



# National Accreditation Board for Testing and Calibration Laboratories

## SCOPE OF ACCREDITATION

**Laboratory Name :**

VANAVIL CALIBRATIONS PRIVATE LIMITED, S2, RISHI MAHARAJ APARTMENT,  
INDRANI NAGAR, SALEM, TAMIL NADU, INDIA

**Accreditation Standard**

ISO/IEC 17025:2017

**Certificate Number**

CC-3690

**Page No**

1 of 21

**Validity**

01/09/2023 to 31/08/2025

**Last Amended on**

-

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)( $\pm$ )
Permanent Facility					
1	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	BIPAP (IPAP) - Inspiratory Positive Airway Pressure)	Using Gas Flow Analyzer By comparison Method	4 cmH <sub>2</sub> O to 40 cmH <sub>2</sub> O	0.09 cmH <sub>2</sub> O to 0.24 cmH <sub>2</sub> O
2	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	BiPAP (Respiration Rate)	Using Gas Flow Analyzer By comparison Method	8 bpm to 40 bpm	0.61 bpm to 1.18 bpm
3	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	BIPAP - (IPAP) Inspiratory Positive Airway Pressure/IPAP/BIPAP (EPAP)Expiratory positive airway pressure	Using Gas Flow Analyzer By comparison Method	4 cmH <sub>2</sub> O to 25 cmH <sub>2</sub> O	0.09 cmH <sub>2</sub> O to 0.17 cmH <sub>2</sub> O
4	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	BIPAP - (O <sub>2</sub> Concentration)	Using Gas Flow Analyzer By comparison Method	21 % to 100 %	0.75 % to 2.38 %
5	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	BP Apparatus / Dial BP Apparatus	Using Vital Sign Simulator by Comparison method	10 mmHg to 300 mmHg	2.39 mmHg to 2.43 mmHg



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**Accreditation Standard**

ISO/IEC 17025:2017

**Certificate Number**

CC-3690

**Page No**

2 of 21

**Validity**

01/09/2023 to 31/08/2025

**Last Amended on**

-

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6	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Flow meter / Oxygen Concentrator / Oxygen Cylinder Flow meter	Using Gas Flow Analyzer By Comparison Method	1 lpm to 15 lpm	0.29 lpm to 0.98 lpm
7	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Infusion Pump / Feeding Pump /Syringe pump-Flow	Using Infusion Device Analyzer By comparison Method	5 ml/hr to 980 ml/hr	2.02 % to 2.40 %
8	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Infusion Pump / Feeding Pump/Syringe pump (Occlusion)	Using Infusion Device Analyzer By comparison Method	5 psi to 40 psi	0.78psi
9	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Infusion Pump / Feeding Pump/Syringe pump (Volume)	Using Infusion Device Analyzer By comparison Method	5 ml to 980 ml	1.87 % to 2.31 %
10	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Nebulizer (Flow)	Using Gas Flow Analyzer By comparison Method	0 lpm to 8 lpm	0.29 lpm to 0.60 lpm
11	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Nebulizer (Pressure)	Using Gas Flow Analyzer By comparison Method	0 psi to 40 psi	0.74psi



