



Bihar Medical Services & Infrastructure Corporation Limited, 2nd & 3rd Floor, Swasthya Bhawan, Behind IGIMS, Sheikhpura, Adjacent to State Health Society, Patna 800023, Phone/Fax: +91612 2283287,+ 91612 2283288

Corrigendum-II

Bihar Medical Services and Infrastructure Corporation Limited (BMSICL) had invited E-Bids from the interested parties for Procurement, Rate contract, Supply, Installation of Medical Equipment vide Tender No.-BMSICL/2025-26/ME-421. During Pre-bid meeting various suggestions were received from different prospective bidders regarding amendment in technical specification of equipment which were discussed and deliberated on by the experts. On the basis of their recommendations certain amendments in the technical specification of the equipment have been made which are annexed as **Annexure-I** of this corrigendum.

Note:-

- 1. Bidders are advised to refer to the Annexure-I of this corrigendum before submission of bid.**
- 2. Those who have submitted their bids are requested to re-submit their bids in accordance with this corrigendum.**

Annexed:- as above

Sd/-
GM (Procurement)
BMSICL

Annexure-I		
Name of the Instrument		
SI. No	Technical Specification as per tender	Final Amendment
1.	Electrical E8 student kymograph (Superior Quality): With special heavy-duty motor, Oil lapped gear system jerk free running instantaneous start & stop clutch, stainless steel spindle screw lift. 15x15cm.cylinder. ISO 9001:2015/13485:2016/GMP/OHSAS 18001:2007/CE/NSIC/MSME/BIFMA certified Co	Electrical E8 student kymograph (Superior Quality): With special heavy-duty motor, Oil lapped gear system jerk free running instantaneous start & stop clutch, stainless steel spindle screw lift. 15x15cm.cylinder. ISO 9001/ISO13485/GMP/OHSAS 18001:2007/CE /BIFMA certified Co
2	Perimeter Pristely Smith model:- A vertical stand on which a metallic arc is pivoted. It also bear a circular black disc to read the meridian in which the arc in shape of a semicircle with radius 330 mm. It's rotating in any direction and fix at any position with a tightening screw. The arc is graduated from 0° to 90° with a movable test object which is a white colour spot of size 10mm diameter painted on a circular disc it can be moved with arc. An adjustable chin rest and a detachable leveling bar is fixed in front of the metallic arc. A Scale and circular chart frame to hold the chart paper in position is provided at the back of the circular disc. Supplied With 100 charts. ISO 9001:2015/13485:2016/GMP/OHSAS 18001:2007/CE/NSIC/MSME/BIFMA certified Co	Perimeter Pristely Smith model:- A vertical stand on which a metallic arc is pivoted. It also bear a circular black disc to read the meridian in which the arc in shape of a semicircle with radius 330 mm. It's rotating in any direction and fix at any position with a tightening screw. The arc is graduated from 0° to 90° with a movable test object which is a white colour spot of size 10mm diameter painted on a circular disc it can be moved with arc. An adjustable chin rest and a detachable leveling bar is fixed in front of the metallic arc. A Scale and circular chart frame to hold the chart paper in position is provided at the back of the circular disc. Supplied With 100 charts. It should be ISO 9001/ISO13485/GMP/OHSAS 18001:2007/CE /BIFMA certified Co

