HLL LIFECARE LIMITED
(A Government of India Enterprise)
CORPORATE R & D CENTRE,
AKKULAM, SREEKARIYAM P.O,
THIRUVANANTHAPURAM-695017
Email: crdc@lifecarehll.com
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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

HLL LIFECARE LIMITED
(A Government of India Enterprise)
Corporate R & D Centre,
Akkulam, Sreekariyam P.O.
Thiruvananthapuram - 695017

Tender No. HLL/CRD/PUR/159/2012-13/3559 03rd January 2013

TENDER NOTICE

Sub:- Supply, Installation and Commissioning of various Equipments

Sealed and super scribed tenders under two bid systems are invited 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.

Name of the Item	Tender No:	Date & Time of Opening of Technical bids
Supply of Equipments (Details of equipments mentioned below)	HLL/CRD/PUR/159/2012-13/3559 Dated 03rd January 2013	24/01/2013 at 02.30 pm (Local Time)

The detailed Tender Notice and tender documents can be downloaded from our website www.lifecarehll.com. Amendments if any to this tender notice will be published only in our website.

The last date for the tender is 24/01/2013, 02:00 pm (Local Time).

Vice President (R&D)
Ph No.: +91 471 2774700
Fax No: +91 471 2774702
Email: crdc@lifecarehll.com

HLL LIFECARE LIMITED
Corporate R & D Centre,
Akkulam, Thiruvananthapuram - 695017

CONTENTS OF BIDDING DOCUMENTS

HLL LIFECARE LIMITED

Corporate R & D Centre,
Akkulam, Thiruvananthapuram - 695017

Tender No. HLL/CRD/PUR/159/2012-13/3559

I - INSTRUCTIONS TO BIDDERS

1. The Bid is intended to procure material as per specification in Schedule A.
2. This is a two Bid system comprising of:

   a) Technical Bid b) Price Bid

3. A complete set of bid documents can be had from the office of the ***VICE PRESIDENT (R&D), CORPORATE R&D CENTRE, HLL LIFECARE LIMITED, AKKULAM, SREEKARIYAM P.O., THIRUVANANTHAPURAM-695 017 KERALA*** during office hours on any working day on submission of written application and remitting a non-refundable fee of Rs.300/- (including taxes) in the form of DD drawn in favour of HLL Lifecare Limited, Thiruvananthapuram, Kerala, India.

The Tender Documents can also be down loaded from our Website www.lifecarehll.com. and cost of the Tender Documents as mentioned above should be furnished along with Technical Bid.

4. Both the Bids shall be submitted in sealed covers separately. Tender Nos. of the Technical Bid and Price Bids shall be super scribed on the respective covers in order to clearly identify between the 2 Bids. The two separately marked Bids enclosed in a single sealed cover with the respective Tender No. mentioned thereon, complete in all respect, addressed to the **Vice President (R&D), Corporate R & D, HLL Lifecare Limited, Akkulam, Sreekariyam P.O. Thiruvananthapuram – 695017, Kerala, India** should reach us on or before the due date and time mentioned in the Tender Notification. HLL shall not be responsible for any delay. Tender brought to the office after prescribed time will not be accepted. **In both evenlop (Technical Bid and Price Bid) the bids for each equipment should be enclosed in separate envelops and name of the equipment clearly mentioned on the envelop.**

5. Tenders should be submitted in sealed cover properly sealed by sealing wax/packing PVC tape. Covers, which are closed by gum or staples only, will not be considered.

6. a) The last date of receipt of Techno-commercial Bid is: 24/01/2013 at 02:00 pm (Local Time)

b) Date of Opening of Technical Bid is: 24/01/2013 at 02 :30 pm (Local Time)

7. In the event of the date mentioned above being declared subsequently as holiday for the Corporate R & D Centre, the due date for submission and opening of bids will be the next working day at the same venue and time.

8.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.

9. The authorized signatory of the tenderer must sign the tender duly stamped at appropriate places and initial all the remaining pages of the tender.

10. Bids received after the deadline for submission shall not be considered. HLL will not be responsible for any delay in transit of tenders sent by post.

11. For imported goods if supplied directly from abroad, prices shall be quoted in any freely convertible currencies say US Dollar, Euro, GBP or Yen. As regards price(s) for allied services, if any required with the goods, the same shall be quoted in Indian Rupees only if such services are to be performed /undertaken in India. Commission for Indian Agent, if any and if payable shall be indicated in the space provided for in the price schedule and will be payable in Indian Rupees only.

