

Amendment No. 1

Sub: Amendment to the referred tender enquiry

Ref.: Tender Enquiry HITES/PCD/PRECLINICAL/RC-01/18-19 dated 14/09//2018

The following changes are being incorporated in the above referred Tender Enquiry Document.

**Section VII
Technical Specification**

**Schedule No. 05
Binocular Microscope (Rfx No. 300002957)**

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Pg 55 Para 2	Halogen / LED light source illumination.	LED light source illumination.
Para 11	Eye piece 10X (FOV 20)	Eye piece 10X (at least FOV 20)
Pg 56	Amended Para: Observation tube - should be Seidentopf type	Observation tube - Interpupillary Distance Adjustment range 52-75mm

**Schedule No. 06
Biosafety Cabinet (Rfx No. 300002958)**

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Pg 56 Para 2	Motor must automatically adjust the air flow speed to ensure continuous safe working condition. Air flow shall be as per requirements of Biosafety regulations in respect of at least BSC II A level cabinet.	Motor must automatically adjust the air flow speed to ensure continuous safe working condition. Air flow shall be as per requirements of Biosafety regulations in respect of at least BSC II A2 level cabinet.
Pg 56 Para 4	Dimensions (Cabinet Size): 4 to 6 feet. The interior of the cabinet shall be of stainless steel or equivalent material and must be smooth to ensure no risk of cuts to the users.	Dimensions (Cabinet Size): 6 feet. The interior of the cabinet shall be of stainless steel or equivalent, outer body powder coated steel material and must be smooth to ensure no risk of cuts to the users.
Pg 56 Para 5	Efficiency of HEPA filter should be almost 99%	Efficiency of HEPA filter should be 99% or better
Pg 56 Para 11	Should be FDA or CE or BIS approved product	Should be US FDA or European CE or BIS approved product. Should comply with NSF or EN 12469 standards.
Pg 56 Para 12	Movable stands	Stand on moveable castors with locking facility
Pg 56 Para 13	Warranty should cover UPS and batteries.	Para Deleted

**Schedule No. 07
Blood gas analyzer (Rfx No. 300002959)**

Tender Page No. & Para	TENDER SPECIFICATION	Read As
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Pg 56 Para 2	Essential Measured parameters; pH, pCO ₂ , pO ₂ , SaO ₂ , tHb, Barometric Pressure, Na ⁺ , K ⁺ , Ca ⁺⁺ , Cl ⁻ , Lactate, BUN & Glucose . All these parameters should be measured simultaneously.	Essential Measured parameters; pH, pCO ₂ , pO ₂ , SaO ₂ , tHb, Barometric Pressure, Na ⁺ , K ⁺ , Ca ⁺⁺ , Cl ⁻ , Lactate & Glucose. All these parameters should be measured simultaneously
Pg 57 Para 4	Sample volume less than 120ul	Sample volume less than 200ul
Pg 57 Para 5	Fast analysis time – less than 72 sec.	Fast analysis time – less than 120 sec.
Pg 57 Para 7	Fully automatic liquid calibration of all parameters at user-defined intervals without the use of Gas calibrated reagents, external gases, tanks or regulators.	Fully automatic liquid calibration of all parameters at user-defined intervals without the use of Gas calibrated reagents, external gas cylinders or regulators.
Pg 57 Para 9	Data display on well-illuminated, adequate size LCD colour touch screen display.	Data display on well-illuminated, adequate size LCD color touch screen display or LCD display with soft touch pad.
Pg 57 Para 11	Built in auto Quality control facility.	Built in Quality control facility.
Pg 57 Para 12	Reagents for one year @20 samples/day should be provided along with the machine.	Para Deleted
Pg 57 Para 13	Cost of reagents to be quoted for comparative evaluation	Cost of all consumables including electrodes, cartridges, calibrators, reagents, quality controls, printing paper etc. required for running the machine for 7 years (365days each year) @20 samples per day for all parameters should be quoted separately. Any consumable not mentioned here but required for running of the machine to be supplied free of cost for 7 years. Price of all consumables for 7 years period shall be considered for L1 ranking purpose. However order for consumables shall be placed as per the requirement of the individual Institute.
Pg 57 Para 16	Should be FDA or CE or BIS approved product	Should be USFDA or European CE with 4 digit certified body no. or BIS approved product