3	Mosso's Ergograph: Computerized ADC 12 bits or moreThe equipment should provide easy plug and play setup for automatic recording and graphing and calculations relevant to Various levels of the hand rest available for different subject's Wireless communication with the device and Bluetooth data transfer.The Software allows to plot different quantities against time or other parameters Work done at a click of a button.The recorded and analyzed data for all subjects should be stored and exported to a text file and a PDF file for reporting purposes. Compatible computer or Tablet to be providedwooden table top equipment to perform human fatigue experiments with provision for finger holder, with weights each of 500gX6	Computerized ADC 12 bits or moreThe equipment should provide easy plug and play setup for automatic recording and graphing and calculations relevant to Various levels of the hand rest available for different subject's Wireless communication with the device and Bluetooth data transfer.The Software allows to plot different quantities against time or other parameters Work done at a click of a button.The recorded and analyzed data for all subjects should be stored and exported to a text file and a PDF file for reporting purposes. Compatible computer or Tablet to be providedwooden table top equipment to perform human fatigue experiments with provision for finger holder, with weights each of 500gX6. It should be ISO 9001/ISO13485/GMP/OHSAS 18001:2007/CE /BIFMA certified Co
4	Perimeter Lister type:- The marker a needle is housed in a retractable tube, sprung to Sheath the pint when not actually marking. A set of interchangeable and permanent washable test objects is included with the instrument. The objects subtend angles of 4 degree, 2 degree, 1 degree, $\times\frac{1}{2}$ degree, $\frac{1}{4}$ degree and are in white, green and red blue objects in the last three sizes are also included. Supplies complete with Transformer to work on 220 Volt A/C mains With 100 charts. To be able to record upto 90 degree in all meridians automatically, the patient perceives the test object moving, with permanent washable test objects in white, green and red blue colours. An ISO 9001:2015/13485:2016/GMP/OHSAS18001:2007/CE/ NSIC/MSME/BIFMA certified Co	Perimeter Lister type:- The marker a needle is housed in a retractable tube, sprung to Sheath the pint when not actually marking. A set of interchangeable and permanent washable test objects is included with the instrument. The objects subtend angles of 4 degree, 2 degree, 1 degree, $\times\frac{1}{2}$ degree, $\frac{1}{4}$ degree and are in white, green and red blue objects in the last three sizes are also included. Supplies complete with Transformer to work on 220 Volt A/C mains With 100 charts. To be able to record upto 90 degree in all meridians automatically, the patient perceives the test object moving, with permanent washable test objects in white, green and red blue colours. It should be ISO 9001/ISO13485/GMP/OHSAS 18001:2007/CE /BIFMA certified Co

5	Binocular microscope:- 1. Body-Inter changeable, inclined Binocular body, 360-degree rotatable head. 2. Eyepieces-Highest quality 10 x wide field anti fungus field eyepiece, FOV 22mm. 3. Objectives-Par focal, antifungal coated 4x, 10x, 40x, and 100x (oil immersion) with plane achromatic correction for FOV of 20 mm. 4. Optical system-infinity corrected 5. Stage - Horizontal mechanical stage preferably 100 x 140 mm with fine Vernier graduations designed with convenient coaxial adjustment for slide manipulation preferably through 30x70 mm.	Deleted
6	Polygraph:- The system should be able to record and analyse. Pulse PPG, blood pressure, ECG, Pulse Transit time, Heart Rate variability (HRV) ECG Multi leads configurations for real time cardiac axis & vector analysis. Digital microphone for heart & Lung sounds studies. Pulse Wave velocity, Deep breathing test, Valsalva Maneuver. SPO2 Acceleration (3Axis), Activity, GSR & Temperature, EEG, EMG NCV etc. Dynamometer to study Hand Grip Test. Hardware Specifications Also should have sample data for animal experiments for demonstrating to the students	Polygraph: - The system should be able to record and analyse. Pulse PPG, blood pressure, ECG, Pulse Transit time, Heart Rate variability (HRV) ECG Multi leads configurations for real time cardiac axis & vector analysis. Digital microphone for heart & Lung sounds studies. Hand-Held Pulse tonometer for Pulse wave velocity, Deep breathing test, Valsalva Maneuver. SPO2 Acceleration (3Axis), Activity, GSR & Temperature, EEG, EMG NCV etc Dynamometer to study Hand Grip Test. Four channel balance board for static post urography or body Sway studies. Hardware Specifications: Simultaneous recording for at least 12 and more parameters. High sampling rate of 40 KHz or more. Should have Fully Isolated stimulator for constant current voltage stimulation output range (0-20 mA) with pulse duration: 50-200 us.