12. 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 within 5 days prior to the Date of opening of the Technical Bid.

13. A Declaration as given in **Schedule E** 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.

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

15. If a Tender is not substantially responsive (Non-Responsive), it will be rejected by the Purchaser and cannot subsequently be made responsive by the Tenderer by correction of the nonconformity.

16.The tenders will be scrutinized to determine whether they are complete and meet the essential and important requirements, conditions etc. as prescribed in the TE document. The tenders, which do not meet the basic requirements, are liable to be treated as non ï responsive and will be summarily ignored. A non-responsive tender is one which deviates technically or commercially from any specific provision in the tender enquiry.

17. 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 F (signed and stamped) not enclosed

(b) Tender is unsigned.

(c) Tender validity is shorter than the required period.

(d) Tenderer has quoted for goods manufactured by other manufacturer(s) without the required Manufacturer’s Authorisation Form as per Section B.

(e) Goods offered are not meeting the tender enquiry specification.

(f) 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.

(g) Tenderers who stand deregistered/banned/blacklisted by any Govt. Authorities.

(h) Tenderer has not quoted for the entire quantity as specified in the List of Requirements in the quoted schedule.

18. 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.

19. Those bidders who download the tender documents from our website should furnish the Name and address of the vendor, name of contact person, telephone & Fax numbers and Email details immediately by fax/Email.

19. Any changes pertains to this tender shall be communicated only through our website www.lifecarehll.com

HLL LIFECARE LIMITED
Corporate R & D Centre,
Akkulam, Thiruvananthapuram - 695017

Tender No.HLL/CRD/PUR/159/2012-13/3559

Specification of Equipments

SNo	Name of the Equipment	URS (User Requirment Specifications)	Qty Required	EMD (Rs.)
1.	Weighing balance 8 kg	• Max. Capacity : 8000 gm • Readability: 0.1 g • Calibration: Automatic Calibration • Linearity: 0.2 g • Repeatability (sd) : 0.1 g • Stabilization time : 1.5 sec • Computer Connectivity: Interface for connection to pc or printer • GLP/GMP/ISO: Meets requirements of GLP/GMP/ISO9000. Calibration reports can be output with date and time, provided by the build-in clock. • Other Units: gram, milligram, Piece counting, Percentage etc. • Weighing Chamber: Compact body with a spacious weighing chamber • Balance should have overload protection, high contrast display, clear symbols, etc.	2	2400.00

SNo	Name of the Equipment	URS (User Requirment Specifications)	Qty Required	EMD (Rs.)
2.	Sifter	• All contact parts should be made of SS 316 and non contact parts should be made of SS 304. • It should be suitable for separation of granular powder as per particle size. • Sifter to be provided with the vibratory motor with adjustable eccentric weight at top and bottom of the shaft, mounted vertically at the centre. • Should be easily movable and should have specially designed brake wheels under it for easy handling purpose. • Gaskets of the sieves should be made up of food grade silicon. • Motor Mounting should be MS Powder Coated • Should have slow, medium and fast vibration option. • Should have emergency switch off button. • Should comprise of size approx 30"Dia (750 mm) • The machine should be Argon welded and buffed to mirror polish. • Should be as per GMP model. • Out Put Capacity/Hr 150-250 Kg (approx) • Sieves should be provided. The sieves should have following features. ➢ Should be in accordance with ISO 3310:1-2000 standards ➢ Sieve should be made up of SS 316 ➢ Should have Inspection and Compliance certificate ➢ Should have Sturdy jointless rims for excellent fitment ➢ Should have no crevices to trap sieving material ➢ Mesh should be evenly tensioned ➢ Mesh should be welded-no soldering (lead free) • Test Sieves of ISO Nominal Aperture Supplementary Sizes R40/3 having the following sizes 2.00 mm,1.70 mm,1.40 mm,1.18 mm,1.00 mm,850 µm,710 µm, 600 µm ,425 µm ,250 µm ,180 µm ,150 µm should be provided	1	3000.00