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**Accreditation Standard**

ISO/IEC 17025:2017

**Certificate Number**

CC-3690

**Page No**

3 of 21

**Validity**

01/09/2023 to 31/08/2025

**Last Amended on**

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12	MEDICAL DEVICES- DISCHARGE EQUIPMENT/DEVICES	Oxygen Cylinder pressure gauge / Boyles Pressure gauge	Using Digital Pressure Gauge By Comparison Method as per DKD R6-1	0 bar to 700 bar	0.092bar
13	MEDICAL DEVICES- DISCHARGE EQUIPMENT/DEVICES	Pulse Oximeter / Fingertip Pulse Oximeter (Pulse Rate)	Using Vital Sign Simulator with SPO2 PULS-R by Stimulation method	40 bpm to 200 bpm	1.29bpm
14	MEDICAL DEVICES- DISCHARGE EQUIPMENT/DEVICES	Pulse Oximeter / Fingertip Pulse Oximeter (SPO2%)	Using Vital Sign Simulator with SPO2 PULS-R by Stimulation method	50 % to 100 %	2.94 % to 1.29 %
15	MEDICAL DEVICES- DISCHARGE EQUIPMENT/DEVICES	suction apparatus / wall suction apparatus	Using Gas Flow Analyzer By comparison Method	0 psi to -10 psi	0.59psi
16	MEDICAL DEVICES- DISCHARGE EQUIPMENT/DEVICES	Syringe Pump (Flow)	Using Infusion Device Analyzer By comparison Method	5 ml/hr to 980 ml/hr	2.02 % to 2.40 %
17	MEDICAL DEVICES- DISCHARGE EQUIPMENT/DEVICES	Syringe Pump (occlusion)	Using Infusion Device Analyzer By comparison Method	5 psi to 40 psi	0.78psi





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INDRANI NAGAR, SALEM, TAMIL NADU, INDIA

**Accreditation Standard**

ISO/IEC 17025:2017

**Certificate Number**

CC-3690

**Page No**

4 of 21

**Validity**

01/09/2023 to 31/08/2025

**Last Amended on**

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18	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Syringe Pump (Volume)	Using Infusion Device Analyzer By comparison Method	5 ml to 980 ml	1.87 % to 2.31 %
19	MEDICAL DEVICES-IMAGING/PLOTTERS	ECG Machine / Cardiac Monitor / ECG monitor / Holter Recorder / ECG Recorder (Heart Rate)	Using Vital Sign Simulator By simulation Method	30 bpm to 280 bpm	1.46 bpm to 3.74 bpm
20	MEDICAL DEVICES-IMAGING/PLOTTERS	ECG Machine / ECG Monitor / ECG Recorder (Amplitude)	Using Vital Sign Simulator By simulation Method	0.5 mV to 5 mV	0.29 mV to 0.31 mV
21	MEDICAL DEVICES-IMAGING/PLOTTERS	Fetal Doppler (Fetal Heart Rate)	Using Fetal Maternal Simulator by Simulation Method	30 bpm to 240 bpm	4.35 % to 0.55 %
22	MEDICAL DEVICES-MONITORING UNIT	CTG Machine / NST Machine (Fetal Heart Rate)	Using Fetal Maternal Simulator by Simulation Method	30 bpm to 240 bpm	1.31bpm
23	MEDICAL DEVICES-MONITORING UNIT	Multipara Monitor / Patient Monitor (Respiration Rate)	Using Vital Sign Simulator By simulation Method	5 bpm to 180 bpm	0.65 bpm to 10.41 bpm



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INDRANI NAGAR, SALEM, TAMIL NADU, INDIA

**Accreditation Standard**

ISO/IEC 17025:2017

**Certificate Number**

CC-3690

**Page No**

5 of 21

**Validity**

01/09/2023 to 31/08/2025

**Last Amended on**

-

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24	MEDICAL DEVICES-MONITORING UNIT	Multipara Monitor / Patient Monitor (Temperature) without sensor	Using Vital Sign Simulator By simulation Method	25 °C to 41 °C	0.13°C
25	MEDICAL DEVICES-MONITORING UNIT	Multipara Monitor / Patient Monitor / Two Para Monitor ( ECG HR)	Using Vital Sign Simulator By simulation Method	30 bpm to 280 bpm	1.46 bpm to 3.74 bpm
26	MEDICAL DEVICES-MONITORING UNIT	Multipara Monitor / Patient Monitor / Two Para Monitor ( Pulse Rate)	Using Vital Sign Simulator with by simulation Method	40 bpm to 200 bpm	1.29bpm
27	MEDICAL DEVICES-MONITORING UNIT	Multipara Monitor / Patient Monitor / Two Para Monitor ( SPO2 %)	Using Vital Sign Simulator With PULS-R By simulation Method	50 % to 100 %	2.94 % to 1.29 %
28	MEDICAL DEVICES-MONITORING UNIT	Multipara Monitor / Patient Monitor / Two Para Monitor/Digital BP Apparatus (NIBP)	Using Vital Sign Simulator By simulation Method	30 mmHg to 300 mmHg	2.44 mmHg to 2.42 mmHg
29	MEDICAL DEVICES-MONITORING UNIT	Multipara Monitor / Patient Monitor/Two para monitor/(IBP)	Using Vital Sign Simulator By simulation Method	30 mmHg to 300 mmHg	1.29mmHg



