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Corrigendum-III

Bihar Medical Services and Infrastructure Corporation Limited (BMSICL) had invited E-Bids from the interested parties for the procurement, rate contract and the supply of medical equipment for different Govt. Institutions of Bihar vide Notice Inviting Re-tender No.- BMSICL/2024-25/ME-330. During and after 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, who after due deliberation recommended certain amendments in the technical specification of the equipment, which are annexed as Annexure-I and Annexure-II of this corrigendum. In order to facilitate maximum participation of bidders the tender schedule is being revised as follows:-

Tender Reference No.	BMSICL/2024-25/ME-330
Last date and time of submission of online bids	20th August 2024 till 17:00 Hrs.
Last date and time of submission of original documents of EMD, Tender Fee and Document	21st August 2024 till 14:00 Hrs.
Date, Time and Place of opening of Technical Bid	21st August 2024 (at 15:00 Hrs.) on the website of https://eproc2.bihar.gov.in in the office of BMSICL
Date and time of opening of financial Bids	To be announced later on https://eproc2.bihar.gov.in

Note:-

- 1. Bidders are advised to refer to the Annexure-I and Annexure-II 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 Equipment :- Heamatology Analyzer (3 Part)		
Sl. No	Technical Specification as per tender	Final Amendment
1	Should be fully automated three part haematology Analyzer providing 20 parameters including a 3- part differential	Should be fully automated three part hematology Analyzer providing 20 parameters: WBC, Lymph#, Mid#, Gran#, Lymph%, Mid%, Gran%, RBC, HGB, MCV, MCH, MCHC, RDW-CV/RDW-SD, HCT, PLT, MPV, PDW, PCT, P-LCR, P-LCC. including 3 color histograms for WBC, RBC, PLT
2	The system should give a differential count as Lymphocytes, mid population and Granulocytes.	No Change
3	System should be capable of processing samples at 60 -70 samples/hour & storage memory result capacity 10000.	No Change
4	The system should be based on “closed, maintenance free Sample Rotary Valve (SRV) / Needle for precise sample all quoting for dilution.	No Change
5	System should have auto Probe wiper to clean the sample probe automatically after sample aspiration and with pre dilution mode.	No Change
6	The system should use non cyanide based reagents for Hb estimation.	No Change
7	System for the reliability of the results should have "electrical Impedance" method of cell counting with an integrated temperature sensor for monitoring and compensating for shift in room temperature.	System for the reliability of the results should have "electrical Impedance" method. Cell counting with an integrated temperature sensor for monitoring and compensating for shift in room temperature is optional
8	The system should use to proven and approved "Volumetric & time Metering" of cell counting, for WBCRBC and PLT for high precision of the results and stability of the calibration with close measuring chamber.	No Change
9	The system should have a system of count and aperture monitoring every 30 sec or before each aspiration of sample for precision and reliability of counts.	Deleted
10	The system should have automatic floating discriminator of RBC /PLT.	No Change
11	The system should have Open mode as well as pre diluted mode of sample aspiration.	No Change
12	The system should use high Intensity LED for HB estimation.	No Change

13	All reagents required should be available locally from the company or its authorized	No Change
14	System should be user friendly with color touch screen and should option for external printer as well as data inter facing	No Change
15	System should be US FDA approved and European CE certified.	System should be US FDA approved / European CE certified (issued by notified body)/CE-IVD (Notified Body)/BIS
16	Price Evaluation will be done as per annexure-II	No Change
17	Reagent Consumption chart for 10 test per day (including two times ON/OFF) should be provided.	No Change
18	Should be provided with UPS for at least 60 min.	No Change
19	Should be provided with control	No Change
20	AMC/CMC of machine for 10 years	Deleted
21	Blood mixer should be provided separately	No Change
22	Bar code for sample should be provided	No Change
23	Proper demonstration of machine should be provided before installations	No Change
24	Proper training of machine should be provided to lab technician & Doctors	No Change
25	Complementary Supply of reagents for first 5000 (Five Thousand) test free of cost	No Change
26	Should be provided with permanent printing facility (Not on thermo graph Paper) Printing facility should be covered in warranty.	No Change
Name of Equipment :-Biochemistry analyser (Semi automated Bio-Chemistry Analyser)		
Sl. No	Technical Specification as per tender	Final Amendment
1	Should be microprocessor controlled general purpose bi-chromatic photometer system with at least 6 filters/grating system ranging from 340 to 630nm.	No Change
2	Temperature 37 self-monitoring built-in incubation systems for temperature controlled absorbance reading.	No Change
3	Light source: Tungsten/ halogen or higher grade with 2 (two) additional bulb.	No Change
4	Should have end point, kinetic and two point kinetic measurement modes.	No Change
5	Should have flow cell measuring device having capability of measuring with 500 µl or less volume of reaction mixture.	No Change
6	Should have inbuilt printer.	No Change
7	Should have a measurement range from 0.001 to 2.500Abs or more	No Change
8	Should have facility for reading results on LCD display.	No Change
9	The system should have good repeatability and precision	No Change
10	Should have quality control – two control/test QC survey of at least 30 points, Levy Jenny plot	No Change
11	Should have a filter half bandwidth of 10nm or lesser.	No Change
12	Should have a test programme memory of 50 or more.	No Change