		• 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		

3.	Double Cone Blender	• Model : cGMP
		• Gross capacities : 20litres,10litres & 5 litres
		• MOC of contact parts: SS 316
		• MOC of non contact parts: SS 304.made/covered
		• Drive: HP 1440rpm TEFC motor coupled to suitable reduction gear box.
		• Loading opening: approx 4" with lid & gasket.
		• Unloading opening: approx 3"opening with butterfly valve/lid with gasket
		• Blender configuration table top/floor mounted with cantilever support.
		• Starter & timer: on/off starter and timer with battery backup provided
		• Safety guard: Tubular guard with limit switch provided
		• Finish: Inside mirror polished and outside matt finished
		• The supplier should provide the following documents to the user
		  • Operational manual and maintenance manual
		  • SOP for equipment operation
		  • Test certificates of 'MOC'
		  • Calibration certificate(s) traceable to national standard and purchase reference.
		  • Trouble shooting methods
		  • IQ, OQ and PQ documents of the equipments.
		  • Spare parts manual
			1	8000.00

4.	Rapid Mixer granulator	• Should be Flame proof • Contact Parts: Stainless Steel 316 • Capacity – Gross: Suitable for 3 L, 5 L & 10 L Bowls and should offer change over of container. • Should have Side Bottom pneumatically operated Discharge Valve, Chopper Blades and Bottom Beater Blades. • Should be GMP Model • Should have Jacketed / insulated bowl • Should offer reproducible mixing and granulation processes. • The PLC should have following features, ➢ Recipe Management ➢ Time Based Functions. ➢ Safety Interlocks. ➢ Touch Screen Type. ➢ Input Temperature of Binder at the time of addition. ➢ The Recipe Management is better controlled for each product. ➢ Password Protection. ➢ End Pointing Sensing (Granules ready for discharge) • Printer should be available. • The supplier should provide the following documents to the user • Operational manual and maintenance manual • SOP for equipment operation • Test certificates of 'MOC' • Calibration certificate(s) traceable to national standard and purchase reference • Catalog number for the various instruments present in the system. • Trouble shooting methods • IQ, OQ and PQ documents of the equipments. • Spare parts manual	1	38000.00
5.	Co-Mill	• The contact parts should be made up of SS316	1	44000.00

		• Should be GMP model
		• Contact surfaces should be welds cleaned and polished
		• Funnel chute with grid bar to guard rotating impeller and interlock proximity switch should be available.
		• Belt driven should be designed for quick and easy access.
		• Impeller speed range should be approx 1000 -5500 RPM
		• Impeller/screen gap should possibly closest.
		• Tooling: one round hole screen and one standard impeller, manufactured in 316 stainless steel with 150 grit surface finish should be provided.
		  • The following sieves should be provided.
		  • Diffusion bonded screen for sizing 009R&001R – 1No
		  • Round hole screen for sizing 018R - 1No
		  • Greater hole screen for dry milling 040g -1No
		  • Square hole screen for wet milling 250Q -1No
		• Emergency stop button should be available.
		• All the necessary accessories and its spare parts required for basic functioning should be provided.
		• The supplier should provide the following documents to the user
		  • Operational manual and maintenance manual
		  • SOP for equipment operation
		  • Test certificates of 'MOC'
		  • Calibration certificate(s) traceable to national standard and purchase reference.
		  • Trouble shooting methods
		  • IQ, OQ and PQ documents of the equipments.
		  • Spare parts manual		

6.	Tablet Compression	• Number of station : 8 • Type of tooling : D-4 &B-4	1	40000.00

	machine
	(R & D model)
		• Output (Tablets/Hr) : Maximum: 7200
		Minimum 2400
		• Max operating pressure-main(KN) : 60 (D-60 & B-40)
		• Maximum tablet diameter (mm) : 19 (D-19 & B-16)
		• Max.Depth of fill (mm) : 20 (D-20 & B-17)
		• Upper punch penetration-main(mm) : 2 to 6
		• Precompression should be available.
		• Should be GMP model
		• Should have overload pressure release mechanism
		• It should be completely accessible from all sides for quick and easy cleaning.
		• It should have provision for containment to prevent exposure of operator with toxic drugs and chemicals.
		• All the necessary accessories and its spare parts required for basic functioning should be provided.
		• The supplier should provide the following documents to the user
		  • Operational manual and maintenance manual
		  • SOP for equipment operation
		  • Test certificates of 'MOC'
		  • Calibration certificate(s) traceable to national standard and purchase reference
		  • Trouble shooting methods
		  • IQ, OQ and PQ documents of the equipments.
		  • Spare parts manual		

