HLL LIFECARE LIMITED
(A Government of India Enterprise)
P.B.NO. 2, PEROORKADA.P.O.,
THIRUVANANTHAPURAM - 695 005
KERALA, INDIA

INVITATION FOR BIDS
(TECHNICAL BID)

FOR

Supply, Installation and Commissioning of various Equipments
Quantity: Mentioned along with equipments

AT

CORPORATE R & D CENTRE,
AKKULAM, SREEKARIYAM P.O.
THIRUVANANTHAPURAM – 695 017
Email: crdc@lifecarehll.com
Website: www.lifecarehll.com
PH: +91 471 277 4700, FAX: +91 471 277 4707

HLL LIFECARE LIMITED
(A Government of India Enterprise)
P.B.NO. 2, PEROORKADA.P.O.,
THIRUVANANTHAPURAM - 695 005
KERALA, INDIA

Tender No. : HLL/CRD/PUR/TENDER/2014-15/02 18.10. 2014

INVITATION FOR BIDS (IFB)

Sub:- Supply, Installation and Commissioning of various Equipments

HLL Lifecare Limited (HLL) invites sealed and super scribed bids under two bid system (Technical & Price bid) from manufacture(s)/Authorized Agent(s) for the supply of Equipments at HLL Lifecare Ltd, Corporate R&D Centre, Akkulam, Sreekariyam P.O., Thiruvananthapuram – 695 017, Kerala, India.

Name of the Item	**Quantity**	**Tender No:**	**Date & Time of Opening of Technical bids**
Supply of Equipments (Details of equipments mentioned below)	Mentioned along with equipments.	Tender No. : HLL/CRD/PUR/TENDER/2014-15/02	06.11.2014,10.30 a.m

The detailed Tender Notice and tender documents can be downloaded from our website www.lifecarehll.com & CPP portal (www.eprocure.gov.in). The tenderers can download the documents from our website & CPP portal and in such case the tender fee of Rs.300/- should be paid by way of DD along with technical bid. The Bidder is expected to examine the specifications and terms and conditions in the Bid Documents. Any subsequent changes / amendments will be published only in our website & CPP portal.

At any time prior to the deadline for submission of tenders, the purchaser may, for any reason deemed fit by it, modify the Tender documents by issuing suitable amendment(s) to it.

Please note that separate bids have to be submitted for each equipment. Completed tenders in separate sealed covers superscribed with Tender No of each equipment along with equipment name should reach latest by 05.11.2014, 04.30 p.m at the following address;

Joint General Manager (Purchase)
HLL LIFECARE LIMITED
P.B.NO. 2, PEROORKADA.P.O.,
THIRUVANANTHAPURAM - 695 005
KERALA, INDIA

The scheduled date for issue, receipt and opening of bids is as follows.
a) Date of issue of tender document - 18.10.2014 onwards.
b) Last date and time for receipt of bids – 05.11.2014,04.30 p.m
c) Date and time of opening of Technical bids – 06.11.2014,10.30 a.m

Bids will be opened in the presence of Bidders representative(s) who choose to attend on the specified date and time, at the office of HLL at the address given above. In the event of the date specified for bid receipt and opening being declared as a closed holiday for HLL's office, the due date for submission of bids and opening of bids will be the following working day at the appointed times.

HLL may, at its discretion, extend this deadline for submission of bids by amending the Bid Documents or any other reasons, in which case all rights and obligations of the HLL and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended. HLL will not be held responsible for the postal delay, if any, in the delivery of the bidding document or the non-receipt of the same. Bids sent by email will not be accepted. The company reserves the right to club or split the items of works, change the qualifying criteria at their discretion and to reject or cancel the tender without assigning any reason thereof.

JGM(Purchase)

HLL LIFECARE LIMITED
(A Government of India Enterprise)
THIRUVANANTHAPURAM – 695005, KERALA, INDIA

CONTENTS OF BIDDING DOCUMENTS

HLL LIFECARE LIMITED
(A Government of India Enterprise)
THIRUVANANTHAPURAM-695 005, KERALA, INDIA

HLL/CRD/PUR/TENDER/2014-15/02

I - INSTRUCTIONS TO BIDDERS

1. The Bid is intended to procure material as per specification in Schedule-A. The scope of vendor would be to comply with the enclosed URS Plan, supply, execute commission & validate the system as per URS.

2. The Bid comprises of two parts:
A. Technical Bid
B. Price Bid

3. The Technical Bid must be accompanied by EMD (amount mentioned against each equipment) by way of Demand Draft drawn in favour of M/s. HLL LIFECARE LIMITED (HLL) and payable at Thiruvananthapuram, India

4**. Both the Bids shall be submitted in separate sealed covers mentioning Tender No. of each equipment along with equipment name shall be superscribed on the respective covers in order to clearly identify between the two Bids.** The two separately marked Bids enclosed in a single sealed cover with the respective Tender No. and equipment name mentioned thereon, complete in all respect, to be addressed to the Joint General Manager (Purchase) HLL LIFECARE LIMITED, Peroorkada P.O., Thiruvananthapuram – 695005, Kerala, India should reach us on or before the due date and time mentioned in the Tender Notification. **Please note that separate bids have to be submitted for each equipment** HLL shall not be responsible for any delay, if any, in the delivery of the bidding document or non-receipt of the same.

5. A complete set of bid documents can be down loaded from our Website www.lifecarehll.com and cost of the Tender Documents of Rs.300.00 (DD Only – in favour of 'HLL LIFECARE LIMITED' payable at 'THIRUVANANTHAPURAM') should be furnished along with Technical Bid.

6. Quote for the unit against the URS, along with all options. The price to include all spare parts; documentation; packing; freight charges; start-up & commissioning; complete qualification package (DQ, IQ, OQ and PQ (Wherever applicable) and training and charges whatsoever required completing the task in all respects to ensure the equipment operation is in accordance with the requirements of design documents.

7. a. The last date of receipt of Techno-Commercial Bid: 05.11.2014, 04.30 p.m
b. Date of Opening of Technical Bid: 06.11.2014,10.30 a.m

8. In the event of the date mentioned above being declared subsequently as holiday for the purchaser's office, the due date for submission and opening of bids will be the next working day at the same venue and time.

9. Bids received after the deadline for submission shall not be considered.

11. The Purchaser may, at its discretion, extend the date & time for the submission of bids by amending the bid documents in which case, all rights & obligations of the Purchaser & bidders shall the subject to the extended date & time. At any time prior to the deadline for submission of tenders, the purchaser may, for any reason deemed fit by it, modify the Tender documents by issuing suitable amendment(s) to it which will be notified in the website of www.lifecarehll.com / The interested parties are advised to regularly visit the website for further updates.

12. The purchaser has right to waive the tender clauses at any time.

13. The authorized signatory of the tenderer must sign the tender duly stamped at appropriate places and initial all the remaining pages of the tender. The earnest money is required to protect the purchaser against the risk of the tenderer's unwarranted conduct.

The tenderers who are currently registered and, also, will continue to remain registered during the tender validity period with **National Small Industries Corporation, New Delhi** for the specific goods as per tender enquiry specification shall be eligible for exemption from EMD. Vague stipulations in the Registration Certificate such as "to customers' specification" etc. will not be acceptable for exemption from furnishing of earnest money. In case the tenderer falls in these categories, it should furnish copy of its valid registration details (with NSIC). The EMD should be furnished in the name of "**HLL Lifecare Limited, payable at Thiruvananthapuram"** from any nationalised bank or scheduled bank, but not cooperative banks.

Earnest money of a tenderer will be forfeited, if the tenderer withdraws or amends its tender or impairs or derogates from the tender in any respect within the period of validity of its tender or if it comes to notice that the information/documents furnished in its tender is incorrect, false, misleading or forged without prejudice to other rights of the purchaser. The successful tenderer's earnest money will be forfeited without prejudice to other rights of Purchaser if it fails to furnish the required performance security within the specified period.

Earnest money deposit (EMD) for disqualified and non L1 tenderers will be return after awarding purchase order. For the L1 tenderer the EMD will be converted to Security Deposit and returned after sucessful installation, satisfactory working and receipt of 10% performance bank gurantee confirmation from the respective bank.

14. The following are some of the important aspects, for which a tender shall be declared **non – responsive** and will be summarily ignored; '

(a) Tender form as per Schedule B, C, D, E, F & G (signed and stamped) not enclosed
(b) Tender is unsigned.
(c) Tender validity is shorter than the required period.
(d) Required EMD (Amount, validity etc.) / exemption documents have not been provided.

(e) Tenderer has quoted for goods manufactured by other manufacturer(s) without the required Manufacturer's Authorisation Form as per Schedule B, 2:C.
(f) Goods offered are not meeting the tender enquiry specification.
(g) Tenderer has not agreed to other essential condition(s) specially incorporated in the tender enquiry like terms of payment, liquidated damages clause, warranty clause, dispute resolution mechanism applicable law.
(h) Tenderers who stand deregistered/banned/blacklisted by any Govt. Authorities.
(i) Poor/ unsatisfactory past performance.
(j) Tenderer has not agreed to give the required performance security.

15. The purchaser reserves the right to accept in part or in full any tender or reject any or more tender(s) without assigning any reason or to cancel the tendering process and reject all tenders at any time prior to award of contract, without incurring any liability, whatsoever to the affected tenderer or tenderers.

16. In case the Tender document permits the tenderers to quote their prices in different currencies, all such quoted prices of the responsive tenderers will be converted to a single currency viz., Indian Rupees for the purpose of equitable comparison and evaluation, as per the exchange rates established by the Reserve Bank of India for similar transactions, as on the date of 'Price bid' opening.

17.The tenderer has to supply and install the equipment with in the stipulated time period as mentioned in tender document Schedule C Clause 4. If any delay in supply of equipment, the tenderer will impose a penalty @0.5% value of the material per week of delay subject to a maximum of 7.5% of the contract value (contract value inclusive of all taxes, duties, transportation, discounts etc.).

18. HLL Lifecare Limited, Corporate R & D centre has not registered with Sales Tax Authority, hence don't have Tax Payer's Identification Number (TIN) / CST No. So the sales taxes will be applicable as per the VAT rules / CST rules (without 'C form). No exemption certificate will be provided by the consignees for custom duty, central Excise duty etc. For dispatching purpose, Form 16 (as per KVAT rules) will be issued upon request.

19. HLL Corporate R&D, Akkulam, Trivandrum has been registered with Department of Scientific and Industrial Research (DSIR) and is eligible for availing CUSTOMS DUTY EXCEPTION vide Government of India customs notification No. 24/2007 dated 01st March 2007 & EXCISE DUTY EXCEPTION vide Government of India customs notification No. 16/2007 dated 01st March 2007.

20. The Bidder is expected to examine all specifications, Instructions, Forms, terms and conditions given in the Bidding documents. Failure to furnish all information required in the Bidding documents or submission of a Bid not substantially responsive to the bidding documents in every respect will be at the Bidders risk and may result in rejection of the Bid. Any clarification required will have to be obtained one week prior to the date of opening of the "Technical bid".

21. A Certificate/Declaration as given in Schedule G stating that **ALL TERMS AND CONDITIONS** of this Tender is acceptable should accompany the tender failing which the tender is likely to be summarily rejected.

22. The Price Bid of those Tenderers who qualify in the Technical Bid only will be opened. The date and time of opening of price bid will be intimated separately. The Price Bids of Tenderers who do not qualify shall be returned unopened.

23. The EMD may be forfeited:

(a) If a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bid Document; or

(b) In case of the successful Bidder, if the Bidder fails:

(i) to provide the confirmation of order within 10days from the date of Purchase order

(ii) to supply the material after the confirmation of order.

