SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL ELECTRONICS CENTRE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2918 **Page No** 15 of 55

Validity 17/11/2024 to 16/11/2028 **Last Amended on** 16/02/2025

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
92	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	S Type Thermocouple	Using Multiproduct calibrator by direct method:	100 °C to 1750 °C	0.08 °C
93	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	T Type Thermocouple	Using Multiproduct Calibrator by direct method	(-) 200 °C to 400 °C	0.08 °C
94	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Time	Using Digital Timer by Comparison Method	1 s to 600 s	0.062 s to 0.20 s
95	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Time	Using Timer by Comparison Method	3600 s to 86400 s	0.89 s to 14.21 s
96	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Time	Using Digital Timer by Comparison Method	600 s to 3600 s	0.2 s to 0.89 s
97	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source)	Frequency	Using Multiproduct Calibrator by direct method	1 Hz to 500 MHz	0.006 % to 0.0003 %
98	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Flow Boyles Apparatus	Using Gas Flow Analyzer by Direct Method	0.15 lpm to 15 lpm	4.62 % to 2.53 %

SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL ELECTRONICS CENTRE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2918 **Page No** 16 of 55

Validity 17/11/2024 to 16/11/2028 **Last Amended on** 16/02/2025

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
99	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Flow - Flow Meter	Using Gas Flow Analyzer by Direct Method	1 lpm to 15 lpm	2.63 %
100	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Flow - Nebulizer (Electric)	Using Gas Flow Analyzer by Direct Method	0.15 lpm to 15 lpm	4.62 % to 2.53 %
101	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Flow Anesthesia Machine	Using Gas Flow Analyzer by Direct Method	0.15 lpm to 300 lpm	4.62 % to 2.54 %
102	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Flow Syringe Pump / Infusion Pump / Enteral Feeding Pump	Using Infusion device Analyzer by Direct Method	1 ml/h to 990 ml/h	1.73 % to 1.16 %
103	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Flow- BiPAP	Using Gas Flow Analyzer by Direct Method	1 lpm to 15 lpm	2.63 %
104	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Flow-CPAP	Using Gas Flow Analyzer by Direct Method	1 lpm to 15 lpm	2.63 %
105	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	IBP/NIBP Pressure BP Apparatus	Using Vital Sign Simulator by Direct Method	10 mmHg to 400 mmHg	9.56 % to 0.89 %

SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL ELECTRONICS CENTRE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2918 **Page No** 17 of 55

Validity 17/11/2024 to 16/11/2028 **Last Amended on** 16/02/2025

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
106	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	IBP/NIBP Pressure Leakage test Pressure BP Apparatus	Using Vital Sign Simulator by Direct Method	10 mmHg to 400 mmHg	9.56 % to 0.82 %
107	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Inspiratory/ Expiratory Positive Airway Pressure-CPAP	Using Gas Flow Analyzer by Direct Method	4 cmH2O to 40 cmH2O	1.3 %
108	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Inspiratory/Expiratory Positive Airway Pressure- BiPAP	Using Gas Flow Analyzer by Direct Method	4 cmH2O to 40 cmH2O	1.3 %
109	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	O2 concentration Anesthesia Machine	Using Gas Flow Analyzer by Direct Method	21 % to 100 %	7.24 % to 3.69 %
110	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	O2 Concentration-BiPAP	Using Gas Flow Analyzer by Direct Method	21 % to 100 %	7.24 % to 3.69 %
111	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Occlusion Enternal feeding pump	Using Infusion device Analyzer by Direct Method	2.9 PSI to 44 PSI	17.41 % to 2.02 %
112	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Occlusion infusion pump	Using Infusion device Analyzer by Direct Method	2.9 PSI to 44 PSI	0.51 PSI to 0.71 PSI

SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL ELECTRONICS CENTRE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2918 **Page No** 18 of 55

