrometer thermo-Scientific iCAP 6300 Radial ICP Spectrometer
(xxxv)	Gas Chromatograph
(xxxvi)	Bomb Calorimeter
(xxxvii)	Data Acquisition System for Static Firing of Rockets
(xxxviii)	Closed Vessel Testing Facility
(xxxix)	Pressure time Measurement System
(xl)	Dead Weight Tester
(xli)	Four-Colour Optical Pyrometer
(xlii)	2-Colour Optical Pyrometer
(xliii)	Facility for Thermo-chemical Characterization of High Energy Materials and Allied Materials
(xliv)	Dilatometer (Unitherm 1000 series)
(xlv)	Ablation rate Measurement Facility
(xlvi)	High Temperature Black Body
(xlvii)	Pressure step generator
(xlviii)	ScopeCorder (DL850)
(xlix)	Portable Data Acquisition & Processing System for VOD Measurement
(l)	IR Spectro-radiometer
(li)	Photometer
(lii)	Static Electricity Detector / Monitor
(liii)	Test Facility for Electrostatic Spark Sensitivity

		(liv) Assessment of Explosive Powders
		(lv) Surface/Volume Resistivity Measurement
		(lvi) High Temperature Blackbody Source and Collimator
		(lvii) HV Pulse Generation and Measurement System
		(lviii) Digital High Speed Video (Color) System
		(lix) Video Matrix System (VMS-3000)
3	NMRL	(i) 2 x 15 kW Fuel Cell test Station
		(iv) 3kW Fuel Cell test Station
		(vii) 100 kW Fuel Cell test Station
		(x) Abrasion tester for non-skid paint
		(xiii) Autolab Potentiostat
		(xvi) Automatic viscometer
		(xix) Contact Angle Meter
		(xxii) D33 meter
		(xxv) Dynamic Mechanical Analyzer
		(xxviii) Elastic Properties Analyzer
		(xxxi) Electrically Heated High Temperature Furnace
		(xxxiv) Electrospinning
		(xxxvii) FEG-SEM
		(xl) Fluorescence Spectrometer
		(xliii) Fourier Transform Infrared spectroscopy
		(xlvi) Fourier Transform Infrared
		(xlix) HDT
		(lii) High Performance Thin Layer Chromatography, Camag
		(lv) High Temperature-Vacuum Inert Atmosphere Furnace
		(lviii) Holiday detector
		(lxi) Impact Testing Machine
		(lxiv) Impedance Analyzer
		(lxvii) Impedance Analyser
		(lxx) Inductively Coupled Plasma Optical Emission Spectrometer
		(lxxiii) Instron Electromechanical 250 kN Universal Testing Machine
		(lxxvi) Lloyd Tensile Testing Machine
		(lxxix) Mercury Porosity meter
		(lxxxii) Moving Die Rheometer
		(lxxxv) Nano Particle Size Analyzer
		(lxxxviii) Particle Size Analyser
		(xci) Potentiostat
		(xciv) Potentiostat (AUTOLAB)
		(xcvii) Potentiostat (GAMRY)

