Laboratory	**True Calibration Services, 68, Silicon Industrial Hub, Moraiya, Ahmedabad, Gujarat**
Accreditation Standard	**ISO/IEC 17025: 2005**
Certificate Number	**CC-2494** **Page 1 of 5**
Validity	**16.08.2018 to 15.08.2020** **Last Amended on -**

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
	MECHANICAL CALIBRATION			
I.	**WEIGHTS**			
1.	Standard Weights[$]	1 mg 2 mg 5 mg 10 mg 20 mg 50 mg 100 mg 200 mg 500 mg 1 g 2 g 5 g 10 g 20 g 50 g	0.02 mg 0.02 mg 0.02 mg 0.02 mg 0.03 mg 0.04 mg 0.05 mg 0.05 mg 0.05 mg 0.05 mg 0.10 mg 0.10 mg 0.10 mg 0.10 mg 0.10 mg	Using E2 Standard Weights & Semi-Micro Balance (Readability: 0.01 mg) Calibration of Weights of Class F2 Accuracy and Coarser as per OIML R-111
		100 g 200 g	0.4 mg 0.4 mg	Using E2 Standard Weights & Analytical Balance (Readability: 0.1 mg) Calibration of Weights of Class F2 Accuracy and Coarser as per OIML R-111
II.	**VOLUME**			
1.	Micro Pipette[$]	10 µl to 100 µl @ 27 °C >100 µl to 1000 µl @ 27 °C >1000 µl to 5000 µl @ 27 °C	0.26 µl 0.50 µl 7.10 µl	Using Weighing Balance of 80 g Capacity and 0.01 mg Readability by Gravimetric Method Based on ISO 8655 Part 6

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Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
		>5000 µl to10000 µl @ 27 °C	7.10 µl	
2.	Glassware Like Pipettes, Burettes, Measuring Cylinder, Volumetric Flask etc[$]	1 ml to 10 ml @27 °C >10 ml to 100 ml @27 °C	0.12 ml 0.22 ml	Using Weighing Balance of 220 g Capacity and 0.1 mg Readability by Gravimetric Method Based on IS/ISO 4787
III.	**WEIGHING SCALE & BALANCE**			
1.	Electronic Weighing Balances with readability d=0.01 mg[♣]	Maximum capacity Up to 80 g	0.05 mg	Using E2 class weights Calibration of electronic weighing balance and Comparator of Class I and coarser As per OIML R-76-1
2.	Electronic Weighing Balances with readability d=0.1 mg[♣]	Maximum capacity Up to 200 g	0.11 mg	Using E2 class weights Calibration of electronic weighing balance and Comparator of Class I and coarser As per OIML R-76-1
3.	Electronic Weighing Balances with Readability d=0.1 g[♣]	Maximum Capacity Up to 5000 g	0.1 g	Using F1 class weights Calibration of electronic weighing balance and Comparator of Class III and coarser As per OIML R-76-1
IV.	**ACCELERATION AND SPEED**			
1.	Centrifuge, Shaker, Rotor[♣]	100 RPM to 15000 RPM	6.8 RPM to 59.0 RPM	Using Digital Tachometer by Comparison Method

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Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
V.	**PRESSURE INDICATING DEVICES**			
1.	Digital & Analog Pressure Gauge/ Transmitter/Indicator[$]	0 to 20 bar 0 to 700 bar	1.05 bar 3.12 bar	Using Digital Pressure Calibrator by Comparison method as per DKD-R 6-1
2.	Digital & Analog Pressure Gauge/ Transmitter/Indicator[♣]	0 to 700 bar	2.68 bar	Using Digital Pressure Calibrator by Comparison method as per DKD-R 6-1

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Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
		THERMAL CALIBRATION		
I.	**TEMPERATURE**			
1.	Liquid in Glass Thermometer[$]	50 ºC to 150 ºC	0.39 ºC	Using Precision Temperature Scanner & SSPRT(Fluke 1586 & 5609) & Oil bath by Comparison Method
2.	RTD, Thermocouple, Thermistor, Digital Thermometer, Temperature Controller/ Indicator with Sensor, Temperature Transmitter, Temperature Gauge[$]	(-) 80 ºC to (-) 20 ºC (-) 20 ºC to 50 ºC 50 ºC to 500 ºC	0.47 °C 0.47 °C 0.53 °C	Using Precision Temperature Scanner & SSPRT(Fluke 1586 & 5609) with Liquid Bath, Oil Bath and Dry Block by Comparison Method
3.	RTD, Thermocouple, Thermistor, Digital Thermometer, Temperature Controller/Indicator with Sensor, Temperature Transmitter, Temperature Gauge[♣]	(-) 25 ºC to 50 ºC 50 ºC to 500 ºC	0.47 ºC 0.59 ºC	Using Precision Thermometer, Multifunction Calibrator, Thermocouple with Dry Block by Comparison Method
4.	Deep Freezer, Freezer Incubator (for Non-Medical Applications), Oven, Autoclave (Single Position)[♣]	(-) 80 ºC to 10 ºC 10 ºC to 100 ºC 100 ºC to 300 ºC	1.20 ºC 0.40 ºC 0.70 ºC	Using Precision Thermometer, Multi-Function Calibrator (Beamex MC2-TE), Process Data Logger, RTD Sensor by Single

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Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
				Position Calibration Method
5.	Oven, Muffle Furnace♣	500 ºC to 1200 ºC	3.0 ºC	Using Multi-function Calibrator, S type Thermocouple by Single Position Calibration Method
6.	Deep Freezer, Freezer Incubator (for Non-Medical Applications), Oven, Autoclave (for Non-Medical Applications) Cold Room, Clean Room, Environmental Chamber (Multi Position) ♣	(-) 80 ºC to 250 ºC	2.73 ºC	Using 16 Channel Data Logger (Masibus 85XX) by Multi Position Method
II.	**SPECIFIC HEAT AND HUMIDITY**			
1.	Thermo Hygrometer, Humidity Data Logger/ Transmitter/Indicator$	30 % RH to 95 % RH 10 ºC to 50 ºC	2.90 % RH 0.57 °C	Using Temperature & Humidity Indicator (Rotronic/Polltech) with Humidity Chamber by Comparison Method
2.	Humidity Chamber, Stability Chamber, Environmental Chamber♣	30 % RH to 95 % RH	4.74 % RH @ 25 ºC	Using Temperature & Humidity Datalogger 10 Nos. by Multi Position Method

*** Measurement Capability is expressed as an uncertainty (±) at a confidence probability of 95%**
$Only in Permanent Laboratory
♣Only for Site Calibration

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