



# GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR (C.G.)

(A Central University Established by the Central Universities Act 25 of 2009)

Website: [www.ggu.ac.in](http://www.ggu.ac.in), phone no. 07752- 260381, Fax: 07752-260148

No. 4107/DBT/Store/ 14

Bilaspur, Date 07.11.2014

## Expression of Interest

Guru Ghasidas Vishwavidyalaya, Bilaspur (A Central University) invites Expression of Interest from reputed Original Equipment Manufacturing Companies or their authorized partners/agents/distributors to supply various laboratory equipments/instruments/accessories. The interested bidder should submit bids in two parts (Part A – Technical and Part B – Financial) for supply, installation & commissioning of the items listed in Schedule-I in EOI document. EOI cum tender bid fee of Rs 1000/- (Rs one thousand only -Non refundable) by Demand Draft drawn in favor of “Registrar, Guru Ghasidas Vishwavidyalaya” payable at Bilaspur (C.G.) to be submitted along with EOI bid.

1. Bids in two parts (Part A – Technical and Part B – Financial) for supply, installation & commissioning of the items listed in **Schedule-I** in EOI notice can be submitted by Speed post/Registered post only by super scribed the envelope “BID FOR ITEM No. .... EOI No. .... to the Coordinator, DBT Builder, Department of Biotechnology, GGV, KONI, Bilaspur-495 009 (C.G.) India and should reach on or before 1400 hrs on 28/11/2014
2. **DUE & OPENING DATES:** The tenders will be opened i.e. 28/11/2014 at 04.00 **P.M.** in the presence of bidders, who wish to present themselves at the time of opening of tender. In case opening date happens to be a holiday, the tender will be opened on next working day at the same time & location. The price bids of two bid tender system shall be opened after technical evaluation of technical bids. The date of opening of price bids shall be informed to the bidders found suitable in technical evaluation.
3. Date of opening of financial bids will be intimated later on through the university website [www.ggu.ac.in](http://www.ggu.ac.in)/email.
4. **Two Bid System:** Vendor will place the “Technical Bid” and “Financial Bid” in the separate sealed covers. Thereafter, both the envelopes should be placed in a big envelope duly sealed and super scribed “BID FOR ITEM No ..... EOI No. ....”.
5. The University is not responsible for non receipt of tenders within the specified date and time due to any reason including postal delay or holidays.
6. For any query pertaining to this bid document, correspondence be addressed to :, **Prof B.N. Tiwary** Coordinator, DBT Builder, Department of Biotechnology, GGV, KONI, Bilaspur-495009 (C.G.) India
7. **Envelope I (Technical Bid):** The vendor must submit the following documents in Envelope-I  
**(Technical Bid):**
  - a) Bidder Profile Annexure-I
  - b) **SPECIFICATIONS:** Specifications are basic essence of the product. It must be ensured that the offers must be strictly as per our specifications. At the same time it must be kept in mind that

merely copying our specifications in the quotation shall not make the parties eligible for consideration of the quotation. A quotation has to be supported with the printed technical leaflet/literature of the quoted model of the item by the quoting party/manufacturer and the specifications mentioned in the quotation must be reflected/ supported by the printed technical leaflet/literature. Therefore the model quoted invariably be highlighted in the leaflet/literature enclosed with the quotation.

- c) Non-compliance of the above shall be treated as incomplete/ambiguous and the offer can be ignored without giving an opportunity for clarification/negotiation etc. to the quoting party.
- d) Technical compliance statement with deviation, if any

S. N.	Name of specifications/ part / Accessories of tender enquiry	Specifications of quoted Model/Item	Compliance Whether "YES" Or "NO"	Deviation, if any, to be indicated in unambiguous terms	Whether the compliance / deviation is clearly mentioned in technical leaflet/ literature
1	2	3	4	5	6

- e) Authorized partner/dealer/distributor certificate from the original manufacturer.
- f) EOI cum tender bid fee of Rs.1,000/- by Demand Draft drawn in favor of "Registrar, Guru Ghasidas Vishwavidyalaya" payable at Bilaspur (C.G.)
- g) Attested copy of PAN card, Service Tax, CST/VAT registration papers
- h) Banker's Solvency Certificate.
- i) Audited statement of accounts and IT returns for the last three years
- j) Authorized Distributors/Vendors must submit appropriate authorization certificate and letter from their OEMs, for participation in the said tender.
- k) Name and address of past satisfactory supplies with **minimum two POs to whom** such items/stores have been supplied should be mentioned in the technical bid.
- l) Copy of mandatory test reports, national testing/reliability and endurance test reports etc., certified or conducted at the manufacturing site, granted by the bureaus/quality control departments/national testing laboratories.
- m) A write up on service and maintenance capability, mitigation of risks or breakdown and replacement capability, with the escalation support matrix suggested for the University. Vendors must indicate their sales and support service centre in India and their plan to address issues about services, maintaining minimum service inventory etc.
- n) The OEMs/Vendors need to submit a certificate during opening of technical bids that they are not currently debarred or blacklisted in GGV for any supplies, products or services, or at present in any national organization or educational institute/university.
- o) Offer should be a page numbered and signed by an authorized signatory giving his/her name and designation below the signatures with Signed copy of the tender document, company seal, agreeing to the terms & conditions and declaration.