13	Should be provided with sample carry over prevention facility.	No Change
14	Should be supplied with 1 variable (10-100µl) and one fixed volume 500µl pipettes.	No Change
15	Aspiration should be based on Bellow/Peristaltic Pump/ Vacuum pump.	No Change
16	Should provide 500 ml of reagents with calibrators for urea, Serum creatinine, Serum bilirubin, Plasma Glucose, Cholesterol, and Quality control 5ml one each for normal and abnormal for installation and demonstration. Should be supplied as and when required by users.	Should provide 500 ml of reagents with calibrators for urea, Serum creatinine, Serum bilirubin, Plasma Glucose, Cholesterol separately and Quality control 5ml one each for normal and abnormal for installation and demonstration.
17	Should submit cost per ml of all reagents and consumables	No Change
18	Should be supplied with online pure sine wave UPS of sufficient capacity for a minimum back of 30 minutes.	No Change
19	Should be provided with calibration certificate issued by the manufacturer at the time of installation and calibration certificate should be issued for the machine by the supplier during preventive maintenance visit in the warranty/AMC period if demanded by the end user.	No Change
20	US FDA (510K) / European CE (Issued from notified Body) Approved model should be offered	No Change

Name of Equipment :- Centrifuge Machine (16 tube)		
SI. No	Technical Specification as per tender	Final Amendment
1	Should have a maximum speed of 3000 RPM with steeples regulator	Should have a speed of 3000 or more RPM with steeples regulator
2	Should be supplied with safety lid and lock. (Brushless Motor)	No Change
3	Should have digital speedometer and timer.	No Change
4	Should have imbalance detector and automatic cut off.	No Change
5	Should work on a220VAC +/- 10 %, 50Hz AC Supply.	No Change
6	US FDA (510K) / European CE(Issued from notified Body Approved model should be offered	US FDA (510K) / European CE (Issued from notified Body/ISO:13485 NABCB Approved model should be offered

Name of Equipment :-Electrolyte Analyzer		
SI. No	Technical Specification as per tender	Final Amendment
1	Should be able to measure sodium potassium, ionized calcium & chloride	Should be able to measure sodium potassium, chloride it should be up gradable to measure ionized calcium

2	Should have a measuring method of Ion Selective Electrode (ISE).	No Change
3	Should be able to measure sodium and potassium in serum and body fluids.	Should be able to measure sodium and potassium in whole blood and serum.
4	Should have a throughput of minimum 60 samples per hour	Should have ability to analyse 30 or above samples per hour.
5	Should have electrode for sodium, potassium, ionized calcium and chloride in case of electrode based technology	No Change
6	Resolution should be at least 0.1mmol/litre for each parameter	No Change
7	Should have automatic calibration, 1 and 2 point calibration, 2 point time bound (4th hour) calibration	No Change
8	Should have QC memory storage of at least 2	No Change
9	Stand-by mode user controlled and automatic	No Change
10	Should have a measuring range for sodium 40 to 200 mmol/l, potassium 1.5 to 10 mmol/l	No Change
11	It should require 120 micro liter or lesser for whole blood serum	No Change
12	Should have printing facility	No Change
13	Should supply reagent pack for 1000 tests, one internal filing solution of 15 ml, two cleaning solution of 125 ml, 100mldeprotenizer and one quality control of 10 ml (5ml each) at the time of installation.	No Change
14	Should have an alpha numeric display/ LCD display.	No Change
15	Should have a minimum memory capacity of at least 100 samples.	No Change
16	Should work on 200-240Vac 50Hz power supply.	No Change
17	Should be supplied with online pure sine wave UPS of sufficient capacity for a minimum back up of 30 minutes	No Change
18	Should be provided with calibration certificate issued by the manufacturer at the time of installation and calibration certificate should be issued for the machine by the supplier during preventive maintenance visit in the warranty/AMC period /CMC period	No Change
19	US FDA (510 K) /European CE (Issued by Notified body) Approved model should be offered.	No Change
	Additional Point	The amount and rate of various reagents required to perform 1000test /month shall be quoted separately and this rate will be taken for evaluation (L1 Calculation)
		The available pack size and amount /pack (in ml) of these reagents available for each bidder shall be quoted. This rate shall be fixed for 5+2 years(extendable for further 2 years with mutual consent of

		BMSICL and firm depending upon the performance of the supplied machine) from the date of Agreement.
		All electrodes, tubing set and membrane assembly will be covered in warranty and CAMC. The rate of each type of electrode shall be quoted separately and this rate will be fixed for 5+2 years(extendable for further 2 years with mutual consent of BMSICL and firm depending upon the performance of the supplied machine) if required to be procured in case of idling machines.
		L1 Will be calculated Cost of 1000 Test/Month for 3 Years + Each type of electrode (Sodium, Potassium, Chloride, & Calcium, Reference Electrode Etc.) + Machine Cost.