7.	Tablet Coating machine	• Should be suitable for film coating of potent drugs / hormone tablets • Should have capacity: 1 kg, 3 kg and 5 kgs. • Should be GMP model. • Should have explosion proof electrical components and drives. • Should be suitable for aqueous and organic coating. • Should have Exhaust air dust collection system with self cleaning filters.	1	86000.00

		• Should comprise of
		  • Pan cabinet
		  • Spray system equipped with automatic spray gun and Make peristaltic pump head with FLP geared motor and VFD
		  • Liquid vessel with pneumatically driven stirrer
		  • Hot air unit with pre and intermediate filter, steam heating coil , suitable blower with FLP drive motor and outlet damper etc. Enclosed in A S.S. 304 cabinet
		  • HEPA filter in S.S. 304 enclosure
		  • CIP system including high pressure pump and jet nozzles.
		  • PLC based control panel having all the necessary components such as cpu having inbuilt digital input output, analog module, necessary dc power supply, battery module, communication port etc for logical control of the coating process. The control system will also have colour touch screen HMI and printer.
		  • All pneumatic components such as solenoid valves, filter, pressure regulator etc should be provided.
		  • Suitable loading system for loading of uncoated tablets to the pan without outside contamination.
		  • Suitable unloading device to eliminate contamination during unloading of coated tablets.
		  • Packed bed spray tower type wet scrubber with water circulation pump.
		  • Cartridge type bag filter with reverse pulse jet cleaning device
		  • M.S. Exhaust cum booster blower made of mild steel (with epoxy coating) with flame-proof drive motor
		  • HEPA filter with prefilter enclosed in an epoxy coated M.S. Casing for final cleaning of exhaust air
		  • Flow measurement of inlet drying air using necessary instruments.
		  • Audio visual alarm annunciation to be		

		given when pressure drop across the HEPA filter exceeds set point. • Provision of display and alarm through HMI to ensure the presence of negative pressure inside the pan cabinet by using necessary instruments including differential pressure transmitter. • Automatic motorized dampers for inlet and exhaust air volume control from HMI • Pressure transmitter for display of atomization air pressure and alarm when the atomization air pressure falls below the set point. • Indication and remote control of atomization air pressure by use of analogue pressure regulator and pressure transmitter. The atomization pressure will be controlled from the HMI • VFD for inlet and exhaust blower motors • Suitable dehumidifier having chilled water Coil (copper tube with aluminium fins), moisture separator housed in S.S. 304 enclosures. The dehumidifier will be supplied with necessary chilled water inlet and outlet connections with modular valve, RH transmitter etc. The absolute humidity of the air after the dehumidifier will not exceed 70 grains per pound. • All the necessary accessories and its spare parts required for basic functioning should be provided. • The supplier should provide the following documents to the user • Operational manual and maintenance manual • SOP for equipment operation • Test certificates of 'MOC' • Calibration certificate(s) traceable to national standard and purchase reference Catalog number for the various instruments present in the system.		

		• Trouble shooting methods • IQ, OQ and PQ documents of the equipments. • Spare parts manual		

8.	Manual Capsule Filling Machine	• Should be made up of stainless steel contact parts and contain non corrosive approved materials
		• Stainless steel should be made up of SS 316
		• Should be GMP model
		• Should be easily cleanable
		• Should provide trouble free operation.
		• Should have 300 holes per tray
		• Change parts should be easily changeable
		• Pin plate assembly and lifting assembly should be there.
		• Change part for the size #0, #1, #2, #3,#4 ,#5 should be provided
		• 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
			1	5000.00

9.	Tablet Hardness Tester	• Should be able to measure Diameter, hardness and thickness of tablet. • Diameter: Measuring range: 2.0mm to 40.0mm. Measuring unit: mm or inch Measuring accuracy: ±0.06mm • Hardness: Measuring sensor: load cell and strain gauge Measuring range: 2N to 500N Measuring unit: Newton (N) or kilo ponds (Kp) Measuring accuracy: ± 1N • Method storage: 99 programs with parameters. • Printer should be available. • Data storage should be available with non-volatile memory.	1	8000.00

		• Report format: GLP & pharmacopoeia compliant report with statistics (Avg, Min, Max and RSD)
		• The supplier should provide the following documents to the user
		  • Operational manual and maintenance manual
		  • SOP for equipment operation
		  • Test certificates of 'MOC'
		  • Calibration certificate(s) traceable to national standard and purchase reference .
		  • Trouble shooting methods
		  • IQ, OQ and PQ documents of the equipments.
		  • Spare parts manual		