24. A complete set of bid document can be downloaded from the website www.lifecarehll.com For any clarifications connected to the tender, please contact;

JGM(Purchase)
HLL LIFECARE LIMITED
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KERALA, INDIA
Ph _ 0471-2435325
Email: materialspft@lifecarehll.com

SCHEDULE- A

HLL LIFECARE LIMITED
(A Government of India Enterprise)
THIRUVANANTHAPURAM-695 005, KERALA, INDIA

HLL/CRD/PUR/TENDER/2014-15/02

Details of Specification of Equipments

Sl. No.	Tender No.	Name of the Equipment	URS (User Requirment Specifications)	Qty Required	EMD amount (Rs.)	EMD amount in USD
1	**HLL/CRD /PUR/TEN DER/2014-15/02- E1**	**Sonicator**	• Internal tank dimensions : □ 320 x □ 300 x □ 200 (lxwxd) • Capacity : □ 15-20 litres • External dimensions : □ 355 × □ 325 × □ 385 (lxwxd) • Drain ball cock : 1/2" • Ultrasonic peak output : 860W • Heating power : 600 W • Current consumption : 3.6 A • Time setting : 1 – 99 min & continuous operation should be possible • Heating : 20 – 80 ^{0}c • Accuracy : ± 1.5 ^{0}c • Power : Microprocessor control • Rapid degassing of liquids/solvents should be possible • Disinfection and cleaning should be possible at the same time • CE & other international standards certifications should be provided • Installation, commissioning & demonstration of the instrument must be undertaken at free of cost • Original brochures, Original specification sheets from equipment manuals directly obtained from the principal manufacturer of the quoted model must be enclosed along with supporting data. Printed manuals in English should be provided	01	4,000	66.00
2	**HLL/CRD /PUR/TEN DER/2014-15/02- E2**	**Digital Magnetic Stirrer**	• Stirring Speed range : 30 - 1200 rpm • Speed accuracy : ± 1 • Heating Power : 800 W • Hot Plate Temp. : 20-300°C	02	4,000	66.00

			• Medium temp. : □250° • Accuracy temp. setting : ± 1 • Should have external temp. sensor • Temp accuracy with external temp. sensor : ± 0.2 • Should have sensor breakage protection • Temp. Control : Micro Controller • Display : Digital • Temp. accuracy Hot plate : ± 5ºC • Safety circuit Hot plate : 10 - 25°C Over Nominal temperature • Stirring capacity : < 6 Ltrs • Load max. : 15 - 25 kg • Power consumption : 825 W • Temp. Range : 0 - 40°C • Max. Relative humidity : 80% • Plate diameter : □145 mm • Plate Material : Ceramic/ glass ceramic • Holder & stand for temp sensor should be provided • Instrument calibration certificates should be provided • CE & other international standards certifications should be provided • Installation, commissioning & demonstration of the instrument must be undertaken at free of cost • Original brochures, Original specification sheets from equipment manuals directly obtained from the principal manufacturer of the quoted model must be enclosed along with supporting data. Printed manuals in English should be provided			
3	**HLL/CRD /PUR/TENDER/2014-15/02- E3**	**Digital pH Meter**	• **Measures pH, Conductivity, ORP, Ion, TDS, Salinity, Resistivity & Temperature** ➢ **<u>Ranges, Resolution & Accuracy:</u>** • **pH range**: -2.00 to 20.00 with resolution of 0.001 pH • **Conductivity range**: 0.050 µs/cm to 500.00 ms/cm • **ORP range**: -2000 to 2000 mV with resolution of 0.1 mV & Accuracy of ±0.2 mV ±LSD • **Ion range**: 0.001 to 19,999 ppm; ±2000mV with accuracy ±0.5% (monovalent), ±1% (divalent) • **TDS range**: 0.050 ppm to 500.00 ppt with resolution of 0.1, 0.01 ppm, 0.001, 0.01, 0.1 ppt & accuracy ±1% • **Salinity range**: practical: 0.00 to 42.00 psu; natural sea water: 0.00 to 80.00 ppt: percent: 0.0 to 400.0% with resolution of 0.01 for practical /natural sea water scale; 0.1% for percent scale • **Temperature range** : -20˚ C to +120˚ C with resolution of 0.1˚ C & accuracy ±0.3^{0}C • Corresponding Electrode (1 Nos.) for each & every	01	6,000	98.00

			individual measurement parameter should be provided separately • **Resistivity**: 1.0 to 99.9 Ohms.cm;100 to 999 Ohms.cm;1.00 to 9.99 kOhms.cm;10.0 to 99.9 kohms.cm;100 to 999 kOhms.cm with resolution of 0.1 Ohms.cm;1 Ohms.cm; 0.01 kOhms.cm; 0.1kOhms.cm;1 kOhms.cm; 0.01MOhms.cm; 0.1MOhms.cm ➢ **Calibrations:** • pH calibration points: more than 5 with 8 standard buffers and 5 custom buffers • Ion calibration points: 2 to 8 points • Conductivity calibration: Automatic- 4 points, Manual- 5 points • Salinity calibration: Percent scale-1 point • Temperature calibration: 0.1^{0}C increment upto ±5^o C • Corresponding calibration buffers/solutions should be provided • Display details: 240 X 320 dot-matrix dot-colour LCD with on screen help, graphing, language selection and custom configuration • Input channels : 1 pH/ORP /ISE+ 1 EC • GLP: cell constant, reference temperature/coefficient, calibration points, calibration time stamp • Logging: 100 lots with 10,000 record/lot (Automatic , Manual and Auto hold Logging) with up to 200 USP reports, and up to 100 ISE methods reports • The supplier should provide IQ, OQ and PQ documents of the equipment. • CE certification is necessary • Installation, commissioning & demonstration of the instrument with training to the technical staff in instrument operation must be undertaken at free of cost • Original brochures, Original specification sheets from equipment manuals directly obtained from the principal manufacturer of the quoted model must be enclosed along with supporting data. Printed manuals in English should be provided			
4.	**HLL/CRD /PUR/TEN DER/2014-15/02- E4**	**Hot Plate**	• Hotplate temperature range: 30 to 400 °C • Plate diameter: 220 – 280 mm • Plate material: Ceramic glass / Ceramic • Should have digital display to show of actual temperature • Medium temperature control accuracy : ± 1 K • Handling capacity : < 20 lbs • Heating Power : 600-700 Watt (at 230V) • Illuminated switch for actual heating condition • Current consumption : 3.0 – 4.0 A	02	4,000	66.00

			• Should have Extra safety control circuit and hot plate cut-out via two independent temperature sensors • Holder clamp & Stand for temp sensor should be provided • An independent safety circuit with separate circuit switches off the heating if the nominal hotplate temperature is exceeded by 25 °C • CE certification should be provided • Installation, commissioning & demonstration of the instrument must be undertaken at free of cost • Original brochures, Original specification sheets from equipment manuals directly obtained from the principal manufacturer of the quoted model must be enclosed along with supporting data. Printed manuals in English should be provided			
5	**HLL/CRD /PUR/TEN DER/2014-15/02- E5**	**Weighing Balance Semi-micro**	**Specifications** • Capacity: 80-100 g • Readability: 10µg • Weighing Units: Milligram, Gram • Stabilization Time (s): in seconds • Calibration: Automatic internal, Manual external • Display Type: LCD Display • Application Modes: Weighing, Gross/Net/Tare Weighing, Totalization. • Selectable Environmental Filters, RS232 Interface with full GLP/GMP Protocol, • Easy to Clean Stainless Steel Platform, Glass & Steel Construction • Should have all necessary Approvals	01	10,000	164.00
6	**HLL/CRD /PUR/TEN DER/2014-15/02- E6**	**Ultrasonic Bath/Cleaner (Sonicator)**	**Specifications** Inner Diameter: □ 300 x □ 240 x □ 250 (L X W X D) External Diameter: □ 325 x □ 625 x □ 350 (L X W X D) Tank capacity: 12-15 L **Sample stand:** 1. 10, 25, 50, 100, 1000 ml volumetric flask stand holder 2. 5 L Scott Duran bottles stand (200 mm diameter) 3. Beaker holder 4. One year warranty **Features:** ➢ Full convenience in use and display for all bath types ➢ Easy to operate – self-explanatory symbols ➢ Well recognizable parameters, target as well as actual values – brightly lighting LED-display ➢ Time 0-30 min (Automatic control) ➢ Heater 20–80 °C, thermostatically adjustable, with LED-display for target value and actual value of temperature	01	4,000	66.00

			➢ Optical signal in case of excess temperature ➢ Timer for countdown and continuous operation ➢ DEGAS: adjustable pulse sound level for removing unwanted air bubbles, visible at LED-display ➢ Automatic short-time ultrasound during heating up period to avoid delay in boiling – switch-off Possible. ➢ Sweep Tec for permanent sound field oscillation ensures even and gentle cleaning ➢ Automatically safety shut-down 12 hours after last key press.			
7	**HLL/CRD /PUR/TEN DER/2014-15/02- E7**	**Shaker Incubator**	**<u>Specifications</u>** • Compact Bench top model • Universal platform • Ideal for a different shapes and size of vessels • Digitally display control time counts up during continuous operation • Automated timer for continuous operation • Temperature Range 5° C + Ambient to 80° C • Temperature Uniformity +/-0.1° C- +/-0.5° C at 37° C • Shaking Speed 25 - 500 rpm, +/- 1 rpm • Shelves to be provided (removable and adjustable in different heights) • CE and/or ISO standard certificate are necessary. • Pre installations requirements must be specified. Supplier should have supplied systems in India. • Supplier should provide IQ/OQ of the instrument and all other relevant documents. • Installation and commissioning of the instrument must be undertaken at free of cost • Original brochures, Original specification sheets from equipment manuals directly obtained from the principal manufacture of the quoted model must be enclosed along with supporting data. Printed manuals in English should be provided. • Compliance statement with proof for specifications of the system should be provided	01	6,000	98.00
8	**HLL/CRD /PUR/TEN DER/2014-15/02- E8**	**HPLC**	**The HPLC system shall include the following individual stackable (modular) self-contained modules** **Pump:** • High precision HPLC pump, Pulse free, low pressure quaternary solvent delivery system with built in vacuum degasser. • Flow rate : 0.0 to 5.0ml/min • Flow precision : ≤0.15% RSD or better • Flow accuracy :±1% or 10µl/min • Pressure range : 400 bar or more • pH range : 1.0 – 12.5 • Composition range : 0 to 100 % in 1% increments • Composition accuracy :±0.5% or better	01	60,000	984.00

			• Composition precision : ≤0.15% or better • Operating temperature range : 20 – 40 ºC • The solvents lines should be compatible with organic, aqueous and non-aqueous solvents. **Auto sampler :** • Mode : Automatic • Replicate injection from vial : 1 - 90 injections per vial or more • Injection volume range : 1 to 1000 µl • Vial capacity : Minimum 100 vial (2 ml vial) • Sample delivery precision : 0.5%RSD or better • Injection accuracy : ±0.1 µl • Injection needle wash :Integral , programmable • Injection linearity : 0.999 or better coefficient of deviation **Thermostat:** • Temperature range : 4°C to 40 °C in 10 °C increments **Column Oven:** • Temperature range : 10 °C below ambient to 80 °C • Temperature stability : ±0.15 °C • Column capacity : 300 mm X 3 nos **Photo diode array detector:** • Wave length range: 190 to 800nm • Light Source: Deuterium lamb and Tungsten • Wave length accuracy: ±1 nm • Wave length bunching : 2-400nm, Programmable in steps of ±1nm • Signal data rate: 80 Hz • Spectra data rate: 80Hz • Drift: 0.001 AU/hr or better • Linear Absorption Range= >2.0 Au(5%) at 265nm • Automated peak purity determinations **Data Acquisition and Instrument control/Operation:** • Latest software should provide full control of HPLC system (Pump ,Column oven , auto sampler , detectors etc) • Data handling in accordance with the technical requirement of FDA regulations 21 CFR part 11. • CE and all other instrument standard certificate are necessary. • PC with latest configuration and laser printer (Minimum specification – Windows7 operating system ,Intel core i5 or higher , 4G RAM , 500GB HDD ,DVD ROM RW drive ,17" high resolution			

			LCD monitor , Optical mouse ,Key board). **HPLC starter Kit:** • HPLC system tool kit contains tools required for the operating and maintenance of the system • HPLC starter kit: Contains solvent bottles (1L x 4nos), 0.17mm ID capillary starter kit, cyber tool, rheotool, tubing cutter. Ideal for the use of 3 -4.6 mm ID Columns • HPLC Column - 250mm x 4.6mm ,5µ - C18 (1 nos) with guard column • HPLC Column - 250mm x 4.6mm ,5µ - slilica (1 nos) with guard column **General:** • Pre installations requirements must be specified. Supplier should have supplied systems of similar applications in Kerala. • Supplier should provide IQ/OQ of the instrument and all other relevant documents. • Installation and commissioning of the instrument and training of to technical staff in instrument operation must be undertaken at free of cost. • Original brochures, Original specification sheets from equipment manuals directly obtained from the principal manufacture of the quoted model must be enclosed along with supporting data. Printed manuals in English should be provided. • Compliance statement with proof for specifications of the system should be provided. CE and all other international standards certification is necessary			
9	**HLL/CRD /PUR/TEN DER/2014-15/02- E9**	**Shaking water bath**	• **Capacity:** 20 Litres to 35 Litres • **Shaking method:** Reciprocal & orbital • **Temperature range:** Ambient+5°C to atleast 65°C • **Temperature stability:** ±0.1°C • Should be capable holding test tubes, 50ml Centrifuge tubes with the lid covered. • Tray and racks to be provided as accessories. • **Power supply:** 220V -230V • Drip free lid to be provided. • IQ, OQ, PQ to be done at site.	01	2,500	41.00
10	**HLL/CRD /PUR/TEN DER/2014-15/02- E10**	**Weighing balance**	• **Capacity:** 320 g • **Readability:** 0.1mg • **Repeatability:** atleast 0.2mg • **Linearity:** ±0.3mg • **Calibration:** Fully automatic internal Calibration with built in weight. Internal Motorized calibration • **Display:** Alpha numerical LCD Display	01	3,600	59.00