Name of Equipment :-ESR Analyzer		
SI. No	Technical Specification as per tender	Final Amendment
	Technical Specification	
1	Microprocessor Controlled ESR analyzer	No Change
2	Loading Capacity – Min 20 samples and random/ batch / Continuous loading	No Change
3	Analysis in less than or equal to 30 min	No Change
4	Sample loading by using vacuum tubes/ any other user friendly methods. Minimum 100 no's of vacuum tube or any other items such as machine specific tubes/ consumables for 100 no's of samples should be supplied free of cost along with the machine.	No Change
5	Results in mm/hr.	No Change
6	Measurement by infrared detection/sedimentation kinetics/ Optical sensor/ kinetic aggregation	No Change
7	LCD display	No Change
8	Result should correlate with Westergren reference method.	No Change
9	US FDA (510 K) /European CE (Issued by Notified body) Approved model should be offered.	US FDA (510 K) /European CE (Issued by Notified body)/BIS Approved model should be offered.
	Additional Point	L1 Calculation The rate of 50000 test including all

		consumables (vacuum tube or any other items such as machine specific tubes/ consumables) should be quoted separately in the BOQ which will be taken for evaluation. For evaluation purpose cost of 50,000 nos. of tests are considered. Any other items required for running the test/ machine along with daily maintenance which is not quoted in the BOQ shall be supplied free of cost as required. The rate will be fixed for 5+2 years (extendable for further 2 years with mutual consent of BMSICL and firm depending upon the performance of the supplied machine) from the date of agreement.
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Name of Equipment :-Semiautomatic Coagulation Analyzer		
Sl. No	Technical Specification as per tender	Final Amendment
1	The equipment should be capable of analyzing PT and a PTT.	No Change
2	Should be an open system with provision to use 3rd party reagents	No Change
3	The cost/ test for PT&APTT should be quoted by the bidder. For the L1 calculation, the total cost of 1000 tests will also be taken and the calculation will automatically be done by the BOQ.	The cost/ test for PT&APTT should be quoted by the bidder. For the L1 calculation, the total cost of 1000 tests (Each) will also be taken and the calculation will automatically be done by the BOQ.
4	Should use optical/mechanical detection principle and there should not be any interference from lipemic /icteric /hemolytic samples.	No Change
5	Should handle stat samples.	Deleted
6	The system should be complete with all incubation steps inbuilt.	No Change
7	Should have automatic INR calculation.	No Change
8	Should quote available reagent pack sizes and rates for each parameter separately.	No Change
9	The bidder shall provide the quantity of reagents required to perform one test and also the reagent requirement as per the format in the offer form. The standard pack should also mention in the offer form. The price bid will not be	This point is to be incorporated in financial bid sheet

	considered for evaluation if any discrepancy in the quantity mentioned in the offer form and price bid. One standard pack of reagents shall be provided along with equipment by the L1 bidder.	
10	US FDA (510 K) /European CE (Issued by Notified body) Approved model should be offered.	US FDA (510 K) /European CE (Issued by Notified body) /BIS Approved model should be offered.
11	Should be semi-automated 4 channel	No Change
12	Should be supplied with inbuilt/external printer with necessary accessories	No Change
13	Should have result storing facility	No Change
14	Manufacturer prescribed calibrator matching with international standards shall be provided along with reagent	No Change
15	Should quote available consumable pack sizes and rates for consumables (Cuvette, Ball vials, and CaCl ₂) separately	No Change
16	Should also supply pipettes-50/100microlitre along with the machine	No Change

Name of Equipment: Vertical Autoclave -Portable		
Sl. No	Technical Specification as per tender	Final Amendment
1	Chamber volume should be approximately 300mm diameter and 500mm depth.	Chamber volume / capacity should be 50 L or more
2	Should have stainless steel construction	No Change
3	Should have pressure gauges for measuring chamber pressure.	No Change
4	Should have safety valve and weight valve.	No Change
5	Should have 121°C working temperature at 15 psi pressure.	No Change
6	Should be operated in mains 220 – 240 V ac 50 Hz input power supply	No Change
7	Should have safety certificate ISO 13485 (NABCB)/BIS	Should have safety certificate EUCE issued by notified body/ISO 13485 (NABCB)/BIS
Added Point		double walled
		digital Temperature controller
		Temperature controller with Timer
		Steam purging Automatic/ manual

Name of Equipment :-Mechanical Shaker/Rotar		
Sl. No	Technical Specification as per tender	Final Amendment
1	Mounting Bench Top	No Change
2	Controller Microprocessor	No Change
3	Type of motor Brushless DC	No Change
4	Speed range in RPM 50 to 400 (Stepless speed control)	Speed range in RPM 50 to 250 (Stepless speed control)