		(xcviii) Precihite Ultra
		(ci) Pulse Multichannel Analyzer
		(civ) Rotating Ring Disk Electrode with bipotentiostat
		(cvii) Rotational Rheometer
		(cx) Scanning Probe Microscope
		(cxiii) Scratch resistance Tester
		(cxvi) Speed Extractor E-914
		(cxix) Surface Area Analyzer
		(cxxii) Surface Tensio Meter
		(cxxv) Taber abrasion tester
		(cxxviii) Thermo Gravimetric Analyzer
		(cxxxii) Three Frame Electromechanical Corrosion Fatigue (CF) Stress Corrosion (SCC) Slow Strain Rate Test (SSRT) System
		(cxxxiv) Twin Bore Capillary Rheometer
		(cxxxvii) Unit Cell (Fuel Cell) Test Facility
		(cxl) Universal Testing Machine
		(cxliv) Weatherometer
		(cxlv) X-RAY Diffractometer
		(cxlix) X-ray Fluorescence Spectrometer
		(clii) Zeta Potential Analyzer
4	R&DE	(i) Kinematic & Dynamic test facility
		(ii) Shock Test Facility
		(iii) Aircraft Arrestor Gear Test Facility
		(iv) Hydraulic Servo Valve Testing Facility
		(v) Mixed Signal Oscilloscope (Tektronics MSO 4104B)
		(vi) Power Analyzer (Tektronix PA-4000)
		(vii) Rheometer
		(viii) Universal Testing Machine Make Biss
		(ix) Universal Testing Machine Make MTS
		(x) Non Contact 3D-Surface Profiler
		(xi) Environmental Scanning Electron Microscopy (EV-040)
		(xii) Climatic Test Facility
		(xiii) High Temp/Damp Heat Tropical exposure test chamber
		(xiv) High Temp/Damp Heat Tropical exposure test chamber
		(xv) Low Temp Test Chamber
5	VRDE	(i) 2/3 Wheeler Chassis Dynamometer - BS III
		(ii) ABS Test Track
		(iii) Automotive Bumper Test System
		(iv) Automotive Door Hinges Test System

	(v) Automotive Noise Test Track
	(vi) AVL Eddy Current Dynamometer (Alpha-80) With EDACS, Gravimetric Fuel Flow meter
	(vii) Belgian Pave Track
	(viii) CE 101 Test Set up
	(ix) CE 102 Test Set up
	(x) Chasis Twister Track
	(xi) Corrugated Track (50mm & 100mm)
	(xii) Cross Country Track
	(xiii) CS 101 Test Set up
	(xiv) CS 109 Test Set up
	(xv) CS114, CS115,CS116
	(xvi) Customized Test Tracks for Mini UGV
	(xvii) Deep Wading Trough Track
	(xviii) Digital Rockwell cum Superficial Hardness Tester
	(xix) Driving rain chamber
	(xx) Dry heat, Dry Cold & Climatic test chamber
	(xxi) Dust Tunnel Track
	(xxii) Eddy Current Dynamometer (AG 250) with computerized controller
	(xxiii) Enhanced Steering Pad
	(xxiv) ESD- Set up
	(xxv) Frontal Impact Test
	(xxvi) FUPD & SUPD
	(xxvii) Gradient Track
	(xxviii) Gradient Track For 'A' Vehicle
	(xxix) Heavy Duty Chassis Dynamometer - BS IV
	(xxx) High Speed Track
	(xxxi) Integrated Lightning Induced Transients Susceptibility Test System
	(xxxii) Load Dump Generator, Voltage Dip Simulator, Electric Fast Transient
	(xxxiii) Long Wave Pitching Track
	(xxxiv) Metallurgical Microscope with Image Analyser software
	(xxxv) Mud Track
	(xxxvi) Optical Emission Direct Reading Spectrometer
	(xxxvii) Ozone test chamber
	(xxxviii) Photometric Instrumentation package consist of Goniophotometer, Colorimeter, Luminance Meter , Illuminance Meter , Integrating Sphere and Reflex Reflector
	(xxxix) Pot Hole Track
	(xl) RE 101 Test Set up

	(xli) RE 102 Test Set up (Antenna: Biconilog, Rod, Biconical, DRG Horn & Horn)
	(xlii) RS 101 Test Set up
	(xliii) RS 103 Test Set up (Antennas: Biconical, V-Log, Horn)
	(xliv) Sand Track
	(xlv) Sealed Housing Evaporative Determination
	(xlvi) Semi Anechoic Chamber
	(xlvii) Serpentine Track
	(xlviii) Shallow Water Trough Track
	(xlix) Shielding Effectiveness Test set up
	(l) Side Slope Track For 'A' Vehicle
	(li) Step Climbing Facility For 'A' Vehicle
	(lii) Straight Track
	(liii) Straight Track For 'A' Vehicle
	(liv) Thermal shock test chamber
	(lv) Thrust Cradle
	(lvi) Vehicle Dynamics Test Track