			• **Operating Temperature:** +10°C to 40°C • **Minimum sample weight:** Not more than 100mg • **Power supply:** AC adaptor for 220V -230V • Should have Standard RS 232C output. • **Compliance:** ISO, GLP / GMP USP Compliance • **IQ, OQ and PQ to be performed at site.**			
11	**HLL/CRD /PUR/TENDER/2014-15/02- E11**	**Hot air oven**	• **Capacity:** 100 Liters – 110 Litres • **Circulation:** Forced air convection type • **Temperature:** o **Range:** +5°C to 250°C o **Uniformity:** 1% of the reached temperature o **Accuracy:** ±0.1°C at 50°C - 70°C ± 0.2°C at 120°C -150°C ± 0.3°C at 210°C -230°C • **Display:** Digital LCD display with back-light • **Material: Internal:** Stainless steel 304 **External:** Powder coated Steel. **Insulation:** preferably glass wool **Racks/ shelves:** Stainless steel 304 **Weight per shelf:** atleast 15kg. • Digital Temperature control • RS 232 port should be available. • Timer option preferable. • Ventilation cap of stainless steel cap • Temperature and time storage function • High temperature cut off and alarm system. • Power supply: 220V – 230V, 50/60 Hz • IQ, OQ, PQ to be performed at site. • Calibration certificates for the temperature sensors to be provided (should be traceable to national or international recognised calibration laboratory or agency)	01	4,000	66.00
12	**HLL/CRD /PUR/TENDER/2014-15/02- E12**	**Glove box**	• Material: S.S. 304 • Dimension: o Main Chamber: (L) 1000mm x (D) 750 mm x (H) 1000 mm (Approx) o Antechamber (for material and equipment entry): (L) 500 mm x (D) 750 mm x (H) 1000 mm (Approx) • Lighting: Internally mounted LED Light strip • Shelves: Two shelves (Height adjustable) S.S 304 • Stand: Levelling feet & Casters, movable, S.S 304 o Height: 750mm • Glove (Pharma grade) : o **Main chamber:** Chemical Resistant, 2 glove ports. o **Antechamber:** Chemical Resistant, 1 glove • Equipment entry door (Approx 700 x 450mm) with gasket. • Transparent Window for observation; Window: Chemical Resistant, inclined to reduce glare. • The front viewing windows of the glove box should	01	20,000	328.00

			be openable for cleaning • All parts made up of Stainless steel SS304 • Electrical requirement: 230V, 50-60 Hz, 10A. • Two plug points 15A (3 pin sockets), 230V. • Connecting air tight glass window between Antechamber and the main chamber. • All stainless steel gas flow piping and fittings, S.S.304. • Purge valve is required. • Two inlets for gas required. • Main chamber leakage rate should not be more than 3 torr/ hour • Pressure gauge with analogue readout. • Gas inlet and outlet valve is required IQ, OQ, PQ has to be performed and certificate has to be given at site.			
13	**HLL/CRD /PUR/TEN DER/2014-15/02- E13**	**Antibody dispensing machine**	• No. of Reagents/pumps : dispense 3 different reagents simultaneously/ 3 Bio jet pump system and 1 Air jet pump • Dispensing rate : 0.01 to 10 µL/mm • Carriage Speed : 10 to 300mm/s • Maximum Membrane Length : 500mm • Maximum Membrane width : 125mm • Minimum spacing between the nozzles : 5mm • Main Unit dimensions : Approx. 37X66X15 cm • Weight : Approx 10kg • Pump Housing dimensions : Approx. 15X23X15cm (with 3 syringe pumps) • Weight : Approx 4 Kg • Power Requirement : Aprrox. 100-240VAC, 50/60Hz, 300watts. • 100 µL Glass syringe : 3 Nos. • 250 µL Glass syringe : 3 Nos. • Syringe pump cable : 3 Nos. • Operation : Completely digital (No micrometres and pressure regulator is required) • Should be used to dispense antibodies and similar in to nitrocellulose membranes and conjugates • Should provide with one extra set of atomizing Nozzle, plunger, syringe, Holder & handheld terminal with cable, Power cable etc. • Should include installation and training	01	30,000	492.00
14	**HLL/CRD /PUR/TEN DER/2014-15/02- E14**	**SDS Page**	• Number of gels should be 1-4 Nos. • Ready gels or precast gels should be used • Glass plate size (WxL) o Short plate Approx. 10.1 x 7.3 cm o Spacer plate Approx. 10.1 x 8.2 cm • Gel size (WxL) o Handcast Approx. 8.3 x 7.3 cm o Precast Approx. 8.6 x 6.8 cm • Typical upper buffer volume should be 120 ml • Typical lower buffer volume should be 180 ml	01	4,000	66.00

			• Universally recommended power supply should be used • Dimensions (WxLxH) should be approximately 12x16x18 cm • Should provide the universal jack for connecting with any type of power pack.			
15	**HLL/CRD /PUR/TENDER/2014-15/02- E15**	**HPLC**	The HPLC system shall include the following individual stackable self-contained HPLC modules. Individual modules must be connected via fibre optic noise resistant high-speed transmission technology to enhance the reliability and sensitivity of the HPLC. A. Binary Gradient Solvent Delivery System for Micro, Semi-Micro, Analytical, Semi-Prep flow rates B. Degassing Unit C. Photo-diode Array UV-Vis Detector D. Auto-Injector with Accessories E. Column Oven F. Columns G. Guard columns H. System Controller I. Data Management System A mobile suitable and stackable stainless-steel shelf should also be provided to assemble all these units without occupying the lab bench **A. Binary Solvent Delivery System for Micro, Semi-Micro, Analytical, Semi-Prep flow rates** • Binary gradient systems with two individual pumps with high pressure binary valve and low pressure quaternary valve • The flow rate should be set between 0.0001 to 10 ml/min in 0.1 µl/min step • Discharge Pressure of solvent delivery unit should be 125 MPa - 130 MPa while the flow rate at/ or <3 ml/min • Flow rate accuracy should be ± 1% or ± 0.5 µl/min of set value whichever is larger • The standard gradient mixer should have delay volume of at least 20 µl • A 180 µl gradient mixer should be made available with the composition accuracy and composition precision at least below 0.5% and at least 0.1% RSD, respectively. • It should employ active check valves that allow stable delivery of even non-polar organic solvents • Maintenance kit and reservoir tray (with 4 solvent bottles complete with fittings) & automatic rinsing kit must be supplied • Starter kit: Contains solvent bottles (1L x at least 4 numbers), 0.17 mm ID capillary starter kit, cyber tool, rheotool, tubing cutter. Ideal for the use of the columns mentioned below,	01	70,000	1148.00

			• Solvent reservoir bottles should come with nylon moisture trap • It must have a leak sensor as a safety feature **B. Degassing Unit** • Membrane degassing unit should have at least five flow lines and the maximum operating flow rate should be up to 20ml/min per flow line • An internal capacity of 380 µl per flow line should be available • It must have a leak sensor as a safety feature • Error status shall be capable of transferring the status to the operating software • It should include a drain-pan • It should be equipped with self-cleaning capability that extends vacuum pump life by drawing in air when the pump is running • The liquid-contact-surfaces of the degasser should employ special synthetic polymers designed to withstand for all types of solvents **C. Photodiode Array (PDA) UV-Vis Detector** • The wavelength range should be at least from 190 nm - 800 nm • The photo-diode array detector should at least have 512 elements and an element resolution of 1.2 nm/element must be available. • The detector must at least have 2 modes of operation using a variable slit: High Resolution mode at a slit width of 1.2 nm and a high sensitivity mode at a slit width of 8 nm • A semi micro flow cell [2.5 µL volume, 5 mm cell path length, 12 MPa pressure maximum] with temperature control with should be made available as standard • A conventional flow cell [12 µL volume, 10 mm cell path length, 12 MPa pressure maximum] with temperature control should be available as an option • The flow cells must be temperature controlled from ambient + 5° C to 50° C • Wavelength accuracy should be ±1 nm • A deuterium lamp (D2) and a tungsten lamp (W) should be made available as light source for UV and visible wavelengths, respectively. • The selection of light source must be flexible to select D2, W or both [D2 +W] the lamps for analysis (3 modes) • The Noise Level must be smaller than 0.6 x 10-5 AU **D. Auto-Sample Injector with Accessories** • The minimum operating pressure must be 115 MPa • The auto sampler design should be a flow through design with variable injection volumes. • Minimum 1000 appropriately suitable (capable of holding 250 – 500 µl) sample vials (500 amber & 500			

			white) should be made available; capable of fit in to the auto sampler • Minimum 1000 appropriately suitable (capable of holding 1 – 2 ml) sample vials (500 amber & 500 white) should be made available; capable of fit in to the auto sampler • The appropriate sample vial metal sealer and metal cap(s) for sample vials should be made available • Sample injection volume should be variable between 0.1 µl to 50 µl • Loop injection using fixed loop [5 µl] should be available as an option for reducing the delay volume • Injection system should be variable injection volume type with zero sample loss during injection • Injection volume accuracy must be below 1% • It must be capable of very fast injection time of 8-12 sec/sample • Flow line rinsing capability both before and after sampling should be made possible • It should be able to use at least four different solvents for effective rinsing • Temperature setting range should be from 4 to 40° C ± 1-2° C • The injection precision should be less than 0.25% of RSD • Number of samples to be processed automatically, random access up to 175 positions for 1ml vial volume, 115 for 1.5 ml, 50 for 4ml, 192 for 2x96 wells microtitre plates (MTP), 768 for 2x384 wells microtitre plates, 192 for 2x96 wells deep-well plates • It should have safety features like leak sensor and automatic rack and vial recognition. maintenance kit should be available • An automatic rack changer capable of seamless coupling to the auto injector should be available for future upgrade. • The rack changer should have a cooler capable of 4˚ C - 40˚ C. It must be capable of accommodating up to 12 MTP and 12 racks (each with at least 54 positions) for standard 2 ml sample vials **E. Column Oven [Forced Air circulation]** • It should be forced-air-circulation type for uniform temperature distribution to maintain the temperature constantly • The temperature range should be ambient ±10˚C to 85˚C • Temperature control precision should be at least ±0.1˚C • The oven should have temperature limit device and temperature fuse and a solvent • The oven should have leak sensor for safety **F. COLUMNS** Guard columns should be made available. Minimum two dedicated guard columns should be			

			provided for each of the eight columns mentioned below. Each guard column shoud come with at least 6 specific appropriate cadridges. The following eight numbers of end caped reverse phase columns must be provided along with instrument. 1. C18- Pore size 120 Å, Particle size 5 µm, Length x Internal diameter 150 x 4.6 mm - 2 No 2. C18- Pore size 120 Å, Particle size 1.7 µm, Length x Internal diameter 50 x 4.6 mm - 2 No 3. C18- Pore size 120 Å, Particle size 1.7 µm, Length x Internal diameter 30 x 4.6 mm - 2 No 4. C18- Pore size 120 Å, Particle size 0.8 µm, Length x Internal diameter 30 x 4.6 mm - 2 No **G. System Controller** • It should acquire up to 24 hours for one analysis, at 500ms sampling rate • It must be controllable from a web-based interface via a network. It allows the system to be controlled, monitored and maintained via at least Internet Explorer Web browser or other browsers • It must be compatible with wireless networking also • It must have an expert function in that if pressure falls below specified value, the expert function should be capable of purging automatically • It should store the analysis files with a total at least 50 steps of time programs **H. Data Management System** • A high end computer should come with the features (Intel Core 2 Duo processor or higher & Minimum 4 GB RAM on board or higher & Minimum 750 GB hard disk or higher) • Pre-installed Windows 8 [64 bits] with MS office 2010 along with a color Laser printer attached with all sufficient drivers ➢ Software • The machine should be capable of exporting the chromatogram and UV spectra of analysis irrespective of the analysis to the MS office format, if we set/do not set the wavelength during analysis • It should be able upgrade for future needs • Full 3D spectral analysis for Diode-Array Detector should be available. • The self-diagnosis feature of the software should enable diagnosis of all detectors and all connected LC units • The software should have column management system • The software should perform customised continuous analyses according to the conditions specified for each sample. Priority samples may be inserted in the queue during automated run.			

			• The software should be capable to perform overlapping injections • 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 • The software must have a safety feature where in when the mobile phase level goes down below the set threshold value, the software should trigger auto shutdown of pump. • CE and/or all other instrument standard certificate are necessary • Pre installations requirements must be specified. Supplier should have supplied systems of similar applications in Kerala • Supplier should provide IQ/OQ of the instrument and all other relevant documents • Installation and commissioning of the instrument and training to technical staff in instrument operation must be undertaken at free of cost • Original brochures, original specification sheets from equipment manuals directly obtained from the principal manufacture of the quoted model must be enclosed along with supporting data • A printed manuals in English should be provided • Compliance statement with proof for specifications of the system should be provided			
16	**HLL/CRD /PUR/TEN DER/2014-15/02- E16**	**Laboratory Turbidity (Spectrophoto) meter (LSM)**	LSM should be bench top compact model with the following features included • LSM should have single beam, capable of holding visible scanning wavelength (at least from 325 – 1100 nm) • Source of the lamp should be tungsten-Halogen • Lifespan of the lamp should be at least for 999 hr or more • Wavelength accuracy ± 1-2 nm • Bandwidth should not be less than 8 nm • LSM should ensure 100-125 % transmittance, and 0-2.5 A • LCD or digital display should enable the users to set the parameters • LSM should have single silicone photodiode detector • LSM should come along with <u>single position cell holder that accepts all types of cuvettes</u> • LSM should come along with single position cell	01	4,000	66.00