10.	Friabilator	• Operating modes: count or time
		• Test mode: Programmable count 1 to 999 or programmable time up to 99:59
		• Display should be clearly visible
		• Rotation speed: 25 rpm
		• Count mode accuracy: ±1 rpm
		• Keyboard: alphanumeric splash water proof polyester soft keys.
		• Output: Printer and PC connectivity for data downloading
		• Friability tester should comply with all current pharmacopoeia requirements as per USP/EP/IP.
		• Automatic discharge of the of the sample into individual sample tray after completion of each cycle
		• Should have 2 drums (acrylic)
		• Should have 10° tilting of drums as per USP recommendation
		• Should have easy front loading system
		• Supports friability drum and abrasion drum
		• Should provide calculation of friability – percentage weight-loss
		• The supplier should provide the following documents to the user
		  • Operational manual and maintenance manual
		  • SOP for equipment operation
			1	4000.00

		• Test certificates of 'MOC', if applicable • Calibration certificate(s) traceable to national standard and purchase reference Catalog number for the various instruments present in the system. • Trouble shooting methods • IQ, OQ and PQ documents of the equipments. • Spare parts manual		

11.	Bulk Density Apparatus	• Meet USP and ASTM specifications
		• Simultaneous tapping and rotating assures even packing of material.
		• Calculates tap density, compressibility index, hausner ratio and bulk density
		• Should have two cylinders and holders for 100 ml and 250 ml cylinders.
		• It should meet the compliance with all current pharmacopoeia requirements as per USP/ EP/ IP.
		• The supplier should provide the following documents to the user
		  • Operational manual and maintenance manual
		  • SOP for equipment operation
		  • Calibration certificate(s) traceable to national standard and purchase reference
		  • Catalog number for the various instruments present in the system.
		  • Trouble shooting methods
		  • IQ, OQ and PQ documents of the equipments.
		  • Spare parts manual
			1	6000.00

12.	Sieve Shaker	• Body should be made up of S.S. as per GMP. • It should be ideal for particle size analysis and separation. • It should be Tri-dimensional sifting motion. • Intermittent and continuous shifting motion with 15 programmable levels of amplitude. • It should be very low noise operation with low maintenance.	1	4600.00

		• Having a programmable shake time from 1 min to 99 min. • It should be suitable for dry and wet sieving. • Mode of operation: Continuous and intermittent • Intermittent operation: At intervals (0.5 sec) • Capacity: Up to 8 sieves of 200 mm dia x 50 mm h Suitable for sieves from 28 µm to 4 mm • Shake time; programmable from 1 min to 99 min • Power level: programmable from 5 to 20 • Display should be clearly visible. • Noise level: Less than 61 dB without sieves at maximum amplitude : Less than 71 dB without sieves and material at maximum amplitude • Standard accessories i.e Rod and clamp should be included. • Test sieves should be provided. The sieves should have following features. ➢ Should be in accordance with ISO 3310:1-2000 standards ➢ Sieve should be made up of SS 316 ➢ Should have Inspection and Compliance certificate ➢ Should have Sturdy jointless rims for excellent fitment ➢ Should have no crevices to trap sieving material ➢ Mesh should be evenly tensioned ➢ Mesh should be welded-no soldering (lead free) • Test Sieves Of ISO Nominal Aperture Supplementary Sizes R40/3 having the following sizes 2.00 mm,1.70 mm,1.40 mm,1.18 mm,1.00 mm,850 µm,710 µm, 600 µm ,425 µm ,250 µm ,180 µm ,150 µm should be provided. • The supplier should provide the following documents to the user • Operational manual and maintenance manual • SOP for equipment operation • Test certificates of 'MOC' • Calibration certificate(s) traceable to		

		national standard and purchase reference Catalog number for the various instruments present in the system. • Trouble shooting methods • IQ, OQ documents of the equipments. • Spare parts manual		
13.	Disintegration Testing Apparatus	• Dip speed: 30 ± 1DPM • Stroke length: 5.5 ± 0.1cm • Water bath temperature range: ambient +5˚C to 50˚C • Temperature accuracy: ±0.2˚C • Water bath: one piece moulded clear acrylic water bath with illumination for better visibility • Test mode: user programmable temperature and time • Display should be clearly visible • Keyboard: alphanumeric splash water proof polyester soft keys. • Baskets are automatically lifted at the end of the test. • Audible, low water level alarm with indication on display for the safety. • External temperature sensors should be available for individual beaker. • Standard accessories such as 2 baskets of 6 tubes each, Fluted discs: 12 nos, Temperature sensors: 2 nos. • It should comply with all current pharmacopoeial requirements as per USP/EP/IP. • The supplier should provide the following documents to the user • Operational manual and maintenance manual • SOP for equipment operation • Test certificates of 'MOC' • Calibration certificate(s) traceable to national standard and purchase reference Catalog number for the various instruments present in the system.	1	4000.00