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**Laboratory Name :**

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INDRANI NAGAR, SALEM, TAMIL NADU, INDIA

**Accreditation Standard**

ISO/IEC 17025:2017

**Certificate Number**

CC-3690

**Page No**

6 of 21

**Validity**

01/09/2023 to 31/08/2025

**Last Amended on**

-

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30	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Defibrillator (Heart Rate)	Using Defibrillator/Pacemaker Analyzer By Comparison Method	30 bpm to 300 bpm	3.62 % to 1.68 %
31	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Defibrillator / AED (Energy) J	Using Defibrillator/Pacemaker Analyzer By Comparison Method	2 J to 360 J	0.59 J to 6.45 J
32	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Diathermy (Power Test) (30 Hz to 2.5 MHz)	Using Electrosurgical Analyzer by Comparison Method	10 w to 400 w	19.32 % to 8.25 %
33	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Pace Maker ( Pacer Amplitude)	Using Defibrillator/Pacemaker Analyzer By Comparison Method	5 mA to 25 mA	0.10 mA to 0.32 mA
34	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Pace Maker ( Pacer Rate)	Using Defibrillator/Pacemaker Analyzer By Comparison Method	30 ppm to 200 ppm	0.95 ppm to 2.77 ppm





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**Laboratory Name :**

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INDRANI NAGAR, SALEM, TAMIL NADU, INDIA

**Accreditation Standard**

ISO/IEC 17025:2017

**Certificate Number**

CC-3690

**Page No**

7 of 21

**Validity**

01/09/2023 to 31/08/2025

**Last Amended on**

-

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)(±)
35	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Patient Warmer / Fluid Warmer (Temperature)	Using RTD Sensor with Indicator by Comparison method	32 °C to 43 °C	0.58°C
36	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Tourniquet (Pressure)	Using Vital Sign Simulator By simulation Method	0 mmHg to 400 mmHg	2.39mmHg



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**Accreditation Standard** ISO/IEC 17025:2017

**Certificate Number** CC-3690 **Page No** 8 of 21

**Validity** 01/09/2023 to 31/08/2025 **Last Amended on** -

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Site Facility					
1	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Anaesthesia Machine - Pressure / (PEEP) Positive end expiratory pressure / (PIP) Peak Inspiratory Pressure)	Using Gas Flow Analyzer By comparison Method	0 cmH2O to 40 cmH2O	0.58 cmH2O to 0.62 cmH2O
2	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Anaesthesia Machine - ti (Inspiration time), te, (Expiratory Time) for I:E ratio	Using Gas Flow Analyzer By comparison Method	0.5 s to 5.5 s	0.06 s to 0.15 s
3	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Anaesthesia Machine BIPAP/CPAP/HFNC/O2 Blende-O2 Concentration	Using Gas Flow Analyzer By comparison Method	21 % to 100 %	0.75 % to 2.38 %
4	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Anaesthesia Machine- Respiration Rate	Using Gas Flow Analyzer By comparison Method	8 bpm to 40 bpm	0.61 bpm to 1.18 bpm
5	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Anesthesia Machine- Volume (Tidal Volume) / (Minute Volume)	Using Gas Flow Analyzer By comparison Method	100 ml to 1500 ml	3.72 % to 3.63 %