5	Shaking amplitude in mm 10	Shaking amplitude should be 10 – 25 mm.
6	Material of body MS with powder coating	No Change
7	Display LCD / LED	Display LCD / LED / Digital.
8	Parameters displayed Speed with preset facility	No Change
9	Timer range in minutes 99	No Change
10	Maximum volume in liters 2 liters	volume in liters 2 liters or more
11	Should have Universal platform with adjustable rollers and surface to accommodate clamps of assorted sizes/capacities for holding conical flasks up to maximum 500 ml flask size	No Change
12	Should have Compact counter balance drive mechanism to ensure stability.	No Change
13	Should have Auto restart facility after power resumption and auto-stop facility with visual indication in case of Motor over load.	No Change
14	Power supply 230V +/- 10, Single Phase, 50/60 Hz AC supply	No Change
15	Certification: EU CE/US FDA/ ISO 13485 (NABCB) approved	Certification: EU CE/US FDA/ ISO 13485 (NABCB) approved

Name of Equipment :-RH View Box		
SI. No	Technical Specification as per tender	Final Amendment
1	Suitable for viewing RH Slides	No Change
2	Should have glare free light provide uniform illumination of slide contents	No Change
3	Should have temperature control	No Change
4	Should work in 220 V- 240V 50Hz supply.	No Change
5	Should have ISO 13485 NABCB Accredited.	No Change

Name of Equipment :-LAMINAR AIR - FLOW BENCH		
SI. No	Technical Specification as per tender	Final Amendment
1	The Laminar Airflow UV Chamber when switched on, the blower unit should create a suction pressure through the primary filter (or Pre-filter), which removes dust particles of above 10- micron size in the first stage. Subsequently, the filtered air passed to the HEPA filters, where the particles or substances of 0.3 micron size and above are removed. Finally, the ultra-clean filtered air supplied to the working chamber as a uniform airflow to perform precision analysis activities.	No Change
2	The system should have:	No Change
a)	Laminar Air Flow Cabinet should have fully enclosed bench design.	No Change
b)	The Laminar flow bench should have Stainless Steel SS 304 table with MS coated tabular.	No Change

c)	The frame and body should be made of CRCA sheet metal construction with powder coated finish.	No Change
d)	Laminar flow unit should also have stand by control system with lock and key.	No Change
3	The unit should have:	No Change
a)	Should have LCD display to show measured parameters like exhaust air flow, flow velocity, cabinet temperature, UV/FL elapsed hour timer (Non resettable), UV/FL lamp on/off, HEPA filter life span (Non resettable).	No Change
b)	Unit should have Differential pressure indicator	No Change
4	The system should have CLASS 100 (ISO 5 for particle sizes $0.5\mu < 3530$ particles/M ³ of air at both at Rest & Operation Condition as per ISO 14644 –1.	No Change
5	Working area Minimum 4 ft (W)x 2 ft (D) x 3ft (H)	Working area Minimum 4 ft (W)x 2 ft (D) x 2ft (H)
6	Work table	No Change
a)	It should have SS 304 grade Stainless Steel with finish 4 polish surface front door.	No Change
b)	5 mm thick clear Acrylic Sheet - Vertical sliding	No Change
7	Floor standing Base stand Have leveling feet or locking casters or motorized height adjustment.	No Change
8	Direction of flow Horizontal airflow.	No Change
9	Airflow Speed Filter face Velocity should have 100 Feet/Minute ± 20 (0.45 to 0.65 m/s)	No Change
10	Blower Assembly It should have one set blower system which consists of dynamically & statically balanced aluminium centrifugal impeller driven by 1/4 HP, single phase, 1200 to 1400 RPM motor, enclosed in an PU coated GI casing suitably suspended in a pair springs & connected to the filter chamber through flexible canvas duct. The Blower motor should be dynamically balanced, with low noise & vibration.	No Change
11	HEPA Filters The filters should have	No Change
a)	Size: 30" x 18" x 3"	Size: 48" x 24" x 3"
b)	Type: Separator less type, Mini-Pleats HEPA	No Change
c)	Media: Ultra clean glass fiber paper	No Change
d)	Initial Pressure: 16 mm WG	No Change
e)	Grade: H13 rating	No Change
f)	Filter class: H14 according to EN 1822:2009	No Change
g)	Retention: 0.3 Micron Efficiency: 99.997% or better (TEST Report from NABL accredited lab should be submitted)	No Change
12)	Pre-Filters	No Change
a)	Size: 600 x 300 x 65 mm	No Change
b)	Media: Synthetic, non-woven polyester	No Change
c)	Casing: Epoxy painted GI frame	No Change
d)	Retention: 10 Micron & above	No Change
e)	Efficiency: 90%	No Change
f)	Initial Pressure: 6 mm WG	No Change