Validity 17/11/2024 to 16/11/2028 **Last Amended on** 16/02/2025

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
113	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Occlusion Syringe Pump	Using Infusion device Analyzer by Direct Method	2.9 PSI to 44 PSI	0.51 PSI to 0.71 PSI
114	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	PEEP Pressure Anesthesia Machine	Using Gas Flow Analyzer by Direct Method	4 cmH2O to 40 cmH2O	1.17 %
115	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Pressure Suction Pump	Using Gas Flow Analyzer by Direct Method	(-) 800 mbar to 0	1.23 %
116	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Respiration rate Anesthesia Machine	Using Gas Flow Analyzer by Direct Method	10 brpm to 100 brpm	3.3 %
117	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Respiration Rate BiPAP	Using Gas Flow Analyzer by Direct Method	10 brpm to 100 brpm	3.3 % to 4.04 %
118	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Respiration Rate-CPAP	Using Gas Flow Analyzer by Direct Method	10 brpm to 100 brpm	3.3 % to 4.04 %
119	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Volume Anesthesia Machine	Using Gas flow Analyzer by Direct Method	2 ml to 1500 ml	4.62 % to 2.03 %

SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL ELECTRONICS CENTRE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2918 **Page No** 19 of 55

Validity 17/11/2024 to 16/11/2028 **Last Amended on** 16/02/2025

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
120	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Volume Enteral Feeding Pump	Using Infusion device Analyzer by Direct Method	1 ml to 400 ml	2.64 % to 1.83 %
121	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Volume Infusion Pump	Using Infusion device Analyzer by Direct Method	1 ml to 400 ml	2.64 % to 1.83 %
122	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Volume Syringe Pump	Using Infusion device Analyzer by Direct Method	1 ml to 50 ml	1.51 % to 1.16 %
123	MEDICAL DEVICES-IMAGING/PLOTTERS	ECG Amplitude ECG unit	Using Vital Sign Simulator by Direct Method	1 mV to 5 mV	9.93 % to 3.65 %
124	MEDICAL DEVICES-IMAGING/PLOTTERS	ECG Heart rate ECG unit/ Cardiac Monitor/ Holter Recorder/ Treadmill/ ECG Recorder	Using Vital Sign Simulator by Direct Method	30 BPM to 300 BPM	2.24 % to 1.17 %
125	MEDICAL DEVICES-IMAGING/PLOTTERS	Fetal Heart Rate Fetal Doppler	Using Fetal Simulator with Mechanical Fetal Heart by Comparison Method	30 BPM to 240 BPM	2.01 % to 0.63 %
126	MEDICAL DEVICES-MONITORING UNIT	ECG Heart rate Apnea Monitor	Using Vital Sign Simulator by Direct Method	30 BPM to 300 BPM	2.24 % to 1.17 %
127	MEDICAL DEVICES-MONITORING UNIT	ECG Heart rate Patient Monitor	Using Vital Sign Simulator by Direct Method	30 BPM to 300 BPM	2.24 % to 1.17 %

SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL ELECTRONICS CENTRE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2918 **Page No** 20 of 55

Validity 17/11/2024 to 16/11/2028 **Last Amended on** 16/02/2025

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
128	MEDICAL DEVICES-MONITORING UNIT	Fetal Heart Rate Fetal Monitor	Using Fetal Simulator with Mechanical Fetal Heart by Comparison Method	30 BPM to 240 BPM	2.24 % to 1.17 %
129	MEDICAL DEVICES-MONITORING UNIT	IBP Pressure Patient Monitor/Apnea Monitor	Using Vital Sign Simulator by Direct Method	10 mmHg to 300 mmHg	9.56 % to 1.38 %
130	MEDICAL DEVICES-MONITORING UNIT	Maternal Heart Rate Fetal Monitor	Using Fetal Simulator with Mechanical Fetal Heart by comparison method	60 BPM to 160 BPM	1.12 % to 0.68 %
131	MEDICAL DEVICES-MONITORING UNIT	NIBP Pressure Patient Monitor/Apnea Monitor	Using Vital Sign Simulator by Direct Method	10 mmHg to 400 mmHg	9.56 % to 0.93 %
132	MEDICAL DEVICES-MONITORING UNIT	Pulse Rate Pulse Oximeter	Using Vital Sign Simulator with SpO2 test Module by Direct Method	30 BPM to 240 BPM	3.4 % to 2.8 %
133	MEDICAL DEVICES-MONITORING UNIT	SpO2 Pulse Oximeter	Using Vital Sign Simulator with SpO2 test Module by Direct Method	70 % to 100 %	5.67 % to 3.32 %
134	MEDICAL DEVICES-MONITORING UNIT	Temperature Patient Monitor/Apnea Monitor	Using Vital Sign Simulator by Direct Method	30 °C to 42 °C	0.47 °C
135	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Autoclave	Using RTD probe with Indicator by Comparison Method	110 °C to 123 °C	0.3 °C

SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL ELECTRONICS CENTRE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2918 **Page No** 21 of 55

Validity 17/11/2024 to 16/11/2028 **Last Amended on** 16/02/2025

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
136	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Breath Rate Ventilator	Using Gas Flow Analyzer by Direct Method	10 brpm to 100 brpm	3.3 %
137	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Charging Time Defibrillator	Using Defibrillator Analyzer by direct method	3 s to 90 s	0.21 s
138	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Conductivity - Dialysis Machine	Using Dialysis Reference Meter by Direct Method	500 µS/cm to 12.88 mS/cm	8.66 % to 0.55 %
139	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	CQM of Electrosurgical unit/ Diathermy Machine/ Cautry machine	Using Electrosurgical Analyzer by comparison method	10 ohm to 470 ohm	8.2 % to 5.77 %

SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL ELECTRONICS CENTRE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2918 **Page No** 22 of 55

Validity 17/11/2024 to 16/11/2028 **Last Amended on** 16/02/2025

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
140	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Earth Resistance of Anaesthesia Machine, BiPAP, CPAP, Diathermy, Defibrillator, Dialysis Unit, Enteral Feeding Pump, Infusion Pump, Syringe Pump, Electrosurgical Unit, Cautery Unit, EGC Machine, Ventilator, Incubator Analyser, Patient/Apnea Monitor and Radiant/Baby Warmer	Using Electrical Safety Analyzer by Direct Method	0 to 1.8 ohm	0.02 ohm to 0.06 ohm
141	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Earth/Enclosure Leakage current of Anaesthesia Machine, BiPAP, CPAP, Diathermy, Defibrillator, Dialysis Unit, Enteral Feeding Pump, Infusion Pump, Syringe Pump, Electrosurgical Unit, Cautery Unit, EGC Machine, Ventilator, Incubator Analyser, Patient/Apnea Monitor and Radiant/Baby Warmer	Using Electrical Safety Analyzer by Direct Method	10 µA to 16 mA	2.40 % to 1.21 %

SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL ELECTRONICS CENTRE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2918 **Page No** 23 of 55

Validity 17/11/2024 to 16/11/2028 **Last Amended on** 16/02/2025

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
142	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	ECG Amplitude Defibrillator	Using Defibrillator Analyzer by Direct Method	0.5 mV to 5 mV	12.40 % to 4.53 %
143	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	ECG heart rate Defibrillator	Using Defibrillator Analyzer by direct method	30 BPM to 300 BPM	3.21 % to 1.82
144	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Electronic Tourniquet	Using Vital Sign Simulator by Direct Method	10 mmHg to 400 mmHg	9.56 % to 0.82 %
145	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Energy Defibrillator	Using Defibrillator Analyzer by direct method	10 J to 360 J	2.43 % to 1.19 %
146	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Flow - Dialysis Machine	Using Dialysis Reference Meter by Direct Method	100 ml/h to 2000 ml/h	2.58 %
147	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Flow Rate Ventilator	Using Gas Flow Analyzer by Direct Method	1 lpm to 300 lpm	2.60 % to 2.54 %

SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL ELECTRONICS CENTRE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2918 **Page No** 24 of 55

Validity 17/11/2024 to 16/11/2028 **Last Amended on** 16/02/2025

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
148	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	HF Leakage current Electrosurgical unit/ Diathermy Machine/ Cautry machine	Using Electrosurgical Analyzer by Direct Method	215 mA to 940 mA	3.06 %
149	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Insulation Resistance of Anaesthesia Machine, BiPAP, CPAP, Diathermy, Defibrillator, Dialysis Unit, Enteral Feeding Pump, Infusion Pump, Syringe Pump, Electrosurgical Unit, Cautery Unit, EGC Machine, Ventilator, Incubator Analyser, Patient/Apnea Monitor and Radiant/Baby Warmer (5 kV)	Using Electrical Safety Analyzer by Direct Method	0.7 Mohm to 10 Mohm	8.79 %

SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL ELECTRONICS CENTRE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2918 **Page No** 25 of 55