8. **Envelope II (Financial Bid):**

- a) The vendor must submit the Price Bid information mentioning all taxes/duties FOR University campus, Bilaspur as per Annexure-II. The price should be quoted in words and in figures, without any errors, erasures or alterations. Unit price of each product and accessories should be quoted separately. Maximum educational discount for University as could be offered should also be mentioned. The bidders **should** mention in the quotation, the rate/amount of annual maintenance charges, if we opt for maintenance contract after expiry of the warranty period.
  - b) Please quote best minimum prices applicable for a premiere Research Institution, **leaving no scope for any further negotiations on prices.**
  - c) **The quoting party should give a certificate to the effect that** the quoted prices are the minimum and they have not quoted the same item on lesser rates than those being offered to UNIVERSITY to any other customer nor they will do so till the validity of offer or execution of the purchase order, whichever is later.
  - d) Copies of **at least last two-supply orders** received from other customers or details of last two supplies made to other customers preferably in India for the same item/model **may be submitted with the offer** giving reasons of price difference of their supply order & those quoted to us, if any.
  - e) The party must give details of identical or similar equipment, if any, supplied to any UNIVERSITY lab during last three years along with the final price paid and Performance certificate from them.
  - f) **Purchaser's Right to Accept Any Bid And To Reject Any Or All Bids:** The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or bidders or any obligation to inform the affected Bidder or bidders of the grounds for the Purchaser's action.
  - g) **Notification of Award:** Prior to the expiration of the period of bid validity, the Purchaser will notify the successful bidder in writing by registered letter or by cable or telex or fax or e-mail that the bid has been accepted by way of a Purchase Order.
  - h) **Modification and Withdrawal of Bids** - The Bidder may modify or withdraw its bid after the bid's submission; provided that written notice of the modification or withdrawal is received by the Purchaser prior to the deadline prescribed for submission of bids. No bid may be modified subsequent to the deadline for submission of bids. A withdrawal notice may also be sent by telex or cable or fax or e-mail but followed by a signed confirmation copy, post marked not later than the deadline for submission of bids. No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the bids.
9. **Offer validity period:** Bid shall remain valid at least for a period of **120 days** after the date of bid opening prescribed by the Purchaser. A bid valid for a shorter period may be rejected by the Purchaser as non-responsive. In exceptional circumstances, the Purchaser may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing (or by cable, telex, fax or e-mail).

10. **Performance Guarantee:** Performance Security for an amount of 5% of the order value may be furnished in the form of an Account payee Demand Draft, Fixed Deposit Receipt from a Commercial bank or Bank Guarantee from a Commercial bank in an acceptable form by the successful bidder. Performance Guarantee is to be furnished within 21 days after notification of the award and it should remain valid for a period of 60 days beyond the date of completion of all contractual obligations of the vendor, including warranty obligations.
11. The Cost of the equipment should be inclusive of all taxes and statutory levies. Labour / installation charges, packing, insurance, freight etc. should be mentioned separately (inclusive of all taxes liveable on them). For imported goods price to be quoted CIF Kolkata/Delhi/Mumbai and in case of local firms they should quote FOR Guru Ghasidas University Campus, Bilaspur. Unit price of each product and accessories should be quoted separately. Maximum educational discount for University as could be offered should also be mentioned. **The university is exempted from payment of custom and excise duty on Scientific and Technical equipment/instruments by DSIR, Govt. of India. Necessary certificate will be issued on demand.**
12. Annual turnover of the tenderer for each of the last three financial years should not be less than 200/- lakhs (Rupees Two hundred Lakhs). Financial statements with net profit, duly audited / certified by Chartered Accountant (CA) of the last three financial years along with the copies of Income Tax Return (ITR) must be enclosed with the technical bid
13. University reserves the right to carry out a technical inspection and performance evaluation (benchmarking) of the offers made by shortlisted vendors. The shortlisted vendors may be asked to come and give out presentation / demonstration.
14. **INSPECTION:** The inspection of the system will be done by our technical expert /Scientist in the presence of firm's representative.
- In case of receipt of the material in short supply or damaged condition the supplier will have to arrange the supplies/ replacement of goods free of cost pending the settlement of the insurance case wherever applicable on FOR at the lab. or CIF basis till satisfactory installation of the system.
- The supplier **should arrange for physical inspection of the items directly or through their authorized representative within seven days of arrival of the consignment failing which they will be responsible for the losses.** After the shipment is effected, the supplier/its representative/Indian agents must remain in touch with the lab/instit. to ascertain the date of arrival of consignment.
15. **No commitment to accept lowest or any bid:** University shall be under no obligation to accept the lowest or any other offer received in response to this tender notice and shall be entitled to reject any or all offers including those received late or incomplete offers without assigning any reason what so ever. University reserves the right to make any changes in the terms and conditions of the bid. University will not be obliged to meet and have discussion with any vendor, and or to listen to any representations.
16. **Shortlisting of Vendors:** University will create a shortlist of technically qualifying vendors and the

financial bid of only these vendors will be opened. University reserves the right to decide whether the items being quoted are as per the requirement of the University and are of standard/leading brands in the market. University reserves the right to decide which offer best suits the requirement of the university. Further, after opening financial bids of the short listed tenders, if there is a discrepancy between word and figure, the amount indicated in words will prevail.