g)	Grade: F7 rating	deleted
13)	Particle Retention 0.3 Micron	No Change
14)	Visual & audio alarm For low exhaust flow, exhaust fan malfunctioning.	No Change
15)	Noise level < 60 dBA±5	No Change
16)	Power Supply	No Change
a)	Power supply should be 220-230 V, 50 Hz.	No Change
b)	All components should be UL listed or CE marked c) Should be supplied with suitable voltage corrector/stabilizer.	Should be supplied with suitable voltage corrector/stabilizer.
17)	Illumination Externally mounted illuminating lamp with separate switch to illuminate the work area.	No Change
18)	Light	No Change
a)	High intensity, low wattage >800 lux.	No Change
b)	It should be 15 Watts, 1½ Feet length– 1 No. each	No Change
19)	Should have USFDA/ European CE (Issued by Notified Body) / BIS Approved	Should have USFDA/ European CE (Issued by Notified Body) / BIS/ISO13485 Approved.
20)	UV lamp pre-mounted germicidal UV lamp (30 W) with separate switch with UV light hours run indicator.	No Change
20)	Other accessories	No Change
a)	Two gas outlets in the working area, one on each side wall Leveling Screws & Castor Wheels	No Change
b)	PAO (Poly Alpha Olefin) test port Easily changeable pre- filters	No Change
c)	Fitted with UV Germicidal lamp for sterilization.	No Change
d)	Pre-installed pressure gauge for Measurement of HEPA Filters Choking system.	No Change
e)	Ensure noiseless operation and anti-vibration construction provides efficient working environment.	No Change
f)	Audible or highly visual alarm for filter replacement warning.	No Change
21)	Electrical sockets or Pass Through Ports a) Side mounted switches for minimum three (15/5 amp) electrical sockets for ancillary equipment operation or b) Convenient rear- wall pass through ports for safe routing of instrument cords, cables and leads for 15/5 amps multiple c) Socket with switches on the wall.	No Change
22)	Standards Compliance Performance specifications and construction must meet or exceed OSHA, ANSI and relevant international standards to assure operator safety.	Deleted
23)	Certification required for sign off	Deleted
a)	Test Certificate for Mini-Pleat HEPA Filters	Deleted
b)	Calibration Certificate for Pressure Gauge	Deleted
c)	Calibration Certificate for Air Velocity Anemometer	Deleted
24)	Spares	Deleted
a)	Spare compatible UV lamp: 2 Nos.	Deleted
b)	A spare HEPA filter for chamber: 1 No	Deleted

Name of Equipment :-PH Meter		
Sl. No	Technical Specification as per tender	Final Amendment
1	Should have up to 5 point calibration with auto-buffer recognition	No Change
2	Should be Quick, easy electrode diagnosis with multiple pH slopes and offset display.	No Change
3	Should have Non-volatile memory holds up to 500 data points – time and date – stamped for GLP compliance	No Change
4	Should calibrate with up to 5 custom pH buffers – use any pH values that are ?1.0 pH unit apart	No Change
5	Should have Cal-due alarm – no more out – dated calibrations	No Change
6	Should have auto-logging function for convenient continuous monitoring.	No Change
7	Should have password protection for setup and calibration	No Change
8	Should have pH Range up to 14 pH	No Change
9	Should have Resolution / Accuracy of 0.1 mV; ± 0.2 mV.	No Change
10	Should have Temp. Range from 0.0 to 1000 C / 32.0 to 212.00 F	No Change
11	Should have ATC Probe	No Change
12	Should have buffer sets each 20ml for all 5 point calibrations. NIST traceable buffer sets shall be provided along with individual certificate	No Change
13	Should have power requirements of 230v, 50HZ ac supply	No Change
14	Should have output RS - 232C (via cable)	No Change
15	Should have European CE (issued by a notified body)/ USFDA / BIS	Should have European CE (issued by a notified body)/ USFDA / BIS /ISO 13485 certificate

Name of Equipment :-Double Pan Balance Electronics		
Sl. No	Technical Specification as per tender	Final Amendment
1	Should be two pan balance.	No Change
2	Should have digital display of weight and other parameters.	No Change
3	Accuracy ± 2 grams.	No Change
4	Should have two independent weight sensors, which display individual weight of each bucket with accuracy.	No Change
5	It should have individual display monitor to display the weight of each bucket with blood bags.	No Change
6	Visual or audio alarm should get on as soon as the two plates get balanced.	No Change
7	Weight Measurement: Should be able to measure weight till 3 Kg.	No Change
8	Should be appropriate to weigh and balance blood holding baskets of standard size.	No Change
9	Weight to balance should not be more than 5 Kg.	No Change

10	Firm should also provide the relevant calibration certificate for the equipment from any NABL accredited Lab and perform annual NABL accredited calibration for the duration of warranty mandatory and AMC mandatory.	No Change
	Added Point	USFDA/EUCE Issued by Notified Body/ISO13845 certification required.

Name of Equipment :-FLAME PHOTOMETER		
SI. No	Technical Specification as per tender	Final Amendment
1	Microprocessor Control with Filters, Na, K, Li, Ca,-Double display Filters-Narrow band-pass interference filters for sodium, Potassium, Calcium and Lithium available.	No Change
2	Power supply – 220 V $\pm$ 10 V 50 Hz	No Change
3	Display- large, Bright Seven Segment LED /LCD Panel meter to display 0-100 scale with negative and over range indication.	No Change
4	Compressor- with built in regulator and Air Filter to deliver stable and moisture/oil free air supplier.	No Change
5	Ignition System- Auto ignition.	Ignition system – Auto/manual ignition.
6	Atomiser- Non-corroding, easily accessible and can be cleaned without putting out the flame.	No Change
7	Sample Take up rate- 5ml/min approximately.	Sample take up rate – 5 - 6 ml / min approximately.
8	Should have ISO 13485 (NABCB Accredited)	No Changes