Schedule No. 12**CO₂ incubator (Rfx No. 3000002964)**

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Pg 59 Para 1	Inner total volume: 170 to 190 ltrs	Inner total volume: 160 to 190 ltrs
Pg 59 Para 2	Temperature range: +4oC above ambient to +50oC	Temperature range: 5°C above ambient to 50°C
Pg 60 Para 5	Thermal conductivity sensor or Infrared sensor with two year warranty	Infrared sensor. Sensor to be covered under warranty and CMC period
Pg 60 Para 11	Certified by ISO 9001, CE mark, UL listed CSA approved.	Should be European CE or USFDA or BIS certified

Schedule No. 13**Cryostat (Rfx No. 3000002965)**

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Pg 60 Para 1	Rotary Microtome facility with rotor brakes and blocks for safety	Rotary Microtome facility with locks/brakes for motor and blocks safety

Pg 60 Para 2	Knife: 3 1/4" (8cm)	Knife/ Disposable Blades : 3 1/4" (8cm)
Pg 60 Para 9	Internal cutting Temperature Range: -40°C to +10°C	Internal cutting Temperature Range: -35°C to +10°C
Pg 60 Para 10	Resolution: 1/2 amp (curr. readout) 0.1°C, digital display	Deleted
Pg 60 Para 11	Heat Removal: ½ liter/min. Tap water or circulating pump & tank unit	Deleted
Pg 60 Para 17	CE/ BIS approved product	Should be European CE/US FDA/BIS approved product
Pg 60 Para 18 b	Low and high profile blades (3 boxes each of 25 blades)	Low and high profile blades (3 boxes each of 50 blades)

Schedule No. 14**Deep freezer (-80 deg C) (Rfx No. 300002966)**

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Pg 61 Para 4	Freezer should have 3 or more Compartment with two or more adjustable height stainless steel shelves.	Freezer should have 3 or more Compartment with two or more adjustable height stainless steel shelves (Racks).
Pg 61 Para 17	Should be CE or FDA or BIS approved product	Should be European CE/US FDA/BIS approved product
Pg 61 Para 19	Cardboard or hardant plastic cryo boxes for storage of samples should be provided in adequate numbers by the supplier.	Cardboard or hardant plastic cryo boxes for storage of samples should be provided for full capacity by the supplier

Schedule No. 17**Dissection Table – Standard (Rfx No. 300002969)**

Tender Page No. & Para	TENDER SPECIFICATION	Read As
1.1	Approximate Dimension:-1820 X 600 X 900 (L x W x H)	Approximate Dimension:-1820 mm X 600 mm X 900 mm (L x W x H)
1.6	Airtight compartment should be mounted beneath the table top to serve as an odor-free storage of drapes. Size: 2 ft (Length) x 1.5ft (Width) x 9" (Depth)	Airtight compartment should be mounted beneath the table top to serve as an odor-free storage of drapes. Size(minimum): 2 ft (Length) x 1.5ft (Width) x 9" (Depth)

Schedule No. 19**ECG machine 12 channel (Rfx No. 300002971)**

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Pg 63 Para 6	Auto-measurement, auto-interpretation, waveform playback and storage of ECG data	Auto-measurement, auto-interpretation and storage of ECG data
Pg 63 Para 7	RS232 and USB interface cope with data-share or remote data management requirement	RS232 / USB interface cope with data-share or remote data management requirement
Pg 63	Option wireless function makes more	DELETED

Para 8	convenient communication with PC	
Pg 63 Para 13	Multiprinting formats: manual & automatic, standard 12 channel, 3 channel plus 3 rhythm lead, 6 channel, 6 channel plus rhythm lead, 60s analysis of arrhythmia, trend graph.	Multi printing formats: manual & automatic, standard 12 channel, 3 channel plus 3 rhythm lead, 6 channel, 3 rhythm lead, 6 channel or similar formats.
Pg 63 Para 14	AC, DC or built-in lithium battery power supply, alarm of battery weak and lead-off	AC, DC or built-in Rechargeable battery power supply, alarm of battery weak and lead-off
Pg 63 Para 15	Tremendous ECG data can be saved in built-in SD card	At least 100 ECG data can be saved in built-in SD card
Pg 63 Para 16	20 boxes of disposable electrodes	Accessories: Patient cable -02 Chest Electrodes Adult & Pediatric-(set of six) -2 set each. Limb Electrodes (set of 4)- 02 sets for Adult & pediatric each Thermal print paper: 10 Rolls/Z Fold
Pg 63 Para 17	Certifications and standards: FDA / CE / UL / BIS approved product	Should be European CE/US FDA/BIS approved product

