Baba Farid University of Health Sciences, Faridkot

E-TENDER NOTICE FOR Equipments for MRU at GGS Medical College & Hospital, Faridkot.

E-Tender Form

(E-Tender enquiry for Supply and Installation of Equipments at GGS Medical College & Hospital, Faridkot.

Tender Notification No :	**To be provided by the E-procurement portal of the Govt. of Punjab.**
Tender Notification Date:	_____/_____/_____
Requirement	**E-Tender notice for supply of Equipments.**
Cost of the tender document:-	Rs.1000/- (Non-refundable) to be deposited through DD in favor of Principal, GGS Medical College, Faridkot on or before due date.
Tender Processing Fee	To be charged by Punjab Infotech, Chandigarh as per their norms. (Non- refundable).
Earnest Money Deposit (EMD)	Rs.5% of the Total value of Each Equipment quoted in shape of DD in favor of Principal, GGS Medical College, faridkot on or before due date (Refundable to the Non-successful bidders, without any type of interest or other charges). However, it will be converted into Performance security in case of successful tenderer and will be returned after successful completion of the warranty period.
Date of start of downloading of tender documents	**31.08.2016** from the website of the Punjab Government i.e. https://etender.punjabgovt.gov.in
Website for downloading of the tender document:-	https://etender.punjabgovt.gov.in **However, the details may also be obtained from the University website i.e. www.bfuhs.ac.in and college website www.ggsmch.org**
Last date for downloading of the tender document:-	***21.09.2016 up to 12.30 pm***
Last date & time for uploading of the tender documents:-	***21.09.2016 up to 1.30 pm (through online mode only)***
Date, time and venue for opening of the Technical Bids	**21.09.2016 at 2.30 p.m. on the e- procurement portal of the Govt. of Punjab in , Baba Farid University of Health Sciences, Faridkot**
Date, time and venue for opening of the Price Bids	**29.09.2016 on the e- procurement portal of the Govt. of Punjab in, Baba Farid University of Health Sciences, Faridkot**
Who can be contacted for obtaining more information about the tender.	Principal, Guru Gobind Singh Medical College & Hospital, Sadiq Road, Faridkot. Phone:- 01639-251111, 8558872572,9814135703,9988803646 E-mail: pr_ggsmc@yahoo.com (on all working days from 9.00 a.m. to 5.00 p.m.)

Important Note:-

- ***For any clarification about the E-tendering, Digital Signature certificates and User Id, the Bidders/agencies may contact on Punjab e-procurement helpline numbers 92572-09340, 80546-28821, 0172-3934667.***
- ***The Bidders/ Agencies may also contact for more information about the e-tendering activities to Sh. Harmeet Singh, District Co-ordinator of Punjab Infotech, Chandigarh at Mob: 81466-99868.***

NOTICE INVITING E-TENDER

E-Tenders are invited on or before 21.09.2016 from manufacturers or their authorized agents/distributors **for supply and Installation of Equipments required at GGS Medical College & Hospital, Faridkot**. The tender document containing detailed terms & conditions may be downloaded from the E-procurement website of the Punjab Government i.e. https://etender.punjabgovt.gov.in and its detail may also be seen at the University website www.bfuhs.ac.in and college website www.ggsmch.org

TERMS AND CONDITIONS:-

1. The tender must be uploaded on or before the last date/ time of the submission of tender.
2. The Tender Document Fee, and EMD should be submitted in the shape of Demand Draft in favor of Principal, GGS Medical College, faridkot on or before due date.
3. The Tender processing fee should be submitted through Net Banking/Credit card/Online mode only and as per Punjab Infotech, Chandigarh.
4. The **tenders will be opened online** on the same day i.e. 21**.09.2016** at 2.30 p.m. on the website i.e. **https://etender.punjabgovt.gov.in.** in the, Baba Farid University of Health Sciences, Faridkot. The bidder(s) shall be at liberty to be present, in person or through their authorized representative(s) at the time of opening of the tender as specified in the Tender Notice. In case the authorized representatives are to be present, they must furnish the authority letter from the bidder (s), on whose behalf they are representing otherwise they will not be allowed to participate in the process of opening of tender.
5. **The Price bids of technically qualified bidders will be opened** on 29.09.2016 at 2.30 p.m. on the website i.e. **https://etender.punjabgovt.gov.in.** at, Baba Farid University of Health Sciences, Faridkot. In case of any change of date and time it will be notified to the technically qualified bidders through E-mail/telephone.
6. The Registrar/Principal reserves all rights to accept or reject any or all the tenders without assigning any reason.

Registrar

INSTRUCTIONS/ GUIDELINES TO THE TENDERERS

1. The bidder needs to register himself/ herself on **https://etender.punjabgovt.gov.in.** The bidder is also required to obtain Class III digital signature certificates to complete this process.
2. Please download the Tender document from the website of e-procurement of the Govt. of Punjab **https://etender.punjabgovt.gov.in.** Please fill all the relevant blanks on all the pages of the tender document sign along with a stamp/ seal all pages and then a scanned copy of the same may be uploaded on the website at the time of submission of the tender document.
3. **It should be clearly noted that this tender will be accepted though e-tender mode only.** The tenders submitted through offline mode will not be accepted under any circumstances.
4. **Tender Fee** of Rs.1000/- (non-refundable) may be deposited in shape of Demand Draft in favor of Principal, GGS Medical College, faridkot on or before due date.
5. **Tender Processing Fee:** as per Punjab Infotech, Chandigarh/- (non-refundable) may be deposited through online mode i.e. Net Banking/ Credit Card/ Debit Card only. The tender processing fee will not be accepted through any other mode.
6. **Refundable Earnest Money Deposit (EMD)** of 5% of the total value of the equipment may be deposited in shape of Demand Draft in favor of Principal, GGS Medical College, faridkot on or before due date.
7. **Upload** signed copy of Technical Bid Compliance Statement **(Annexure-I).**
8. **Upload** an affidavit regarding Non-Black listing as per proforma given at **Annexure-II** duly attested by an Executive Magistrate or a Notary Public.
9. In case the Bidder is Authorized Supplier/Agency, the Authorization Certificate as per the Format given at **Annexure-'III'** (duly filled in), **to be uploaded**.
10. In case the Bidder is Authorized Supplier/Agency, an undertaking/certificate issued by their Principle Manufacturer/Supplier that in case dealership/distributorship is withdrawn after supply of the Instruments then the Principle Manufacturer/Supplier will be responsible for Guarantee/Warranty/AMC/CMC of the Equipments/Instruments. **(Annexure – 'IV'), to be uploaded**.
11. **Upload** details of Bank Account for refund of EMD **(Annexure – V).**
12. In addition to this, following **documents are to be uploaded** with Technical Bid:-
    i) Details of registration as Company /Firm/ Establishment.
    ii) Certificate regarding **USFDA/FDA/CE/ISO/TUV or** as per in required specifications standard in quality.
    iii) Copy of Certificate of Registration for service Tax/TIN/TAN/PAN/VAT.
    iv) A certificate from C.A. regarding Annual Turnover with Balance Sheet for the last 3 (three) financial years i.e. 2013-14, 2014-15 & 2015-16.
    v) Copy of the IT Returns for three financial years i.e. 2013-14, 2014-15 & 2015-16.
15. Price should be quoted and **uploaded** only in Exel Sheet proforma at **Annexure-'VI'.**

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SCOPE of SUPPLY/Detail of Item with Specifications

To supply and Installation of Equipments/instruments required at this Institution.