			holder that accepts all types of test tubes • Universal adaptor/holder should also be provided to hold and/or insert all types of test tubes/COD vials and cells for either low or high concentration of samples, which should allow the user to measure absorbance/wavelength scan at particular wavelength and range of wavelength • LSM should have auto zero function to ensure 100% transmittance • LSM should have PC control software application for wavelength scanning, fixed-multi wavelength scanning and kinetics • CE and/or all other instrument standard certificates are necessary • Pre installations requirements must be specified. • Supplier should provide IQ/OQ of the instrument and all other relevant documents • A printed manuals in English should be provided • Compliance statement with proof for specifications of the system should be provided			
17	**HLL/CRD /PUR/TEN DER/2014-15/02- E17**	**Floor Ultra Centrifuge (FUC)**	Ultracentrifuges should achieve best in class sample separation performance and processing capacity, combining high speeds and RCFs with fast acceleration and deceleration rates. It Should accommodate tubes from 0.2 mL to 30 mL with a choice of fixed angle, swinging bucket or vertical rotors. FUC should be ideal for working with Virus bacterial cultures, Lipoproteins, Nanoparticles, Nucleic Acids. The supplier should provide a special 10 years **non-prorated** warranty on the Drive system, and rotors are provided with 5 years **Non-prorated** warranty with Unlimited Number of Run Cycles. **Type:** Floor Model **Maximum speed:** Up to 150,000 rpm **Maximum RCF:** 1,000,000 x g or more **Acceleration/deceleration:** Without sample, it should reach 70-85 seconds/It should be able to come down within 60-80 seconds **Speed control accuracy:** ± 50 rpm • FUC should have two appropriate Carbon Fiber Fixed Angle Rotors for achieving 150,000 rpm (at least with the maximum volume of 10-16 ml) and 50,000 rpm ((at least with the maximum volume of 150-180 ml) of samples, irrespective of the types of sample • For spinning the sample(s), at least 2 sets of unbreakable, suitable and highly appropriate sample tubes (for achieving 150,000 rpm, capable of holding 10-16 ml) and at least 2 sets of unbreakable sample	01	30,000	492.00

			tubes (for achieving 50,000 rpm; capable of holding 150-180 ml) must be provided along with FUC. Tubes should be compatible with the rotors provided. • FUC must come along with an appropriate digital weighing balance to determine the accurate weight the sample tubes and to balance of the sample tubes before spin. • Weighing balance should be capable of weighing minimum at least 200 gm with the readability of 0.001 gm, including the pan diameter of at least 4.5 inches. It should have an internal battery, AC power adaptor and weighing units should be g, lb, ct, d, gn. • FUC should have the program memory: at least for 15-18 programs • The Refrigeration System of the FUC should be solid-state thermoelectric & the temperature set range should be 0 to + 40° C with an accuracy of + 1° C, should have digital timer & up to 10 micron level of vacuum is required. Hence the machine should have oil rotary vacuum pump with moisture removal function and oil diffusion pump (vacuum of 0.13 pa). • FUC should work in ambient temperature range of 5 – 35 °C • Noise level should be <46 dBA (measured 1M from instrument) • FUC should come with LCD screen or touchscreen along with graphical interface for easy operation [read, select and navigate etc.] • FUC should provide individual rotor runs & total run hours, operating histories (at least last 50 runs along with the other parameters), rotor specifications. • Password protection option should be given in a multi user environment • FUC should have delayed start/stop provision for step runs, pulse runs • FUC should have selecting RPM or RCF mode automatically whenever necessary, There should be a provision for USB port for taking data out • FUC should have auto restart control in the event of power failure; also the machine should have imbalance detection, sample imbalance tolerance, over speed detection, over temperature detection, safety door lock. • CE and/or all other instrument standard certificates			

			is/are necessary • Pre installations requirements must be specified • Supplier should provide IQ/OQ after installation • A printed manuals in English should be provided • Compliance statement with proof for specifications of the system should be provided			
18	**HLL/CRD /PUR/TENDER/2014-15/02- E18**	**Liquid Nitrogen container (LNC)**	• An advanced vacuum insulated liquid nitrogen container to minimize the evaporation • LNC should come along with the appropriate roller cart, which should make LNC portable from one place to another place • LNC should have double wall, vacuum insulated narrow neck • LNC dimension should be (65-70 height in cm x 52-60 diameter in cm) • Liquid nitrogen capacity should be at least 48-52 Lit, with the consumption rate, not more than 0.8-0.9 Lit/day. • LNC should be capable holding static time of at least 60 days or more • LNC should be capable of accommodating four stainless steel racks • LNC should have at least 16 cryogenic boxes with the dimension (LxWxH) 12-14 x 13-14 x 4.5-5.5 cm) • LNC should have at least 8 polypropylene storage boxes, capable of accommodating 2 ml cryogenic vial in size • LNC should have at least 500 appropriate polyethylene round bottom vials to fit in to the above mentioned cryogenic boxes, each round bottom (internal thread) vial should be capable of holding at least 4.5 ml of sample • Each of the above mentioned vials should withstand from -196 to 135° C • LNC may allow us to detect the low level of liquid nitrogen by alarm; optional • LNC should come with one medium size cryo-clove (at least 39 cm length) capable of withstanding the temperature at least -160° C to ensure thermal protection	01	4,000	66.00
19	**HLL/CRD /PUR/TENDER/2014-15/02- E19**	**Lyophilizer**	➢ Condenser Capacity: 25L-60L ➢ Ice condensing capacity: 10L-30L ➢ Ice Condensing Capacity in 24 h: min.10L ➢ Lowest Shelf Temperature: -65 °C ➢ Shelf Temperature Control range: -55 to 60 °C ➢ Lowest Condenser Temperature: -85 °C ➢ LCD display for temperature and vacuum ➢ Sensor such as vacuum sensor; Product Sensor; shelf control Sensor ➢ Condenser Type: Internal ➢ Number of product shelves within the chamber: minimum 3 No.	01	84,000	1,377.00

			➢ Pre freezing facility within the chamber ➢ Shelf Pull-Down from 20 °C to -40 °C in ramping mode ➢ Temperature Uniformity: ± 1.0 °C. ➢ Hot gas / electrical defrost ➢ Number of compressor: minimum 2 ➢ Vacuum pump approximately : minimum 60 litre per minute, 200V-240V/ 50Hz ➢ Refrigerator: 2; CFC free • PLC controller based software with a programmer module, colour display, touch-screen display. • Alarms alerts received via e-mail. • Controllable vacuum and temperature by auto or manual mode in the thermal treatment (primary drying) and freeze-drying steps in the lyophilisation cycle; preferably includes secondary phase drying; multiple programme storage capacity. System Status screen that displays the system's phase, status and time, along with current parameters and set points.			
20	**HLL/CRD /PUR/TEN DER/2014-15/02- E20**	**Overhead stirrer (pilot scale)**	• Stirring quantity max. (H_2O): 100 L • Motor rating input : 130 W • Motor rating output : 84 W • Speed range II (60 Hz) :30 - 2000 rpm • Speed control :stepless • Setting accuracy speed: 1 ±rpm • deviation of speed measurement n > 300rpm:3 ±rpm • deviation of speed measurement n < 300rpm: 1 ±% • Stirring element fastening :chuck • Frequency : 50/60 Hz • Power input:130 W	01	10,000	164.00
21	**HLL/CRD /PUR/TEN DER/2014-15/02- E21**	**Packing machine**	• Sealing Width 5/10 mm • Sealing Speed 4 meter / minute • Max Conveyor Load 5 Kg • Conveyor Width125 mm • Temp. Range 0 - 300° C • M/C Dimension L x W x H (mm)800 x 380 x 440 • Power 50Hz 1Ø - 220V/5A	01	20,000	328.00
22	**HLL/CRD /PUR/TEN DER/2014-15/02- E22**	**Water purification system (Pure-Type2/ultra pure water)**	Capacity: 3ltr/hrs or more type 2 grade water • System should be a two stage system to produce both type 2 and ultrapure separately. • Pretreatment cartridge with antiscaling compound and silver impregnated carbon. • High flux Thin film composite polyamide RO membrane with 94- 99% rejection. • Conductivity meter before and after RO to measure the performance of the system. • Mixed bed ion electro deionisation module with auto regeneration. • Carbon beads at cathode of the EDI module to prevent scaling of the module. Permeate divert valve which will divert low quality water to the drain .	01	20,000	328.00

			• Product Water Specifications Resitivity : > 5 Meg Ohm.cm (typically 10-15) TOC : <50 ppb Ultra Pure water purification system • Purification pack tailored to specific feed water source containing mixed bed ion exchange resin/ microfilter / activated carbon. • Feed water should be type 2 water. • Easy plug and use design of purifictaion cartridges. • Pharmacutical grade , final filter with 0.22micron membrane filter in stack disc configuration. • Automatic recirculation when system is not in use. Product Water Specifications Resitivity : 18.2 Meg Ohm.cm (@ 25 degree C) Conductivity : < 0.055uS/cm TOC : <10 ppb Bacteria : <1cfu/mL Pyrogen : <0.001Eu/mL RNase : <0.003 ng /mL Flow Rate : 0.5L /min or more			
23	**HLL/CRD /PUR/TEN DER/2014-15/02- E23**	**-20°C Refrigerator (Freezer)**	• Capacity in litres- 344L horizontal model • Temperature range: -17 deg C to -24 deg C • Should have advanced microcontroller for temperature setting • Should Digital display of operating parameters • Should have Alarm for abnormalities • Zero ODP based insulation • ODP Class- Low • GWP- <0.1 • Low thermal conductivity (19.5 to 20.5 mW/mK @10 'C) • No. of shelves required - 8 adjustable • Single solid door • Should have Lockable castors • Dimensions- 24/24/73 inches WDH • Power- 220V/50Hz • Certifications required : ISO 9001 & ISO 14001	01	30,000	492.00
24	**HLL/CRD /PUR/TEN DER/2014-15/02- E24**	**Zeta Potential analyser**	• Sample type: Nanoparticles, colloidal particles and protein solutions • Zeta potential range: ±200 mV to ±500 mV • Minimum volume: 20 µL to 200 µL • Sample concentration: Lower and up to 400mg/mL • Temperature range: up to 900C • Source: LED/Laser diode/He Ne • Mobility range: >± 20µ.cm/V.s • Power requirements: The complete system should operate at standard 220-230 V, 50-60 Hz power supply. • Software: Standard user friendly software should include capability to measure and report zeta potential, mobility. Upgradable software.	01	60,000	984.00

25	**HLL/CRD /PUR/TEN DER/2014-15/02- E25**	**Rheometer**	Research grade Rheometer for the viscoelastic characterization of pharmaceutical & personal care materials such as creams, gels. Suspensions, lotions complex fluids etc. The rheometer should have the capability to operate under both stress control & strain control mode. Necessary temperature control systems such as peltier temperature unit should be included. Necessary geometries such as Cone/Plate. Plate/Plate geometries, concentric cylinder should be provided. 1. The Instrument should operate in both Controlled stress and Controlled strain. 2. It should have a dual air bearing to facilitate highest sensitivity and accuracy in viscosity and modulus changes during measurements. 3. It should have automatic Gap Setting for controlled and reproducible sample loading. 4. The rheometer should be supplied with compatible Air compressor, Air dryer. Air filter, regulator and tubing. 5. Geometries : 25mm, 50mm cone and 25 mm, 50 mm Paralle Plate, , 1 deg Cone, Concentric Cylinder 6. It should have the following minimum technical specifications: a. Torque Range Minimum torque (oscillation): 2nN.m or lesser Minimum Torque (rotation) 10nN.m Maximum Torque : 200mN b. Torque resolution: 0.1 nNm c. Frequency Range: 10^{-7} to 628 rad/sec (1µHz 100µHz) d. Angular Velocity Range: 0 to 300 rad/s e. Step Time, Rate:< 10 ms f. Normal force Range:0.005 to 50N g. Normal Force Resolution :0.5-1 mN h. Drive Unit: Electrically Coupled Synchronous Motor or Drag Cup Motor i. Temperature Control Unit: -20 °C or more to +170	01	80,000	1,311.00
26	**HLL/CRD /PUR/TEN DER/2014-15/02- E26**	**UV Chamber for TLC**	• Inernal Dimentions (WxD): 450x300 mm • Dual wavelength combination of **254 nm** and **365** nm within a unit equiped with 4 Nos. • Automated ON/OFF of UV light and normal light when cabinet door is closed and vice-versa • UV tubes should be exchangeable if required • Viewing port should have UV absorbing filter. • Inner wall should be made of UV-stabilized polycarbonate sheet.	01	3,000	49.00
27	**HLL/CRD /PUR/TEN DER/2014-15/02- E27**	**Heating-cooling Circulator**	• Working temperature ranges from -30 to +200°C. • Temperature stabilities: ±0.005°C. • Cooling Capacity @ 20°C ranges: 200 to 1400 W. • Capacity: 50L chamber capacity.	01	8,000	131.00

			• Should have Smart Touch display and multiple communication options. • Time/temperature programming • Protection against over-temperature and low fluid level. • Variable-speed pressure/suction pump with external circulation • Low water indication & Pump shutdown. • Inlet and outlet adapters for 3/8, 1/4, and 3/16" (.95, .63, and .47 cm) tubing. • Control System for Whisper Cool Environmental. • Cool Command Technology regulates amount of cooling required. • Capable of reaching low temperature upto -40°C. • Automatic or user-adjustable performance optimization. • Provision for external control of Temperature. • Remote on/off for external temperature probe. • CE and all other international standards certification is necessary			
28	**HLL/CRD /PUR/TEN DER/2014-15/02- E28**	**Laboratory glassware washer (LGW)**	The LGW machine shall include the following features. The internal chamber (6 sides) of LGW should be made up of stainless steel (3:1:6) and body should also be made with combatible strong material. LGW should have an internal diagnostics to monitor the instrument's performance and record in a logbook. LGW should come along with HEPA filtered air drier. • It should be capable of rinsing with purified water and capable of pumping HEPA filtered forced-air to eliminate soluble airborne contaminants and ensure complete drying of washed glassware • HEPA-filtered forced air drying through the spindles programmable up to 99 minutes and HEPA filter is 99 % efficient on particulates 0.3 micron. • It should be capable of accommodating wide varieties of glassware, including volumetric flask in a specially designed spindled rack • Washing and blowing the air for drying should be done through spindle and two arms. Drying should also be done throughout washing chamber • LGW <u>should be capable of having at least 2 different adjustable positions</u> for dedicated baskets/racks • LGW should be compatible with spray and injection wash • LGW should come with separate baskets/racks for different glass wares and purposes, including 1. Either type 304 or 316 stainless steel 36-Lower dedicated spindle rack 2. Upper standard rack 3. Upper spray rack at least for 25 glassware 4. Upper spindle rack for at least 18 glassware	01	36,000	590.00