Schedule No. 22**Electrolyte analyzer (Rfx No. 300002974)**

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Pg 64 Para 2	The Analyser should be able to measure Na, K, Cl and Expandable to Ca and Li	The Analyser should be able to measure Na, K, Cl with option for Ca and Li
Pg 65 Para 8	Should have option to feed Patient Name and Patient ID.	Should have option to feed Patient ID.
Pg 65 Para 11	Should be FDA or CE or BIS approved product	Should be USFDA or European CE with 4 digit notified body no. or BIS approved product
		Added Para: Cost of all consumables including electrodes, cartridges, calibrators, reagents, quality controls, printing paper etc. required for running the machine for 7 years (365days each year) @20 samples per day for all parameters should be quoted separately. Any consumable not mentioned here but required for running of the machine to be supplied free of cost for 7 years. Price of all consumables for 7 years period shall be considered for L1 ranking purpose. However order for consumables shall be placed as per the requirement of the individual Institute.

Schedule No. 23**Elisa reader (Rfx No. 300002975)**

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Pg 65 Para 3	Filters - 405, 450, 492 and 620nm (upto 8 filters that can be mounted)	Filters - 405, 450, 492 and 620nm (upto 5 filters that can be mounted)
Pg 65 Para 7	Multi label measurement and kinetic measurement.	Multi level measurement and kinetic measurement.
Pg 65 Para 8	Halogen lamp	Halogen/Xenon/LED lamp
Pg 65 Para 11	System should be FDA, IVD, CE and ISO certified.	System should be USFDA or European CE or BIS certified

Schedule No. 24
Elisa reader with washer and shaker (Rfx No. 3000002976)

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Pg 65 Para A 1	Optical system diffraction grating Band width- 8 nm .	Optical system diffraction grating Band width- 4-10 nm .
Pg 65 Para B 4	Data Presentation in 4 Modes (absorbance, transmission , blank subtracted absorbance limit +/-report).	Data Presentation in 4 Modes (absorbance, blank subtracted absorbance limit +/-report).
Pg 66 Para B 10	Final report in +/- format.	Final report in +ve/-ve format.
Pg 66 Para C d	User interphase Flat with 5 diaphragm keys.	User interphase Flat with 5 diaphragm keys or touch screen or computer controlled
Pg 66 Para C e	2-4 x 20-26 characters LCD screen.	16 characters LCD display or better .
Pg 66 Para D	In Built Printer Required	Para Deleted
Pg 66 Para E 3	Capacity- up to 6 micro plates.	Capacity- 2-6 micro plates .
		Added Para: Suitable printer to be provided

Schedule No. 26
Simple Bench Top Flowcytometer (Rfx No. 3000002978)

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Pg 67 Para 6	System should have sampler to fit in at least 20 tubes, 48& 96 micro titer plates	System should have sampler to fit in tubes & 96 micro titer plates
Pg 67 Para 8	System should have high resolution with 5-7 decade	System should have high resolution with 5-7 decimal
Pg 67 Para 11	Should be FDA or CE or BIS approved product	Should be USFDA or European CE with 4 digit notified body no. or BIS approved product

Schedule No. 28 (Rfx No. 3000002980)
Fully automated chemiluminiscence immunoassay analyzer

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Pg 68 Para 7	Throughput of up to or more than 200 tests per hour with random access.	Throughput of up to or more than 150 tests per hour with random access.
Pg 68 Para 8	Facility for detection of clot, bubble, viscosity and inadequate sample.	Facility for detection of clot, bubble and inadequate sample.
Pg 68 Para 12	At least 40 different parameters should be available on board and 15- 20 parameters must be done at one time.	At least 25 different parameters should be available on board and 15- 20 parameters must be done at one time.
Pg 68 Para 20	Should have the self diagnosis and error recovery system with on board operation guides for efficient trouble shooting purpose	Should have the self diagnosis with on board operation guides for efficient trouble shooting purpose
Pg 68	Should be CE and USFDA approved.	Should be European CE with 4 digit notified body no. or USFDA