Sr. No.	Name of Item	Qty. Required
1.	BIOSAFETY CABINET with Anemometer	1
2.	BACTERIOLOGICAL INCUBATOR	1
3.	ELISA READER	1
4.	ELISA PLATE WASHER	1
5.	Liquid Nitrogen container	1
6.	Dry Bath and Mixer	1
7.	Double distillation water apparatus (horizontal type)	1
8.	Vortex Mixer	1
9.	Automatic pipette	1
10.	Multichannel pipette	1
11.	single channel Pipette	1
12.	pH Meter	1
13.	HOT AIR OVEN	1
14.	Digital Electronic balance	1
15.	Spectrophotometer	1
16.	Digital Water Bath	1
17.	HORIZONTAL GEL ELECTROPHORESIS UNITS (Mini, Midi and Maxi)	1
18.	MICROSCOPE FLUORESCENT	1
19.	Gradient PCR machine with accessories	1
20.	GEL DOCUMENTATION SYSTEM	1
21.	Fully automatic microprocessor controlled floor standing vertical autoclave	1
22.	Digital Autoclave	1
23.	AIR CURTAIN	1
24.	Orbital Shaker	1
25.	ULTRAPURE WATER PURIFICATION SYSTEM	1
26.	UV Cabinet	1
27.	HEATING MANTLE (Digital) (500 ml/1000 ml/1500 ml flask capacity)	1

Separate tender should be quoted for each item

* The quantity may increase /decrease as per actual requirement.

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TERMS AND CONDTIONS

FOR SUPPLY AND INSTALLATION OF EQUIPMENTS AT GGS MEDICAL COLLEGE & HOSPITAL, FARIDKOT

ELIGIBILITY

- The sole manufacturers of equipments or their authorized agents/distributors may quote their rates.
- In case of Authorized Supplier/Agency/Distributor, the Authorization Certificate as per the Format given at **Annexure-'III'** should be uploaded.
- In case the Tenderer is authorized dealer/supplier an undertaking/certificate issued by their Principle Manufacturer/Supplier that in case dealership/distributorship is withdrawn after supply then the Principle Manufacturer/Supplier will be responsible for Guarantee/Warranty/AMC/CMC. **(Annexure – 'IV').**

1. This institution reserves the right to reject tenders without assigning any reason and increase or decrease the quantity of the articles tendered.

2. If the supply is not made within the stipulated period then late delivery charges @ **2%** will be imposed on the total amount of Supply Order up to delay of **30 days** and thereafter @ **4%** for another **30 days** after which Supply Order will be deemed cancelled & security/earnest money forfeited and company will be black-listed for future.
3. In-complete or conditional offers incorporating price variation will not be entertained.
4. The firm should have been in existence for at- least **three years** and it should have turn of **Rs.1,00,00,000/- per year.**

5. The successful bidder shall deposit bank guarantee of 10% of the total value of the equipment in the shape of Demand Draft only.

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Annexure-I

TECHNICAL BID COMPLIANCE STATEMENT

Name and Address of the applicant / firm _____

Specify whether Manufacturer/Dealer/Distributor: _____

Sr. No.	Particulars	Remarks
1.	Tender Fee of **Rs.1000/-** in the shape of DD in favor of Principal, GGSMCH on or before due date.	Yes/No
2.	Tender Processing fee charged by Punjab Infotech, Chandigarh as per their norms. (Non- refundable).	Yes/No
3.	Earnest Money of 5% of the total value of the each equipment in the shape of Demand Draft in favor of Principal, GGS Medical College, faridkot. On or before due date.	Yes/No
4.	Technical Bid Compliance Proforma uploaded **(Annexure-I).**	Yes/No
5.	Whether an affidavit regarding Non-Black listing as per proforma given at **Annexure-II** duly attested by an Executive Magistrate or a Notary Public uploaded.	Yes/No
6.	In case the bidder is Authorized Supplier/Agency, the Authorization Certificate as per the Format given at **Annexure-'III'** uploaded.	Yes/No
7.	In case the Tenderer is Authorized Supplier/Agency, an undertaking/certificate issued by their Principle Manufacturer/Supplier that in case dealership/distributorship is withdrawn after supply then the Principle Manufacturer/Supplier will be responsible for Guarantee/Warranty/AMC/CMC **(Annexure – 'IV')** uploaded.	Yes/No
8.	Details of Bank Account for refund of EMD **(Annexure – V)** uploaded.	Yes/No
9.	Price Bid in the prescribed format in Excel Sheet **(Annex – VI** uploaded.	Yes/No
10.	Copy of Certificate of Registration for service Tax/TIN/TAN/PAN uploaded.	Yes/No
11.	A certificate from C.A. regarding Annual Turnover with Balance Sheet for the last 3 (three) financial years i.e. 2013-14, 2014-15 and 2015-16 uploaded.	Yes/No
12.	Copy of the IT Returns for three financial i.e. 2013-14, 2014-15 and 2015-16 uploaded.	Yes/No
13.	Certificate regarding USFDA/**CE/FDA/ISO/TUV or as per required in specifications** standard in quality.	Yes/No
14.	Fax Number	
15.	E-mail ID	

Signature & seal of bidder

Place:
Date :

Note: Please upload Catalogue/Brochure/Pamphlets with complete specifications of each Equipment quoted..

Annexure-II

(To be furnished on non-judicial stamp paper worth Rs.30/- duly attested by Executive Magistrate or Notary Public).

AFFIDAVIT

I/We _____

partner/sole proprietor (Strike out which is not applicable) of (Name & Address of Firm) _____ do hereby declare and solemnly affirm:-

a) That the individual/firm/ companies are **not debarred or black- listed** by any department of Union/ State Government or any autonomous institute.

b) That no partner or shareholder, directly or indirectly connected with the applicant who has been debarred or blacklisted by any department of Union Govt./State Govt./Autonomous Institute.

c) And that the terms and conditions for supply and Installation of Equipments at GGSMCH, Faridkot. are acceptable to me/us. I/We shall abide by them in letter and spirit.

Date:

Place:

DEPONENT

VERIFICATION

I/We do hereby solemnly declare and affirm that the above declarations are true and correct to the best of my/our knowledge and beliefs. No part of it is false and nothing has been concealed therein.

Date:

Place:

DEPONENT

Annexure- III

MANUFACTURER'S/PRINCIPLE'S AUTHORIZATION FORM

TO

The Registrar
Baba Farid University of Health Sciences,
Faridkot -151203

Ref. No..... **Dated:**

Sub: Authorization Certificate in favour of M/s..... for supply of .....(name of equipment) for MRU.

We, M/s....., who are established and reputable manufacturers of .....(name of equipment) having factory(ies) at ..... and ....., hereby authorize M/s.....(name and address) to bid, negotiate and conclude the Tender formalities with you against Tender No..... for the above equipment(s) manufactured by us.

No company or firm or individual other than M/s..... are authorized to bid, negotiate and conclude the tender formalities in regard to this business against this specific tender.

We, hereby extend our full guarantee and warranty as per the conditions of tender for the goods offered for supply against this tender by the above firm.

Yours faithfully,

(Name)
For and on behalf of M/s_____
(name of manufacturer/Principle)

Note: This letter should be signed by a person competent and having authority to sign on behalf of manufacturer, and should be on manufacturer Letter Head and same will be uploaded with Technical Bid..

Annexure - IV

UNDERTAKING BY MANUFACTURER/PRINCIPLE SUPPLIER

TO

The Registrar
Baba Farid University of Health Sciences,
Faridkot -151203

Ref. No..... **Dated:**

Sub: Undertaking for after sales service

We, M/s....., who are established and reputable manufacturers of .....(name of equipment) have authorized M/s.....(name and address) to bid, negotiate and conclude the Tender formalities with you against Tender No..... for the above equipment(s).

Further, we undertake that in case dealership/distributorship is withdrawn after supply of equipment then we shall be responsible for after sales service till the date of guarantee/warranty of the equipment and afterwards for a period of 10 years.