			5. Upper glassware clips for at least 36 glassware 6. Atleat 10 small upper spindles rack/trolly 7. 10-pin insert rack 8. A dedicated rack/trolley for animal & plant tissue culture bottles at least 25 bottles 9. A dedicated rack for short injectors, atleast for 80 10. A dedicated rack for at least 100 pipettes • All the above mentioned racks/trolleys should be interchangeable and detachable • Water consumption should be the maximum of 40-60 Lit/wash cycle • Washing temperature should reach the maximum of 93° C ± 2 ° C • Interior light(s), at least 4 levelling feets and utility hook-up terminals for both side should be made available • A drainage coiling kit (at least 115 VAC) along with all accessories should ensure the outlet of cool water for drain • LGW should provide validation of washing cycle in the LED display • LED display should ensure easy monitoring for wash cycle including water temperature • At least 10 pre-set cycle and pre-programmable cycles should be allowed including pure water rinses • Pre-set cycle should be capable of make a start delay (for 4-8 hr) to run the machine as per our convenience • Built-in alarm should warn for hot glass, water low and/or high, and overflow conditions • An inbuilt peristaltic pump should be given for detergent dispensing • Automatic rinse aid compartment should ensure the dispenser filled automatically • An inbuilt steam generator should be capable of penetrating through spindles and removing dried residues, likely in the glass wares • An inbuilt purified water pumps should be capable of using non-pressurized purified water supply • Reverse Osmosis water stations (ROWS) for generating at least 40-50 Lit/hr must be provided along with all accessories including at least two pre-filters (sand filter, activated carbon filter) and at least 2 reverse osmosis membrane have to be provided as additional to the reverse osmosis (RO) membrane that comes with the system • ROWS must come with required/sufficient number(s) of electric motors with adequate horse power to take raw water into the pre-filters and filters inlet, and inlet of the RO membrane, wherever necessary • Cellulose-tri-acetate based reverse osmosis membrane have to be given though there is a carbon filter attached with the system • There should be a check valve, located in the outlet end			

			of the RO membrane housing. The check valve should be capable of preventing the backward flow or product water from the RO storage tank in order to prevent rupturing of the RO membrane • An automatic shut off valve should enable the shutoff valve of incoming water when the reserve tank is full. Similarly, once water is drawn from the RO water tank, the pressure in the tank drops and the shut off valves opens, allowing water to flow to the membrane and waste-water (water containing contaminants) to flow down the drain. • There should be a flow restrictor to regulate the flow in RO membrane. This device should maintain the flow rate required to obtain the highest quality water. It should also help to maintain pressure on the inlet side of the membrane. The flow control should be located in the RO drain line tubing • The standard RO storage tank should hold at least 100 Lit of water in a given time. A bladder should be kept inside the tank that keeps water pressurized in the tank when it is full. • There should be sensor in the storage tank ensuring the water level low, and makes the ROWS turn on & produce RO water automatically • There should be connector that enables the connection between RO water tanks to LGW input. • LGW should come along with a portable stainless steel service cart capable of holding a variety of laboratory supplies, equipment and miscellaneous containers and glass wares • Size of the above mentioned service cart must be at least in the following dimensions: 85-90 L x 45-50 W x 90-100 H in cm • The above mentioned service cart should have two removable polished Type 304 stainless steel pans that are at least 2" inches deep on three sides with one open side for easy equipment transfer from countertop to cart. • This service cart should have at least 4" diameter casters, two with toe locks; ready-to-roll, ergonomic, extruded rubber handle grips; durable glacier white, powder-coated 18 gauge welded tubular steel frame capable of supports loads up to 400 lbs • Non-foaming powder or liquid detergent (at least for 365 loads) and neutralizing acid rinse (sufficient for 365 fills) should also be provided. LGW should be compatible with locally available detergents as well. • LGW should have CE and/or any other internationally recognized certificate.			
29	**HLL/CRD /PUR/TEN DER/2014-15/02- E29**	**Vacuum Pump**	• Integrated speed control Oil free high vacuum pump with auto digital vacuum control display • Should be able to combined with condenser • Should include secondary condenser and air intake	01	6,000	98.00

			separation vessel • Should have excellent compatibility with chemicals and condensate • Should have excellent ultimate vacuum of less than 2 mbar. • Should have very high suction capacity of min 3.0 m^3/h, with 4 PTFE diaphragms • Integrated gas ballast for drying the diaphragms • Should be very quiet and should give very low vibration • Tubing and cables required for installation should be provided • Extra vacuum tubes for 5 meters should be provided • CE certification is necessary			
30	**HLL/CRD /PUR/TENDER/2014-15/02- E30**	**Vacuum Oven (For flammable solvent)**	• Should be specific for drying the Flammable Solvents having samples. • Inner chamber must be designed for flammable solvent drying • Spring-mounted safety glass panel with shatter protection • All electrical components should be decoupled from the inner chamber • Thermal conducting plates for homogeneous temperature distribution • Temperature range: 10-200 °C • Digital temperature setting with an accuracy of ±1 °C • End vacuum: $1x10^{-2}$ mbar • Capacity: 50L • Should have electronically controlled preheating chamber with 2 expansion racks assuring temperature accuracy and reproducible results • CE and all other international standards certification is necessary	01	30,000	492.00
31	**HLL/CRD /PUR/TENDER/2014-15/02- E31**	**Chilled water circulator**	➢ Chilled water circulator-5.5-8 ltr reservoir ➢ Ideal for rotary vacuum evaporators ➢ Temperature range-20°C to 40°C ➢ Flow range:23ltr/min,1bar ➢ The supplier should provide IQ,OQ and PQ documents of the equipment's. ➢ Voltage :230V(±15%) 50/60Hz ➢ Power consumption:max.1350W ➢ Ambient temperature: 5°C to 40°C ➢ Cooling capacity:800W at 15°C ➢ Operational manual and maintenance manual ➢ SOP for equipment operation ➢ Trouble shooting methods ➢ Spare parts manual ➢ CE and all other International standard certification	01	8,000	131.00
32	**HLL/CRD /PUR/TENDER/2014-**	**High Vacuum Pump**	➢ Dimensions (WxDxH): 51.0 x 30.5 x 23.0) ➢ Vacuum: 2 x 10-3 mBar (1.5 micron) ➢ 3/4" OD inlet adapter	01	12,000	197.00

	15/02- E32		➢ Should be designed for use with acids and other harsh chemicals including TFA, TFA by-products, acetonitrile, HBe and HNO3 present in samples such as HPLC-prepared and peptide purified materials. ➢ Should have pressure control valve compensates for the different volumes displaced by the two pumps. ➢ Combination pump system should consist of a two-stage rotary vane pump and two-stage, chemical-resistant diaphragm pump. ➢ Low maintenance, longer lasting. ➢ Made of PTFE and other chemical-resistant fluoropolymer components. ➢ Should be environmentally-friendly ➢ Pump oil lasts up to 10 times longer than conventional rotary vane pumps under virtually all conditions. ➢ Fewer oil changes. ➢ Glass separator to capture downstream condensate vapours. ➢ Include one litre bottle of vacuum pump oil, power switch, power cord and plug. ➢ The supplier should provide the following documents to the user. ➢ Operational manual and maintenance manual ➢ SOP for equipment operation ➢ Trouble shooting methods ➢ Spare parts manual ➢ CE and all other International standard certification			
33	**HLL/CRD /PUR/TEN DER/2014-15/02- E33**	**a. Vacuum Oven**	➢ Electronically controlled preheating chamber with two-four expansion racks made of Aluminum assuring temperature accuracy and reproducible results. ➢ Temperature range : +15˚C above Ambient to 200˚C ➢ Temperature variation : at 100°C : ±1.5K & at 200°C : ± 3 K ➢ Temperature fluctuation : 0.1 K ➢ Heating-up time: at 100°C = 65 min. & at 200°C = 100 min. ➢ Vacuum connection with small flange : 16 (DN mm) ➢ Measuring access port with small flange : 16 (DN mm) ➢ Inert gas connection with flow limiter threads (RP): 3/8. ➢ End vacuum : 0.01 mbar ➢ Leak rate (max. bar 1/h) : 0.01 ➢ Display: digital display (LED) for Main display and	01	20,000	328.00

			➢ Secondary Liquid Cristal Display for Programming. ➢ Should have Digital temperature setting with an accuracy of 1°C. ➢ Should have Spring-mounted shatter proof Safety glass panel on door ➢ Door Gasket should be made of tempered Silicone ➢ Exterior Dimension: ➢ Width × Height × Depth : ~515 × 655× 500 (mm) ➢ Door Handle : ~ 100 mm ➢ Wall clearance (rear) : ~ 100 mm ➢ Wall clearance (side) : ~ 135 mm ➢ Interior Dimension: ➢ Interior volume : ~ 50-60 Ltr ➢ Expansion racks (aluminum) (number standard/max.) :2/5 ➢ Usable space per rack (width × depth) : ~ 234 × 280 mm ➢ Distance between the racks : Min 53 mm ➢ Load per shelf: at least 20 Kg. ➢ Total load: 35-40 Kg. ➢ Electrical Data: ➢ Voltage : 230 V (50/60 Hz) ➢ Nominal power: <0.9 kW.			
		b. Vacuum Pump	➢ High vacuum oil pump ➢ Should include secondary condenser and air intake separation vessel made of Borosilicate Glass ➢ Max. pumping speed (Nominal air flow) at 50/60 Hz : 5.7 to 6.8 m3/hour. ➢ Ultimate vacuum : ~ 2 X 10^{-3} mbar ➢ Ultimate vacuum with gas ballast : ~ 2 X 10^{-2} mbar ➢ Ambient temperature range (operation) : 10-40°C ➢ Ambient temperature range (storage) : -10 to -60°C ➢ Max. back pressure : ~ 1.1 bar ➢ Motor speed at 50/60 Hz : 1500-1800 min-1 ➢ Inlet & outlet connection : Hose nozzle DN 10 mm ➢ Coolant connection : 2 x hose nozzle DN 6-8 mm ➢ Motor power : ~ 0.3 kW ➢ Should have excellent compatibility with chemicals and condensate ➢ Should be very quiet and should give very low vibration Tubing and cables required for installation should be provided. **Additional requirements:** ➢ It should have Integrated weekly program timer with real-time function			

			➢ It should have Precision-adjustable ventilation valve /inert gas valve. ➢ Interior body should be made of extremely corrosion resistant stainless steel V4A (1.4571) and the trays ➢ should be easily removable for cleaning purposes by pressing a latch. ➢ All tubings should be made of stainless steel material ➢ It should have Analog pressure guage to displays pressure difference between the inner chamber and ambient pressure ➢ It should have independent adjustable temperature safety device with visual temperature alarm ➢ All required cables and tubing required for installation should be provided ➢ Should have 2 x 24 V DC (max 0.4 A) switching outputs, switched via 2 control contacts in the program editor ➢ Oven should come with RS 422 interface for computer communication. **General:** ➢ Calibration certificates should be provided where ever required ➢ CE certification for oven & pump are necessary ➢ Installation and commissioning of the instrument and training of the technical staff in instrument operation must be undertaken at free of cost. Original brochures, Original specification sheets from equipment manuals directly obtained from the principal manufacture of the quoted model must be enclosed along with supporting data & Printed manuals in English should be provided.			
34	**HLL/CRD /PUR/TEN DER/2014-15/02- E34**	**Peristaltic Pump**	➢ Simple tubing changes, tubing replacement and fluid changeover should be very quick ➢ Max. Flow rate: 12-15 L/min. ➢ Min. Flow rate: 0.01 ml/min. ➢ Max pressure: 2.7 mbar ➢ It should accept multiple tubing sizes for maximum flexibility ➢ It should have automatic tubing retention ➢ It should have five screw mounting ➢ Rotor material: Stainless steel ➢ It should chemical resistant housing ➢ Housing material: PSF (polysulfone) ➢ Occlusion: Adjustable ➢ It should have dual-channel hardware to allows two pump heads to operate on a single drive ➢ Stainless steel mounting hardware for two I/P Easy-Load pump heads should be provided ➢ CE certification is necessary ➢ Installation and commissioning of the instrument	01	4,000	66.00

			and training of the technical staff in instrument operation must be undertaken at free of cost. ➢ Original brochures, Original specification sheets from equipment manuals directly obtained from the principal manufacture of the quoted model must be enclosed along with supporting data. ➢ Printed manuals in English should be provided.			
35	**HLL/CRD /PUR/TEN DER/2014-15/02- E35**	**Tensile cutter**	➢ Automatically operated ➢ Dimensions of the sample holder plate (WxD): 320 x 200 mm ➢ Force on the die head axis: 50-70 kN (with 6-10 bar air pressure) ➢ Max cutting thickness: approx. 16mm ➢ Max stroke of the die head: 25-35 mm ➢ Max useful clearance between die head and sample plate: 60-80 mm ➢ Grounded worktop screwed in the mainframe, interchangeable with worktops having different sizes ➢ Adjustable die head support, suitable for 25 mm dia. connections; smaller connections may be inserted with spacers, available on request. ➢ Polycarbonate cutting board ➢ Suitable for rubber, plastic, paper, fabric or laminate **Accessories** ➢ Cutting die without ejector mm 80 x 20 – ASTM D 3492(rectangular specimen from male condoms) ➢ Cutting die with ejector (dumbbell shape) as per ASTM D 412 (D) ➢ Cutting die with ejector as per ASTM D 412 Type B (Dumbbell shape) ➢ Operational manual and maintenance manual ➢ SOP for equipment operation ➢ Trouble shooting methods ➢ Spare parts manual ➢ CE and all other International standard certification	01	16,000	262.00
36	**HLL/CRD /PUR/TEN DER/2014-15/02- E36**	**Probe sonicator**	➢ Power :750 watts ➢ Frequency: 20KHz ➢ Volume: 250microlitre to 1Litre ➢ Standard probe: Titanium alloy ➢ ¾'' (19mm) probe with threaded end and replaceable tip volume: 25 – 500ml, intensity: Medium, max amplitude: 58% ➢ Energy (joules)monitor ➢ Digital Wattmeter ➢ Automatic tuning and frequency control ➢ Microprocessor based and programmable ➢ Alphanumeric display ➢ 10 programme storage stability ➢ On demand real time display	01	12,000	197.00