Para 25		or BIS certified
		Added Para: Should be supplied with suitable online UPS with 1 hour battery back up

Schedule No. 30
Gradient PCR Machine (Rfx No. 3000002980)

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Pg 69 Para 8	Gradient temperature range at least 40-75°C	Gradient temperature range at least 40-75°C or Block based temperature control technology achieving 40-75°C gradient equivalent
Pg 69 Para 11	Should be FDA & ISO or CE or BIS approved product	Should be USFDA or European CE with 4 digit notified body no. or BIS approved product

Schedule No. 32
HPLC Based Automated Analyzer for HbA1C & Hemoglobinopathy Testing (Rfx No. 3000002984)

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Pg 70 Para 5	The system should have optional feature to load at least 50 samples simultaneously with continuous loading facility.	The system should have optional feature to load at least 25 samples simultaneously with continuous loading facility.
Pg 71 Para 13	The system should preferably have an independent mode to perform HbA1c or HbA2/Hb, F/HbA1c without changing any reagents or columns.	The system should have an independent mode to perform HbA1c or (HbA2, HbF, HbA1c).
Pg 71 Para 19	The company should have minimum of 50 installations in India	The company should have minimum of 25 installations in India
Pg 71 Para 21	The System should be both CE & FDA approved.	The System should be European CE with 4 digit notified body no. or USFDA or BIS certified
Pg 71 Para 24	Compatible UPS	Should be supplied with suitable online UPS with 30 min. Battery backup facility
		Added Para: Cost of all consumables including electrodes, cartridges, calibrators, reagents, quality controls, printing paper etc. required for running the machine for 7 years (365days each year) @20 samples per day for all parameters should be quoted separately. Any consumable not mentioned here but required for running of the machine to be supplied free of cost for 7 years. Price of all consumables for 7 years period shall be considered for L1 ranking purpose. However order for consumables shall be placed as per the requirement of the individual Institute.

Schedule No. 39
Laminar Air Flow Chamber (Rfx No. 3000002991)

Tender Page No. &	TENDER SPECIFICATION	Read As
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Para		
Pg 76 Para 3.1	Type of Flow: Vertical or Horizontal	Type of Flow: Vertical
Pg 77 Para 5.1	Should be CE or FDA or BIS approved product	Should be European CE or US FDA or BIS approved product

Schedule No. 40**Laminar airflow for cell culture (Rfx No. 3000002992)**

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Pg 77 Para 1	Dimension of the system (WxDxH)	Should be Horizontal Laminar Air Flow System. Dimension of the system (WxDxH)
Pg 77 Para 4	Should have an approximate air volume capacity of 1350 m3/h	Para Deleted
Pg 77 Para 7	The air purification should be done through class 100 HEPA filter, with 99.97%, 0.3 um particle removal	The air purification should be done through H13 or better HEPA filter , with 99.97%, 0.3 um particle removal
Pg 77 Para 8	Should have a pre-filter of 3-30 um particle removal, and it should be recyclable	Should have a pre-filter of 3-30 um particle removal, and it should be reusable or washable
Pg 77 Para 9	The cabinet should give class 100 purity	The cabinet should give class 100 purity (as per ISO 14644)
Pg 77 Para 20	Should be FDA or CE or BIS approved product	Should be USFDA or European CE or BIS approved product

Schedule No. 41**Laminar flow with PCR (Rfx No. 3000002993)**

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Pg 77 Para 2	Vertical ultra clean air flow at 90 +/- 20 rpm.	Vertical ultra clean air flow at 90 +/- 20 fpm.
Pg 77 Para 7	Conforms to air cleanliness tests as per article 5.1 of U.S. Federal standard 209-B (class 100).	Conforms to air cleanliness tests as per class 100, ISO 14644 standards.
Pg 77 Para 8	Heavy duty and continuous use Blower Assembly with ¼ H.P Motor, 50Hz lph Max. 1375 RPM to deliver air at 550 CFM (approx.).	Heavy duty and continuous use Blower Assembly to deliver air at 550 CFM (approx.).
Pg 78 Para 9 a	CABINET: All wood and Mild Steel heavy gauges P.C.R.C. sheet, and mild steel sections welded at the ends to ensure leak free operation, all the joints are filled with steel filled "M" seal to gap any possible leaks.	Material of construction: Inner chamber: Stainless steel Outer chamber: Powder coated steel
Pg 78 Para 9 b	Inside painted with synthetic Enamel Paint and outside with fine automotive finish.	Para Deleted
Pg 78 Para 13	Should be FDA or CE or BIS approved product	Should be USFDA or European CE or BIS approved product