Validity 17/11/2024 to 16/11/2028 **Last Amended on** 16/02/2025

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
150	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Insulation Resistance of Anaesthesia Machine, BiPAP, CPAP, Diathermy, Defibrillator, Dialysis Unit, Enteral Feeding Pump, Infusion Pump, Syringe Pump, Electrosurgical Unit, Cautery Unit, EGC Machine, Ventilator, Incubator Analyser, Patient/Apnea Monitor and Radiant/Baby Warmer (5 kV)	Using Electrical Safety Analyzer by Direct Method	10 Mohm to 100 Mohm	8.79 %
151	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Irradiance Phototherapy Unit	Using Phototherapy Radiometer by Direct Method	13.3 µW/cm2/nm to 44.4 µW/cm2/nm	5.77 %

SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL ELECTRONICS CENTRE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2918 **Page No** 26 of 55

Validity 17/11/2024 to 16/11/2028 **Last Amended on** 16/02/2025

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
152	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Load current of Autoclave, Anaesthesia Machine, Boyles Apparatus, BiPAP, CPAP, Diathermy, Defibrillator, Dialysis Unit, Enteral Feeding Pump, Infusion Pump, Syringe Pump, Electrosurgical Unit, Cautery Unit, EGC Machine, Ventilator, Incubator Analyser, Radiant/Baby Warmer, Patient/Apnea Monitor, Suction pump and Nebulizer @ 50 Hz	Using Electrical Safety Analyzer by Direct Method	1 A to 8 A	9.11 % to 6.04 %
153	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Output Power (Coagulation/Cut mode) Electrosurgical Unit/ Diathermy Machine/ Cautry Machine	Using Electrosurgical Analyzer by Direct Method	5 W to 300 W	6.36 %
154	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Pacer Current External Pacemaker	Using Defibrillator Analyzer by Direct Method	10 mA to 140 mA	3.9 %

SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL ELECTRONICS CENTRE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2918 **Page No** 27 of 55

Validity 17/11/2024 to 16/11/2028 **Last Amended on** 16/02/2025

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
155	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Pacer Energy - External Pacemaker	Using Defibrillator Analyzer by Direct Method	0.1 J to 1 J	12.27 % to 5.85 %
156	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Pacer Rate - External Pacemaker	Using Defibrillator Analyzer by Direct Method	30 PPM to 180 PPM	2.57 % to 1.57 %
157	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Patient Leakage Current of Diathermy, Defibrillator, Electrosurgical Unit, Cautery Unit, EGC Machine, Patient/Apnea Monitor	Using Electrical Safety Analyzer by Direct Method	10 µA to 16 mA	2.38 % to 1.21 %
158	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	PEEP Pressure Ventilator	Using Gas Flow Analyzer by Direct Method	4 cmH2O to 40 cmH2O	1.17 %
159	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Pressure - Dialysis Machine	Using Dialysis Reference Meter by Direct Method	(-) 700 mmHg to 1900 mmHg	2.55 mmHg

SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL ELECTRONICS CENTRE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2918 **Page No** 28 of 55

Validity 17/11/2024 to 16/11/2028 **Last Amended on** 16/02/2025

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
160	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Supply Voltage of Autoclave, Anaesthesia Machine, Boyles Apparatus, BiPAP, CPAP, Diathermy, Defibrillator, Dialysis Unit, Enteral Feeding Pump, Infusion Pump, Syringe Pump, Electrosurgical Unit, Cautery Unit, EGC Machine, Ventilator, Incubator Analyser, Radiant/Baby Warmer, Patient/Apnea Monitor, Suction Pump and Nebulizer @ 50 Hz	Using Electrical Safety Analyzer by Direct Method	95 V to 240 V	2.35 %
161	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Temperature - Dialysis Machine	Using Dialysis Reference Meter by Direct Method	19 ° C to 45 ° C	0.59 ° C
162	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Volume Ventilator	Using Gas Flow Analyzer by Direct Method	2 ml to 1500 ml	4.62 % to 2.03 %
163	THERMAL-TEMPERATURE	RTD, Thermocouple with/without Indicator/Controller/ DAQ	Using PRT with Super DAQ and Dry Block Calibrator by Comparison Method	(-) 25 °C to 150 °C	0.15 °C

SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL ELECTRONICS CENTRE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2918 **Page No** 30 of 55