17. **Warranty:** The equipment/instrument must be guaranteed/warranted for a period of at least **one year, if not specifically mentioned otherwise in the specifications sheet, from the date of its satisfactory installation/commissioning** against all manufacturing defects. If the equipment is found defective during this period the whole equipment or part thereof will have to be replaced/repared by the supplier free of cost at the lab. Or at site of the supplier for which 'to and fro' expenses will be borne by the supplier. However, if the items are guaranteed for a period of more than one year, it may be specifically mentioned in the quotation. Availability of spare parts of the equipment/instrument must be guaranteed for a period of at least five years from the date of supply. The warranty period and validity of Performance Guarantee shall be extended for the period of delay in satisfactory installation and delay in warranty services.
18. **Delivery period:** For imported goods the complete delivery, installation & commissioning of both the equipments/instruments should be made within 12 weeks from the date of issue of order. For indigenous goods it is 8 weeks.
19. **Installation and Commissioning:** Free of cost at University. The OEM must ensure timely installation of the complete unit with necessary support to the indenters, as per details and lists to be made available by the Stores Section or the indenting Departments/Centers/Schools .
20. **Conditional Offer** will not be accepted.
21. **Past Performance of the Vendors will be judged at the time of Technical Evaluation.**
22. The OEM should be an ISO-9000 and ISO-14001 certified company with due credits to energy conservation and green earth compliance.
23. Firm has to quote their rates only on the format attached at Annexure-II. Rates quoted on other format or specifications not be accepted.
24. **Relevant documents of the OEM shall be enclosed, along with the Technical Bid. Any explanation on this account shall be supported with documentary evidence from the principals.**
25. **The University does not bind** itself to offer any explanation to those bidders whose technical bids have not been found acceptable by the Technical Evaluation Committee of the University.
26. **FORCE MAJEURE:** The Supplier shall not be liable for forfeiture of its performance bank guarantee, liquidated damages or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure. For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not

limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

**If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.**

**27. Custom Clearing:** After arrival of the goods at Airport/Seaport, Indian agent or Indian subsidiary of the principal firm is solely responsible for getting the material clearance from customs. University will provide all custom documents for custom clearance on the demand of agent. Transportation from airport to Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.) campus is also the responsibility of authorized agent. All charges/ expenses incurred in this process will be reimbursed to firm after submitting the bill along with documentary proof in original. Please note that the freight forwarder or clearing agent should be approved from IATA. **NO DEMURRAGE / WHARFAGE CHARGES WILL BE PAYABLE BY THE UNIVERSITY UNDER ANY CIRCUMSTANCES. NO ADVANCE PAYMENT WILL BE PAYABLE FOR CUSTOM CLEARANCE/ FREIGHT / INSURANCE ETC.** However the University can also appoint Custom Clearing Agent if required.

**28.** The successful bidder with quoted price as approved by university shall be considered for issue of purchase order only when the bidder fulfill all the terms and conditions laid down in tender document & shall submit bid security @3% of total estimated amount in form of demand draft/BG in favor of "The Registrar, Guru Ghasidas Vishwavidyalaya, Bilaspur" payable at Bilaspur (C.G.). The bid security will be returned back without any interest to bidder on successful execution of the purchase order/work order.

**29.** The vendor should adhere with all seriousness to the time schedule provided by the University. The **Liquidated Damage** will be applicable at the rate of **0.5%** per week. The purchaser has the right to cancel the purchase order when LD accumulates to 10 %. **The same rate of penalty shall be applicable for late installation of the equipment/instrument also.**

**30.** The specification & quantity indicated in the **Schedule-I**. University reserves the right to increase or decrease the quantity or delete some or all of items depending on the needs of the University without assigning any reasons.

**31.** The bids will be opened on due date and time indicated. Tendered or his/her authorized representative (with proper authorization letter) for attending opening of technical bids.  
In case the due date for opening tender happens to be a holiday, the same will be opened on the next working day. The timings will however remain unchanged. Please Note that the University remains closed on Saturday & Sunday.

**32. PAYMENT CONDITION:**

**FOR INDIGENEOUS SUPPLIES: Payment on Bill Basis after supply:** For local supplies the payment will be made only after satisfactory installation, commissioning and performance of the equipment at GGV, Bilaspur and after certification by our technical expert/scientist. However, supplier will be required either to submit performance bank guarantee for 5% amount of the total value of equipment, after installation of the material, valid up to 60 days after the expiry of warranty period or the equivalent

amount shall be released after expiry of the satisfactory warranty period.

**FOR IMPORTS:** The payment against imports shall be made through irrevocable LC. L/C will be opened for 100% FOB / CIF value. 90% of LC amount shall be released on presentation of complete and clear shipping documents and remaining 10% shall be released after installation/demonstration/commissioning, subject to submission of PBG of equivalent amount to cover the warranty period. The PBG should remain valid upto 60 days after the expiry of warranty period.. In case of non-submission of PBG after installation/ demonstration/commissioning, remaining payment i.e 10% will be released only after the completion of warranty period.

**You are requested to mention the exact product/import code(i.e. HS code) in your quotations.**

33. University may accept or reject any or all the bids in part or in full without assigning any reason and does not bind himself to accept the lowest bid. The University at its discretion may change the quantity/upgrade the criteria/drop any item or part thereof at any **time before & after placing** the Purchase Order.
34. A bid submitted with false information will not only be rejected but also the OEM/vendor will be debarred from participation in future tendering process. Late or delayed/Unsolicited quotations/offers shall not be considered at all. These will be returned to the firms as it is. Post tender revisions/corrections shall also not be considered.
35. The bids (technical and price bids) once submitted shall be the property of the University and shall not be returned to the vendor in future.
36. **Resolution of disputes:** University and the vendor shall make every effort to resolve amicably, by direct informal negotiations, any disagreement or dispute arising between them under or in connection with the contract. If after thirty days from the commencement of such informal negotiations, University and the vendor have been unable to resolve amicably a resolution by formal arbitration the Vice-Chancellor of University shall appoint a sole Arbitrator of the dispute who will not be related to the vendor and whose decision shall be final and binding. In case of any dispute, the decision of the HVC of this University shall be final and binding on the bidders.
37. **Jurisdiction :** All disputes will be subject to Bilaspur jurisdiction only.
38. All correction/corrigendum will be given in our website only. Please visit university website regularly for any information/updates.