			➢ Variable power output control ➢ Ten hour process timer ➢ Elapsed time indicator ➢ Independent On/off pulser ➢ User friendly ➢ Sealed converter ➢ Converter cable ➢ Additional requirments: • 13mm (1/2") sold probe-volume 10-250ml • 6mm (1/4") tapered micro tip volume 5-50ml) ➢ Tool kit (one open wrench and two spanner wrenches) ➢ Operational manual and maintenance manual ➢ SOP for equipment operation ➢ Trouble shooting methods ➢ Spare parts manual ➢ CE and all other International standard certification			
37	**HLL/CRD /PUR/TEN DER/2014-15/02- E37**	**Magnetic Stirrer with heating block**	➢ Stirring Speed range: 1,400-1500 rpm ➢ Speed accuracy : ± 1 ➢ Display : Digital ➢ Heating Power : 800 W ➢ Hot Plate Temp. : 20-300°C ➢ Medium tempe. Max. : 250° ➢ Accuracy temp setting : ± 1 ➢ External temp. sensor : Pt1000 ➢ Temp accuracy with external Temp. sensor: ± 0.2 ➢ Sensor breakage protection : With Pt1000 ➢ Temp. control : Micro Controller ➢ Temp. accuracy hot plate : ± 5ºC ➢ Safety circuit hot plate : 10 - 25°C Over Nominal temperature ➢ Power consumption : 825 W ➢ Ambient temp. Range : 0-40°C ➢ Plate Material : Kera-Disk (Silumin with ceramic coating) or Aluminium blocks ➢ Additional requirements: • Multi well holder-1No. • Heat on 100ml insert (use only with multi well holder)-1 No. • Heat on 250ml block-1 No. • Heat on 500ml block-1 No. • Heat on 1ltr block-1No. ➢ The supplier should provide the following documents to the user. ➢ Operational manual and maintenance manual ➢ SOP for equipment operation ➢ Trouble shooting methods ➢ Spare parts manual	01	6,000	98.00

			➢ CE and all other International standard certification.			
38	**HLL/CRD /PUR/TENDER/2014-15/02- E38**	**Vacuum Mixing unit - pilot scale**	➢ It should be GMP compliant model. ➢ It should be compact, R&D model. ➢ Machine can be moved easily. ➢ All contact parts should be made up of SS 316 / Non-contact parts SS 304 ➢ Minimum working capacity: 200 to 600 ml. ➢ Maximum volume: 3 to 5 Ltr. ➢ Variable speed for main agitator and homogenizer. ➢ Teflon/ PTFE scraper arm should be present. ➢ Integrated vacuum pump. ➢ Motor should be flame proof. ➢ Tiltable/ detachable bowl. ➢ Bowl should be equipped with heating and cooling jacket. ➢ Variable speed bottom homogenizer: 500 to 4000 rpm. ➢ Inspection sight glass with wiper integrated should be there. ➢ Digital display and controller for speed, time and vacuum should be provided. ➢ Probe for reading product temperature should be provided. ➢ Programmable heating & mixing function should be there. ➢ Vacuum rated vessel, cover and agitators. ➢ Option for recirculation is preferred. ➢ Power supply: 220 - 230 V. ➢ The supplier should provide the following documents to the user • Operational manual and maintenance manual • SOP for equipment operation • Test certificates of 'MOC' • Trouble shooting methods • IQ, OQ and PQ documents of the equipments. • Spare parts manual	01	60,000	984.00
39	**HLL/CRD /PUR/TENDER/2014-15/02- E39**	**Orbital Shaker**	➢ It should be programmable table top R & D model ➢ It should be compact, orbital and linear shaker for a maximum shaking weight of about 10kg. ➢ Digital LCD display for speed and time adjustment and can be viewed simultaneously. ➢ Brushless DC motor. ➢ Wide range of accessory platform to make it possible to use almost all shapes and size of vessels. ➢ Electronic time switching clock shall be provided. ➢ It should have controls to avoid speed variations	01	6,000	98.00

			with respect to weight load. ➢ Over speed detection and protection should be provided. ➢ One universal platform should be provided with the machine. ➢ Clips should be provided for different flask volumes (15, 25, 50, 100, 250 & 500ml) ➢ Temperature range should be 5 ˚C to 60˚C ➢ Speed range: 10 to 300 rpm. ➢ Time setting range: 1 to 1199 min or more. ➢ Power supply: 220 - 230 V. ➢ The supplier shall provide the following documents to the user • Operational manual and maintenance manual • Test certificates of 'MOC' • Calibration certificate(s) traceable to national standard and purchase reference. • Trouble shooting methods • Spare parts manual			
40	**HLL/CRD /PUR/TENDER/2014-15/02- E40**	**Semi Micro Balance**	➢ Capacity: Max 40 to 80 gm ➢ Readability: 0.01±0.005mg ➢ Linearity: 0.03 to 0.04 mg. ➢ Response time: ≤ 3 sec. ➢ Weighing pan should be made up of SS 304/ 316. ➢ Glass closed system with automatic internal Calibration. ➢ Easy to use keypad, up-front level indicator, stability indicator, mechanical and software overload/under load protection. ➢ Backlit graphic display ➢ Printer should be provided. ➢ Weights for calibration of semi micro balance. ➢ The supplier should provide the following documents to the user • Operational manual and maintenance manual • SOP for equipment operation • Test certificates of 'MOC' • Trouble shooting methods • Spare parts manual	01	8,000	131.00
41	**HLL/CRD /PUR/TENDER/2014-15/02- E41**	**Capillary Viscometer with automated water bath**	**Key Features** For finding viscosity for polymer solutions Configured for use with popular capillary viscometers chemical-resistant top deck Includes tap water cooling coil Drain port Swivel 180™ Rotating Controller On-board connectivity: RS232 serial output On-screen prompts Automatic performance optimization	01	6,000	98.00

			Single-point calibration capability **Key specifications** Viscosity Range: 0 to 500 mPas (cP) Temperature: - 25°C to +100°C Maximum Pressure: 25 bar Input Power: 230 V AC, 50/60 Hz; 24 V DC Output: 4 - 20 mA Electrical Requirements (VAC/Hz/Ph/A): 240/50/1/10 Option for PC connection. **Regulatory Approvals : CE** ▪ Requires no kinetic energy corrections over 0.5 to 100,000 centistoke range. ▪ Viscometer constant is the same at all temperatures. ▪ Sample volume: upto 15 mL. ▪ Require liquid bath depth of 254 mm; must be submerged to approximately 220 mm. ▪ Calibrated viscometers include a certificate of calibration and instruction sheet			
42	**HLL/CRD /PUR/TEN DER/2014-15/02- E42**	**Planetary Ball Mill**	➢ Planetary ball mill to grind coarse (< 10 mm) ceramic and metallic powder samples to < 1µm particles in wet and dry grinding method. ➢ Min sample quantity: 10 ml. ➢ Max sample quantity: 900 ml. ➢ Both dry and wet grinding should be applicable. ➢ Final fineness: < 1 µm. ➢ Four grinding stations for placing grinding jars of typical capacities. ➢ The wheel diameter and wheel speeds stipulated to get speed of the jar up to 800 min^{-1} or better. ➢ Rotational speed regulated by microprocessor. ➢ Programmable grinding and pause times and grinding sequences – for short-time operation adjustable down to the second. ➢ Grinding chamber with forced air ventilation. ➢ Provision for digital grinding time setting in the range of 0 to 100 hours with a minimum step increment of 1 minute or better. ➢ Provision for interval time setting in the range of 0 to 100 hours with a minimum step increment of 1 minute or better. ➢ Provision for pause time setting in the range of 0 to 100 hours with a minimum step increment of 1	01	80,000	1,311.00

			minute or better. ➢ Provision for direction reversal. ➢ Provision for measurement of input energy. ➢ Safety provisions to ensure that the mill can only be started after all grinding jars have been securely fixed with the clamping device. ➢ Self-acting lock to ensure the grinding jars are seated correctly and securely. ➢ Provision for serial interface. ➢ Power: 230 V and 50 Hz. ➢ Four numbers of Yttria stabilized zirconia grinding jars of 250 ml capacity. ➢ Two numbers of stainless steel grinding jars of 250 ml capacity. ➢ 300 numbers of spherical Yttria stabilized zirconia grinding media of 10 mm size. ➢ 4000 numbers of spherical Yttria stabilized zirconia grinding media of 5 mm size. ➢ 50 numbers of spherical Yttria stabilized zirconia grinding media of 20 mm size. ➢ 300 numbers of spherical stainless steel grinding media of 10 mm size. ➢ Energy save function. ➢ Installation, demonstration and training. ➢ Three years warranty and AMC after warranty period. ➢ Operational manual and maintenance manual ➢ SOP for equipment operation ➢ Trouble shooting methods ➢ Spare parts manual ➢ CE and all other International standard certification			
43	**HLL/CRD /PUR/TEN DER/2014-15/02- E43**	**Vacuum Pump**	➢ PTFE Diaphragm pump for laboratory use ➢ 2-4 stage pump ➢ Flow rate: 1.8 – 2.2 m3/h ➢ Ultimate vacuum <10mbar ➢ Single stroke pump ➢ Vacuum controller, silencer and silicon tubing should be included. ➢ Voltage: 230 V, 50 Hz ➢ Vacuum regulator with gauge ➢ Drip for trapping solvents Operational manual and maintenance manual ➢ SOP for equipment operation ➢ Trouble shooting methods ➢ Spare parts manual CE and all other International standard certification	01	5,200	85.00
44	**HLL/CRD /PUR/TEN DER/2014-15/02- E44**	**Analytical Balance**	➢ Capacity : 20 kg ➢ Readability : 0.1 gm ➢ Pan Size (mm): approx. 400 x 300 mm ➢ Platform made of : Rust proof Stainless Steel platter ➢ Calibration : External Weight Calibration ➢ Linearity : 0.2gm	01	1,500	25.00

			➢ Response time: 2-3sec. ➢ Display: Back Lite LCD Display ➢ Calibration: External ➢ Units of measure: g. mg, ct, GN, mo, oz, dwt, T1T, t1H, t1S, t1S, mom, Bat, MS ➢ Tare range: Full ➢ Operating temp. 5ºC to 40ºC ➢ Power supply: A/C Adapter 230 V-115 V +/- 20% 50-60 Hz ➢ Operational manual and maintenance manual ➢ SOP for equipment operation ➢ Trouble shooting methods ➢ Spare parts manual ➢ CE and all other International standard certification			
45	**HLL/CRD /PUR/TEN DER/2014-15/02- E45**	**Vacuum Oven**	• Electronically controlled preheating air jacket chamber with 2 expansion racks assuring temperature accuracy and reproducible results. • Temperature range from 15 °C above ambient temperature to 200 °C • Volume (L) -22-25Ltr • Multi Parameter controller with Dual display (Large LED and LCD) & 2 programs with 10 sections each or switchable to 1 program with 20 sections • Integrated weekly program timer with real-time function • Digital temperature setting with an accuracy of one degree • Elapsed time indicator • Precision-adjustable ventilation valve (the standard inert gas connection is also used as the ventilation valve) • Precision-adjustable inert gas valve with Cross-Flow-Technology • All electrical components are decoupled from the inner chamber • Spring-mounted safety glass panel with shatter protection (View Glass) • Independent adjustable temperature safety device class 2 (DIN 12880), with visual temperature alarm • Measuring port DN 16 in rear panel • Analogue pressure gauge (displays pressure difference between the inner chamber and ambient pressure) • Electro polished inner chamber, suction and ventilation tubes, pressure container, expansion racks, and ball valve are made of stainless steel • Door gasket made of tempered silicone • Two point door locking for tight closing. • 2 x 24 V DC (max 0.4 A) switching outputs, switched via 2 control contacts in the program editor • RS 422 interface for communication software & Installation of software free of cost • 2 flexible aluminium expansion racks which can be	01	20,000	328.00