Validity 17/11/2024 to 16/11/2028 **Last Amended on** 16/02/2025

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
Mobile Calibration					
1	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Flow - Flow Meter	Using Gas Flow Analyzer by Direct Method	1 lpm to 15 lpm	2.63 %
2	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Flow - Nebulizer (Electric)	Using Gas Flow Analyzer by Direct Method	0.15 lpm to 15 lpm	4.62 % to 2.53 %
3	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Flow Syringe Pump / Infusion Pump / Enteral Feeding Pump	Using Infusion device Analyzer by Direct Method	1 ml/h to 990 ml/h	1.73 % to 1.16 %
4	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Flow- BiPAP	Using Gas Flow Analyzer by Direct Method	1 lpm to 15 lpm	2.63 %
5	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Flow-CPAP	Using Gas Flow Analyzer by Direct Method	1 lpm to 15 lpm	2.63 %
6	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	IBP/NIBP Pressure BP Apparatus	Using Vital Sign Simulator by Direct Method	10 mmHg to 400 mmHg	9.56 % to 0.89 %
7	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	IBP/NIBP Pressure Leakage test Pressure BP Apparatus	Using Vital Sign Simulator by Direct Method	10 mmHg to 400 mmHg	9.56 % to 0.82 %

SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL ELECTRONICS CENTRE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2918 **Page No** 31 of 55

Validity 17/11/2024 to 16/11/2028 **Last Amended on** 16/02/2025

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
8	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Inspiratory/ Expiratory Positive Airway Pressure- CPAP	Using Gas Flow Analyzer by Direct Method	4 cmH2O to 40 cmH2O	1.3 %
9	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Inspiratory/Expiratory Positive Airway Pressure- BiPAP	Using Gas Flow Analyzer by Direct Method	4 cmH2O to 40 cmH2O	1.3 %
10	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	O2 Concentration-BiPAP	Using Gas Flow Analyzer by Direct Method	21 % to 100 %	7.24 % to 3.69 %
11	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Occlusion Enternal feeding pump	Using Infusion device Analyzer by Direct Method	2.9 PSI to 44 PSI	17.41 % to 2.02 %
12	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Occlusion infusion pump	Using Infusion device Analyzer by Direct Method	2.9 PSI to 44 PSI	0.51 PSI to 0.71 PSI
13	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Occlusion Syringe Pump	Using Infusion device Analyzer by Direct Method	2.9 PSI to 44 PSI	0.51 PSI to 0.71 PSI
14	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Respiration Rate BiPAP	Using Gas Flow Analyzer by Direct Method	10 brpm to 100 brpm	3.3 % to 4.04 %

SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL ELECTRONICS CENTRE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2918 **Page No** 32 of 55

Validity 17/11/2024 to 16/11/2028 **Last Amended on** 16/02/2025

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
15	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Respiration Rate-CPAP	Using Gas Flow Analyzer by Direct Method	10 brpm to 100 brpm	3.3 % to 4.04 %
16	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Volume Enteral Feeding Pump	Using Infusion device Analyzer by Direct Method	1 ml to 400 ml	2.64 % to 1.83 %
17	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Volume Infusion Pump	Using Infusion device Analyzer by Direct Method	1 ml to 400 ml	2.64 % to 1.83 %
18	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Volume Syringe Pump	Using Infusion device Analyzer by Direct Method	1 ml to 50 ml	1.51 % to 1.16 %
19	MEDICAL DEVICES-IMAGING/PLOTTERS	ECG Amplitude ECG unit	Using Vital Sign Simulator by Direct Method	1 mV to 5 mV	9.93 % to 3.65 %
20	MEDICAL DEVICES-IMAGING/PLOTTERS	ECG Heart rate ECG unit/ Cardiac Monitor/ Holter Recorder/ Treadmill/ ECG Recorder	Using Vital Sign Simulator by Direct Method	30 BPM to 300 BPM	2.24 % to 1.17 %
21	MEDICAL DEVICES-IMAGING/PLOTTERS	Fetal Heart Rate Fetal Doppler	Using Fetal Simulator with Mechanical Fetal Heart by Comparison Method	30 BPM to 240 BPM	2.01 % to 0.63 %

SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL ELECTRONICS CENTRE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2918 **Page No** 33 of 55