Name of Equipment :-CHEMICAL BALANCE		
SI. No	Technical Specification as per tender	Final Amendment
1	Analytical with weight box.	No Change
2	Best quality with divided doors shows case, capacity 250 gms.	No Change
3	Sensitivity 1-2 mgm having all stone agates fitted in open graduated beam	No Change
4	Should have ISO 13485 (NABCB Accredited)	No Change

Name of Equipment :-MULTICHANNEL PIPETTE - VARIOUS TYPES		
SI. No	Technical Specification as per tender	Final Amendment
1	Spring Loaded Tip Cone for connecting tips very tightly	Spring Loaded/Universal Tip Cone for connecting tips very tightly.
2	Adjustment opening for adjusting pipettes to a specific liquid and volume.	Adjustment opening for adjusting pipettes to a specific liquid and volume. (Optional)
3	Control Button with very low operating force, Color indication for pipette volume.	No Change

4	Tip ejector with very low operating force, positioned for perfect ergonomics.	No Change
5	Volume Display: 4 Digits with magnifier.	It should be 3/4 digit. (as it depends upon the volume ranges)
6	Perfect Piston System made out of Fortron or similar material.	Perfect Piston System made out of Fortron /Stainless Steel or similar material.
7	Very easy removable lower part for cleaning pipette	No Change
8	Fully Autoclavable	No Change
9	No discoloration upon UV irradiation	Deleted
10	Channel indicator to use pipette the same way round	Channel indicator to use pipette the same way round (optional)
11	Channel can be removed for adjusting the distance between channels to use it in different format	Channel can be removed for adjusting the distance between channels to use it in different format (Optional)
12	Volume range 0.5 – 10 uL, 5 – 10 uL, 2-20 uL, 10 – 100 uL, 10 – 200 uL, 20-200 uL, 30– 300 uL, 100-1000 uL, 50 uL, 100 uL, 200 uL, 1000 uL	Volume range 0.5 – 10 uL, 10 – 100 uL, 20-200 uL, 30– 300 uL, 50 uL, 100 uL, 200 uL, 500ul,1000 uL
13	All accessories needed to make the equipment functional, must be supplied	No Change
14	USFDA/European CE (Issued by Notified body) approved model should be offered	USFDA/European CE (Issued by Notified body)/BIS approved model should be offered
	Note: L1 shall be declared individually for each volume and separate orders shall be issued as per the need	1. The bidder must Quote rates against all required pipette in the price bid individually all pipette rates are not quoted then bidder will be considered as disqualified. 2. L1 shall be declared upon summation of rates for all 09 types of pipette together. 3. Separate orders shall be issued as per the need

Name of Equipment :-High Performance Liquid Chromatography (HPLC) Machine		
SI. No	Technical Specification as per tender	Final Amendment
1	Automated, Integrated system, dedicated to HbA1c. Thalassemia and hemoglobinopathy testing and screening based on HPLC technology.	No Change
2	The system should be able to screen and quantitate hemoglobin's Hb A2, Hb A, Hb F and Hb A 1c and detect the most commonly occurring abnormal hemoglobin's like Hb s, Hb D, Hb E, Hb C, Hb Q-India and other rare abnormal hemoglobin's.	The system should be able to screen and quantitate hemoglobin's Hb A2, Hb A, Hb F and Hb A 1c and detect the most commonly occurring abnormal hemoglobin's like Hb s, Hb D, Hb E, Hb C and other rare abnormal hemoglobin's.

3	Complete ready to use reagent format should be provided with buffers in plastic tanks/aluminum tank/pouches with a facility to view and show the number of different reagents	No Change
4	It should have a faster throughput of 7 or higher operating system	No Change
5	It should have facility for data feeding.	It should have facility for data feeding, The system should be a fully automated system
6	It should have chromatogram library with fully classified abnormal hemoglobin and thalassemia majorly prevailing in India and across the world.	No Change
7	The system should have in-kit external standards for instrument calibration ensuring accurate quantitation of results.	No Change
8	The HPLC System should have an automated buffer delivery system that ensures a continuous and precise buffer gradient at High Pressure.	No Change
9	The system should have a bi-directional LIS	The system should have a Uni/bi-directional LIS
10	The system should have a feature of rack & sample position identification to avoid error in case of bad/fault barcode reading.	No Change
11	The system should have a visible alarm system for low buffer in the mobile phase reservoirs, low level value for cartridge injections and overflow for the waste tank, as well as built in alarms for calibration failure.	No Change
12	The system should be capable of positive sample identification using a Barcode reader.	No Change
13	The system should have the facility of primary tube sampling and direct dilution of the samples without manual intervention.	No Change
14	It should have an inbuilt system check facility which checks that all the system parameters (etc., cartridge, Buffer, reagent, waste etc.) are ready before the sample analysis.	No Change
15	The system should have mode to perform HbA1c or HbA2/HbF without changing any reagents or columns	No Change
16	The system should not require changing of reagents while switching from HbA1c to HbA2/Hb F/Hba1c testing mode.	No Change
17	The system should be able to detect correct A1c values in presence of abnormal hemoglobin variants like HbD, HbE, HbS & HbC.	No Change
18	Assay time should not be more than 3 minutes for HbA1c testing and 6.5 minutes for A2/F testing	Assay time should not be more than 4 minutes for HbA1c testing and 8 minutes for A2/F testing
19	The system should be NGSP (National Glycohemoglobin Standardization program) Certified and traceable to IFCC reference method.	No Change