Registrar (Acting)

**FORMAT TO BE FILLED BY THE MANUFACTURERS / INDIAN AGENTS (ON BEHALF OF THEIR FOREIGN PRINCIPLES) OR THEIR AUTHORIZED COUNTRY DISTRIBUTORS/ REPRESENTING DEALERS/ REGIONAL AGENCIES, SUBMITTING TENDER**

**Bidder profile (Technical)**

Sr. No	Details	
1.	Name of the Firm	
2.	EOI Fee Details Name of Bank Amount Date	
3.	Registered Office address Telephone Number Fax Number e-mail	
4.	Correspondence/ contact address	
5.	Details of Contact person (Name, designation, address etc.) Telephone Number Fax Number e-mail	
6.	Is the firm a registered company? If yes, submit Documentary proof. Year and Place of the establishment of the Company	
7.	Bidder's Bank Details Name of Bank A/c No. IFS Code	
8.	Is the firm Government/ Public Sector Undertaking propriety firm partnership firm (if yes, give partnership deed) limited company or limited corporation member of a group of companies (if yes, give name and address, and description of other companies) subsidiary of a large corporation (if yes give the name and address of the parent organization) If the company is subsidiary, state what involvement if any, will the parent company have in the project.	



9.	Is the firm registered with sales tax department? If yes, submit valid sales tax registration certificate.	
10.	Is the firm registered for service tax with Service Tax department? If yes, Submit valid service tax registration certificate.	
11.	What type best describes your firm? · Manufacturer · Supplier · System Integrator · Consultant · Service Provider (pl. specify details) others	
12.	Details of Empanelment Certificate/Purchase Order of any 3 PSUs / Govt. institutions, enclosed 1)	
	2)	
	3)	
13.	Have you ever been denied tendering facilities by any Government/ Department/ Public sector Undertaking? (Give details)	

S. NO	Name of the Bidder	Turn Over ( Rs. Crores) Total of 3 Financial Years			Average Turn Over for three years
		2011-12	2012-13	2013-14	

**Note: Please enclose certificate issued by CA in this regard.**

Seal & Signature of Bidder

**DECLARATION**

1. I, ----- Son /Daughter of Shri -----

----- Proprietor/ Partner/ Director/ Authorised Signatory of M/s. -----

----- am competent to sign this declaration and execute this EOI cum tender bid document.

2. I have carefully read and understood all the terms and conditions of the EOI cum tender bid and hereby convey my acceptance of the same.

3. The information/ documents furnished along with the above application are true and authentic to the best of my knowledge and belief.

4. I/ we/ am are well aware of the fact that furnishing of any false information/ fabricated document would lead to rejection of my bid at any stage besides liabilities towards prosecution under appropriate law.

5. Our firm is neither blacklisted by any Government Department nor any Criminal Case is registered against the firm or its owner or partners or directors anywhere in India.

6. Each page of the tender document and papers submitted by my Company is authenticated, sealed and signed, and I take full responsibility for the entire documents submitted.

Signature of the Authorised Person

Date : -----

Full Name : -----

Place : -----

Company Seal : -----

Mobile No.- -----

Note : 1. The above declaration, duly signed and sealed by the authorised signatory of the firm/company, should be enclosed with the EOI cum tender bid document.

**2. Certificate as per above must be submitted only on non-judicial stamp paper of suitable amount.**

Please quote rates for apparatus separately or in a list for the items in Schedule -I

For Indigenous Items

Item No.	Name of Instruments & Specification	Unit Price	CST/VAT/Tax if any,	Total Unit Price (F.O.R GGV, Bilaspur)

For Foreign Items, if quoted

Item No.	Name of Instruments & Specification	Name of Manufacturer	Unit Price	CST/VAT/Tax if any,	Total Unit Price CIP/DDU/CIF/FOR Kolkata/Mumbai/Delhi/Bilaspur Price