Validity 17/11/2024 to 16/11/2028 **Last Amended on** 16/02/2025

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
22	MEDICAL DEVICES-MONITORING UNIT	ECG Heart rate Apnea Monitor	Using Vital Sign Simulator by Direct Method	30 BPM to 300 BPM	2.24 % to 1.17 %
23	MEDICAL DEVICES-MONITORING UNIT	ECG Heart rate Patient Monitor	Using Vital Sign Simulator by Direct Method	30 BPM to 300 BPM	2.24 % to 1.17 %
24	MEDICAL DEVICES-MONITORING UNIT	Fetal Heart Rate Fetal Monitor	Using Fetal Simulator with Mechanical Fetal Heart by Comparison Method	30 BPM to 240 BPM	2.24 % to 1.17 %
25	MEDICAL DEVICES-MONITORING UNIT	Maternal Heart Rate Fetal Monitor	Using Fetal Simulator with Mechanical Fetal Heart by comparison method	60 BPM to 160 BPM	1.12 % to 0.68 %
26	MEDICAL DEVICES-MONITORING UNIT	NIBP Pressure Patient Monitor/Apnea Monitor	Using Vital Sign Simulator by Direct Method	10 mmHg to 400 mmHg	9.56 % to 0.93 %
27	MEDICAL DEVICES-MONITORING UNIT	Pulse Rate Pulse Oximeter	Using Vital Sign Simulator with SpO2 test Module by Direct Method	30 BPM to 240 BPM	3.4 % to 2.8 %
28	MEDICAL DEVICES-MONITORING UNIT	SpO2 Pulse Oximeter	Using Vital Sign Simulator with SpO2 test Module by Direct Method	70 % to 100 %	5.67 % to 3.32 %
29	MEDICAL DEVICES-MONITORING UNIT	Temperature Patient Monitor/Apnea Monitor	Using Vital Sign Simulator by Direct Method	30 °C to 42 °C	0.47 °C

SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL ELECTRONICS CENTRE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2918 **Page No** 34 of 55

Validity 17/11/2024 to 16/11/2028 **Last Amended on** 16/02/2025

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
30	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Autoclave	Using RTD probe with Indicator by Comparison Method	110 °C to 123 °C	0.3 °C
31	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Breath Rate Ventilator	Using Gas Flow Analyzer by Direct Method	10 brpm to 100 brpm	3.3 %
32	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Charging Time Defibrillator	Using Defibrillator Analyzer by direct method	3 s to 90 s	0.21 s
33	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	CQM of Electrosurgical unit/ Diathermy Machine/ Cautry machine	Using Electrosurgical Analyzer by comparison method	10 ohm to 470 ohm	8.2 % to 5.77 %

SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL ELECTRONICS CENTRE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2918 **Page No** 35 of 55

Validity 17/11/2024 to 16/11/2028 **Last Amended on** 16/02/2025

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
34	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Earth Resistance of Anaesthesia Machine, BiPAP, CPAP, Diathermy, Defibrillator, Dialysis Unit, Enteral Feeding Pump, Infusion Pump, Syringe Pump, Electrosurgical Unit, Cautery Unit, EGC Machine, Ventilator, Incubator Analyser, Patient/Apnea Monitor and Radiant/Baby Warmer	Using Electrical Safety Analyzer by Direct Method	0 to 1.8 ohm	0.02 ohm to 0.06 ohm
35	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Earth/Enclosure Leakage current of Anaesthesia Machine, BiPAP, CPAP, Diathermy, Defibrillator, Dialysis Unit, Enteral Feeding Pump, Infusion Pump, Syringe Pump, Electrosurgical Unit, Cautery Unit, EGC Machine, Ventilator, Incubator Analyser, Patient/Apnea Monitor and Radiant/Baby Warmer	Using Electrical Safety Analyzer by Direct Method	10 µA to 16 mA	2.40 % to 1.21 %

SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL ELECTRONICS CENTRE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2918 **Page No** 36 of 55

Validity 17/11/2024 to 16/11/2028 **Last Amended on** 16/02/2025

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
36	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	ECG Amplitude Defibrillator	Using Defibrillator Analyzer by Direct Method	0.5 mV to 5 mV	12.40 % to 4.53 %
37	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	ECG heart rate Defibrillator	Using Defibrillator Analyzer by direct method	30 BPM to 300 BPM	3.21 % to 1.82
38	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Energy Defibrillator	Using Defibrillator Analyzer by direct method	10 J to 360 J	2.43 % to 1.19 %
39	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Flow Rate Ventilator	Using Gas Flow Analyzer by Direct Method	1 lpm to 300 lpm	2.60 % to 2.54 %
40	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	HF Leakage current Electrosurgical unit/ Diathermy Machine/ Cautry machine	Using Electrosurgical Analyzer by Direct Method	215 mA to 940 mA	3.06 %

SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL ELECTRONICS CENTRE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2918 **Page No** 37 of 55

Validity 17/11/2024 to 16/11/2028 **Last Amended on** 16/02/2025

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
41	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Insulation Resistance of Anaesthesia Machine, BiPAP, CPAP, Diathermy, Defibrillator, Dialysis Unit, Enteral Feeding Pump, Infusion Pump, Syringe Pump, Electrosurgical Unit, Cautery Unit, EGC Machine, Ventilator, Incubator Analyser, Patient/Apnea Monitor and Radiant/Baby Warmer (5 kV)	Using Electrical Safety Analyzer by Direct Method	0.7 Mohm to 10 Mohm	8.79 %
42	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Insulation Resistance of Anaesthesia Machine, BiPAP, CPAP, Diathermy, Defibrillator, Dialysis Unit, Enteral Feeding Pump, Infusion Pump, Syringe Pump, Electrosurgical Unit, Cautery Unit, EGC Machine, Ventilator, Incubator Analyser, Patient/Apnea Monitor and Radiant/Baby Warmer (5 kV)	Using Electrical Safety Analyzer by Direct Method	10 Mohm to 100 Mohm	8.79 %

SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL ELECTRONICS CENTRE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2918 **Page No** 38 of 55

Validity 17/11/2024 to 16/11/2028 **Last Amended on** 16/02/2025

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
43	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Irradiance Phototherapy Unit	Using Phototherapy Radiometer by Direct Method	13.3 µW/cm2/nm to 44.4 µW/cm2/nm	5.77 %
44	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Load current of Autoclave, Anaesthesia Machine, Boyles Apparatus, BiPAP, CPAP, Diathermy, Defibrillator, Dialysis Unit, Enteral Feeding Pump, Infusion Pump, Syringe Pump, Electrosurgical Unit, Cautery Unit, EGC Machine, Ventilator, Incubator Analyser, Radiant/Baby Warmer, Patient/Apnea Monitor, Suction pump and Nebulizer @ 50 Hz	Using Electrical Safety Analyzer by Direct Method	1 A to 8 A	9.11 % to 6.04 %
45	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Output Power (Coagulation/Cut mode) Electrosurgical Unit/ Diathermy Machine/ Cautry Machine	Using Electrosurgical Analyzer by Direct Method	5 W to 300 W	6.36 %

SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL ELECTRONICS CENTRE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2918 **Page No** 39 of 55

Validity 17/11/2024 to 16/11/2028 **Last Amended on** 16/02/2025

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
46	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Pacer Current External Pacemaker	Using Defibrillator Analyzer by Direct Method	10 mA to 140 mA	3.9 %
47	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Pacer Energy - External Pacemaker	Using Defibrillator Analyzer by Direct Method	0.1 J to 1 J	12.27 % to 5.85 %
48	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Pacer Rate - External Pacemaker	Using Defibrillator Analyzer by Direct Method	30 PPM to 180 PPM	2.57 % to 1.57 %
49	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Patient Leakage Current of Diathermy, Defibrillator, Electrosurgical Unit, Cautery Unit, EGC Machine, Patient/Apnea Monitor	Using Electrical Safety Analyzer by Direct Method	10 µA to 16 mA	2.38 % to 1.21 %
50	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	PEEP Pressure Ventilator	Using Gas Flow Analyzer by Direct Method	4 cmH2O to 40 cmH2O	1.17 %

SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL ELECTRONICS CENTRE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2918 **Page No** 40 of 55

Validity 17/11/2024 to 16/11/2028 **Last Amended on** 16/02/2025

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
51	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Supply Voltage of Autoclave, Anaesthesia Machine, Boyles Apparatus, BiPAP, CPAP, Diathermy, Defibrillator, Dialysis Unit, Enteral Feeding Pump, Infusion Pump, Syringe Pump, Electrosurgical Unit, Cautery Unit, EGC Machine, Ventilator, Incubator Analyser, Radiant/Baby Warmer, Patient/Apnea Monitor, Suction Pump and Nebulizer @ 50 Hz	Using Electrical Safety Analyzer by Direct Method	95 V to 240 V	2.35 %
52	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Volume Ventilator	Using Gas Flow Analyzer by Direct Method	2 ml to 1500 ml	4.62 % to 2.03 %