Yours faithfully,

(Name)
For and on behalf of M/s_____
(name of manufacturer/Principle)

Annexure- V

Details of Bank Account of the firm who has deposited EMD

Name of the firm: _____

Sr. No.	Particulars	Detail
1.	Account No.	
2.	Name of Bank	
3.	Branch Name	
4.	IFSC Code of Bank	
5.	Name of Operator	

Baba Farid University of Health Sciences

Faridkot

Tender for supply & installation of BIOSAFETY CABINET with Anemometer

Name and Address of Bidder

Sr.No.	Name of Item with Specifications
1	BIOSAFETY CABINET with Anemometer
	Class II Biosafety Cabinet Type A2 design.
	Should include a germicidal UV lamp, set of arm rest, an electrical outlet, and a support stand provided with leveling bases
	Size 4 feet width, Single Piece (for easy cleaning and prevent contamination) stainless steel (SS304).
	Motor should be Dual DC & must automatically adjust the airflow speed (balancing inflow and down flow) without the use of a damper to ensure continuous safe working conditions.
	30% exhaust and 70% recirculation should be achievable through HEPA filters.
	The microprocessor must display the inflow and down flow air velocities in real-time on an LED/LCD display.
	front window must be a 10" sash opening and be made of laminated safety glass to ensure containment of potentially hazardous samples in the case of accidental glass breakage.
	Separatorless Minipleat anti-microbial HEPA filters of EU 13 grade with an efficiency of 99.97% on monodisperse, 0.3 micron challenge for supply
	Separatorless Minipleat anti-microbial HEPA filters of EU 13 grade with an efficiency of 99.99% on monodisperse, 0.3 micron challenge for exhaust
	Interlocking of supply & exhaust motor blower with logic control to ensure the system stops if either motor stops. This is for additional operator safety.
	The front of the cabinet must be angled 10° to help minimize glare on the window to the user.
	The cabinet must automatically reduce fan/blower motor speed to 30% when the front window sash is in closed position to ensure reduced energy consumption when the cabinet is not is use.
	UV light must be programmable to allow for specific exposure times from 0 to 24 hours. The automatic shut off feature on the UV light saves money on replacement of the bulbs.
	Lightening power should >1100 lux(100fc).
	The cabinet noise level must be less than 65 dB(A).
	Alarm to trigger in case blower trips as a safety measure
	Cabinet should be NSF (National Sanitation Foundation) standard no 49 as per recommendation by WHO for safety of user. UV certified and certificate of the quoted model should be attached
	Energy saving mode should be there; Power Consumption Normal mode :200W ±10%
	CE (European Conformity) and UL model only to be quoted.
	Additional HEPA Filter
	Warranty: 5 years

Baba Farid University of Health Sciences

Faridkot

Name of Work : for supply & installation of BACTERIOLOGICAL INCUBATOR

Name and Address of Bidder

Sr.No.	Name of Item with Specifications
2	BACTERIOLOGICAL INCUBATOR
	Dual convection for versatility of application. forced air circulation by quite air turbine and fan speed adjustable from 0 to 100% @ 10% steps for each segment individually
	Advanced digital timer for daily or weekly on / off cycles
	Easy to clean and corrosion resistant SS304 stainless steel interior
	Broad temperatures range from 5 °C above ambient to 105 °C – even suitable for drying application
	Temperature uniformity as good as ± <±0.5°C
	Temperature stability at ± <±0.5°C
	Chamber volume L / 200-250 liters
	Intuitive user interface for setting temperature
	Large, easy to read LED or LCD
	Internal glass door allows sample viewing without impacting temperature
	Number of shelves supplied : three shelves
	Self diagnostics function for fault analysis
	Incl. work calibration certificate for +37 °C
	Audible and visual alarm.
	Rated Voltage/Frequency; Rated Power; Max. Current; Plug: 230VAC 50/60Hz; 1100w; 4.8A
	Interior (atleast) 450x605x450 MM
	CE European Conformity (230V, 50Hz models) & UL certified
	Warranty: 5 Years

Baba Farid University of Health Sciences
Faridkot

Tender for supply & installation of ELISA READER

Name and address of Bidder

Sr.No.	Name of Item with Specifications
3	ELISA READER
	Should be True Monochromator based dual beam spectrophotometer Elisa Reader for absorbance and turbidity measurements using 96 or 384 well microplates using halogen lamp as light source and silicon photo detectors
	The system should have a linear measurement range of 0 to 6 Abs with a photometric accuracy of ± 2% or better and resolution of 0.001 Abs
	Able to read Plate, Strip and have automated wavelength selection option.
	Measurement wavelength range covers both UV and VIS wavelengths (from 200 nm to 1000 nm).
	Reading speed for 96 well plates less than six seconds, capable of doing multi standard tests and controls.
	It should have variable speed plate shaking capability in 3 different mode
	Internal USB port for data transfer and storage using USB memory drives when internal user interface is used.
	A reference channel system to compensate Xenon lamp flash to flash variations
	Possibility of upgradation to measure RNA, DNA & protein samples with very low volume (2-5µl) with specially designed low volume micro drop plate.
	Onboard path length correction for the correction of the variations in the photometric path length.
	The instrument should be compatible for automation purposes. The instrument should have a power Save function for low energy consumption. The instrument should meet RoHS (Restriction of Hazardous Substances) directive
	Low power consumption. Maximum 110 W typical during operation <22W, in Power Save mode <2 5W
	Measurement data stored in database without possibility to modify or accidentally delete any results
	The instrument should run in stand -alone mode and also with computer and software controlled
	Internal Software. The system should have inbuilt internal software for the measurement of samples with plates. The inbuilt software should be able to perform all calculations and save the data within the system. The data export should be through USB device
	Computer Controlled Software. The instrument should have the ability to choose free selection of plates from any manufacturer. The software should be able to display the results in the table or list format. The results can be exported in the excel or PDF format. The software should be able to perform parallel line assays.
	The instrument should be provided with compatible branded computer and printer
	The company should provide training along with wet demonstration of the equipment at site & must provide consumable like Elisa Plates (at least 100 Plates with lids to be provided), for the initial wet demo & training.
	CE (European Conformity) and UL model only to be quoted
	Instrument should be quoted with standard warranty of 3 years

Baba Farid University of Health Sciences

Faridkot

Tender for supply & installation of ELISA PLATE WASHER

Name and Address of Bidder

Sr.No.	Name of Item with Specifications
4	ELISA PLATE WASHER
	It should have capability to wash 96 well micro plates, option for interchangeable wash heads option 1x8 or 1x12 way wash heads with programmable washing time, volume and soaking time. It should use non-pressurized bottles to minimize the risk of spillage and also choice for user to substitute bottles of different sizes but should be provided with two 2 litre wash bottles & one 4 litre waste bottle.
	Should provide aerosol cover to prevent aerosols of infectious diseases from spreading
	Should have residual volume less than 1.5 µl and dispensing volume should be 50- 400 µl for 96 well.
	Should have a USB port for easy data transfer and should have large color screen for easy set-up of wash protocols
	Should have the liquid level sensors in both the wash and waste bottles to guarantee safe performance. And should have plate sensor to recognize if a plate is present or not
	The automatic rinse feature can be set after using the instrument, to operate in a specified time sequence to ensure that the liquid channels do not get clogged
	Training and warranty:-The company should provide training along with wet demonstration of the equipment at site.
	Instrument should be quoted with standard warranty of 3 years.
	CE (European Conformity) and UL model only to be quoted.