Item No.	Instruments	Specification	Qty.
1.	Incubator Shaker	<ul style="list-style-type: none"> <li>➤ Triple-eccentric counterbalanced drive mechanism in cast iron housing with 9 permanently lubricated ball bearings and should be driven by solid-state brushless DC motor</li> <li>➤ Shaker should have programmable controller to automate parameter changes on timed basis</li> <li>➤ Capable of holding different size of flask in the universal platform like 125ml, 250ml, 500ml, 1L, 2L, 2.8L and 6L flasks</li> <li>➤ Dimensions should be small enough to accommodate shaker under lab bench</li> <li>➤ Temperature range from 20°C below ambient upto 80°C (minimum 4°C)</li> <li>➤ Accuracy and control: <math>\pm 0.1^{\circ}\text{C}</math> at 37°C with nominal uniformity of <math>\pm 0.25^{\circ}\text{C}</math></li> <li>➤ Provision for stackability in future</li> <li>➤ Speed range from 25-400rpm</li> <li>➤ System should be able to maintain set point during power interruption and restart when power resumes</li> <li>➤ Adjustable stationary shelf should be available for incubating plates</li> <li>➤ Possibility to use universal and dedicated platforms</li> <li>➤ Maximum capacity – 64 x 50ml flasks / 34 x 125ml/ 25 x 250ml/ 16x 500ml/ 9 x 1L/ 4 x 2.8L / 4 x 5L / 2 x 6L</li> <li>➤ Should be possible to use test tubes, and micro plates stackable (72 plates maximum) also</li> <li>➤ Shaker control and data logging via RS 232 and remote computer running conventional lab management software or hyper terminal.</li> <li>➤ Moisture proof power receptacle to accommodate accessory instruments inside the shaker</li> <li>➤ Acceleration circuit to prevent sudden start and stop should be available</li> <li>➤ Sensor to detect high temperature limit and to shut off temperature when limit is exceeded.</li> </ul>	1
2.	Digital Analytical Balance	<ul style="list-style-type: none"> <li>• Analytical balance with 0.1mg readability with a capacity of 220 gr</li> </ul>	1 Nos

		<ul style="list-style-type: none"> <li>• The balance should have minimum sample weight of 100mg and it should be documented</li> <li>• The weighing pan size should be 90mm dia with weighing chamber height of 209mm</li> <li>• Tare range (Subtractive) : 220gr</li> <li>• Repeatability : <math>\leq \pm 0.0001g</math></li> <li>• Linearity : <math>\leq \pm 0.0002g</math></li> <li>• Should have overload protection</li> <li>• The leveling of the balance should have Glass Level Indicator with air bubble for centering</li> <li>• The balance should have typical Response time of 2 sec</li> <li>• Internal calibration facility with isoCAL</li> <li>• The balance should have touch screen with graphical user interface</li> <li>• mini USB function</li> <li>• Direct Data Transfer option to windows applications</li> <li>• The balance should have supervisor lock for protection against unintentional changes</li> <li>• Monolithic Load Cell Design</li> <li>• Fixed Draft Shield</li> <li>• ISO/GLP-compliant printing/recording</li> <li>• An Integrated under floor weighing option should be available</li> <li>• Built-in application programs like Counting, weighing in %, Net-total formulation; animal weighing; Mass unit conversion by toggling between 2 units, Statistics, Peak hold, Check weighing &amp; Density Measurement.</li> </ul>	
3.	96 Well PCR machine	<p>Max Block Ramp Rate - 5.00°C/sec 3.90°C/sec  Max Sample Ramp Rate 4.25°C/sec 3.35°C/sec  VertiFlex blocks 20 to 26° c  Temp Accuracy <math>\pm 0.25^\circ C</math>  Temp range 2- 99.9° c  Temperature uniformity <math>&lt; 0.5^\circ c</math> (20 sec after reaching 95° c)  Dimensions Hight 24.5 cm Width : 23.7 cm depth : 48.5 cm  Weight 10 to 20 kg  PCR Volume range 10- 30 <math>\mu l</math>  Instrument memory 800 protocol on board, unlimited with use of USB memory stick  Display Interface 16.51 cm with touch screen  Warranty 2 year  Tm calculator Menu –driven through touch screen</p>	<b>1 Nos</b>

4.	Mini spin	<ul style="list-style-type: none"> <li>• Compact centrifuge for speed up to 14,500 rpm &amp; rcf 14,100 x g</li> <li>• IVD certification</li> <li>• Ability to set RPM and RCF</li> <li>• Metal rotor housing</li> <li>• Separate short spin button for fast, convenient quick spins</li> <li>• Timer 15sec to 99min, with continuous function</li> <li>• Noise level &lt;52dB(A)</li> <li>• Rotor for 12 X 1.5 ml 2 ml tubes &amp; optional 8 tube strips</li> <li>• Adaptors for 0.2 and 0.5 ml tubes</li> <li>• Acceleration to reach max speed in 13 sec, Braking time from max. speed 12sec</li> <li>• Automatic lid opening after the run</li> <li>• Brushless motor &amp; Autoclavable rotor</li> <li>• Stainless Steel Rotor Lid</li> </ul>	<b>1 Nos</b>
5.	Plant Growth Chamber	Capacity: 250/300L Temp Range: 0-65C (Light off), 10-65C (Light on), 10-65C (With Humidity) Temp Uniformity 2°C Temp Fluctuation 1°C Temp Resolution 0.1°C Humidity Range 60-90% RH Humidity Uniformity 5%RH Humidity Fluctuation 5%RH CO2 Fluctuation None Illumination Range 0-15000 Lux Control Steps 60 Steps Fluorescent Lamps 30Wx14EA Timer 0-9999 min Shelves 4 Load per shelf 15 kg Power 1300W Power Supply 220V, 60Hz	
6.	Binocular microscope	Microscope for Bright field & Phase contrast application upgradable for Digital imaging Microscope with AG treat – Touchpoints treated to inhibit the growth of bacteria Observation tube - 45° viewing angle, IPD adjustment 50mm - 75 mm , 360° rotation Eye-piece 10x with eye guard Objectives - tampe proof Plan Phase contrast objectives Obj. HI PLAN 4x/0.10 -, 18 Objective PLAN 10x/0.25 PH1 -, 12.1 Obj. PLAN 40x/0.65 PH2 0.17/, 0.36 Obj. PLAN 100x/1.25 Oil PH3 -, 0.1 Mechanical stage - Mechanical stage with double plate flat top with stainless steel slide holder Condenser – condenser 0.90/1.25 Oil for BF , PH and DF with phase rings PH1/2/3 Illumination – LED Illumination provides cool white light with a life time of over 20years of average use. 6000K temp , 25,000h life at full intensity Focussing – with coarse and fine ocusing tension free	<b>1 Nos</b>
7.	Inverted microscope	Stand - Inverted Microscope for transmitted light BF PH and Reflected light fluorescence. stage with 3 position stage support (changeable by 180° turn).	<b>1 Nos</b>