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INDRANI NAGAR, SALEM, TAMIL NADU, INDIA

**Accreditation Standard**

ISO/IEC 17025:2017

**Certificate Number**

CC-3690

**Page No**

9 of 21

**Validity**

01/09/2023 to 31/08/2025

**Last Amended on**

-

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6	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	BIPAP - (EPAP) Expiratory Positive Airway Pressure	Using Gas Flow Analyzer By comparison Method	4 cmH2O to 25 cmH2O	0.09 cmH2O to 0.17 cmH2O
7	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	BIPAP - (IPAP) Inspiratory Positive Airway Pressure)	Using Gas Flow Analyzer By comparison Method	4 cmH2O to 40 cmH2O	0.09 cmH2O to 0.24 cmH2O
8	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	BIPAP - (O2 Concentration)	Using Gas Flow Analyzer By comparison Method	21 % to 100 %	0.75 % to 2.38 %
9	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	BIPAP - Respiration Rate	Using Gas Flow Analyzer By comparison Method	8 bpm to 40 bpm	0.61 bpm to 1.18 bpm
10	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Boyles Apparatus /CPAP/HFNC/O2 Blender/Nebulizer/Oxygen concentrator/Flow meter/ Oxygen cylinder flow meter - Flow	Using Gas Flow Analyzer By comparison Method	1 lpm to 15 lpm	0.29 lpm to 0.98 lpm



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INDRANI NAGAR, SALEM, TAMIL NADU, INDIA

**Accreditation Standard**

ISO/IEC 17025:2017

**Certificate Number**

CC-3690

**Page No**

10 of 21

**Validity**

01/09/2023 to 31/08/2025

**Last Amended on**

-

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11	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	BP Apparatus / Dial BP Apparatus	Using Vital Sign Simulator by Comparison method	10 mmHg to 300 mmHg	2.39 mmHg to 2.43 mmHg
12	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	CPAP / HFNC / O2 Blender (PEEP) Positive end expiratory pressure	Using Gas Flow Analyzer By Comparison Method	0 cmH2O to 20 cmH2O	0.08 cmH2O to 0.14 cmH2O
13	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	CPAP / HFNC / O2 Blender(O2%)	Using Gas Flow Analyzer By comparison Method	21 % to 100 %	0.75 % to 2.38 %
14	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	CPAP/HFNC/O2 Blender (Flow)	Using Gas Flow Analyzer By comparison Method	1 lpm to 15 lpm	0.29 lpm to 0.98 lpm
15	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Flow meter / Oxygen Concentrator / Oxygen Cylinder Flow meter	Using Gas Flow Analyzer By Comparison Method	0 lpm to 15 lpm	0.29 lpm to 0.98 lpm
16	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Infusion Pump / Feeding Pump (Flow)/Syringe pump	Using Infusion Device Analyzer By comparison Method	5 ml/hr to 980 ml/hr	2.02 % to 2.40 %



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INDRANI NAGAR, SALEM, TAMIL NADU, INDIA

**Accreditation Standard**

ISO/IEC 17025:2017

**Certificate Number**

CC-3690

**Page No**

11 of 21

**Validity**

01/09/2023 to 31/08/2025

**Last Amended on**

-

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17	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Infusion Pump / Feeding Pump/Syringe pump (Occlusion)	Using Infusion Device Analyzer By comparison Method	5 psi to 40 psi	0.78psi
18	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Infusion Pump / Feeding Pump/Syringe pump (Volume)	Using Infusion Device Analyzer By comparison Method	5 ml to 980 ml	1.87 % to 2.31 %
19	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Nebulizer (Flow)	Using Gas Flow Analyzer By comparison Method	0 lpm to 8 lpm	0.29 lpm to 0.60 lpm
20	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Nebulizer (Pressure)	Using Gas Flow Analyzer By comparison Method	0 psi to 40 psi	0.74psi
21	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Pulse Oximeter / Fingertip Pulse Oximeter (Pulse Rate)	Using Vital Sign Simulator with SPO2 PULS-R by Stimulation method	40 bpm to 200 bpm	1.29bpm
22	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Pulse Oximeter / Fingertip Pulse Oximeter (SPO2%)	Using Vital Sign Simulator with SPO2 PULS-R by Stimulation method	50 % to 100 %	2.94 % to 1.29 %