		Must have preferred parameters for wireless monitoring ECG, SPO2, PPG, Respiration, GSR and Temp, activity etc. The software should have step by step instructions, protocol and experimental design for performing various experiments in physiology teaching applications. Also should have sample data for animal experiments for demonstrating to the students. Must be supplies with ECG, EMG, EEG, NCV studies. Facility for automatic analysis in while data recording and after recording for ECG, Heart Rate Variability, Blood Pressure, Peak analysis, spectrum analysis etc. Should have option for Mathematical function and statistical analysis and export options to other software like MATLAB, Excel, Quick Time, Wav, Text etc for desired interpretation of the data. The software should provide an easy file sharing option to a distant user with-out involving any cost with a 5 year of freeupdates and upgrade. The system should have upgrade Options for: Non-Invasive Beat to Beat Blood Pressure monitor for tilt table testing. Non-Invasive skin blood flowmeter. Compatible Desktop Computer with I5, 8GB, 500GB, 21inch Monitor. It should be US FDA/EU declaration of conformity/European CE (notified body)/ ISO 13485/BIS (approved model).
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7	Physiograph:- 1. Should be supplied as a standalone recorder to monitor & record the data on three channels colored TFT Monitor.2. System should have built in stimulator.3. System should have facility to store the recording and review the recorded data on inbuilt TFT screen without need of any computer.4. A software should be provided free of cost along with the system to review and printing the recorded data from PC whenever required, (No need to quote cost of computer)5. Should be supplied with Forcer Transducer, Isotonic Transducer & Volume transducer.6. For human experiment, transducers/ electrodes to perform following tests i.e. ECG, EEG, EMG, GSR, Pulse, respiration, Hand dynamometer Phonocardiogram & Temperature should be supplied.7. US FDA/European CE (Issued from notified Body) Approved model should be offered	Physiograph:- 1. Should be supplied as a standalone recorder to monitor & record the data on three channels coloured TFT/LED 21inch Monitor. 2. The advance transducers should have inbuilt data recorder and software for analysis. 3. System should have facility to store the recording and review the recorded and analyzed data on the monitor. 4. A software should be provided free of cost along with the system to review and printing the recorded data from PC. The Software should have contents with step by step instructions, protocol and experimental design for performing various applications.Should have sample data for human and animal experiments for demonstrating to the students.Software should support competency-based learning and offer students to work in small groups and submit/save their work as PDF or printed report format.The software should allow educators to customize/modify the experiments as required.It should have the option of taking assessments including multiple choice questions, theoretical questions, drag and drops, Picture annotation of the students and automated grading facility should be available. 5. The system should be supplied with transducer for human studies as listed below 6. For human experiment, transducers/ electrodes to perform following tests i.e. ECG, EEG, EMG, Pulse, Respiration. Phonocardiogram supplied as standard and Hand dynamometer, GSR, & Temperature should be available for future upgrades. It should be US FDA/EU declaration of conformity/European CE (notified body)/ ISO 13485/BIS (approved model).
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8	Pentahead microscope – Teaching microscope-Pentahead (1+4) with binocular eyepiece tube, eyepiece of 10x magnification, LED arrow pointer, 360 degree rotatable pointer dual color LED Adjustment fuction, LED intersity	Pentahead microscope – Teaching microscope-Pentahead (1+4) with binocular eyepiece tube, eyepiece of 10x magnification, LED arrow pointer, 360 degree rotatable pointer dual color LED Adjustment fuction, LED intersity. It should be US FDA/EU-CE (Notified body).
9	Spirometer Digital1. Should be electronic with computer attachment and print out with software for complete analysis2. The proper medical reference from where these values have been incorporated should be clearly mentioned.3. The system should measure the following:Slow and forced spirometry (Inspiratory and Expiriory Flow Volume Curve)4. The system should measure the following parameters: Slow and forced Spirometry, VT, BF, MV, ERV, FVC, FEV1, VCin, VCex, MEF 50, MEF 75, PEF, MVV etc5. Power Supply power input to be 220-240VAC, 50Hz Suitable UPS with maintenance free batteries for minimum one-hour back-up should be supplied with the system.	Spirometer Digital1. Should be electronic with computer/ Laptop (i5, 8GB) and printer (B/W Laser) attachment with software for complete analysis2. The proper medical reference from where these values have been incorporated should be clearly mentioned.3. The system should measure the following:Slow and forced spirometry (Inspiratory and Expiriory Flow Volume Curve)4. The system should measure the following parameters: Slow and forced Spirometry, VT, BF, MV, ERV, FVC, FEV1, VCin, VCex, MEF 50, MEF 75, PEF, MVV etc5. Power Supply power input to be 220-240VAC, 50Hz Suitable UPS with maintenance free batteries for minimum one-hour back-up should be supplied with the system. It should be US FDA/ European CE with notified body
10	Digital Perimeter When specifying digital perimetry for purchase, key features include bowl size (typically 30 cm), integrated computer and monitor, and the ability to perform various threshold and screening tests. Also consider stimulus intensity, duration, and fixation monitoring systems. Here's a more detailed breakdown of specifications to consider:	No Change
I	General Specification•Type:- Automated full-field perimeter (Goldman standard).•Bowl Size: 30 cm (International Standard).•Computer & Monitor: Integrated into the perimeter unit (no external computer required)•Accessories: Should be from the same Original Equipment Manufacturer (OEM) as the main unit	No Change
II	Technical Specification: •Stimulus Intensity:10,000 Asb (as per Goldman standard).	Technical Specification: • Stimulus Intensity:10,000 Asb (as per Goldman standard). • Bowl Illumination: 31.5 Asb.