Baba Farid University of Health Sciences

Faridkot

Tender for supply & installation of Liquid Nitrogen container

Name and Address of Bidder

Sr.No.	Name of Item with Specifications
5	**Liquid Nitrogen container**
	Stainless steel body, Durable, corrosion-resistant
	Stainless-steel exterior, With Carrying handle and vented secure Lid, easy to transfer
	Useful Capacity- 40-60 Liter
	Vacuum insulated interiors
	Diameter of neck (mm) 120-150mm
	Overall height (mm) 700-1000mm
	Static holding time (days) 120-150
	Storage capacity of 2ml vial
	Number of racks: 6
	Number of stages (2ml vials): 5-6
	Size of boxes (mm): 70-75*70-75
	Total capacity of 2ml vials: 800-900
	Cryoboxes included required
	Roller base with fixation kit, flexible transfer hose: required
	Terms & Conditions From manufacturer or sole distributors

Baba Farid University of Health Sciences

Faridkot

Annexure-VI

Tender for supply & installation of Liquid Nitrogen container

Name and Address of Bidder

Sr.No.	Name of Item with Specifications
6	**Liquid Nitrogen container**
	LN2 Capacity: 70- 100 lit
	Vial storage capacity (2ml):2000 or above
	Neck Diameter: 8.5 in. / 21.5 cm
	Static Evaporation Rate: Not more than 0.4 lit/day
	Static Holding time: 80 days or more
	Outstanding temperature uniformity: samples are stored below -180°C, even when less than 2 in. (5cm) of liquid nitrogen remains in the vessel
	With Ultrasonic Level Monitor safeguards irreplaceable samples with minimal liquid nitrogen evaporation and conduction
	Monitor should provides continuous LED readout of liquid nitrogen level in 1/8 increments;
	Audible alarm sounds when nitrogen level falls below safe range; dry remote alarm contact for remote monitoring
	Advanced vacuum insulation minimizes liquid nitrogen evaporation and reduces operating costs
	Secure locking hasp prevents unauthorized entry
	Warrenty 2 years
	Regulatory Listing: CE
	System should be supplied with full capacity of 2ml Racks

Baba Farid University of Health Sciences

Faridkot

Tender supply & installation of Dry Bath and Mixer

Name and Address of Bidder

Sr.No.	Name of Item with Specifications
7	Specification for Dry Bath and Mixer
	Double Block Digital Dry Bath Heater
	Microprocessor control with large digital display
	Temperature accuracy of ±0.5°C
	Wide temperature set range from 1 to 100°C
	Stainless steel block cavity for corrosion resistance
	Voltage 230V/50/60Hz
	Accessories
	Single Block, 20 x 2.0 mL tubes
	Single Block, 96 x 0.2 ml. PCR tubes
	Single Block, 4 x 50 ml. centrifuge tubes
	Single Block, 8 to 12 x 15 ml. centrifuge tubes
	CE Certified
	Should have inbuilt Shaking System.
	Heating Time - 20 Min
	Accuracy :0.1 degree C
	Should Have Peltier Heating & cooling System.
	Shaking Speed : upto 2500 RPM or more
	Should have beep –Signal / Stop Program Completion.
	Timer facility 15 sec. to 99 hrs.
	Warrenty 2 years
	At least 30 predefined programs
	CE (European Conformity) and UL model only to be quoted

Baba Farid University of Health Sciences
Faridkot

Tender for supply & installation of Double distillation water apparatus (horizontal type)

Name and adress of Bidder

Sr.No.	Name of Item with Specifications
8	**Double distillation water apparatus (horizontal type)**
	Capacity: to produce 1.5 L/hr
	Made of high quality heat resistant glass cylinders and tubes and also resistant to minor damages
	Boiler portion made of high purity and good quality borosilicate material along with water level indicator.
	Borosilicate condenser
	Heater is of high purity electronic grade transparent quartz type. Should avoid contact of embedded boiler with water.
	Provision for easy cleaning and general maintenance of boiler
	The resultant distillate obtained should be of high quality ultra pure water that is suitable for laboratory use including the HPLC operations.
	Distillate should be free from organic, inorganic and colloidal solids. Constituents, metallic ions including heavy metals and also pyrogen free
	Distillation stand should be of high quality rust free metal with embedded clamps for perfect holding.
	Apparatus compatible with single phase electrical supply within 250 volts range.
	Energy efficient
	Warrenty 2 years
	Provided with safety cutoff device.
	Parts should be replaceable.
	Pre-water treatment (water softner) should also be quoted.
	ISO accredited

Baba Farid University of Health Sciences

Faridkot

Tender for supply & installation of Vortex Mixer

Name and Address of Bidder

Sr.No.	Name of Item with Specifications
9	Vortex Mixer
	Variable speed for gentle to vigorous mixing
	Digital display.
	Optimized counter balance for minimal vibration
	Lightweight and portable
	Includes cup head for all standard microtubes and centrifuge tubes
	Mix a variety of tubes and plates with optional accessory heads
	Touch and continuous mix modes
	Voltage 230v/50/60Hz
	Accessories
	Optional head for PCR plate and deep well plate
	Optional head, 3 inch diameter dimpled disk for multiple tubes
	Warrenty 2 years
	Optional head for 24 x 1.5/2.0 mL tubes, 24 x 0.5 mL tubes and 32 x 0.2 mL tubes 1 (or 4 tube strips)
	Optional head for 4 x 15 mL tubes, held horizontally
	CE (European Conformity) and UL model only to be quoted

Baba Farid University of Health Sciences

Faridkot

Tender for supply & installation of Automatic pipette

Name and Address of Bidder

Sr.No.	Name of Item with Specifications
1	Automatic pipette
	Large backlit LCD display for visual confirmation of remaining battery charge and speed settings Control Speed
	Separate aspirate and dispense speed controls to precise control over pipetting speeds and to reduce risk of overpipetting with smaller pipets
	Options from eight speeds with a simple "+" or "-" to adjust pipetting speed which should be displayed on the LCD
	Rechargeable lithium-ion battery for long runtime per charge while eliminating battery memory problems
	Battery should rapid charge at a rate of 80% in one hour and should deliver up to 15 hours of continuous operation before recharge
	Accommodate pipets from 1 to 100 ml; included 1 ml pipet stabilizer prevents 1 ml pipets from wobbling or coming loose from nose piece
	Comes with weighted table stand and a wall mountable holder.
	Warranty 2-years
	Should have dispensing Speed 8 (+ Gravity Dispense)
	Amperage 0.2A
	Recharge Time 3 hours
	Filter Type 0.45 Micron Standard
	CE (European) Certified

Baba Farid University of Health Sciences
Faridkot

Tender for supply & installation of Specification of UV Cabinet

Name and address of Bidder

Sr.No.	Name of Item with Specifications
10	**UV Cabinet**
	UV Lamp fitted in UV Cabinet
	Glass filter in the viewing window
	Made from shock resistant plastic.
	Base measures 400x250 mm inside: outer dimensions 450x300x250 mm or more approximately
	Compatible with most of the UV lamps.
	UV lamps: It can be of specific lambda i.e 254/366 nm Light tubes 8W each. Powered with 12V AC from the mains adapter. Homogeneous illumination. High level of user safety through sensor of timer. Automatic switch off by timer after specific time (Reduce the risk of exposure to radiation).
	Chromatogram inspection with minimal influence of ambient light.
	Extra four UV Lamps
	Protective goggles

Baba Farid University of Health Sciences
Faridkot

Tender for supply & installation of HEATING MANTLE Digital (500

Name and address of Bidder

Sr.No.	Name of Item with Specifications
11	**HEATING MANTLE (Digital) (500 ml/1000 ml/1500 ml flask capacity)**
	Suspended Mineral wool woven heating mantle with Digital Display
	Heating element homogenously distributed throughout the woven mantle.
	Thermally insulated case, mineral wool fiber insulation.
	Nickel connectors.
	Safety earth connection.
	For safety purpose, All units feature an emergency cut out which will automatically trigger in the event of a spillage
	Outer casing i.e Aluminium housing is chemical resistant, tough, light weight and easy to clean.
	Built in controller regulated element temperature ambient to 450° C.
	Unique air flow through ventilation slots beneath and around the rim and case keeps the exterior safe to touch.
	Flexible coiled heating element provides good heat transfer while absorbing shock minimizing risk of flask breakage.
	Covering only the bottom half of the vessels and provide full view of the content of the vessels.
	Heating catridge can be quickly and easily replaced the event of failure.
	Temperature meter should be calibrated.
	Instrument should be of high standard quality.