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INDRANI NAGAR, SALEM, TAMIL NADU, INDIA

**Accreditation Standard**

ISO/IEC 17025:2017

**Certificate Number**

CC-3690

**Page No**

12 of 21

**Validity**

01/09/2023 to 31/08/2025

**Last Amended on**

-

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23	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	suction apparatus / wall suction apparatus	Using Gas Flow Analyzer By comparison Method	0 psi to -10 psi	0.59psi
24	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Syringe Pump (Flow)	Using Infusion Device Analyzer By comparison Method	5 ml/hr to 980 ml/hr	2.02 % to 2.40 %
25	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Syringe Pump (Occlusion)	Using Infusion Device Analyzer By comparison Method	5 psi to 40 psi	0.78psi
26	MEDICAL DEVICES-DISCHARGE EQUIPMENT/DEVICES	Syringe Pump (Volume)	Using Infusion Device Analyzer By comparison Method	5 ml to 980 ml	1.87 % to 2.31 %
27	MEDICAL DEVICES-IMAGING/PLOTTERS	ECG Machine / Cardiac Monitor / ECG monitor / Holter Recorder / Tread Mill / ECG Recorder (Amplitude)	Using Vital Sign Simulator By simulation Method	0.5 mV to 5 mV	0.29 mV to 0.31 mV



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INDRANI NAGAR, SALEM, TAMIL NADU, INDIA

**Accreditation Standard**

ISO/IEC 17025:2017

**Certificate Number**

CC-3690

**Page No**

13 of 21

**Validity**

01/09/2023 to 31/08/2025

**Last Amended on**

-

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28	MEDICAL DEVICES-IMAGING/PLOTTERS	ECG Machine / Cardiac Monitor / ECG monitor / Holter Recorder / Tread Mill / ECG Recorder (Heart Rate)	Using Vital Sign Simulator By simulation Method	30 bpm to 280 bpm	1.46 bpm to 3.74 bpm
29	MEDICAL DEVICES-IMAGING/PLOTTERS	Electrical Safety Earth Leakage EEG / EMG / Physiotherapy Equipment's	Using Electrical Safety Analyzer	100 $\mu$ A to 9000 $\mu$ A	2.48 % to 1.25 %
30	MEDICAL DEVICES-IMAGING/PLOTTERS	Electrical Safety Earth Resistance EEG / EMG / Physiotherapy Equipment's	Using Electrical Safety Analyzer	0.040 Ohm to 1.5 Ohm	0.019 Ohm to 0.053 Ohm
31	MEDICAL DEVICES-IMAGING/PLOTTERS	Electrical Safety Enclosure Leakage EEG / EMG / Physiotherapy Equipment's	Using Electrical Safety Analyzer	100 $\mu$ A to 9000 $\mu$ A	2.48 % to 1.25 %
32	MEDICAL DEVICES-IMAGING/PLOTTERS	Electrical Safety Insulation Resistance EEG / EMG / Physiotherapy Equipment's	Using Electrical Safety Analyzer	20 Mohm to 100 Mohm	0.91 Mohm to 8.92 Mohm
33	MEDICAL DEVICES-IMAGING/PLOTTERS	Electrical Safety Patient Leakage EEG / EMG / Physiotherapy Equipment's	Using Electrical Safety Analyzer	10 $\mu$ A to 1000 $\mu$ A	1.56 $\mu$ A to 27.16 $\mu$ A