		• Trouble shooting methods • IQ, OQ and PQ documents of the equipments. • Spare parts manual		

14.	Dissolution Test Apparatus	• Dissolution apparatus should comprises of
		  • 14 Nos. Paddles (USP II)
		  • 14 Nos. Baskets with Rods (USP I)
		  • 1 No. Water Circulating Pump
		  • 14 Nos. Clear Merlon Jars
		  • 1 No. Moulded prespex Water Bath
		  • 1 No. External Probe
		• It should have Programmable System Control with Splash proof operational panel, LCD Display for RPM, Temperature & Elapsed Time Displays For 12 sampling intervals, Built-in control of speed, Bath vessel Temperature, Interfaces for automated Collector & programmable for 12 Different products
		• Should have Precise Individual Vessel Centering system.
		• Temperature control wake up i.e Heater turns on at preset clock time
		• 12 Programmable sample intervals & 20 programmable monographs
		• Validation prints out with summary of test.
		• Power failure recovery should be there.
		• On-Line/Off-line sampling facility should be available.
		• Volume adjustable from 1 to 99 ml.
		• Vibration free, smooth electrical lift movement
		• Auto calibration of temperature
		• It should Reduce Routine Validation
		• Audio-Visual status and error indication
		• On-line validation of RPM
		• Off line sampling accessories for the syringe pump such as 12 syringes (10 mL) and 4 way valve should be provided.
		• Accessories such as PTFE carrier tubing, SS.tip full flow filters, motorised sampling manifold, sample collector, Tablet input device, individual vessel temperature sensor,sample colletor vial tray, syringe filter
			1	30000.00

		manifold to be provided .
		• It should comply with all current pharmacopoeial requirements as per USP/EP/IP.
		• The supplier should provide the following documents to the user
		  • Operational manual and maintenance manual
		  • SOP for equipment operation
		  • Test certificates of 'MOC'
		  • Calibration certificate(s) traceable to national standard and purchase reference
		  • Catalogue number for the various instruments present in the system.
		  • Trouble shooting methods
		  • IQ, OQ and PQ documents of the equipments.
		  • Spare parts manual		

15.	Digital pH meter	• Measuring Range: 0.00…….14.00 pH, -1999…1999mV, 0ºc…..100ºc(32ºF….212ºF)
		• Resolution : 0.01pH, 1mV ,0.1ºc
		• Error Limits : ± 0.01pH, ±0.5ºC
		• Calibration : 3points 3predefined buffer Groups
		• Display : Liquid Crystal
		• Memory : 99 preset memory
		• Interface : RS232 interface.
		• The supplier should provide the following documents to the user
		  • Operational manual and maintenance manual
		  • SOP for equipment operation
		  • Test certificates of 'MOC'
		  • Calibration certificate(s) traceable to national standard and purchase reference
		  • Trouble shooting methods
		  • IQ, OQ and PQ documents of the equipments.
		  • Spare parts manual
			1	1600.00

16.	Fluid Bed processor	• Should be R and D model and comply with GMP. Fluid Bed Laboratory unit should comprise of • One lower housing, movable swiveling casters. Within the housing the following components should be mounted, with non-flameproof i. Inlet air system for operation with ambient room air- • Inlet air flow rate measuring device. • Process air temperature sensor • Air filter • Electric heater ii. Pressing device The processing chamber is sealed by an pneumatic cylinder which is compressing the processing insert within the inlet air plenum, and the filter chamber housing. iii. Exhaust air system • Modulating air flow control flap • Exhaust air pre-filter • Exhaust air fine filter (cartridge) • Exhaust air fan with electric motor. • Noise attenuator. • On the top of the lower housing the parts for i. Top Spray process should includes the following • Single -piece conical granulation insert for top spray processes made of stainless steel ss 316L, incl. • Standard nozzle (without needle automatic) made of stainless steel ss316L • Two (2) nozzle entrance port , one liquid insert ø 0.8mm as well as product sample port (20ml) , product temperature port for product temperature probe. Including bottom screen 100 micron. Product container with 2 rectangular windows. • Filter chamber • Support device for processing insert • Swivel operator interface terminal • one (1) peristaltic pump • Pump should be automatically	1	90000.00