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Faridkot

Tender for supply & installation of Multichannel pipette

Name and Address of Bidder

Sr.No.	Name of Item with Specifications
12	**Multichannel pipette**
	Fully Autoclavable
	soft-touch tip ejection for volume Range (Metric) 30 to 300µL
	should have Color Code
	Description 8-ch
	All eight channels should be calibrated to simultaneously dispense exactly the same volume of liquid.
	Volume Display -4 digits , magnifying shape
	Adjustment of Pipette to a specific liquid and volume
	Removable independent channels
	Quick Connection clip; Removable lower part easily
	Light weight
	Designed for work with microplates
	CE,IVD,FDA Certified

Baba Farid University of Health Sciences
Faridkot

Tender for supply & installation of single channel Pipette

Name and address of Bidder

Sr.No.	Name of Item with Specifications
13	**single channel Pipette**
	Fully autoclavable
	Adjustable finger rest for ergonomicss and comfortability
	Secured volume adjustment
	Antimicrobial surface for better protection
	Large easy to read display for better vision ergonomics, 4 digits
	Soft-touch tip ejection for light end effortless tip ejection, low operating force
	Pipette volume range (0.1-1µL, 0.2-2µL, 2-20µL, 20-200µL, 100-1000µL)
	Quick connection clip:easily removable lower part
	Adjustment of Pipette to a specific liquid and volume
	Warranty 3 Year
	CE.IVD.FDA Certified
	Color of pipette should indicate volume

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Faridkot

Tender for supply & installation of Specification pH Meter

Name and address of Bidder

Sr.No.	name of item with specification
14	pH Meter
	Single channel with simultaneous displayed measurements of pH with mV and Temperature, Unit, Low concentration range reading stability with facility for Serial Calibration
	pH: Measurable Range should be -2.000 to 19.999 with resolution:- 0.1, 0.01, 0.001,accuracy :- ± 0.002
	Calibration Point : upto 6 and buffer Recognition: USA, NIST, Euro
	It should has pH/mV/ORP calibration and measurement capability mV-Rel mV-ORP: Range should be ± 1999.9. resolution:- 0.1, Relative Accuracy :- ± 0.2 mV or 0.05%, whichever is greater and EH Calibration Capability
	Temperature Range :- -5 to 105°C with Resolution:- 0.1°C and relative Accuracy :-± 0.1°C
	Meter should have 10 methods stored- retains calibrations among multiple electrodes with time & date
	It should have Calibration graph with slope data for on-screen viewing
	Should allow single-point editing in a multiple-point calibration
	Should have facility for propeller stirrer probe controlled directly from the meter
	Should have facility for Auto-sampler compatibility
	LCD Display Type: Simultaneous dual channel or individual channel with Back Light (On/Off)
	Should have Data transfer via USB ports for PC and printer Interface, RS 232 Port

	Ambient Operating Temperature : 5 to 45 °C
	Relative Humidity : 5 to 85% (non condensing)
	Power : Universal AC Adaptor (110 V/220 V/240 V) included with meter
	Meter should be supplied along with ross ultra combined ph electrode, thermistor based temperature sensor, NIST treacable ph buffers of 1.68, 4.01, 7.00, 10.01, 12.46 of app 450-475 ml each. Buffers should be supplied along with NIST treacblity certificate for ph buffers

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Faridkot

Annexure-VI

Tender for supply & installation of HOT AIR OVEN

Name and Adress of Bidder	
Sr.No.	Name of item with specification
15	HOT AIR OVEN
	Max temperature range 250° C.
	Size: 200-250 ltrs approx.
	Accuracy +0.1 °C.
	Should have Alarm / Buzzer System (Optional)
	Should have self diagnostics function for fault analysis.
	Should have forced air circulation by quiet air turbine, adjustable in 10% steps for each segment individually.
	Should have adaptive multifunctional digital PID-microporcessor controller with 2 high-definition TFT-colour display.
	Should have 2 Pt 100 sensor class A in 4-wire-circuit, mutually monitoring and taking over the performance at the same temperature value.
	Power supply: 220-240 V, 50 Hz with India specific plug and suitable voltage stabilizer.
	Standard Documentation: CE (European) or ISO 13485 certified with documentation of the same.
	Compliance statement in tabular form giving details as per specification along with literature in support of the same

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Tender for supply & installation of Specification Digital Electronic Balance

Name and Adress of Bidder	
Sr.No.	**Name of item with specification**
16	**Digital Electronic balance**
	European CE / EN ISO 13485 / Any other international Quality Certification
	Weighing Capacity : 0.1 mg to 200g or more
	Readability : 0.1mg
	Repeatability : 0.1mg
	Linearity : 0.2 mg
	Temperature and time dependent fully automatic internal/self calibration system
	High contrast LED/LCD/Fluorescent display
	Chemically resistant sealed key pad
	Pipette calibration mode
	Density determination mode
	Compatible UPS for more than 20 minutes backup
	To work on 220-240 Volts / 50 Hz
	A comprehensive warranty of FIVE years (including all spares and servicing) after the satisfactory installation of equipment.
	CE (European Conformity) and UL model only to be quoted

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Tender for supply & installation of Spectrophotometer

Name and Adress of Bidder	
Sr.No.	Name of item with specification
17	Spectrophotometer
	Minimum Sample Size: 1.5 to 50 µl.
	Path Length: 1 mm -10mm
	Light Source: Xenon flash lamp
	Temperature controlled cuvelte 20 - + 40°C.
	Wavelength Range: 200 – 800 nm ;
	Wavelength Accuracy: 1 nm:
	Cuvettes to be supplied Macrocuveltes (50 microliter,200 nos), Microcuvettes, 1 pair of Quartz cuvette
	Spectral Band Width ≤ 5 nm
	Used for DNA, RNA Protein
	System should be supplied with validation certificate of photomertic measurment
	Absorption Measuring range 0 A - 3,0 A (260 nm)
	Operating voltage: 100 to 230 v, 50 Hz
	Display atleast 5" TFT Display
	Data transfer to external storage device
	System should be provided with a Superior quality compatable UPS capable of giving power back up upto minimum two hours.

	All necessary cables, wires and accessories required for installation of the equipment should be provided and instruction manual of the instrument
	CE (European Conformity) and UL model only to be quoted
	RS232 interface
	Detection limit : DNA 2/25/3.0 ng /microleter to max.1500ng /microleter
	Curvefit analysis, regression linear, cubic and Quadratic interpolation

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Faridkot

Tender for supply & installation of Digital Water Bath

Name and Address of Biddder

Sr.No.	Name of item with specification
18	**Digital Water Bath**
	LED display indicating temperature, speed, time and state of power failure.
	Over temperature protection capability.
	Lid for water bath in order to maintain temperature inside the chamber.
	The heater for chamber should be outside the water chamber (not inside).
	Convenient adjustment of water level with engraved level scale in chamber
	Reciprocating shaking mode with 10-200ocillations/min
	Water flow should be directed around bath perimeter with elevated sample platform for more circulation
	Additional adaptors for holding flasks and tubes inside the water bath chamber.
	Temperature Range: +5° to 99.9°C
	Bath Volume 34.5L
	Voltage 120V
	Amperage 12.9A
	Control Microprocessor
	Display Digital LED
	Hertz 50/60Hz
	Cabinet Material Epoxy powder-coated stainless steel