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INDRANI NAGAR, SALEM, TAMIL NADU, INDIA

**Accreditation Standard**

ISO/IEC 17025:2017

**Certificate Number**

CC-3690

**Page No**

14 of 21

**Validity**

01/09/2023 to 31/08/2025

**Last Amended on**

-

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34	MEDICAL DEVICES-IMAGING/PLOTTERS	Fetal Doppler (Fetal Heart Rate)	Using Fetal Maternal Simulator by Simulation Method	30 bpm to 240 bpm	4.35 % to 0.55 %
35	MEDICAL DEVICES-IMAGING/PLOTTERS	OT Light / Spotlight / Focus Lamp / Light Source /Magna Vision Lamp / Colposcope	Using Digital Lux Meter by comparison method	1000 lux to 200000 lux	4.86%
36	MEDICAL DEVICES-MONITORING UNIT	Baby Weighing Machine / Baby Weighing Scale Readability: 1g (class III and coarser)	Using Std Weights M1 Class as per OIML R76-1	200 g to 10000 g	4.12g
37	MEDICAL DEVICES-MONITORING UNIT	CTG Machine / NST Machine (Fetal Heart Rate)	Using Fetal Maternal Simulator by Simulation Method	30 bpm to 240 bpm	1.31bpm
38	MEDICAL DEVICES-MONITORING UNIT	Electrical Safety Earth Leakage For All Lab Equipment's	Using Electrical Safety Analyzer	100 $\mu$ A to 9000 $\mu$ A	2.48 % to 1.25 %
39	MEDICAL DEVICES-MONITORING UNIT	Electrical Safety Earth Resistance For All Lab Equipment's	Using Electrical Safety Analyzer	0.040 Ohm to 1.5 Ohm	0.019 Ohm to 0.053 Ohm





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**Laboratory Name :**

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INDRANI NAGAR, SALEM, TAMIL NADU, INDIA

**Accreditation Standard**

ISO/IEC 17025:2017

**Certificate Number**

CC-3690

**Page No**

15 of 21

**Validity**

01/09/2023 to 31/08/2025

**Last Amended on**

-

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40	MEDICAL DEVICES-MONITORING UNIT	Electrical Safety Enclosure Leakage For All Lab Equipment's	Using Electrical Safety Analyzer	100 $\mu$ A to 9000 $\mu$ A	2.48 % to 1.25 %
41	MEDICAL DEVICES-MONITORING UNIT	Electrical Safety Insulation Resistance For All Lab Equipment's	Using Electrical Safety Analyzer	20 Mohm to 100 Mohm	0.91 Mohm to 8.92 Mohm
42	MEDICAL DEVICES-MONITORING UNIT	Multipara Monitor / Patient Monitor (Respiration Rate)	Using Vital Sign Simulator By simulation Method	5 bpm to 180 bpm	0.65 bpm to 10.41 bpm
43	MEDICAL DEVICES-MONITORING UNIT	Multipara Monitor / Patient Monitor (Temperature) without sensor.	Using Vital Sign Simulator By simulation Method	25 °C to 41 °C	0.13°C
44	MEDICAL DEVICES-MONITORING UNIT	Multipara Monitor / Patient Monitor / Two Para Monitor ( ECG HR)	Using Vital Sign Simulator By simulation Method	30 bpm to 280 bpm	1.46 bpm to 3.74 bpm
45	MEDICAL DEVICES-MONITORING UNIT	Multipara Monitor / Patient Monitor / Two Para Monitor ( Pulse Rate)	Using Vital Sign Simulator With PULS-R By simulation Method	40 bpm to 200 bpm	1.29bpm
46	MEDICAL DEVICES-MONITORING UNIT	Multipara Monitor / Patient Monitor / Two Para Monitor ( SPO2 %)	Using Vital Sign Simulator With PULS-R By simulation Method	50 % to 100 %	2.94 % to 1.29 %