		<p>Transmitted light illumination 100W halogen / Light emitting diode [LED] min 5 – 10W with service life of 50,000 hours and automatic adjustment of illumination to the contrast method. Auto off Function.</p> <p>Phase contrast – For all magnification levels without any installation or adjustment.</p> <p>Object Guide - Object guide with universal object holder for slides , patridish, Culture plates etc</p> <p>Observation Tube – Trinocular with 45° viewing angle, 100% photo or 100% visual .Positioned 88mm to the left side and allows an unobstructed view of specimen at all times.</p> <p>EYEPIECE PLAN 10X</p> <p>Condenser with long working distance and phase slider</p> <p>All LWD Objective for Bright field , Phase contrast and Fluorescence</p> <p>4x,10x,L20x, L40x, FL 63x</p> <p>Fluorescence Attachment – 100W Hg with 6 lens collector</p> <p>Fluorescence Filter – BP - Blue Excitation 450-490] , Green Excitation [515-560] and UV Excitation [340-380]</p> <p>C-mount 0.55x</p> <p>FIRE WIRE COOLED DIGITAL COLOR CAMERA</p> <p>Max.30 frames per sec. depending on the computer p</p> <p>Hardware – Latest I5 PC with PCI Express slot , 3.0 C</p> <p>4gbRAM , 18.5” TFT monitor etc.</p> <p>External manual trigger, flash synchronization,</p> <p>Advanced Fluorescence SW for Multichannel images</p> <p>Offers the following functionality:</p> <p>Full control of camera features exposure, gain, binnin</p> <p>and gamma level, region of interest image capture</p> <p>Hardware Configuration, enabling configuration of cor</p> <p>Experimental setup and user interface</p> <p>Automatic recording of all experimental parameters fo</p> <p>reloading for subsequent experiments</p> <p>Image Processing &amp; Measurement:</p> <p>Adjust contrast, brightness and gamma on every imag</p> <p>Merge, crop and image arithmetic</p> <p>Intensity, length and area measurements</p> <p>Measurement of area intensities through image stack</p> <p>Online measurement whilst displaying a live image</p> <p>Parallax correction</p> <p>Modular Structure Possibility to add additional applica</p> <p>Deconvolution , mark and find , Time lapse, etc.</p> <p>Image analysis Software : Complete control of the ca</p> <p>balancing, Gamma, color saturation, exposure time sl</p> <p>for both Monochrome and color images should be pos</p> <p>images both vertically and horizontally should be poss</p> <p>objective, eyepiece, magnification changer and C-mo</p> <p>should do automatic calibration .Facility for manual ca</p> <p>micrometer should be possible Facility to compare live</p> <p>side by side on the screen should be possible. Stitchi</p> <p>manually for getting the mosaic image of the sample s</p> <p>marker, point to point length measurement, Annotatio</p>	
8.	BioSafety Cabinet	<p><b>Size Standard 4 ft model:</b> Exterior dimension not to exceed 52x64x33 inch (W X H X D)</p> <p><b>Direction of Flow :</b> vertical Smart Flow and Indicator with Digital airflow verification technology The balance</p>	<b>1 Nos</b>

		<p>of downflow and inflow controls the cleanliness and containment- preventing room contamination from reaching the BSC Work surface and keeping any biological hazards in the BSC work area from escaping out of the front opening</p> <p><b>Air Balancing:</b> 70 % re-circulation and 30% exhaust  Particle retention: 0.3 micron &amp; above  Material : Stainless steel  Filter : ULPA  Control system : Microprocessor  Sound level : &lt;67  Design : Ergonomic design 10° sloped front, Armrest</p>	
9.	HPLC	<p><u>Supply, Delivery, Installation and Commissioning of Completely Modular High Performance Liquid Chromatography System With Accessories.</u></p> <p>The HPLC system shall include the following individual stackable self-contained modules. The HPLC system must be controllable, monitored, capable of performing system maintenance using Microsoft Internet Explorer web browser. Modules must be connected via fibre optic noise resistant high-speed transmission technology to enhance the reliability and sensitivity of the HPLC.</p> <ol style="list-style-type: none"> <li>1. Solvent Delivery System QTY 2No</li> <li>2. Mixture QTY: 1No</li> <li>3. Photo Diode Array Detector : 1 No</li> <li>4 Manual Injector with Syringe :1 NO</li> <li>4. System Controller: 1No</li> <li>5. Computer and Printer:1 NO</li> <li>6. Chromatographic Software: 1 No</li> <li>7. Colum – 4 cm (c-18) c-8</li> </ol> <ol style="list-style-type: none"> <li>1. Solvent Delivery System for Micro, Semi-Micro, Analytical, Semi-Prep flow rates <ul style="list-style-type: none"> <li>• It must be a high speed double micro-plunger in-parallel pump with automatic pulsation correction mechanism achieving pulse-free solvent delivery.</li> <li>• It should have a flow rate resolution of 3 nl/min</li> <li>• The flow rate should be settable between 0.0001 to 10 ml/min from micro to semi-preparative flow rates without any hardware changes</li> <li>• Flow rate accuracy should be ±1% or ±0.5 µl/min of set value whichever is larger</li> <li>• Flow rate precision must be less than ±0.06% RSD</li> <li>• Pressure setting range should be 1-40 MPa</li> <li>• Pressure pulsation must not exceed 0.3 bar (0.03MPa)</li> <li>• The precision of composition must be less than 0.1% RSD.</li> <li>• It should employ active check valves that allow stable delivery of even non-polar organic solvents such as hexane</li> <li>• Automatic rinsing of plunger must be available.</li> <li>• Maintenance kit should be quoted.</li> </ul> </li> </ol>	<b>1 Nos</b>