		remote-controlled from the control panel for on/off. The same pump can be able to used for 6" wurster insert as well as for rotor insert RI 300. • The filter chamber should be connected to the lower housing by a vertical duct. The filter chamber and the vertical duct can be tilted for transportation. • One (1) twin chamber exhaust air shaking filter – 20 micron pc satin filter bag, pneumatically actuated to retain the fluidised product. • The filter should be suspended by a quick disconnect coupling and a suspension ring. The filter should be squeezed between the flange o the filter housing and the relevant processing insert for positive sealing. • one (1) on/off plug valve, pneumatically operated, on each side of the twin filter. • To clean each of the two filter segments alternately, the air flow of one of the filter sections should be stopped by closing the plug valve during the shaking cycle. Alternatively, both filter sections can be shaken synchronously. ii. Bottom Spray process should includes the following Made of stainless steel ss 316 l (bottom spray) in conical execution , single- piece design including- • Two (2) rectangular windows (product bowl + expansion chamber) • product sample port (20 ml) • Product temperature sensing port • binary bottom spray nozzle (made of stainless steel AISI 316l) with one (1) 0.8mm liquid • Height adjustable inner partition • Perforated bottom plate type "b" (for processing pellets and granules size 250µm-720µm)		

		• Bottom retention screen 250µ (60 mesh)
		• It should be plc controlled system and it should comprises of the following
		  • All parameters should be shown on the screen.
		  • Inbuilt data logging with file storage & transfer facility
		  • Recipe handling with trends for process parameters.
		  • With USB printer interface. Provided with printer for batch report printing.
		• Product contacting parts should be made up of AISI 316l mirror polished ra<0.5pm and the outside welds of the machine tower brushed and passivated process air contacting parts should be AISI 304.
		• Sieves for Top spray, bottom spray should be provided.
		• Supply and integration of weighing balance with PLC interface to monitor to be supplied.
		• All the necessary accessories and its spare parts required for basic functioning should be provided.
		• The supplier should provide the following documents to the user
		  • Operational manual and maintenance manual
		  • Sop for equipment operation
		  • Test certificates of 'moc'
		  • Calibration certificate(s) traceable to national standard and purchase reference catalogue number for the various instruments present in the system.
		  • Trouble shooting methods
		  • IQ, OQ and PQ documents of the equipments.
		  • Spare parts manual		

17.	Automatic Film Applicator	• Drawdown speeds can be varied between 50 and 500 mm/sec per second in 10 mm/sec increments to establish the most suitable application conditions for each formulation. • Keypad for setting the drawdown speed and	1	14000.00

		forward / reverse keys to commence or reset the drawdown bar ensure that the instrument is simple to use. • Key panel should be Solvent resistant and easily cleaned. • Emergency stop operation should be available • It should Conforms to ASTM D 823 • Wide range of operating speeds allowing optimum settings of shear rate • Memory function to store commonly used speeds • Constant downward force applied to coated surface • Wire bar coater attachment should be included • Should have built in vaccum pump. • Traverse Speed 50 - 500 mm/s (2 - 20 in/s) • Traverse Speed Accuracy 10 mm/s (0.4 in/s) • Display Resolution 10 mm/s (0.4 in/s) • Wire Bar Diameter 10 - 13 mm (0.4 - 0.5 in) • Wire Bar Test Length 320 mm max. (12.4 in max.) • Stroke Length 340 mm (13.4 in) • Minimum 2 Preset Speed Memories should be available. • The supplier should provide the following documents to the user • Operational manual and maintenance manual • SOP for equipment operation • Test certificates of 'MOC' • Calibration certificate(s) traceable to national standard and purchase reference Catalog number for the various instruments present in the system. • Trouble shooting methods • IQ, OQ and PQ documents of the equipments. • Spare parts manual		