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INDRANI NAGAR, SALEM, TAMIL NADU, INDIA

**Accreditation Standard**

ISO/IEC 17025:2017

**Certificate Number**

CC-3690

**Page No**

16 of 21

**Validity**

01/09/2023 to 31/08/2025

**Last Amended on**

-

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)(±)
47	MEDICAL DEVICES-MONITORING UNIT	Multipara Monitor / Patient Monitor / Two Para Monitor/Digital BP Apparatus (NIBP)	Using Vital Sign Simulator By simulation Method	30 mmHg to 300 mmHg	2.44 mmHg to 2.42 mmHg
48	MEDICAL DEVICES-MONITORING UNIT	Multipara Monitor / Patient Monitor/Two para monitor/(IBP)	Using Vital Sign Simulator By simulation Method	30 mmHg to 300 mmHg	1.29mmHg
49	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	(Temperature) Humidifier, Baby/Infant Incubator	Using Precision Thermometer With RTD Sensor by Comparison method	30 °C to 110 °C	0.58°C
50	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Autoclave (Pressure)	Using Digital Pressure Gauge By Comparison Method as per DKD R6-1	0 bar to 25 bar	0.015bar
51	MEDICAL DEVICES-PATIENT CONDITIONING / MAINTENANCE	Autoclave (Temperature)	Using Precision Thermometer With RTD Sensor by Comparison method	110 °C to 121 °C	0.58°C



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**Accreditation Standard**

ISO/IEC 17025:2017

**Certificate Number**

CC-3690

**Page No**

17 of 21

**Validity**

01/09/2023 to 31/08/2025

**Last Amended on**

-

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52	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Baby Warmer / Infant Warmer (Temperature)	Using Precision Thermometer With RTD Sensor by Comparison method	32 °C to 38 °C	0.58°C
53	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Defibrillator (Heart Rate)	Using Defibrillator/Pacemaker Analyzer By Comparison Method	30 bpm to 300 bpm	3.62 % to 1.68 %
54	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Defibrillator / AED (Energy) J	Using Defibrillator/Pacemaker Analyzer By Comparison Method	2 J to 360 J	0.59 J to 6.45 J
55	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Diathermy (Power Test) (30 Hz to 2.5 MHz)	Using Electrosurgical Analyzer by Comparison Method	10 W to 400 W	19.32 % to 8.25 %
56	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Electrical Safety ( Earth Leakage) for OT table/all Lab Equipment's	Using Electrical Safety Analyzer	100 µA to 9000 µA	2.48 % to 1.25 %





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INDRANI NAGAR, SALEM, TAMIL NADU, INDIA

**Accreditation Standard**

ISO/IEC 17025:2017

**Certificate Number**

CC-3690

**Page No**

18 of 21

**Validity**

01/09/2023 to 31/08/2025

**Last Amended on**

-

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57	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Electrical Safety ( Enclosure Leakage) for OT table/all Lab Equipment's	Using Electrical Safety Analyzer	100 $\mu$ A to 9000 $\mu$ A	2.48 % to 1.25 %
58	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Electrical Safety ( Insulation Resistance) for OT/all Lab Equipment's	Using Electrical Safety Analyzer	20 Mohm to 100 Mohm	0.91 Mohm to 8.92 Mohm
59	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Hemo Dialysis (Conductivity)	Using Dialysis Reference Meter by Comparison Method	12.8 ms/cm to 15.7 ms/cm	0.20 ms/cm to 0.24 ms/cm
60	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Hemo Dialysis (Flow)	Using Dialysis Reference Meter by Comparison Method	100 ml/min to 800 ml/min	2.44 % to 2.33 %
61	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Hemo Dialysis (Temperature)	Using Dialysis Reference Meter by Comparison Method	35 °C to 39 °C	0.59°C



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INDRANI NAGAR, SALEM, TAMIL NADU, INDIA