Baba Farid University of Health Sciences
Faridkot

Tender for supply & installation of HORIZONTAL GEL

Name and Address of Bidder	
Sr.No.	Name of item with specification
19	**HORIZONTAL GEL ELECTROPHORESIS UNITS (Mini, Midi and Maxi)**
	Horizontal Mini Gel Electrophoresis System: A good quality, small and compact, leak proof and maintenance free system with gel casting tray, casting stand, buffer tank and compatible comb sets, safety lid, electrodes connecting cord. Sample Capacity: 8-12 Samples
	Output power supply (Mini analog type): 50V, 100V, 150V, 200V and 250V. Power supply should have on/off controls. Instrument should be operational at standard Indian voltage/current conditions.
	Horizontal Electrophoresis (Midi) A good quality, medium size, leak proof and maintenance free system with gel casting tray (UV transparent) casting stand, buffer tank and compatible comb sets, safety lid, electrodes connecting cord. Gel Tray Size: Medium Size Combs sizes: 1.0 mm -10 wells, 12 wells, 16 wells,24 wells, 2.0 mm - 10 wells, 12 wells, 16 wells & 24 wells. Sample Capacity: 24 Samples
	Output power supply: A branded, Compatible and programmable power supply max upto 250 Volt with digital display panel with minimum 4 electrical outputs **Note: Gel Trays and combs sets of all sizes should be quoted**
	Horizontal Electrophoresis (Maxi) A good quality, max/large size, leak proof and maintenance free system with gel casting tray (UV transparent) casting stand, buffer tank and compatible comb sets, safety lid, electrodes connecting cord. Gel Tray Size: large/maxi Combs sizes: 1.0 mm -16 wells, 20 wells, 28 wells, 40 wells (4 sets). Sample Capacity: 40 Samples
	Output power supply: Output power supply: A branded Compatible and programmable power supply max upto 250 Volt with digital display panel with minimum 4 electrical outputs **Note:** Gel Trays and combs sets of all sizes should be quoted.

Baba Farid University of Health Sciences

Faridkot

Tender for Supply & installation of MICROSCOPE FLUORESCENT

Name and address of Bidder	
Sr.No.	**Name of Item with specifications**
20	MICROSCOPE FLUORESCENT
	Optical system UIS2 or comparable optical system
	Focus Coaxial coarse and fine focus with stage up and down mechanism
	Focus stroke 25 mm
	Coarse stroke 15 mm/rotation
	Fine stroke 100 µm/rotation
	Graduation on fine focus 1 µm
	Prefocusing limit stopper and torque adjustment on coarse focus
	Illuminator Built-in Koehler illumination for transmitted light
	Light Manager with individual light intensity settings for all objectives
	High color reproductivity LED light source
	Optional: 6 V 30 W halogen bulb (pre-centered)
	Revolving nosepiece Interchangeable reversed quintuple/sextuple/septuple nosepiece
	Encoding optional with quintuple and septuple nosepiece
	Motorized septuple revolving nosepiece
	Observation tube Widefield tilting, telescopic and lifting binocular, inclined -3°-27°
	Widefield tilting trinocular, inclined 5°–35°
	Widefield trinocular, inclined 30°
	Widefield erect image trinocular, inclined 30°
	Widefield tilting binocular, inclined 5°–35°

	Widefield ergo binocular, inclined 0°–25°
	Widefield binocular, inclined 30°
	Super widefield trinocular, inclined 24°
	Super widefield erect image trinocular, inclined 24°
	Stage Ceramic-coated coaxial stage with left or right hand low drive control, with rotating mechanism and torque adjustment mechanism, optional ergo grips available (Non stick coated grooved coaxial, plain, rotatable stages are also available)
	Condenser Swing out achromatic condenser (N.A. 0.9), for 1.25x–100x (swing-out: 1.25x–4x)
	Achromatic aplanatic condenser (N.A. 1.4), for 10x–100x
	Phase contrast, darkfield condenser (N.A. 1.1), [phase contrast: for 10x–100x, darkfield: for 10x–100x (up to N.A.0.80)]
	Universal condenser (N.A. 0.9), for 1.25x–100x [swing-out: 1.25x–4x,with oil top lens:(N.A. 1.4)]
	Low magnification condenser (N.A. 0.75), for 2x–100x (Dry)
	Ultra low magnification condenser (N.A. 0.16), for 1.25x–4x
	Darkfield dry condenser (N.A. 0.8–0.92), for 10x–100x
	Darkfield oil condenser (N.A. 1.20–1.40), for 10x–100x
	Motorized universal condenser (N.A. 0.9, motorized 8-position turret, Aperture stop, polarizing filter in/out mechanism and top lens swing out mechanism), for 1.25x–100x [swing-out 1.25x-4x, with oil top lens: (N.A. 1.4)]
	Fluorescence illuminator Manual reflected fluorescence, 8-position mirror turret unit, encoded with tool-free exchange of filter cubes
	Fluorescence light source
	100 W Hg apo lamp housing and transformer
	100 W Hg lamp housing and transformer
	75 W Xe lamp housing and transformer
	Fibre coupled metal-halide lightsources
	Fibre coupled LED lightsource
	Controller Optional: Control box for semi-motorised setups

	Operating environment Indoor use
	Ambient temperature: 5 °C to 40 °C (41 °F to 104 °F)
	Maximum relative humidity: 80% for temperatures up to 31 °C (88 °F), decreasing linearly through 70% at 34 °C (93°F), 60% at 37 °C (99 °F), to 50% relative humidity at 40 °C (104 °F)
	Supply voltage fluctuations: Not to exceed ±10% of the normal voltage
	Equipment should be provided with a branded desktop computer with minimum 3rd generation Intel® Core i3, minimums 4GB RAM, 21.5 inch full HD widescreen, minimum 1TB hard drive, CD / DVD Burner, compatible key board and mouse, licensed antivirus package and compatible HP color LaserJet Printer. System should be provided with a superior quality voltage stabilizer from a standard company and a 2KV UPS capable of giving power back up upto minimum two hours.
	All necessary cables, wires and accessories required for installation of the equipment and instruction manual of the instrument should be provided.
	CE (European Conformity) and UL model only to be quoted

Baba Farid University of Health Sciences

Faridkot

Tender for supply & installation of Gradient PCR machine with accessories

Name and address of Bidder

Sr.No.	Name of Item with specifications
21	**Gradient PCR machine with accessories**
	Gradient PCR machine compatible for tubes, plates and slides
	Single universal block to accommodate 96 x 0.1/0.2 µL PCR tubes, 71 x 0.5 µL PCR tubes, 96-well PCR plates (Standard & low profile) In-situ adapter must be supplied to perform in-situ PCR
	Gradient PCR, capable of testing 12 different temperatures simultaneously across a gradient range of 1 - 20° C
	SteadySlope technology for identical ramp rates both during gradient optimization and normal run
	Triple circuit technology to ensure precise temperature control across the block
	Flexlid technology with Thermal Sample Protection
	"Fast, Standard & Safe" temperature control modes
	Preprogrammed PCR program templates for easy selection
	Time or Temperature increment/decrement with cycles in PCR program
	Adjustable ramp rate from 0.1° C to 3.0° C to meet critical amplification conditions
	Customized programming allows a maximum of 20 steps and 99 cycles
	Should have the possibility to expand with additional two blocks with combination of any of the following formats, viz., gradient and/or non-gradient universal block, gradient and/or non-gradient fast block, flat block for in-situ PCR.
	Auto Restart facility with user defined time interval when power fails and resumes

	Log book function for error messages and new calibration
	Copy card provision
	CE, ISO certified and RoHS compliance
	Suitable on line UPS for minimum 3 hours backup is to be provided along with PCR machine
	Accessories: Microtubes, PCR stripes and basic consumables and reagents for 1000 reactions