			removed by pressing a lever • Vacuum Pump connection set has to be supplied along with the Oven.			
46	**HLL/CRD /PUR/TEN DER/2014-15/02- E46**	**KF Titrator**	Method of Detection: Conductometric Range : 100 ppm to 100% End Point Determination • Resolution : 1 ppm (0.0001%) • Sample Type : Liquid or Solid • Pre titration conditioning : Automatic • Background drifts correction : Automatic or user selectable value • Endpoint time : 1 to 99 sec. • End Point Potential: Adjustable • Burette : Interchangeable burette system • Dosing pump resolution : 1/20000 of burette volume • Dosing pump accuracy : ±0.1% of full burette volume • Tubing: PTFE with light block and thermal jacketing. • Titration vessel: volume between 50 to 150 ml. • Electrode: Dual platinum pin, polarization electrode with BNC connector. • Result statistic : Mean, standard deviation • External stirrer type : magnetic, optically regulated, digital stirrer • Speed : 200-2000 rpm • Resolution : minimum 100 rpm • GLP Conformity: Good Laboratory and instrument data storage and printing. • Operating Environment : 10 to 400c up to 90 % RH The supplier should provide IQ, OQ and PQ documents of the equipments.	01	14,000	230.00
47	**HLL/CRD /PUR/TEN DER/2014-15/02- E47**	**Digital Microphotogr aphy system for capturing cell images from inverted microscope**	• Digital Camera (12 mega pixels and above) • One zoom lens • Rechargeable battery • Carry bag • Compatible 4GB memory card • Optically corrected adapter for inverted microscope	01	5,800	95.00
48	**HLL/CRD /PUR/TEN DER/2014-15/02- E48**	**Demineralize d-Water purification system (Ultra pure)**	Water purification system to obtain demineralized, pyrogen free, Rnase free and Dnase free water. Production capacity: Approx. 2L/min or above Water quality: • Resistivity: Approx. 15-20MΩ.cm at 25°C • TOC: ≤ 5 ppb (µg/L) • Bacteria: < 0.1 cfu/ml • Pyrogens: <0.001 Eu/mL • RNases: < 0.01ng/mL • DNases: < 4 pg/mL Capacity: 200-350 ltr/ day System should have integrated Flexible automatic water dispensor. • Adjustable Manual dispense flow rate	01	12,000	197.00

			• Adjustable automatic dispensing. • Volumetric dispensing accuracy: 1% for volumes between 250ml and 60 L Alarm system for any malfunction should be built-in the system. Electric power supply: 230 V, 60 Hz± 10Hz Data connection: Suitable data transfer method for connecting to printer and windows PC. Filters and other required accessories to be provided. Spares sufficient for first three years to be provided. IQ, OQ, PQ to be performed and certification to be provided. Product warranty for 2 years is expected. (Preference shall be given to product with longer warranty period)			
49	**HLL/CRD /PUR/TENDER/2014-15/02- E49**	**Air Compressor**	Oil free and noise free air compressor With Covered Body (Canopy) as per the following specification is required to supply dry and clean compressed air for various equipments • Provision for temperature control & pressure control • Volume of Receiver Air Tank-20-30 Litres Water Equivalent • Pressure – 8-10 Bar • Air delivery – Minimum 1.3 CFM • Motor power-1 Hp maximum • Noise level – Not more than 60dB	01	4,000	66.00

HLL LIFECARE LIMITED
(A Government of India Enterprise)
PEROORKADA, THIRUVANANTHAPURAM-695 005, KERALA, INDIA

HLL/CRD/PUR/TENDER/2014-15/02

Minimum Eligibility Criteria for qualifying in the Technical Bid

PRE-QUALIFICATION REQUIREMENTS
(MINIMUM ELIGIBILITY CRITERIA)

1. Name of the Organization :

2. a. Are you a manufacturer? : Yes/ No

b. Are you an authorized agent? : Yes /No

c. In the case of authorized agent , following documents from the Principal should be enclosed

i. Letter confirming the agency from the Manufacturer valid for FY 2014-15

ii. Letter from the manufacturer that they also agree to abide by all the terms and conditions of this tender.

3. What is your annual production/ process capacity? :

4. Do you have in house testing facility to check HLL's: Yes/ No
parameters?

5. Do you have previous experience : Yes/No

All the information provided herein is true and correct.

Place: Name and Signature of the Tenderer
Date: (With Office Seal)

HLL LIFECARE LIMITED
(A Government of India Enterprise)
PEROORKADA, THIRUVANANTHAPURAM-695 005, KERALA, INDIA

HLL/CRD/PUR/TENDER/2014-15/02

Minimum Eligibility Criteria for qualifying in the Technical Bid

PRE-QUALIFICATION REQUIREMENTS

a) The firm should have proven and demonstrable experience in supply and installation of packages (equipments) in the field of biopharmaceuticals / biologics / vaccines for the last five years.

b) The firm must have supplied, installed and commissioned at least 5 such equipments during the last three years in biopharma / vaccine production units.

c) Their Client's list must include atleast five approved facilities from national regulatory bodies (Schedule M) / international regulatory bodies (Like USFDA, UK MHRA, TGA, etc.).

d) Net worth of the company should be positive during the last three financial years.

e) What is your average annual invoiced sales value (based on past previous 3 year's records) for each of the type of equipments under consideration.

Equipment Name : _____
(If more than one equipment, enclose the same separately)
(Documentary evidence (duly signed & stamped) must be enclosed.

a) Year 1 : _____
b) Year 2 : _____
c) Year 3 : _____

(f) Annual Turnover of the Firm/ company:
(Must be minimum 10 times that of the equipment cost under consideration.)
(Documentary evidence (duly signed & stamped) must be enclosed.

a) Financial Year 2011-2012 : _____
b) Financial Year 2012-2013 : _____

c) Financial Year 2013-2014 : _____

Bidders are to submit copy of valid current Income Tax Return submitted, Sales Tax Registration failing which their offer may be liable to be rejected.

Experience:

Past Project Experience:

Firm must have executed under their Company/ firm's name at least 3 (Three) similar type of order during the last three calendar years. Client's list must include atleast five approved biopharma/vaccine manufacturing facilities from international regulatory bodies (Like WHO, USFDA, UK MHRA, TGA, etc.,)

SN	Year awarded	Project Name	Equipments Supplied	Contract Value (INR)	Client Name & Reference (Contact details)	Facility Approved by: (Name of approving agency)
1						
2						
3						

Details of Ongoing project

SN	Year awarded	Project Name	Equipments Supplied	Contract Value (INR)	Client Name & Reference (Contact details)	Facility Approved by: (Name of approving agency)
1						
2						
3						

* Documentary evidence of work completion certificate duly signed & stamped must be enclosed including the evidence of the facility having approved by regulatory agencies.

Place: Name and Signature of the Tenderer
Date: (With Office Seal)

HLL LIFECARE LIMITED
(A Government of India Enterprise)
PEROORKADA, THIRUVANANTHAPURAM-695 005, KERALA, INDIA

HLL/CRD/PUR/TENDER/2014-15/02

APPLICATION FOR PREQUALIFICATION

(General information of the tenderer)

1. Name & Address of the tenderer with :

   (a) Telephone No.
   (b) Fax No.
   (c) E – mail Address
   (d) Name of the contact person
   (e) Whether proprietor / partnership / Limited company.

2. Are you a manufacturer, authorized Dealer or any other? If authorized agent, A copy of the original letter from the Manufacturer / Principal, duly attested, Should be furnished conforming the agency :

3. If your manufacturer, how many years have you been in the business of manufacturing of the equipment as per the HLL specification enclosed :

4. What would be the minimum period required to deliver the machine from the date of confirmed Purchase order? :

5. Have you been a tenderer / manufacturer, if so details of the name, address, quantity and values of orders :

received and executed during
last three years? (Attach separate sheet)

6. What is your Annual Turn Over during the last 3 years? :

7. **What is your :-** :
   a) CST No :
   b) VAT NO /TIN NO :
   c) Central Excise Registration No: :
   d) PAN No :

8. **Bank details for returning of EMD**
   (Indian Tenderer)
   Name of the tenderer as per Bank Account :
   Name of the Bank :
   Branch Name :
   Acount No. :
   IFSC Code :

   (Foreign Tenderer)
   Name of the tenderer as per Bank Account :
   Name of the Bank :
   Branch Name :
   Acount No. :
   ABA :
   SWIFT :

9. Any other details :

All the information provided herein is true & correct.

Place: Name and Signature of the Tenderer
Date: (With Office Seal)

HLL LIFECARE LIMITED
(A Government of India Enterprise)
PEROORKADA, THIRUVANANTHAPURAM-695 005, KERALA, INDIA

HLL/CRD/PUR/TENDER/2014-15/02

ACCEPTANCE FORM

(To be submitted in the letter pad of the firm indicating full name and address, telephone & fax numbers etc.)

From

To

JOINT GENERAL MANAGER (PURCHASE)
HLL LIFECARE LTD
PEROORKADA,
THIRUVANANTHAPURAM – 695 005
KERALA, INDIA

Dear Sir,

I / We, hereby offer to supply/test/commission the equipment as detailed in schedule hereto or such portion thereof as you may specify in the acceptance of Bid at the price given in the price bid and agree to hold this offer open for one year from the date of bid opening prescribed by the Purchaser. I/We have understood the terms and conditions mentioned in the invitation for bid and Conditions of Contract furnished by you and have thoroughly examined the specifications quoted in the bid document hereto and are fully aware of the nature of the scope of work required and my/our offer is to comply strictly in accordance with the requirement and the terms and conditions mentioned above.

Yours faithfully,

SIGNATURE OF BIDDER WITH SEAL

HLL LIFECARE LIMITED
(A Government of India Enterprise)
PEROORKADA, THIRUVANANTHAPURAM-695 005, KERALA, INDIA

HLL/CRD/PUR/TENDER/2014-15/02

TERMS & CONDITIONS

1. The tender should be completed in all respects; incomplete tenders are liable to be rejected.

2. Unsealed tenders received are liable to be rejected and this will be at the sole risk of the tenderers.

3. Supply: The successful tenderer will have to done the supply and sucessful working within the stipulated delivery time mentioned in the Purchase order. As a token of acceptance, the tenderer should submit the duplicate copy of purchase order with signature of authorized person and offical seal with in 07 working days.

4. Period of validity of tender: The tender will remain open for acceptance for 90 days from the date of opening of the tender.

5. Termination of Contracts: i) In case, after issue of a firm order, the successful tenderer fails to supply the item as per the specified quality and the required quantity according to the Delivery Schedule as given in the purchase Order, and even fails to supply the equipment within the extended period if any given in writing by HLL Lifecare Limited, Thiruvananthapuram, it will be within HLL's full rights to terminate the contract by giving a notice of 21 days in writing sent by Registered courier to the address given in the tender submitted or to any other address which may be recorded in the office at the request of the tenderer. The period of 21 days will be counted from the date of issue of the notice.

6. In case of notice sent by registered post/ courier to the address recorded in the office as per clause 5 (i) & (ii) is returned undelivered with the remark addressee not found or addressee refused to accept, the notice shall be deemed to have been served and the termination will automatically take effect from the 22nd day of dispatch of the notice.

7. HLL Lifecare Limited, will have the full right to reject any or all the tenders without assigning any reason whatsoever. The HLL Lifecare Limited, also reserves the right to award the contract with more than one contractor.

8. PRICE

Price: The tenderer has to quote the rate for supply of the item as per unit as given in the tender. Statutory levies if any such as, Sales Tax, VAT/CST etc. should be shown separately. Rates quoted should be strictly as per HLL's format- Schedule-G (Price Bid)

Price variation: Rate quoted shall be firm and valid for a period of one year from the date of opening of the tender. The benefit of reduction of statutory levies should be passed on to the purchaser.

9. Bid Opening:

The bids shall be opened on date and time as specified, in the presence of such bidder(s) or their representatives who may be present. The bidder(s) or the authorized representative(s) who are present shall sign an attendance register. The authorized representative(s) of the bidder(s) shall submit letter(s) of authority before they are allowed to sign the attendance register and participate in the bid opening.

The Technical Bid will be opened on the prescribed tender opening date and time. The Price Bid will be opened on a later date, which will be made known to all qualified bidders (Technically qualified), after technical bid evaluation has been completed.

The bids, which are found as substantially responsive in the technical evaluation and comply with the entire requirement, shall only be considered for Price Bid opening. The Price Bid (price schedule) submitted by such tenderers whose technical bid have been considered as technically unacceptable on the basis of evaluation, will not be opened.

10. RELEASE OF PURCHASE ORDER

The purchaser may consider placement of a purchase order for commercial supplies on those bidder(s), whose offers have been found technically, commercially and financially acceptable.

During the period of contract, if so desired by the purchaser, the tenderer (s) premises shall be visited by the purchaser for inspection/evaluation.

11. PAYMENT TERMS:

Payment shall be made subject to recoveries, if any, by way of liquidated damages or any other charges as per terms & conditions of contract in the following manner.

a) Domestic supply

1) 100 % of the contract value shall be paid on receipt of goods in good condition as well as proper installtion and upon the submission of the following documents within 30 days.

(i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount.
(ii) Acceptance by concerned authority of HLL Lifecare Limited.
(iii) Two copies of packing list identifying contents of each package;
(vi) Installation certificate
(v) A performance bank guarantee (as per HLL format) of 10% of the contract value (Including all taxes, duties, transportation etc.) and confirmation of bank guarantee from the respective bank. The validity should be 12 months from date of installation.

or

2) As pe the request from the tenderer, 90% of the contract value shall be paid on receipt of goods in good condition as well as proper installtion and upon the submission of the following documents within 30 days.

