Laboratory	**Indian Technical Services, 28, Electronic Complex, Industrial Area, Pardeshipura, Indore, Madhya Pradesh**
Accreditation Standard	**ISO/IEC 17025: 2005**
Certificate Number	**CC-2580** ***(in lieu of C-1045)*** **Page 1 of 3**
Validity	**03.03.2018 to 02.03.2020** **Last Amended on -**

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
		ELECTRO-TECHNICAL CALIBRATION		
I.	**SOURCE**			
1.	DC Voltage[$]	1mV to 100 mV	1.2 % to 0.13 %	Using Temperature Calibrator Source and 5½ MFC by Direct Method
		100 mV to 990 V	0.13 %	Using 5½ MFC by Direct Method
	DC Voltage[#]	1mV to 100 mV 100mV to 5V	1.2 % to 0.6 % 0.6 % to 0.3 %	Using Temperature Calibrator Source by Direct Method
2.	AC Voltage[$]	**50 Hz** 20 mV to 100 mV 100 mV to 10 V 10 V to 900 V	 0.5 % to 0.23 % 0.23 % 0.23 % to 0..25 %	Using 5½ MFC by Direct Method
3.	DC Current[$]	0.2 mA to 100 mA 100 mA to 2.0A 2.0 A to 9.9 A	0.20 % to 0.14 % 0.15 % 0.19 % to 0.48 %	Using 5½ MFC by Direct Method
4.	AC Current[$]	**50 Hz** 0.2 mA to 100 mA 100 mA to 2.0A 2.0 A to 9.9 A	 0.34 % to 0.26 % 0.27 % 0.27 % to 0.53 %	Using 5½ MFC by Direct Method
5.	Resistance[$] (2 Wire)	1Ω to 10 Ω 10Ω to 1kΩ 1kΩ to 1 MΩ	1.52 % to 1.20 % 1.20 % 1.21 %	Using Decade Resistance Box by Direct Method

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Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
6.	Capacitance DC[$]	0.1 nF to 10 nF 10 nF to 10 µF	1.63 % to 1.3 % 1.3 %	Using Capacitance Box & 8846 DMM by Direct Method
7.	Frequency[$]	45 Hz to 1000 Hz	0.3 % to 0.28 %	Using 5½ MFC by Direct Method
8.	Temperature Simulation[#] (Indicator, Recorder, Controller, Data Logger)			
	RTD Type	(-) 200 ºC to 800 ºC	1.5 ºC to 1.00 ºC	Using Process Source/ Temperature Calibrator by Direct Method
	Thermocouple R Type S Type J Type K Type B Type T Type	 300 ºC to 1700 ºC 300 ºC to 1700 ºC (-) 100 ºC to 600 ºC (-) 100 ºC to 1300 ºC 600 ºC to 1700 ºC (-) 200 ºC to 350 ºC	 2 ºC 2 ºC 1.3 ºC 1.3 ºC 2 ºC 1.2 ºC	
II.	**MEASURE**			
1.	DC Voltage[$]	1 mV to 100 mV 0.1 V to 900 V	0.9 % to 0.012 % 0.012 % to 0.02 %	Using Fluke 6½ DMM by Direct Method
2.	AC Voltage[$]	**50 Hz** 20 mV to 100 mV 0.1 V to 900 V	 0.65 % 0.65 % to 0.10 %	Using Fluke 6½ DMM by Direct Method
3.	DC Current[$]	0.2mA to 100 mA 0.1A to 9 A	0.12 % to 0.10 % 0.1 % to 0.2 %	Using Fluke 6½ DMM by Direct Method
4.	AC Current[$]	**50 Hz** 0.2 mA to 100 mA 0.1A to 9 A	 0.76 % to 0.65 % 0.65 % to 0.4 %	Using Fluke 6½ DMM by Direct Method
5.	DC Resistance[$]	1Ω to 10 MΩ	0.4 % to 0.46 %	Using Fluke 6½ DMM by Direct Method

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Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
6.	Frequency[$]	10 Hz to 1000 kHz	0.6 % to 0.12 %	Using Fluke 6½ DMM by Direct Method
7.	Temperature Simulation[$] RTD Type	(-) 200 ºC to 600 ºC	0.41 ºC	Using Fluke 6½ DMM by Direct Method
8.	Time- Stop Watch[#]	10.00 s to 60.00 min.	0.35 to 2.3 s	Using Digital Stop Watch by Comparison Method

*** Measurement Capability is expressed as an uncertainty (±) at a confidence probability of 95%**
[$]Only in Permanent Laboratory
[*]Only for Site Calibration
[#] The laboratory is also capable for site calibration however, the uncertainty at site depends on the prevailing actual environmental conditions and master equipment used.

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Convenor

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Program Director