		<ul style="list-style-type: none"> <li>• It should be capable of standalone operation</li> <li>• It should have up to 20 storage files</li> <li>• Maintenance kit, reservoir tray with 4 solvent bottles complete with fittings.</li> <li>• It must have a leak sensor as safety feature.</li> <li>• It should have functions for maintenance and validation which are accessible by a dedicated operation button</li> </ul> <p>2. Mixture:</p> <p>3. Manual Injector with Syringe</p> <p>4. Photodiode Array (PDA) UV-Vis Detector</p> <ul style="list-style-type: none"> <li>• The wavelength range should be 190 nm - 800 nm</li> <li>• The photo-diode array detector should have 512 elements and an element resolution of 1.2nm/element must be available.</li> <li>• The detector must have 2 modes of operation using a variable slit: High Resolution mode at a slit width of 1.2nm and a High Sensitivity mode at a slit width of 8nm</li> <li>• A Conventional flow cell [12 µL volume, 10 mm cell path length, 12 MPa pressure max.] with temperature control should be available as an option</li> <li>• The flow cells must be temperature controlled from ambient <math>\pm 5^{\circ}\text{C}</math> to <math>50^{\circ}\text{C}</math></li> <li>• Wavelength accuracy should be <math>\pm 1</math> nm</li> <li>• A deuterium lamp [D2] and a Tungsten lamp [W] should be available as Light Source for UV and visible wavelengths respectively.</li> <li>• The selection of light source must be flexible to select D2, W or both [D2 +W] the lamps for analysis (3 modes)</li> <li>• The Drift must be smaller than <math>0.5 \times 10^{-3}</math> AU/Hour</li> <li>• The Noise Level must be smaller than <math>0.6 \times 10^{-5}</math> AU</li> <li>• Linearity should be equal or more than 2.0AU (ASTM method)</li> <li>• It should have automatic wavelength accuracy check at 4 wavelengths (UV &amp; Vis) &amp; wavelength correction</li> <li>• It should have a self-aligning mechanism for the light sources and cell.</li> <li>• Light sources and cell should be accessible from the front for easy maintenance.</li> <li>• It must have data buffering function to collect up to 20 min of data for all wavelength regions in case of PC malfunctions</li> </ul> <p>5. System Controller</p> <ul style="list-style-type: none"> <li>• It should function as a communication bus module with data buffering capability</li> <li>• It should acquire up to 24 hours for one analysis, at 500ms sampling rate</li> <li>• It must be controllable from a web-based interface via a network. It allows the system to be controlled, monitored and maintained via Internet Explorer Web browser</li> <li>• It must be compatible with wireless networking</li> <li>• It must come with Expert function in that if pressure falls below specified value, the</li> </ul>	
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		<p>expert function will automatically purge the mobile phase</p> <ul style="list-style-type: none"> <li>• It should store up to 20 analysis files with a total up to 400 steps of time programs</li> </ul> <p>5. Computer and Printer</p> <ul style="list-style-type: none"> <li>• Intel Core</li> <li>• 4.0GB RAM</li> <li>• 500GB Hard Disk</li> <li>• 17" LCD Monitor</li> <li>• DVD-RW</li> <li>• Pre-loaded with Window 7</li> <li>• Laserjet Printer</li> </ul> <p>6. Chromatographic Software</p> <ul style="list-style-type: none"> <li>• Operation of the system should be very easy and intuitive via a state-of-the-art 32 bit Windows 7 based software</li> <li>• It should cover full one-point digital instrument control, qualitative and quantitative processing, report creation and self-diagnosis</li> <li>• Sample schedule wizard function should be standard</li> <li>• There should be an on-line help function context sensitive</li> <li>• The reporting format should be flexible and easy to use in any desired format</li> <li>• The data can be converted to other formats. Spread Sheet software and word-processing software can be readily employed to provide data in tables or graphs through industry standard protocols</li> <li>• The software should allow automatic execution of system checks, auto-purge and baseline checks</li> <li>• Software must have its own log files for complete audit trails</li> <li>• An audio-visual multi-media CD-ROM for Maintenance and Troubleshooting must be provided</li> <li>• System suitability, System security as well as System check functions must be provided which comply with Good Laboratory Practice (GLP) and Regulatory Conformity</li> </ul> <p><u>Service, Warranty and Training</u></p> <ol style="list-style-type: none"> <li>1. The system should be accompanied with Conformity Certificate.</li> <li>2. Tendered price should include delivery, installation, commissioning and training (at least 4 users) at customer's location.</li> <li>3. On-site installation, commissioning and training shall be conducted by a qualified factory-trained engineer.</li> <li>4. Complete support for equipment for at least a period of 12 months. This shall include the following at no extra cost: <ul style="list-style-type: none"> <li>• Travel and Labour expenses of Customer Engineer.</li> <li>• Service Parts used for repairs.</li> </ul> </li> <li>5. Vendor to provide service guarantee: should the system require service during the warranty period, vendor must guarantee or replacement of instrument for free.</li> <li>6. Vendor to have logistic support to ensure that over at least 95% of the service parts are readily available and</li> </ol>	
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		<p>upkeep delivery within 24 hours.</p> <ol style="list-style-type: none"> <li>7. The warranty shall commence only upon successful completion of the Acceptance Test or commissioning.</li> <li>8. Support will be available from Monday to Friday, 8.30am to 5.30pm (excluding Public Holidays), local time.</li> <li>9. Vendor to provide a copy of Site-Preparation checklist.</li> <li>10. Vendor to provide both on-site and operator training for users on the system start-up, usage, maintenance, quality control, trouble shooting, etc. including comprehensive classroom training.</li> <li>11. Vendor must demonstrate that it has a proven appropriate set-up and capability to provide after-sales service efficiently and effectively. The supplier should have in his facility a similar system to that proposed in this tender for training purpose.</li> <li>12. A declaration of Conformity certificate must be provided.</li> <li>13. A declaration of System Validation certificate must be provided.</li> <li>14. All modules must be GLP compliant.</li> </ol>	
10.	Refrigerated Centrifuge	<p>Max g-force 25,000 rcf  Speed range 500-16,400 rpm  Capacity 30 x 1.5/2.0 mL tubes  Number of rotors 5  Capacity for 1.5 mL  Refrigeration Yes  Temperature control range -9°C to 40°C  Power supply 120 V, 50/60 Hz  Power consumption max. 700 W  Acceleration time to max speed ≤13 s (in FA-45-30-11)  Braking time from max speed ≤12 s (in FA-45-30-11)  Acceleration/Brake speed settings 2  Timer 30 s to 99 min, with cont. mode  Noise level &lt;54 dB(A)  Dimensions (W x D x H) 12.2 x 23.6 x 9.5 in / 31 x 60 x 25 cm  Height with lid open 21.1 in / 53.5 cm  Weight 77 lb / 35 kg</p>	1 Nos
11.	Lyophilizer, Rotavapourator	<p>Labconco/Martin Christ  Upright stainless steel collector coil condenser with holding capacity 2.5 Liters of ice before defrosting and have capacity of removing 2 liter in 24 hours.  CFC-free refrigeration system to cool collector to -50°C.  LCD displays system operating parameters, set-up parameters and alarm messages  Alarm system (Audible and visual) for Power failure(Inbuilt feature to protect the system from Power cuts /failure), improper voltage supply, Collector temperature rise above -40° C, Service vacuum pump (after 1000 hours of vacuum use), Moisture in collector.  Stain less steel drying manifold with 12 ports to</p>	1 Nos