Schedule No. 44**Meat cutting machine (Bakon's slicer) (Rfx No. 300002996)**

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Page 78	Meat cutting machine (Bakon's slicer) for thin body sections for gross anatomy sections study	Cutting machine for thin body sections for gross anatomy sections study

Schedule No. 45**Microplate multimode reader (Rfx No. 300002997)**

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Pg 79 Para A.4	General Shaking – Fixed or variable , linear and orbital modes.	Shaking – linear and orbital modes.
Pg 79 Para A.5	Temperature Control -2oC temperature to 42oC.	Temperature Control Ambient to 42oC.
Pg 79 Para B.2	Spectral Range 350 – 650nm	Spectral Range 400 – 650nm
Pg 79 Para B.4	Linear Dynamic Range >8 logs	Linear Dynamic Range >6 logs
Pg 79 Para D.2	Detector - PIN-Photodiode	Detector -PMT
Pg 79 Para D.3	Read Position - Top Reading	Read Position - Top and Bottom Reading
		Added Para D.8: System should be supplied with 3 pairs of fluorescent filters
Pg 79 Para E.2	Detector - Photodiode	Detector - Photodiode or CCD
Pg 79 Para E.4	Wavelengths for installed Filters - 260, 280, 450, 560, 600, 750 nm	Wavelengths for installed Filters - 260, 280, 450, 560, 600, 750 nm (or Monochromator or spectrometer)
Pg 79 Para F	Should be FDA or CE or BIS approved product	The System should be European CE with 4 digit notified body no. or USFDA or BIS certified

Schedule No. 49**Paraffin embedding system (Rfx No. 300003001)**

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Pg 82 Para A.14	Height of Work Surface: Work stage 2.75"(7cm) above countertop	Height of Work Surface: Work stage 2.75"(7cm) +/-10% above countertop
Pg 82 Para A.15	Wax Reservoir Dimension (approx): .75"(L) x 4.75"(W) x 4"(D) (19.5 x 12 x 9.5cm)	Wax Reservoir Dimension (approx): 75"(L) x 4.75"(W) x 4"(D) (19.5 x 12 x 9.5cm) +/-10%
Pg 82 Para A.16	Wax Bath Dimension (Approx): 10.25"(L) x 8.5"(W) x 1.75"(D) (26 x 21.5 x 4cm)	Wax Bath Dimension (Approx): 10.25"(L) x 8.5"(W) x 1.75"(D) (26 x 21.5 x 4cm) +/-10%
Pg 82	Warming Oven Dimension (approx):	Warming Oven Dimension (approx): 6.5"(L) x 7.5"(W) x min 2.5"

Para A 17	6.5"(L) x 7.5"(W) x min 2.5" max 6" (14 - 16.5cm)	max 6" (14 - 16.5cm) +/-10%
Pg 82 Para B.2	Thermostats - 1	Deleted

Schedule No. 51**Polygraph four channel (RFX NO. 300003003)**

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Para 11	Computer: Intel® Core™ i5-760 processor (2.80GHz, 1333MHz FSB, 8MB Cache) Genuine Windows® 7 professional , 64bit (English); 21.5 " Full HD Widescreen Flat Panel Monitor ; 6GB DDR3 SDRAM ,500GB SATA Hard Drive ; Single Drive: Blu-ray Disc Combo (DVD+/-RW + BD-ROM) . Facility for internet connectivity, with facility of up gradation; color laser printer	Latest Model PC (at least 21" LED monitor, i5 processor or better, 2 Terabyte hard disk space, 8GB RAM,DVD drive, licensed softwares with compatible latest windows operating system) with1200dpi color laser printer.