	•Bowl Illumination: 31.5 Asb. •Stimulus Duration: 200ms. •Wavelength: Broad band visible light. •Stimulus/Background Color: White on white. •Maximum Temporal Range: 90 Degrees. •Testing Range: Suitable for central 30 as well as full field testing.	• Stimulus Duration: 200ms. • Wavelength: Broad band visible light. • Stimulus/Background Color: White on white. • Maximum Temporal Range: 90 Degrees. • Testing Range: Suitable for central 30 as well as full field testing. It should be US FDA/ European CE with notified body
11	Computerized Bicycle Ergometer	
I	General Features:- • Purpose: Designed for metabolic and physiological testing during rest and exercise. • Application Areas: Research, clinical trials, and applied physiology studies. • Design: Durable, ergonomic, and easy to use for subjects of varying fitness levels. • Portability: Integrated casters for easy transport	No Change
II	Measurement Capabilities:	No Change
	Resting Metabolic Rate (RMR):•Capable of indirect calorimetry for measurement of oxygen consumption (VO ₂), carbon dioxide production (VCO ₂), and respiratory exchange ratio (RER).•Should support breath-by-breath gas exchange analysis and canopy dilution techniques.	Resting Metabolic Rate (RMR):•Capable of indirect calorimetry for measurement of oxygen consumption (VO ₂), carbon dioxide production (VCO ₂), and respiratory exchange ratio (RER).•Should support breath-by-breath/mixing chamber gas exchange analysis.
	Cardiopulmonary Exercise Testing (CPET): •Real-time measurement of VO₂, VCO₂, ventilatory thresholds, oxygen kinetics, and maximal oxygen uptake (VO₂max). •Must provide breath-by breath gas exchange measurements. •Equipped with a mixing chamber option for tests requiring a stable gas exchange analysis	Cardiopulmonary Exercise Testing (CPET): •Real-time measurement of VO₂, VCO₂, ventilatory thresholds, oxygen kinetics, and maximal oxygen uptake (VO₂max). •Must provide breath-by breath / mixing chamber gas exchange measurements. •Equipped with a mixing chamber option for tests requiring a stable gas exchange analysis
	Spirometry:- •Conducts Forced Vital Capacity (FVC), Slow Vital Capacity (SVC), and Maximum Voluntary Ventilation (MVV) tests. •Measures pre/post-bronchial provocation. •Ensures compliance with ATS/ERS guidelines for accuracy.	No Change