20	The system should offer both NGSP & IFCC value reporting on the same patient report, control & calibrator report.	No Change
21	It should be able to print a hard copy report giving identification and information on the subtype and quantity of hemoglobin's detected. It should have the facility to view current and stored chromatograms & should enable storage of chromatograms.	No Change
22	It should have sufficient data hard disk of approx. 80 GB hard drive and a remote access feature when connected to LAN or intranet or RS-232	No Change
23	The company should be able to provide normal and abnormal controls for HbA2 and HbF. Optional controls for HbS can be supplied. The company should facilitate Quality control program to help compare results with similar users worldwide.	The company should be able to provide normal and abnormal controls for HbA2 and HbF. Optional controls for HbS should be supplied. The company should facilitate Quality control program to help compare results with similar users worldwide.
24	The company should facilitate External Quality Assurance Service (EQAS/CAP etc.) for haemoglobin variants.	No Change
25	The system should have software for real time viewing of the analysis of the sample.	No Change
26	The system should be USFDA/European CE issued by notified body.	No Change
27	The company should have offline library of chromatograms for result interpretation.	No Change
28	The system should have optional feature to load at least 50 samples simultaneously with continuous loading facility	The system should have features to Load minimum 10 samples with continuous loading facility.
29	The company should have option feature of capillary collection kit for remote sample collection with sample stability at 2-8 C for 14 days.	The system should have feature to load at least 10 or more samples simultaneously with continuous loading facility

30	To be provided as a startup kit/ Reagent free of cost at the time of installation - 400 kit for HbA1C, 100 Kit for Hb F and 200 kit for HbA2 /reagents and other Reagents (Cleaner/Washer/Diluent /Kits /Calibrator, QCs (Positive control and Negative control required daily) /Tips required /Any other accessory required for the above parameters, to be provided free of cost	To be provided as a startup kit/ Reagent free of cost at the time of installation - 400 test for HbA1C, 100 test for Hb F and 200 test for HbA2 /reagents and other Reagents (Cleaner/Washer/Diluent /Kits /Calibrator, QCs (Positive control and Negative control required daily) /Tips required /Any other accessory required for the above parameters, to be provided free of cost Note- Any reagent/calibrator/equipment specific, consumable, not quoted in the BOQ but required for performing any test shall be supplied free of cost as required by the end user at the time of installation.
31	Cost of above mentioned kit for HbA2/Hb F/Hba1c /reagents and other Reagents (Cleaner/Washer/Diluent /Kits /Calibrator, QCs (Positive control and Negative control required daily) /Tips required /Any other accessory required for the above parameters according to the mentioned number of tests must be quoted in Financial Bid and the rate will be frozen for 5 years . L-1 will be decided on considering unit price of the equipment and Cost of (8000 kit for HbA1C, 2000 Kit for Hb F and 4000 kit for HbA2) along with their all consumables to perform those tests.	Cost of above mentioned test for HbA2/Hb F/Hba1c /reagents and other Reagents (Cleaner/Washer/Diluent /Kits /Calibrator, QCs (Positive control and Negative control required daily) /Tips required /Any other accessory required for the above parameters according to the mentioned number of tests must be quoted in Financial Bid and the rate will be frozen for 5 years. L-1 will be decided on considering unit price of the equipment and Cost of test in 5 years (8000 test for HbA1C, 2000 test for Hb F and 4000 test for HbA2) along with their all consumables to perform these tests.

Name of Equipment :-Fully Automated Chemiluminescence Immunoassay		
SI. No	Technical Specification as per tender	Final Amendment
	Chemiluminescence Immunoassay System with capability to perform Thyroid Panel, Fertility Panel, Cardiac Markers, Bone-Markers, Tumor Marker with the following technical specifications.	No Change
1	The analyzer should have a minimum loading capability of 50 samples per load/batch as well as	No Change