Schedule No. 52**Random access medium throughput fully automated chemistry analyzer (Rfx No. 300003004)**

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Pg 84 Para 2	THROUGH PUT: About 600 Photometric tests/Hour and about 900 Tests /Hour with ISE.	THROUGH PUT: Minimum 600 Photometric tests/Hour and minimum 900 Tests /Hour with ISE.
Pg 84 Para 7	Cooled compartment for Standards and Controls.	Para Deleted
Pg 84 Para 17	STIRRER: 2 or more on board variable speed stirrers should be available	STIRRER: 2 or more on board variable speed stirrers or ultrasonic mixture should be available
Pg 84 Para 29	The equipment to be supplied should have FDA / CE certification	The equipment to be supplied should have US FDA / European CE with 4 digit notified body no. / BIS certification

Schedule No. 53**Real time PCR (Rfx No. 300003005)**

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Pg 84 Para 1	Thermal Cycling in Peltier-based system with gradient block.	Thermal Cycling in Peltier-based system / air based heating or cooling technology with rotor system.
Pg 84 Para 2	Block Format 96-well block compatible with 96-well (0.1 ml/0.2ml) plates, at least 8-tube (0.1 ml/0.2ml) strips with optical flat caps and Individual (0.1 ml/0.2ml) tubes with optical flat caps	Block/ Rotary Format 96 or more well compatible with 96 samples or more (0.1 ml/0.2ml), at least 4 or 8-tube (0.1 ml/0.2ml) strips with optical flat/Compatible caps and Individual (0.1 ml/0.2ml) tubes with optical flat/Compatible caps
Pg 84 Para 7	Optical System: LED excitation source, four-emission filters, and photodiode for	Optical System: LED excitation source, at least four-emission filters, and (photodiode / CCD / CMOS) for FAM, SYBR Green I, VIC, JOE,

	FAM, SYBR Green I, VIC, JOE, NED, TAMRA, ROX dyes, with option to select no passive reference.	NED, TAMRA, ROX dyes, with option to select no passive reference.
Pg 84 Para 10	Should be FDA or CE or BIS approved product	Should have US FDA / European CE with 4 digit notified body no. / BIS certification

Schedule No. 54**Refrigerated centrifuge (Rfx No. 300003006)**

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Pg 85 Para 20	Swing out rotor 4 place without bucket	Swing out rotor 4 place with bucket
Pg 85 Para 21	Should be US FDA or European CE approved product	Should be US FDA or European CE or BIS approved product

Schedule No. 57**Rotary Microtome with knives/ Blades (Rfx No. 300003009)**

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Pg 86 Para 3	Specimen advance 28 mm or more	Specimen advance 25 mm or more
Pg 86 Para 4	Vertical stroke 60 mm or more	Vertical stroke 59 mm or more
Pg 86 Para 6	Adjustable specimen clamp at least 50 x 45 mm with orientation in X,Y axis	Adjustable specimen clamp at least 40 x 40 mm with orientation in X,Y axis
Pg 87 Para 7	Single disposable blade holder for accommodating both high and low profile blades	Single or double disposable blade holder for accommodating both high and low profile blades
Pg 87 Para 11	Microtome knives – 02 nos.	Deleted
Pg 87 Para 12	Specimen holders – Plastic (as many as required)	Specimen holders – Plastic (1000 nos)
Pg 87 Para 13	The equipment should conform to ISO 9001 & CE/BIS.	The equipment should conform to European CE/US FDA/ BIS

Schedule No. 58**Semi Auto Analyzer (Rfx No. 300003010)**

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Pg 87 Para 14	Should have inbuilt incubator for at least 5 test tubes.	Para Deleted
Pg 87 Para 22	The system should be US FDA or European CE approved.	The system should be US FDA or European CE or BIS approved.

Schedule No. 63**Stimulator, Isolator & Recorder system (Rfx No. 300003015)**

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Page 89	The system should have the four components, i.e. stimulator, isolation unit for stimulation, averager and a Digital Recorder with in-built oscilloscope with suitable in-built memory and print out facility	The system should have the four components, i.e. stimulator, isolation unit for stimulation, averager, a Digital Recorder and with graphical output facility & print out facility
Page 90	4) The oscilloscope should a Have at least 4 channels with options for up gradation of channel numbers b Have option for external as well as auto triggering source c Have low cut filter to be varied from 0.01 Hz – 200 Hz d Have high cut filter to be varied from 10Hz -20KHz e Have AC and DC adjustment option f Have the option for manual calibration g Have time scale range 1 μ s – 2 sec and sensitivity range 1 μ V-5V	Deleted