III	Ergometer Specifications: •Type: Electrically braked cycle ergometer. •Load Range: Adjustable workload from 0 to 1000 W or higher. •Load Increment: Fine adjustments with a precision of 1 W. •Measurement Accuracy: $\pm 2\%$ of the set workload. •Subject Comfort: . Adjustable seat and handlebars. . Suitable for pediatric and adult subjects	No Change
IV	Sensors and Calibration: •Gas Sensors: Paramagnetic O₂ sensors and infrared CO₂ sensor for long-lasting performance. •Flow Sensors: Turbine or pneumotach options for both low flow (resting) and high-flow (exercise) conditions. •Calibration: Automated gas and flowmeter calibration for consistency.	Sensors and Calibration: •Gas Sensors: Paramagnetic/Visible spectrum O₂ sensors and infrared CO₂ sensor for long-lasting performance. •Flow Sensors: Turbine or pneumotach options for both low flow (resting) and high-flow (exercise) conditions. •Calibration: Automated gas and flowmeter calibration for consistency.
V	Data Management and Software: •Interface: Intuitive touch-screen compatible software with real-time graphical displays. •Data Analysis: Calculation of key metrics (e.g., ventilatory thresholds, VE/VCO₂ slope, and steady-state responses). - Customizable training zones and advanced post-test analysis tools. •Data Export: Supports exporting to common formats such as CSV, Excel, and PDF. •Database: SQL-based database for secure storage and retrieval of results. •Compatibility: Windows and macOS (via virtual OS).	No Change
VI	Additional Features: •Ventilation Monitoring: Compatible with oro-nasal masks and canopy systems for gas exchange. •Ergometer Control: Integration with other medical-grade devices (e.g., ECG, pulse oximeters). •Accessories: - Pediatric and adult masks in multiple sizes. - Antibacterial filters for infection control. - Optional high-altitude simulation feature (low/high FiO₂).	No Change
VII	Power Supply: •Input Voltage: 220-240 V, 50 Hz. •Battery Backup: Integrated battery with at least 4 hours of operational time.	No Change

VI II	Compliance and Safety: •Certifications: CE, ISO, and other relevant medical device certifications. •Hygiene: All patient- contact surfaces must be easy to clean and disinfect.	Compliance and Safety: •Certifications: ISO 9001/ISO13485/GMP/OHSAS 18001:2007/BIFMA certified Co •Hygiene: All patient- contact surfaces must be easy to clean and disinfect.
IX	Warranty and Support: •Warranty: Minimum 2-year warranty with CMC of 8 years. •Support: Comprehensive after-sales service, including training, maintenance, and software updates. Vendors should provide a detailed demonstration to confirm compliance with these specification	Warranty and Support: •Warranty: Minimum 3-year warranty with CMC of 7 years. •Support: Comprehensive after-sales service, including training, maintenance, and software updates.
12	Wright's peak flow The wright's peak flow meter, particularly the mini-wright Standard, is a handheld device used to measure the maximum speed at which air can be exhaled from the lungs, also known as peak expiratory flow(PEF). It's a valuable tool for monitoring lung function, especially in asthma management. The mini-Wright Standard is considered a "Gold Standard" in asthma care. Here's more detailed description:	No Change
	Key Features:	
	•Portability and Lightweight: The mini-Wright is designed to be small and portable, making it easy to use at home or in a clinic	No Change
	•Accuracy: It's known for its accuracy and reliability, with each device individually calibrated to ensure consistent measurements.	No Change
	•Measurement Range: The standard Mini-Wright measures PEF between 60-880 l/min. A low- range model is also available, measuring between 30-400 L/min, and is particularly useful for children or individuals with severe airflow obstruction.	No Change
	•Easy of Use: The device is relatively simple to use, with clear instruction included	No Change
	•Asthma Management: It helps individuals and healthcare professionals monitor asthma control and detect changes in airflow, which can indicate the severity of asthma.	No Change
	•Components: The mini-Wright typically includes the peak meter, a sterilisable mouthpiece (or disposable options), instructions, and a patient self-monitoring chart.	No Change