		<p>connect flasks of different sizes along with one product shelf and flask of different capacity along with their 45 Deg angled SS connector.</p> <p>Rotary Vane Vacuum Pump with minimum displacement capacity of 90 L/min or more @ 50 hz. along with 2 liter oil (Extra) for vacuum pump.</p> <p>Suitable trap to trap minute acid percentage.</p> <p>Moisture sensor to prevent vacuum start up when moisture is detected in the collector chamber area or start vacuum pump after -40 Deg C Collector coil.</p> <p>Vacuum control to maintain set point vacuum level.</p> <p>Separate graphical and wave display to indicate that</p> <p>Conditions are right to add samples.</p> <p>Display of total number of hours of refrigeration, operation and the total number of hours of vacuum pump operation.</p> <p>40 ml flask and 80 ml flask (4 each) along with suitable compatible St. steel 45 deg angled connector/adaptor</p> <p>SS angled adaptor for conical flask (for Borosil flask)</p> <p>IQ and OQ documentation.</p> <p>Vacuum grease – silicone free along with system.</p> <p>Warranty: 1 -3 years.</p> <p>Supplied with all the required accessories to make this system functional and protected from electrical surges.</p>	
12.	UPS Microtek	<ul style="list-style-type: none"> <li>▪ Minimum 1 to 2 Hours backup</li> <li>▪ Battery: Exide /Okaya/Sukan/Microtek.</li> <li>▪ True online Double Conversion technology</li> <li>▪ High and Micro Controller/DSP based.</li> <li>▪ Automatic battery charging in UPS mode.</li> <li>▪ Wide input voltage range</li> <li>▪ Short circuit and Overload Protection.</li> <li>▪ Capacity: 20 KVA to 30 KVA</li> <li>▪ Alarm: Battery low/DC High/Output High/Overload</li> </ul>	1 Nos
13.	Phytotron	<ul style="list-style-type: none"> <li>• Type: LCD advanced type</li> <li>• Temp. Range: 0-65°C (without illumination); 10-65°C (with illumination)</li> <li>• Resolution: 0.1°C</li> <li>• Temp. Fluctuation: ±1°C</li> <li>• Temp. Uniformity: ±2°C</li> <li>• Humidity range: 60%-90%</li> <li>• Humidity fluctuation: ±5%</li> <li>• Illumination range: 0-15000LX</li> <li>• Time range: 0-9999min</li> <li>• Power consumption: 1300W</li> </ul>	1 Nos