**Accreditation Standard**

ISO/IEC 17025:2017

**Certificate Number**

CC-3690

**Page No**

19 of 21

**Validity**

01/09/2023 to 31/08/2025

**Last Amended on**

-

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62	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	OT Table (Earth Leakage)	Using Electrical Safety Analyzer	100 $\mu$ A to 9000 $\mu$ A	2.48 % to 1.25 %
63	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	OT Table (Enclosure Leakage)	Using Electrical Safety Analyzer	100 $\mu$ A to 9000 $\mu$ A	2.48 % to 1.25 %
64	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	OT Table (Insulation Resistance)	Using Electrical Safety Analyzer	20 Mohm to 100 Mohm	0.91 Mohm to 8.92 Mohm
65	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	OT Table (Patient Leakage)	Using Electrical Safety Analyzer	10 $\mu$ A to 1000 $\mu$ A	1.56 $\mu$ A to 27.16 $\mu$ A
66	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Pace Maker ( Pacer Amplitude)	Using Defibrillator/Pacemaker Analyzer By Comparison Method	5 mA to 25 mA	0.10 mA to 0.32 mA



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INDRANI NAGAR, SALEM, TAMIL NADU, INDIA

**Accreditation Standard**

ISO/IEC 17025:2017

**Certificate Number**

CC-3690

**Page No**

20 of 21

**Validity**

01/09/2023 to 31/08/2025

**Last Amended on**

-

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67	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Pacemaker (Pacer Rate)	Using Defibrillator/Pacemaker Analyzer By Comparison Method	30 ppm to 200 ppm	0.95 ppm to 2.77 ppm
68	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Patient Warmer / Fluid Warmer (Temperature)	Using Precision Thermometer With RTD Sensor by Comparison method	32 °C to 43 °C	0.58°C
69	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Phototherapy (Irradiance)	Using Irradiance meter by comparison method	30 $\mu\text{W}/\text{cm}^2/\text{nm}$ to 80 $\mu\text{W}/\text{cm}^2/\text{nm}$	1.73 $\mu\text{W}/\text{cm}^2/\text{nm}$ to 4.62 $\mu\text{W}/\text{cm}^2/\text{nm}$
70	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Pressure / (PEEP) Positive end expiratory pressure / (PIP) Peak Inspiratory Pressure)	Using Gas Flow Analyzer By comparison Method	0 cmH <sub>2</sub> O to 40 cmH <sub>2</sub> O	0.58 cmH <sub>2</sub> O to 0.62 cmH <sub>2</sub> O
71	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Tourniquet (Pressure)	Using Vital Sign Simulator By simulation Method	0 mmHg to 400 mmHg	2.39mmHg





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**Accreditation Standard**

ISO/IEC 17025:2017

**Certificate Number**

CC-3690

**Page No**

21 of 21

**Validity**

01/09/2023 to 31/08/2025

**Last Amended on**

-

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72	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Ventilator (Oxygen Concentration)	Using Gas Flow Analyzer By comparison Method	21 % to 100 %	0.75 % to 2.38 %
73	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Ventilator (Respiration Rate)	using Gas Flow Analyzer By comparison Method	8 bpm to 40 bpm	0.61 bpm to 1.18 bpm
74	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Ventilator $t_i$ (Inspiration Time) , $t_e$ (Expiratory Time) for I:E Ratio	Using Gas Flow Analyzer By comparison Method	0.5 s to 5.5 s	0.06 s to 0.15 s
75	MEDICAL DEVICES- PATIENT CONDITIONING / MAINTENANCE	Ventilator VOLUME (Tidal Volume) / (Minute Volume)	Using Gas Flow Analyzer By comparison Method	100 ml to 1500 ml	3.72 % to 3.63 %

\* CMCs represent expanded uncertainties expressed at approximately the 95% level of confidence, using a coverage factor of  $k = 2$ .