Schedule No. 64**Thermal Aesthesiometer – Digital Rfx No. 300003016)**

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Page 90	Should have sampling rate of 18 samples/sec	Should have sampling rate of 18 samples/sec or more
Page 90	Should work on the temperature range of 5 Deg to 55 Deg	Should work on the temperature range of 5 Deg C to 55 Deg C
Page 90	Should have a starting temperature 25° to 40°	Should have a starting temperature 25° C to 40° C

Schedule No. 67**Trinocular microscope – Teaching Rfx No. 300003019)**

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Page 91	Illuminator - Built-in Koehler illuminator for transmitted light, 12V 100W halogen light source and built-in filters.	Illuminator - Built-in Koehler illuminator for transmitted light, LED light source with lifetime of 20000 hrs or more and built-in filters.
Page 91	Objectives 4x, 10x, 20x, 40x, 100x	Objectives 4x/ 5x , 10x, 20x, 40x, 100x
Page 91	Digital color CCD camera with suitable mount.	Digital color CCD/ CMOS camera with suitable mount.
Page 91	Camera specification – 2/3 CCD 5 MP or better, 12bit, USB interface.	Camera specification – CMOS/CCD 5 MP or better, 12bit, USB interface.
Page 91	Image management software with High Resolution TFT Monitor & Computer	Image management software with High Resolution Monitor & Computer

Schedule No. 68
Ultra Centrifuge (Rfx No. 300003020)

Tender Page No. & Para	TENDER SPECIFICATION	Read As
Pg 92 Para 13	Machine should accept rotors of other makes.	Para Deleted
Pg 92 Para 14	Fixed Angle Rotors of titanium/carbon with 8 places of 6.5 ml (100,000 rpm, 802,000xg) & of carbon Fiber/titanium with 6 places of 13.5 ml (65,000 rpm, 324,000xg) & of carbon Fiber /titanium with 24 places of 1.5ml (50,000 rpm, 280,000xg)	Fixed Angle Rotors of titanium/carbon with 8 places of 6ml / 6.5ml (100,000 rpm, 802,000xg) & of carbon Fiber/titanium with 6 places of 13.5 ml (65,000 rpm, 324,000xg) & of carbon Fiber /titanium with 24 places of 1.5ml (50,000 rpm, 280,000xg)
Pg 92 Para 15	Vertical rotor of Titanium with 8 places of 6 ml (70,000rpm, 467,000xg)	Vertical rotor of Titanium with 8 places of 5ml / 6ml (70,000rpm, 467,000xg)
Pg 92 Para 17	Should be FDA or CE or BIS approved product	Should be USFDA or European CE or BIS approved product

Schedule No. 70
Vertical Deep Freezer (-20 deg C) Rfx No. 300003023)

A	Specifications:
	Ultra Low Temperature Freezer – with operating temperature of (-20) Deg C having internal volume approximately 400 Litres, External casing should be powder coated galvanized sheet metal, non corrosive.
B	Main Features:
1	Stainless steel or steel with 4 lockable castors
2	Heated door sealing, lockable doors.
3	Five Drawers or compartments each with separate inner doors for better sample protection through minimum sample warming
4	Adjustable shelves.
5	Polyurethane Insulation minimum of 70mm for better thermal insulation and sample safety in case or power failure
C	Refrigeration:
1	Refrigeration – CFC and HCFC free.
2	Cooling system with hermetic compressor
D	Control Unit:
1	Microprocessor controlled.
2	Temperature deviation of maximum +/-3oC
3	Ambient temperature: 16 to +32°C.
4	Actual temperature display with at least 20mm LED display for better visibility.
5	Key Board lockable Battery Powered.
6	Optical and acoustical alarm system for high and low temperature.
7	Voltage stabilizer.
E	Should be FDA or CE or BIS approved product

Schedule No. 71
Vertical Gel Electrophoresis (RFX NO. 300003023)