	•Scales: The Mini-Wright is available in different scales, such as the standard range(60-880 L/min) and the low range (30-400 L/min), allowing for a wider range of measurements. How it Works: 1.The user inhales deeply, then exhales forcefully and rapidly into the mouthpiece of the peak flow meter. 2.The meter measures the speed of the exhaled air, which is displayed on a scale. 3.The user repeats the process several times and records the highest reading.	No Change
	Uses and Benefits:	No Change
	•Monitoring Asthma: Helps individuals with asthma track their peak flow readings and identify any changes in airflow.	No Change
	•Assessing Asthma Control: Can help determine if asthma is well-controlled and if medication adjustments are needed	No Change
	•Early Detection of Asthma Flare-ups: Changes in peak flow readings can sometimes indicate an impending asthma flare-up before symptoms become noticeable	No Change
	•Personalized Asthma Management: Provides information to healthcare professionals for tailoring asthma management plans to individual needs	No Change
	Additional-	ISO 9001/ISO13485/GMP/OHSAS 18001:2007/BIFMA certified Co
13	Hand grip spring dynamometer A hand grip spring dynamometer is a handheld device used to measure isometric grip strength, typically in kilograms or pounds. It measures the force a person can exert when squeezing a handle. In a physiology practical, it's used to assess hand and forearm muscle strength and can be used to compare grip strength between individuals or different conditions.	No Change
	Specifications and Usage:	No Change
	•Measurements: Measures isometric grip force, meaning the muscles contract without moving	No Change
	•Range: Typically measures grip strength from 0 to 90 kilograms (0 to 200 pounds).	No Change

	•Handle Adjustment: Some dynamometers, like the Jamar, have adjustable handle positions to accommodate different hand sizes	No Change
	•Procedure: The subject sits with the arm at a 90-degree angle, the elbow at the side, and the wrist neutral. They then squeeze the dynamometer as hard as possible	No Change
	•Trials: Multiple trials are typically taken and the highest reading is recorded, with some studies averaging three trials.	No Change
	•Types: There are different types of dynamometers, allowing comparisons to average values for different age and gender groups	No Change
	•Normative Data: Normative data exists for grip strength, allowing comparisons to average values for different age and gender groups	No Change
	•Clinical Use: Hand grip dynamometers are used clinically to assess muscle strength, monitor recovery from injuries, and assess overall health	No Change
	•Practical Considerations: It's important to use a standardized procedure for grip strength testing, including proper positioning and instructions to the subject	No Change
	•Calibration: Regular calibration is crucial for accurate measurements, especially for devices like the Jamar	No Change
	Additional points	ISO 9001/ISO13485/GMP/OHSAS 18001:2007/BIFMA certified Co.
14	tilt table for autonomic function test	Deleted
1	<u>Tilt Mechanism:-</u>	
	•Angle Adjustment: Precise and adjustable tilt angles, ideally from 0 to 90 degrees, with a smooth and controlled tilt mechanism	
	•Accuracy: Ensure the tilt table accurately reflects the chosen angle during the test.	
	•Return Mechanism: A quick and reliable return mechanism to lower the table in an emergency, ideally with a manual override option	
	•Safety Features: Safety belts, side rails, and possible a patient support structure to prevent falls	

2	Monitoring and Recording:	
	•Blood Pressure Monitoring: Non-invasive blood pressure monitoring with the ability to record beat-to-beat pressure values	
	•Heart Rate Monitoring: EKG monitoring with the ability to record heart rate and rhythm	
	•Data Recording: Digital data recording with storage capabilities and the ability to export data for analysis	
3	Functionality and Features:	
	•Patient Size and Weight: Ability to accommodate various patient sizes and weights, with appropriate support features	
	•Integration: Consider integration with other autonomic testing equipment, such as Valsalva maneuver devices, deep breathing test equipment, or handgrip testers	
	•Ease of Use: A user-friendly interface for setting tilt angles, monitoring data, and recording results	
	•Cleaning and maintenance: Easy to clean and maintain, with durable materials that can withstand routine use	
	Safety	
	•Emergency Stop: A readily accessible emergency stop button to quickly lower the table.	
	•Patient Support: Safety features to prevent patient falls, such as side rails and a patient support system.	
	•Training and Support: Manufacturer should provide training and ongoing support for the equipment's use and maintenance	
	•Mobility: Consider whether the tilt table needs to be easily mobile within the clinic or lab.	
	•Warranty and Service: A comprehensive warranty and access to reliable service and repair support	
	•Calibration and Maintenance: Regular calibration and maintenance procedures to ensure accurate and reliable performance. By including these specifications, you can ensure the purchase of a tilt table that is safe, accurate, and capable of performing autonomic function tests effectively	
15	<u>Dale's organ bath</u>	No Change