(i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount.
(ii) Acceptance by concerned authority of HLL Lifecare Limited.

(iii) Two copies of packing list identifying contents of each package;
(vi) Installation certificate
(v) Balance 10% contract amount after providing Performance bank guarantee (valid for 12 months from date of installation) in th HLL prescribed format and the confrimation of PBG from the respective bank or if 10% PBG is not submitting the amount will be paid one year after installation.

3) For 100% advance payment of the contract value, the tenderer should provide 100% supply bank guarantee prescribed in HLL format along with 10% PBG of the contract value (Including all taxes, duties, transportation etc.) & confirmation from respective bank and perform invoice. The validity of the supply bank guarantee should be minimum 05 months or upto installation period and validity of PBG should be 18 months.

b) Import supply

Payment against Imported goods shall be made in the currency as specified in the price bid and contract in the following manner:

1) For 100 % payment of the contract value (Including all taxes, duties, transportation, discounts etc.) shall be paid on receipt of goods in good condition as well as proper installtion and upon the submission of the following documents within 30 days.

(i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
(ii) Copy of the Bill of Lading/ Airway bill.
(iii) Four Copies of packing list identifying contents of each package;
(iv) Manufacturer's/Supplier's warranty certificate;
(v) Certificate of origin by the chamber of commerce of the concerned country;
(vi) Acceptance by concerned authority of HLL Lifecare Limited.
(vii) Installation certificate.
(viii) A performance bank guarantee (as per HLL format) of 10% of the contract value (Including all taxes, duties, transportation, discounts etc.) and confirmationa of bank guarantee from the respective bank. The validity should be 12 months from date of installation.

2) For 90% payment of the contract value (Including all taxes, duties, transportation etc.) as per the request from the tenderer shall be paid on reciept of the above mentioned doucments except 10% performance bank guarantee. For the balance 10% of the contract value after providing Performance bank guarantee (valid for 12 months from date of installation) in th HLL prescribed format and the confrimation of PBG from the respective bank or if 10% PBG is not submitting the amount will be paid one year after installation.

3) For 100% advance payment of the contract value, the tenderer should provide 100% supply bank guarantee prescribed in HLL format along with 10% PBG of the contract value (Including all taxes, duties, transportation etc.) & confirmation from respective bank and perform invoice. The validity of the supply bank guarantee should be minimum 05 months or upto installation period and validity of PBG should be 18 months.

12. WARRANTY

Period of warranty shall be 12 months from date of installtion of equipment as certified jointly by the tenderer and the Purchaser.

During Warranty period, the supplier is required to visit consignee's site at least once in 3 months commencing from the date of the installation for preventive maintenance of the goods.

The Purchaser/Consignee reserve the rights to enter into Annual Comprehensive Maintenance Contract between Consignee and the Supplier after the completion of warranty period.

13. COMPREHENSIVE MAINTENANCE CONTRACT

The cost of Comprehensive Maintenance Contract (CMC) which includes preventive maintenance including testing & calibration as per technical/ service / operational manual of the manufacturer, labour and spares, after satisfactory completion of Warranty period may be quoted for next 3 years on yearly basis for complete equipment and Turnkey (if any).The supplier shall visit each consignee site as recommended in the manufacturer's technical/ service / operational manual, but at least once in six months during the CMC period.

The cost of CMC may be quoted along with taxes applicable on the date of Tender Opening. The taxes to be paid extra, to be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such taxes and no claim for the same will be entertained later.

Cost of CMC will be added for Ranking/Evaluation purpose.

All software updates should be provided free of cost during CMC

14. SPARE PARTS

If specified in the List of Requirements and in the resultant contract, the supplier shall supply/provide any or all of the following materials, information etc. pertaining to spare parts manufactured and/or supplied by the supplier:

The spare parts as selected by the Purchaser/Consignee to be purchased from the supplier, subject to the condition that such purchase of the spare parts shall not relieve the supplier of any contractual obligation including warranty obligations; and

In case the production of the spare parts is discontinued:

i) Sufficient advance notice to the Purchaser/Consignee before such discontinuation to provide adequate time to the purchaser to purchase the required spare parts etc., and

ii) Immediately following such discontinuation, providing the Purchaser/Consignee, free of cost, the designs, drawings, layouts and specifications of the spare parts, as and if requested by the Purchaser/Consignee.

Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the goods so that the same are supplied to the Purchaser/Consignee promptly on receipt of order from the Purchaser/Consignee.

15. Insurance

The supplier shall make arrangements for insuring the goods against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the following manner:

i) In case of supply of domestic goods on consignee site basis, the supplier shall be responsible till the entire stores contracted for arrival in good condition at destination. The transit risk in this respect shall be covered by the Supplier by getting the stores duly insured. The insurance cover shall be obtained by the Supplier and should be valid till 3 months after the receipt of goods by the consignee.

ii) In case of supply of the imported goods on CIP (Carriage and Insurance Paid) Named port of Destination Basis, the additional extended Insurance (local transportation and storage) would be borne by the Supplier from the port of entry to the consignee site for a period including 3 months beyond date of delivery.

If the equipment is not commissioned and handed over to the consignee within 3 months, the insurance will get extended by the supplier at their cost till the successful installation, testing, commissioning, qualification and handing over of the goods to the consignee. In case the delay in the installation and commissioning is due to handing over of the site to the supplier by the consignee, such extensions of the insurance will still be done by the supplier, but the insurance extension charges at actuals will be reimbursed.

16. TECHNICAL EVALUATION OF FIRST STAGE BIDS (Techincal bid opening)

The purchaser will carry out a detailed evaluation of the bids in order to determine whether the technical aspects are substantially responsive to the requirement set forth in the bidding documents. In order to reach such a determination, the bidder will examine the information supplied by the bidders and other requirements in the bidding documents, taking into account the following factors.

Overall completeness and compliance with the Technical Specification, quality function and operation of any process control concept included in the bid.

For any clarification regarding technical aspects, specificatin of the equipment or queries with technical bid will be commuicate through e mail which has to be clarify atleast within time. Minimum time limit is 24 hours from e mail / fax sending time . If the clarification has not received (through e mail / fax) within 24 hours, it should be considered as disqualified.

Any other relevant technical factors that the bidder deems necessary to take into consideration. Any deviation to the contractual provisions stipulated in the bidding documents should be mentioned in the technical bid document.

17. OPENING AND EVALUATION OF SECOND STAGE BIDS (Price bid opening)

The purchaser will open the price bids of only those who qualify in the Technical Bid evaluation. The venue, date and time of opening of price bids will be intimated to the technically qualified bidders atleast before 24 hours through e mail.

The bidder's names, the bid price and any such other details as the purchaser considers appropriate, will be announced by the purchaser at the price bid opening.

Bids not opened and read out at bid opening shall not be considered for further evaluation, irrespective of the circumstances.

18. 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 assigning any reason whatsoever and without thereby incurring any liability to the affected bidder or bidders on the grounds of purchaser's action.

19. OPERATIONAL ACCEPTANCE:

Performance Test: The performance test shall be conducted by the tenderer during the commissioning of the facilities to ascertain whether the facilities can attain the functional guarantees.

Operational Acceptance: Operational Acceptance shall occur in respect of the facilities when the performance test has been successfully completed and the functional performance is met.

20. Mode of Transport:

a) Transportation of domestic goods including goods already imported by the tenderer to be done by the tenderer himself and the goods to be delivered at the site of the consignee at his own risk and cost.

b) Instructions for transportation of imported goods offered from abroad: The tenderer shall not make part-shipments and/or transhipment without the express/prior written consent of the purchaser. The tenderer is required under the contract to deliver the goods under Delivery Duty Paid (DDP) at consignee site.

c) Despatch documents like delivery note/ challan, packing list and invoice should be intimated immediately with the LR No/Shipping Bill No/Air way Bill No/Bill of Lading etc.

21. The jurisdiction of any disputes, suits and proceedings arising out of this tender shall be only in the courts of Thiruvananthapuram, Kerala State, India.

22. "Any disputes or difference whatsoever arising between the parties out of or relating to the construction, meaning and operation or effect of this contract or the breach thereof shall be settled by arbitration in accordance with the rules of arbitration of the Indian Council of Arbitration and the award made in pursuance thereof shall be binding on the parties" in case the matter is referred for arbitration.

23. The decision of HLL will be final and no correspondence on this shall be entertained.

24. THERE WILL NOT BE ANY POST TENDER NEGOTIATION EXCEPT WITH THE FIRST LOWEST RESPONSIVE BIDDER.

PLACE: NAME AND SIGNATURE OF THE APPLICANT
DATE: (WITH OFFICE SEAL)

HLL LIFECARE LIMITED
(A Government of India Enterprise)
PEROORKADA, THIRUVANANTHAPURAM-695 005, KERALA, INDIA

HLL/CRD/PUR/TENDER/2014-15/02

INDEMINITY CLAUSE:

If the supplier fails to execute the order within the time prescribed for the delivery of goods ordered or violates or infringes the existing rates as agreed to as mentioned in the supply order, the supplier shall and will indemnify the company against all loses or damages whatsoever to be incurred or sustained including the legal cost or expenses incurred by the company by reason of non-delivery of goods at agreed quantity and rate with in the time specified in the supply order. The company will initiate legal action if the supplier fails to execute the supply order as per the schedule in the supply order for the actual loss suffered. Responsiveness of the Bid shall be at the discretion of HLL.

Bid pronounced Non Responsive by HLL shall be summarily rejected. The decision of HLL will be final and no correspondence of this shall be entertained.

We have read and understood the above conditions and agree to abide by the same.

Place:
Date:

Name and Signature of the Tenderer
(With Office Seal)

HLL LIFECARE LIMITED
(A Government of India Enterprise)
PEROORKADA, THIRUVANANTHAPURAM-695 005, KERALA, INDIA

HLL/CRD/PUR/TENDER/2014-15/02

CERTIFICATE

I / we hereby certify that the information given with this bidding document is correct. If, at any stage, it is found to be incorrect, I / we understand that the contract will be liable to be terminated and action could be taken against me/us by the Company for damages.

SIGNATURE(S) OF BIDDER WITH SEAL

(To be submitted in the letter pad of the firm indicating full name and address, telephone & fax numbers etc.)

HLL LIFECARE LIMITED
(A Government of India Enterprise)
P.B.NO. 2, PEROORKADA.P.O.,
THIRUVANANTHAPURAM - 695 005
KERALA, INDIA

INVITATION FOR BIDS
(PRICE BID)

FOR

Supply, Installation and Commissioning of various Equipments
Quantity: Mentioned along with equipments

AT

CORPORATE R & D CENTRE,
HLL LIFECARE LIMITED,
AKKULAM, SREEKARIYAM P.O.
THIRUVANANTHAPURAM – 695 017

HLL LIFECARE LIMITED
(A Government of India Enterprise)
PEROORKADA, THIRUVANANTHAPURAM-695 005, KERALA, INDIA

HLL/CRD/PUR/TENDER/2014-15/02

I) For Domestic suppliers:

A. Part A – _____

SN	Item Description	Amount (Rs.)
i.	Total Basic Price	
ii.	Taxes	
iii.	Others if any	
	Total (Rs.)	

*HLL Corporate R&D, Akkulam, Trivandrum has been registered with Department of Scientific and Industrial Research (DSIR) and is eligible for availing EXCISE DUTY EXCEPTION vide Government of India customs notification No. 16/2007 dated 01st March 2007

A. Part B – _____

SN	Item Description		Amount (Rs.)
i.	CMC Charges:	First Year:	
		Second Year:	
		Third Year	
ii.	AMC Charges:	First Year:	
		Second Year:	
		Third Year	

**** Detailed split up rates should be attached seperately**

VALIDITY: ONE YEAR FROM THE DATE OF OPENING OF PRICE BID

Statutory levies if any:
Any other Remark (s):

Certified that the rate quoted will hold good for one year during which period no upward revision will be asked for.

NAME OF Tenderer:_____

Place:
Date:

Address and Signature of the Tenderer
(With Office Seal)

HLL LIFECARE LIMITED
(A Government of India Enterprise)
PEROORKADA, THIRUVANANTHAPURAM-695 005, KERALA, INDIA

HLL/CRD/PUR/TENDER/2014-15/02

II) For International suppliers:

A. Part A – _____

SN	Item Description	Amount ((US$.))
i.	Total Basic Price	
ii.	Packing, Forwarding Charges	
iii.	Air freight & insurance charges	
iv	Others if any	
v.	Total CIF price upto Trivandrum*	
	Total ((US$.))	

*Customs and clearange charge will be beared by HLL. If destination other than Trivandrum, then transporation charge upto Trivandrum may be beared by the supplier.
*HLL Corporate R&D, Akkulam, Trivandrum has been registered with Department of Scientific and Industrial Research (DSIR) and is eligible for availing CUSTOMS DUTY EXCEPTION vide Government of India customs notification No. 24/2007 dated 01st March 2007

A. Part B – _____

SN	Item Description		Amount ((US$.)
i.	CMC Charges:	First Year:	
		Second Year:	
		Third Year	
ii.	AMC Charges:	First Year:	
		Second Year:	
		Third Year	

**** Detailed split up rates should be attached seperately**

VALIDITY: ONE YEAR FROM THE DATE OF OPENING OF PRICE BID

Statutory levies if any:
Any other Remark (s):

Certified that the rate quoted will hold good for one year during which period no upward revision will be asked for.

NAME OF Tenderer:_____

Place:
Date:

Address and Signature of the Tenderer
(With Office Seal)