Sl. No	VERTICAL GEL ELECTROPHORESIS
	Twin-plate mini gel unit with tank cooling device, built-in cooling coil and quick-fit tubing, lid, 2 sets each of plain and notched glass plates, spacers, spacer aligners, dummy plate and combs
A	TECHNICAL SPECIFICATION
1	Spacer thickness should be approximately : 0.1cm
2	Running Conditions for Denaturing/Native PAGE Gel
3	Voltage : 100 - 150V
4	Current : 10 - 15mA
B	Power pack
	Technical specifications:
1	Type of Output: Constant Voltage/ Constant Current
2	Output Voltage (V): 0 - 500 V
3	Output Current (mA): 0 - 500 mA
4	Maximum Power (W): At least 250 W
5	Number of Output: atleast 4
6	Voltage Setting Resolution: 1V
7	Current Setting Resolution: 1mA
8	Display for Voltage: at least 3 Digit
9	Display for Current: at least 3 Digit
10	Timer: 1min to 999 min
11	Input Supply: 230 V AC \pm 10%
12	Max Operating Temperature: ambient to 45°C
13	Should be US FDA or European CE or BIS approved product

Schedule No. 72
Water Bath Serological (RFX NO. 300003024)

Sl. No	Water Bath Serological
1	Useful for dual purpose. It is a combination of serological and routine rectangular water bath with holes and concentric rings.
2	Standard double wall construction. Inner chamber made out of highly polished stainless steel sheet and exterior made out of thick mild steel duly finished power coated paint.
3	Immersion heaters are provided for heating to attain temperature range from 5° C above ambient to 95° C \pm 1 °C.
4	Digital temp. Indicator-cum-Controller. The equipment to work on 220v AC 50 Hz single phase.
5	Chamber size in mm & inches L x W x H 300 x 225 x 175 mm Approx Capacity approx 15 ltrs. Approx.
6	Should be CE or FDA or BIS approved product

Schedule No. 73
Water Purification System Rfx No. 300003025)

Sl. No	Water Purifications System
A	Ultra pure Water System: - Water quality required for Molecular biology, Tissue culture/HPLC applications. The system should contain pre filtration unit, Type 2 RO filtration equipment, Reservoir 50L and Type 1 filtration equipment.
B	Pre filter Unit:
1	A Regenerablepretreatment unit for removing hardness, iron, manganese, organics and coarse particles
2	Motor and booster pump for feed pressure.

3	R O grade water system
4	Prefilter with anti scaling and activated carbon reverse osmosis
5	Conductivity cell after RO membrane to check health of RO membrane..
6	Feed water handling of conductivity up to 2000microns/cm.
C	TYPE 2 RO Stage Water Quality:
1	Flow rate: 15-20L/hr
2	Organic ion removal up to 99%
3	Resistivity: 5-15 mega ohm.cm.
4	TOC < 30 ppb,
5	Colloidal index SDI < 3
6	Feed water pressure bar:0 -5
7	Reservoir of 50 L capacity.
8	Electrical feed voltage 90 – 230V ± 10%
9	Pre installation site survey and water testing should be done by supplier for optimal installation.
D	Ultra pure water machine producing water of the following quality:
1	Output/flow rate up to: 1.5 to 2 litre/min.
2	Conductivity of 0.055 microns/cm
3	Resistivity of 18.2 mega ohm. Cm
4	Bacteria cfu/ml < 1
5	Particles : <1/ml
6	TOC:< 5 ppb
7	Endo toxin:< 0.001EU/ml
E	Should be USFDA or European CE or BIS approved product
	Accessories: Five complete set for additional filters

Schedule No. 74 - DELETED**Weighing Balance 2 Kg/ sensitivity 10 gm (RFX NO. 3000003026)****SECTION - VI
LIST OF REQUIREMENTS**

Tender Page No. & Para	Existing	Read As
PG. 49 Point No.1. Details of Requirement:	(Warranty- 02 years, CMC -05 years for all items)	(Warranty- 02 years, CMC -05 years for all items except Sch. No. 1, 10, 29, 34 & 60 for which Warranty & CMC is not applicable).
PG.53 Point No. 4 (c)	Cost of CMC will notbe added for Ranking/Evaluation purpose.	Cost of CMC will be added for Ranking/Evaluation purpose. The same will be taken at Net Present Value with a 10% discounting factor each year.

All other contents of the tender enquiry including terms & conditions remain unaltered.

Note:

- i. Prospective Bidders are also advised to check the website regularly prior to the closing date and time of online submission of bids