	A Dale's organ bath is a piece of laboratory equipment used in physiology research to study the responses of isolated tissues, like smooth muscle, to various stimuli. It typically includes a Perspex or Perspex bath, a thermostatic temperature controller, a stirring system, and accessories for holding and stimulating the tissue. The bath is designed to mimic in vivo conditions, allowing for controlled temperature, oxygenation, and fluid composition.	No Change
	Key Features and Specifications:	No Change
	•Bath: Often made of Perspex (acrylic) with leak-proof dovetailed joints for durability and stability. Standard dimensions can be around 9"×6"×8".	Bath: Often made of Perspex (acrylic) with leak-proof dovetailed joints for durability and stability. Standard dimensions.
	•Temperature Control: Includes a thermostatic system (often with a thermostat and heater) to maintain a consistent temperature, typically around 38°C±1°C. Some systems offer fine temperature control.	No Change
	•Stirring System: A mechanical stirrer ensures even distribution of temperature and solution within the bath	Stirring System: Pump controller and diffuser set to ensure uniform temp maintenance across the bath.
	•Tissue Holder: A hook or holder to securely place and suspend the isolated tissue within the bath chamber	No Change
	•Accessories: May include a frontal writing lever, organ tube, aeration tube, stirrers, and stainless steel capillary levers.	No Change
	•Electrical Components: May include a junction box for electrical connections, pilot lamps to indicate thermostat and stirrer function, and a USB interface for data transfer.	No Change
	•Stimulation: Some organ baths are equipped with built-in stimulators for applying electric or chemical stimuli to the tissue	Stimulation: Organ baths with built-in software-controlled stimulators for applying electric or chemical stimuli to the tissue.
	•Data Acquisition: Features may include a TFT monitor for displaying data, data storage capabilities, and software for reviewing and printing data. Common Uses: oStudying the effects of drugs on smooth muscle contractions.oInvestigation nerve-muscle interactions.oAnalyzing the contractile properties of different tissues, such as ileum, colon, vas deferens, and trachea	Data Acquisition:Features may include a TFT/LED monitor 21 Inch for displaying data, data storage capabilities, and software for reviewing and printing data.
	Features:-	

	•Isolated Tissue Chamber•Temperature Control•Stirring Mechanism•Solution Delivery System•Durability and Quality construction	Features: -Isolated Tissue Chamber· Temperature Control· Stirring Mechanism· Solution Delivery System· Durability and Quality construction· Dose response· Water filling and drain facility from chamberwithout exposing tissue in the air.Isolated Tissue Chamber size 25 and 50mlinterchangeable. Micro-manipulatorIsometric Transducer (0-50gms)Isotonic Transducer. ISO 9001/ISO13485/GMP/OHSAS 18001:2007/BIFMA certified Co
16	Harvard step test	No Change
	• Step/Platform:	No Change
	• Height: inches (50.8 cm) for men, 16 inches (40 cm) for women	No Change
	• Material: A sturdy, stable platform or bench is required. The material should be able to withstand repeated steps and be non-slip	No Change
	• Shape: Rectangular or square shape is typical for ease of stepping. Stopwatch: A reliable stopwatch is needed to measure time and pulse rates during and after the test.	No Change
	Metronome or Cadence Tape: This is used to maintain the specified stepping rate of 30 steps per minute. A metronome can be a physical device or a digital app on a smartphone.	No Change
	Pulse Measurement Device: A way to accurately measure the heart rate, such as a wrist-mounted pulse monitor, is required. Additional Considerations:	No Change
	• Safety: Ensure the step/Platform is stable and secure to prevent accidents during the test	No Change
	• Instructional Materials: Consider including a printed guide or video explaining the test procedure to the user	No Change
	• Optional Accessories: Some may include a chair for the participant to sit on after the test or a measuring tape for accurate step height measurement.	No Change
	Additional Points	ISO 9001/ISO13485/GMP/OHSAS 18001:2007/BIFMA certified Co