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Faridkot

Tender for supply & installation of GEL DOCUMENTATION SYSTEM

Name and Adress of Bidder	
Sr.No.	**Name of Item with specifications**
22	**GEL DOCUMENTATION SYSTEM**
	A modular Gedoc System with software interface controlled motorized and manual zoom lens and options to add additional emission filters, epi UV lights, white light plate or UV converter plates to maximize gel fluorescence capabilities.
	System should have an advanced high resolution CCD GelCam of 2.0 Megapixel and above.
	System Should have built-in overhead white light and slide out tray hold UV transilluminator for electrophoresis of detailed DNA and protein gels.
	Standalone high resolution fluorescent imaging system should facilitate comprehensive imaging functions in one configuration.
	System should have features such as easily control exposure time and other image capture settings with the user-intuitive touch screen interface.
	The built-in computer should be capable of creating a networkable, stand-alone imaging system with ethidium bromide filter (EtBr) as standard with option to put in additional filters.
	System must have compact gel imaging design integrated with simple plug and play imaging capabilities
	Gel camera should have minimum resolution of 1280 x 960.
	System should be provided with compatible image acquisition and analysis software capable of image capture and analysis of gels, plates and membranes as well as colony counting as well as advanced 1D lane densitometry and analysis including area density and molecular weights.
	Software should be capable of binning and saturation preview assuring that imaging results are quantifiable by detecting over-exposure of bands in live preview. Imaging templates should allow for creation of custom settings to enable quick image capture with reproducible results and autoexpose enabling the perfect image exposure to be captured automatically below the saturation level of every pixel in the image for the widest dynamic range possible and the best quantitative analysis of bands.
	Software should allow Dynamic Integration for blotting with substrates of high signal but limited duration and low background (e.g. ECL Plus) and saturation warning

	Software should have full range of analysis capabilities for a wide range of applications including chemiluminescence, fluorescence, bioluminescence, colorimetric, and live animal samples.
	There should be functions to automate experiment analysis with accurate quantitation, generation of lane profile graphs, plus intensity histograms, concentration curves etc for applications such as Protein Quantitation, Quantitative PCR, cDNA Differential Expression, GFP Expression Analysis, FISH Analysis, Gel Scoring, PCR Gene Expression, Colony Counting, TLC Analysis, Dot Blot Analysis, Live Animal Imaging, Area Density etc.
	Software should have Image Enhancement capability features for visualization and publication such as enhancing images with brightness, contrast, gamma, emboss, invert and pseudo color, crop image so top control boxes do not show, annotate with text, lines, arrows, ellipse, and highlighter tools; show, hide or burn into image, select from filters to sharpen, blur and remove frequency based noise as well as personalizing the workspace.
	The software interface should allow users to select from various options such as to see a *live* preview of gels, plates and colonies *snap* (capture).
	Software should be able to save images as various file formats including TIFF, JPEG, BMP, TGA, PNG and GIF for use in presentations or documentation, create detailed and user-configured reports showing extensive analysis results on MW, Rf, precise position of bands, band intensities, etc. Option to print to a digital printer.
	The system should be provided with a suitable branded computer and 2 KVA Online UPS for power back up and a suitable network laser printer.
	The specifications for the computer are as follows: The CPU and the monitor should be integrated. Size of the monitor should be at least 21.5 inch or comparable and the CPU should be equipped with at least Intel Core i5 processor with 4GB RAM and 1 TB HDD
	The system should be pre-loaded with latest and appropriate operating system and software, CD / DVD Writer, Integrated Stereo Audio, key board, mouse, built-in Lan/Ethernet card, Antivirus
	Package and compatible Color LaserJet Printer with ability for scanning and copying.
	Instrument should be operational at standard Indian voltage/current conditions.
	All necessary cables, wires and accessories, instruction manual and appropriate voltage stabilizer etc. required for installation of the equipment should be provided.

	Custom Clearance, Transport to the laboratory and commissioning/installation shall be the responsibility of the supplier/firm
	Necessary reagents/chemicals for one time demonstration of capabilities of the equipment as well as requisite training to a suitably qualified laboratory professional for successfully operating the equipment must be provided by the firm

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Faridkot

Tender for supply & installation of Fully automatic microprocessor

Name of Contractor/Aggency	
Sr.No.	**Name of Item with specifications**
1	**Fully automatic microprocessor controlled floor standing vertical autoclave**
	Quality compliance: • Compliance with international directives and standards: EN 285:2006; DIN 58951-2:2003 Steam Sterilizers for Laboratory Use. • Comply with ISO 17665-1 and ST79 Good Practice Standards • Comply with Quality Systems ISO 9001:2008; ISO 13485:2003 for Quality Systems for Medical Devices
	Built: • Floor standing vertical type top loading autoclave • Outer Dimensions: Width 75-87 cm; Height 90-110 cm; Depth 65-80 cm
	Software control: • Fully microprocessor based Proportional Integral Differential (PID) pressure control • Controller and software should comply with international standards such as 21 CFR part 11 or any other equivalent. • Should have facility to store identification codes and password codes for access level control • Built –in memory to store number of cycles
	Sensors: • Should have in-built platinum resistance temperature detector with a typical resistance of 100 Ω at 0°C that complies with international standards of safety requirements for electric equipment for measurement control and laboratory use, eg. IEC61010-1, IEC 61010- 2-040 • Option to connect additional temperature sensors and pressure sensors should be available Page-18/21
	Display: • User interface should: o be easy to operate • have digital display enabling visualization of stage of the cycle, set and process temperature, pressure and quick access to important information • preferably have graphical display of temperature and pressure • have notification for replacement of filters after appropriate number of runs performed.
	Chamber volume: Should be not less than 100 litres and preferably should be 150-180 litres in capacity. Suitable number of basket for bottle, vessels or agar media preparation should be quoted along with the instrument.

	Chamber material: Should be long lasting, made up of 316Ti grade Stainless steel of ASME/UL grade
	Chamber pressure: Chamber should be designed to withstand at least 2.8Bar/142°C and should meet European Pressure Equipment Directive (PED 97/23/EC).2 | 2
	Chamber heating: Should be heated uniformly by a heating plate on the outer wall with heater of suitable wattage for quick heating
	Chamber insulation: Chamber should be completely insulated with chloride free glass wool.
	Sterilization temperature range: 105°C to 137°C with accuracy of ± 0.1 deg C at 121 deg C & an additional isothermal temperature range of 60°C to 105°C. Should have feature minimizes the time liquids are exposed to high temperatures during sterilization thereby protecting liquid media, saving laboratory time and reducing energy consumption.
	Biohazard and waste management system: Should have the facility to filter air removed from chamber before sterilization that is useful for sterilization of biohazard waste.
	Additional Elements -02
	• Safe and convenient operation for over temp, pressure, current over leakage protection, automatic over pressure release value to ensure user safety. • Biohazard and Waste System so as to allow sterilization of biohazard waste. • Water level monitoring and maintenance of constant level for safety of heaters. • A safety device to prevent opening the door when the chamber is pressurized. • Prevent starting of runs if doors are improperly locked. • Safety feature should allow opening of doors only when the temperature reaches a pre-set temperature and pressure reaches atmospheric pressure. • Power requirement: A suitable size of electrical switch gear 3 phase 440 volt with earthing and recommended size of current capacity MCCB will be made available on wall at appropriate place. • Other connection and installation has to be done by the supplier. • Suitable Servo Voltage Stabilizer should be quoted