	continuous sample and reagent loading & unloading capability	
2	The analyzer should have capability to accommodate tubes of various sizes	No Change
3	System must be able to process Samples types: Serum, Plasma and Urine	No Change
4	The analyzer should have automatic sample dilution ranging from 1:2 to 1:40	Deleted
5	The analyzer should have Clot detection capability	No Change
6	The analyzer should have sample probe with liquid level detection	No Change
7	The analyzer should have a through-put of minimum 150 tests/hour	The analyzer should have a through-put of minimum 50 tests/hour or more.
8	The analyzer should have at least 15 reagent positions.	The analyzer should have 15 or above reagent position.
9	The analyzer should have onboard refrigeration at 2-8 deg C	No Change
10	Analyser must have facility of auto calibration and history of calibration should be available in graphical representation.	Analyser must have facility of calibration and history of calibration should be available in graphical representation.
11	The analyzer should have reagent level detection	No Change
12	Reagent packs should have bar code identification, automatic tracking and notification of inventory calibration and control validity, on board stability, low and expiry reagents.	No Change
13	The reagent on- board stability of reagent should be a minimum of 28 days for all parameters	No Change
14	The analyzer should have STAT capability for prioritized sample request	No Change
15	Analyser should have in built QC programmes - Westgard rules, Twin plot LJ graphs, Auto QC, CV%. QC history should be available.	No Change
16	Analyser should be directly connected to the drainage system for waste disposal.	Analyser should be directly connected to the waste container/drainage system for waste disposal.
17	The system should have facility for storage and retrieval of at least 10,000 patient samples	The system should have facility for storage and retrieval of 5000 patient samples or above.
18	System should have the capability of bi- directional interfacing with hospital information system. In case of any software or application is required for the same shall be provided free of cost.	No Change
19	Analyser and reagents should be US FDA or European CE (Issued by Notified body) approved.	No Change
20	The analyser should be supplied with all necessary hardware including computer system and printer, and	No Change

	software for performance of all available test parameters.	
21	All Consumables required for installation and standardization to be given free of cost	No Change
22	All available tests in the system should be quoted in the price bid should be given for all available pack sizes.	No Change
23	List of all reagents, cleaning solutions, buffers, calibrators, consumables and any other item required for the routine maintenance and running of the machine should be provided along with available pack sizes. Frequency of usage of each component to be provided.	No Change
24	Order will be placed only for the required test kits. All accessory reagents, consumables and calibrators required for running the ordered parameters should be given free of cost. The cost of the same should be included in the reagent cost.	No Change
25	Calibration and validation of the equipment will be done by the bidder free of cost during warranty and CMC period.	No Change
26	L1 shall be calculated based on the total ownership cost for 7 years calculated including the cost of the machine, CMC rates for 5 years and reagent cost of test parameters (T3, T4, TSH) at 500 tests per month for 7 years.	L1 shall be calculated based on the total ownership cost for 5 years calculated including the, unit cost of the machine + reagent cost of test parameters (T3, T4, TSH, vitamin D, vitamin B12) at 1000 tests (each) per month for 5 years + all types of consumables (cleaning solution, buffers, calibrators, cups tips, controls, etc.) for 1000 tests (each) per month for 5 years.
27	Parameters to be offered :-	No Change
1	Thyroid: FT3, FT4, T3, T4, TSH, Anti-TG, Anti-TPO, TG	No Change
2	Bone Metabolism: Intact PTH, Calcitonin, Vitamin D Total	No Change
3	Adrenal Function: DHEA-S, Cortisol, ACTH	No Change
4	Cardiac Panel: CK-MB, Myoglobin, Troponin-I, BNP	No Change
5	Fertility Panel: Total beta HCG, FSH, LH, Prolactin, E2, E3, Testosterone, Progesterone, AMH	No Change
6	Diabetes: Insulin, C-Peptide	No Change
7	Tumor Makers: CEA, AFP, CA-125, CA-15.3, CA-19.9, Free PSA, NSE, CYFRA 21.1, CA72.4	No Change
8	Anaemia: Ferritin, Vitamin B12, Folate, RBC- Folate	No Change
9	Inflammation: PCT	No Change
		The analyzer should be Random access

	Added Point	1. All consumables required for installation and commissioning to be given free of cost 2. All available test in the system should be quoted in the price bid and price should be given for all available pack size. 3. List of all reagent, cleaning solution, buffers, calibrators, consumables and any other item required for the routine maintenance and running of the machine should be provide along with available pack sizes 4.The Company must also supply reagents, consumables and calibrators required for conducting following numbers of test along with the equipment as startup kits:- T3-500,T4-500,TSH-600,Vitamin D-250,Vitamin B12-250, Anti-tpo-200. 5. All price should be freezed for 05 years Note:- 1. Flexibility to use direct primary tube sampling /different sizes of tubes/samples Cups, Microcups and Cups on tube 2. There Should be lot to lot and reagent pack calibration and no requirement of daily calibration stability for not less than 02 weeks. 3. To be supplied with other accessories viz vortex mixer, de-ionized/Ro water Plant (6Lt per Hr) etc. if required for performing test as per the menu. 4. To be supplied with an online UPS having battery Backup at Least One hour.
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Annexure-II

Revised Earnest Money Deposit (EMD) in Indian Rupees

Schedule No.	Brief Description of Goods and Services	Qty./ No.	Delivery Schedule (in days)	Revised Earnest Money Deposit (EMD) in Indian Rupees
1	Biochemistry analyser (Semi automated Bio-Chemistry Analyser)	31	As per GCC Clause -8	38,000
2	Centrifuge Machine (16 tube)	59		60,000
3	Electrolyte Analyzer	59		1,00,000
4	ESR Analyser	957		47,85,000
5	Vertical Autoclave – Portable	89		1,00,000