Baba Farid University of Health Sciences

Faridkot

Tender for supply & installation of Digital Autoclave

Name and Address of Bidder	
Sr.No.	**Name of Item with specifications**
24	**Digital Autoclave**
	Chamber made of stainless steel with external body coated and top lid covered, Chamber capacity (internal) not less than 50L.
	should have a pressure gauge display along with temperature display indicating sterilization, heating and warming.
	should have an operational temperature range for sterilization 105 ~ 135^0 C (0.019MPa-0.212MPa), heating range 45 ~ 104^0 C (0-0.015MPa) and warming, 45 ~ 95^0C
	Digital Instrument should have digital display of time (range 1-99 hrs, 1-999 minutes), Digital water level detector for preventing dry heating.
	The instrument should have an LED display to show working status of the instrument on the monitor.
	Easily viewable large ON/OFF indication lamp.
	Instrument should have electronically activated safety device (lid interlock) to protect the operator and lab against dangerous opening.
	Programmable Time, Temp. & Pressure adjustment function for digital setting of time and temperature. Instrument should have device for rapid air cooling.
	Instrument should have a sterilization course selection feature for optimum selection of best parameters
	(Liquid sterilizing/ Sterilizing/ Sterilizing –warming/ heating –warming/ memory recall etc.
	Auto variable exhaust speed and timer function feature to set starting time of operation for unattended operation.
	Instrument should economize space.
	Instrument should have low noise level and power consumption not more than 2KW.
	Cooling fan should be provided as a standard feature.
	Equipment should have a large indication lamp.
	Variable temperature setting should be possible.
	Equipment should be able to maintain auto balance of temperature and pressure during sterilization and auto variable exhaust speed.
	A preset timer function, lid interlock for safety to prevent dry heating by water level detection feature should be present.
	Instrument should be movable so that it can be moved throughout on wheels (on caster for easy placement in lab).
	Data output recording facility for monitoring of sterilization and recording of temperature and pressure. Memory function for last run memory feature should be present.

	Equipment should have built in steam exhaust bottle, exhaust bottle detection and lid opening/closing detection mechanism.
	Instrument should have simple foot switch operation and easy to open and close with one hand.
	• Suitable Servo Voltage Stabilizer should be quoted
	Additional Elements: - 02
	Machine should be supplied with two big and small stainless baskets of appropriate dimensions. Instrument should not be very bulky and weight should not exceed 60 Kg

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Faridkot

Tender for supply & installation of AIR CURTAIN

Name and Address of Bidder	
Sr.No.	Name of Item with specifications
25	AIR CURTAIN
	Suitable for Door of Height: 2 Meter & Width: 1.5 Meter
	MS power coated body
	Velocity: 16 m/sec or more
	Silent operation
	High efficiency and low power consumption.
	Low weight
	CE (European Conformity) and UL model only to be quoted

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Faridkot

Tender for supply & installation of Orbital Shaker

Name of Contractor/Aggency	
Sr.No.	**Name of Item with specifications**
26	**Orbital Shaker**
	Display for temperature and speed should be LED digital with front panel displaying ON/Off-key, up arrow key, down arrow key.
	Lid should be scratch-resistant allowing unobstructed sample viewing without disturbing chamber temperature In case lid is open interlock should stop the platform
	Display should target the speed of the Orbital Shaker in rpm. Orbital Shaker is powered should be displayed by light
	Over temperature safety feature with independent thermostat as an additional back if main temperature controller fails
	Speed Controller should be there and over speed should be displayed in the display panel.
	Platform with adaptors for conical flask and 15ml and 50 ml tubes
	Two temperature ranges: incubated (5°C above ambient to 80°C) Monitor and control chamber temperature range with ±0.1°C accuracy
	Uniform agitation and continuous 24-hour operation even at high speeds.
	Temperature Range 39.2° to 104°F
	Speed Range 20 to1500rpm
	Load Bearing Capacity (Metric) 4.5kg
	Voltage 120V Wattage 50w
	Electrical Requirements 120V 50/60Hz
	Minimum exterior dimensions (L x W x H). (35 x 32 x 11cm)
	Timer 1 to 60 min
	Humidity Range 20 to 80%
	Hertz 50/60Hz
	Minimum platform dimension: 30cmX 30cmX11cm
	Continuous-duty motor with smooth, quiet orbit
	Timer setting for continuous or timed
	Autoclavable and nonslip platform mat
	Variable speed control for gentle or vigorous agitation

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Tender for supply & installation of ULTRAPURE WATER PURIFICATION SYSTEM

Name and Adress of Bidder	
Sr.No.	**Name of Item with specifications**
27	**ULTRAPURE WATER PURIFICATION SYSTEM**
	Pretreatment system: • Three stage pretreatment system with 10, 5 & 1 micron spun filters 10" long for removal of suspended particles and to take care of F.I. and Chlorine in feed water. • The system should respond favourably to feed water having Fouling Index (FI) approx 10, total Free Chlorine <0.5 ppm and Feed Water Conductivity upto 2000 µs/cm; maximum silica 30 ppm. • Three stage purification process; primary purification by a Prefilteration secondary purification through RO membrane, DI bacteria counts are low and provide Type II water. System should have unique integral recirculation ensures optimum water quality at point of dispense. • System should be GLP compliance documentation. (GLP compliance is must as we require to work on ultra sensitive tests. • System should have option to connect printer through RS 232 for data recording and traceability. (We need to record the data by taking printouts periodically for QA i.e no manual recording or manipulation). • System should be supplied with 50 to 75L reservoir with vent filter and recirculation facility
	Product Water Type II Quality : Resistivity : 10 to 15 mΩ at 25 deg. C (megaohm C). TOC : <30 ppb Removal, bacteria and particle, % 99. Silica removal, % : >99.9% Bacteria : <1 cfu/ml Flow rate : 6 - 10 liters / Hr at 25 deg. C.
	The system should have facility to remove Ionic and organic impurities by the ultrapure polisher cartridge, sterile 0.2um filter, pressure regulator, UV lamp and Ultra filter.
	The water within the unit should be recirculated through the purification technologies to maintain purity. To reduce heat build up the recirculation is at reduced flow rate.
	The system should have recirculation of the purified water to maintain consistent peak quality.
	System should have dual wavelength UV lamp – UV photo oxidation 185/254nm.
	CE (European Conformity) and UL model

	ULTRAPURE WATER Output Details: • Inorganic : 18.2M □ -cm @ 25oC • TOC : 1-5 ppb with RO water feed • Bacteria : < 1 CFU/ml • Bacteria endotoxin: <0.001EU/ml • Flow Rate : 1 Ltr./min. • RNase : <0.003 ng/ml • DNase : <0.4 pg/ml • Conductivity : 0.055uS/cm • Particle,0.22 um/ml : <1

Baba Farid University of Health Sciences

Faridkot

Tender for supply & installation of ULTRAPURE WATER PURIFICATION SYSTEM

Name and Adress of Bidder	
Sr.No.	**Name of Item with specifications**
27	**ULTRAPURE WATER PURIFICATION SYSTEM**
	Pretreatment system: • Three stage pretreatment system with 10, 5 & 1 micron spun filters 10" long for removal of suspended particles and to take care of F.I. and Chlorine in feed water. • The system should respond favourably to feed water having Fouling Index (FI) approx 10, total Free Chlorine <0.5 ppm and Feed Water Conductivity upto 2000 µs/cm; maximum silica 30 ppm. • Three stage purification process; primary purification by a Prefilteration secondary purification through RO membrane, DI bacteria counts are low and provide Type II water. System should have unique integral recirculation ensures optimum water quality at point of dispense. • System should be GLP compliance documentation. (GLP compliance is must as we require to work on ultra sensitive tests. • System should have option to connect printer through RS 232 for data recording and traceability. (We need to record the data by taking printouts periodically for QA i.e no manual recording or manipulation). • System should be supplied with 50 to 75L reservoir with vent filter and recirculation facility
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ANNEXURE - VI

PRICE BID

TO BE UPLOADED in Printed/Computerized format in Excel Sheet Attached.

Note:

1) Minimum delivery period must be quoted clearly in the offer.

2) **Warranty should be quoted separately as per required in specifications.**

3) **Price of AMC/CMC after warranty should be quoted as mentioned in specifications & it will be optional for institute to opt for any**. The rates quoted should be F.O.R. destination and should also include packing and forwarding charges, taxes and other levies. Any taxes, if applicable, should also be quoted clearly.