18.	High Pressure Homogenizer	• Should comply with GMP.
		• It should be suitable to process nano-particales, nano-dispersions, nano-emulsions, and for cell distruption,
		• Should have minimum sample volume of 15 mL
		• Maximum flow rate: 150ml/min
		• It should have heat exchangers to control inlet and outlet temperatures.
		• Suitable to SIP and CIP.
		• Should have built in over pressure safety.
		• Maximum homogenizing pressure: 2000 bar (29,000psi)
		• It should be easily cleanable.
		• It should have touch screen display with start/stop drive control, pressure trend diagram visualization and with built-in safety protection against over pressure.
		• All the necessary accessories and its spare parts required for basic functioning should be provided.
		• The supplier should provide the following documents to the user
		  • Operational manual and maintenance manual
		  • SOP for equipment operation
		  • Test certificates of 'MOC'
		  • Calibration certificate(s) traceable to national standard and purchase reference
		  • Catalog number for the various instruments present in the system.
		  • Trouble shooting methods
		  • IQ, OQ and PQ documents of the equipments.
		  • Spare parts manual
			1	60000.00

19.	High Shear Homogenizer	• It should be table top homogenizer and have digital speed controls. • Should comply with GMP. • The display should be clearly visible. • Should be capable for sample volume range from millliters to liters • It should be enormously versatile at homogenizing, emulsifying, blending and/or	1	10000.00

		mixing organic and inorganic materials.
		• RPM range 0 - 28,000
		• Sample vol 0.03 ml - 5 L
		• Noise rating dB 68
		• Generators of 5 mm,10 mm and 30 mm should be supplied.
		• The supplier should provide the following documents to the user
		  • Operational manual and maintenance manual
		  • SOP for equipment operation
		  • Test certificates of 'MOC'
		  • Calibration certificate(s) traceable to national standard and purchase reference
		  • Trouble shooting methods
		  • IQ, OQ and PQ documents of the equipments.
		  • Spare parts manual		

20.	Over head stirrers	• Stirrer should be useful for high viscosity range products. • Should comply with GMP. • It should provide constant speed by microprocessor control • It should be infinitely adjustable without gear shifting • Non-locking, overload capabilities • Push-through agitator shafts • Digital display should show rated- and actual- speed • Integrated torque trend display for viscosity control should be available, • Analogue interface for recording speed and torque. • Stirring quantity max. (H2O) [l] - 60 • Speed display should be available. • Speed range [rpm] - 50 - 1200 • Viscosity max. [mPas] - 70000 • Torque max. at stirring shaft [Ncm] - 100 • Torque max. at stirring shaft at 60 1/min (overload) [Ncm] - 100 • Torque max. at stirring shaft at 100 1/min [Ncm] -100	1	4000.00

		• Torque max. at stirring shaft at 1.000 1/min [Ncm] -100 • Speed control - stepless • Stirring element fastening - chuck • Chuck range min. diameter [mm] - 0.5 • Chuck range max. diameter [mm] - 10 • Hollow shaft, inner diameter [mm] - 11 • Extension arm diameter [mm] -16 • Extension arm length [mm] - 200 • Torque display should be available • Nominal torque [Nm] -1 • Head clamp, stand, Propeller stirrer (4 – bladed) , Strap clamp should be provided. • The supplier should provide the following documents to the user ◦ Operational manual and maintenance manual ◦ SOP for equipment operation ◦ Test certificates of 'MOC' ◦ Calibration certificate(s) traceable to national standard and purchase reference ◦ Trouble shooting methods ◦ IQ, OQ and PQ documents of the equipments. ◦ Spare parts manual		
21.	Flow-Through Dissolution Tester	• It should comply with USP • It should have seven stations with piston pump and temperature controller. • It should be user friendly • It should have 99 programmable protocols • Automatic flow rate adjustment for individual channel • Programme should support for gravimetric flow • Bath temperature should be 30.0° C to 40.0° C and its accuracy should be ± 0.1° C • Should have temperature probe • Piston pump stroke rate should be 120 strokes/min and its accuracy should be ± 1 stroke • Programmable flow rate for individual	1	40000.00

		channel should be 1.5 ml/min to 32 ml/min and its accuracy of flow rate should be ± 5% • Standard accessories such as bath assembly, sampling canula, filters, mesh, ruby bead should be provided. • 22.6 mm Flow-Through cells as per USP and 12 mm cell for powder as per USP should be provided. • External temperature sensors for individual cell should be provided. • The supplier should provide the following documents to the user • Operational manual and maintenance manual • SOP for equipment operation • Test certificates of 'MOC' • Calibration certificate(s) traceable to national standard and purchase reference • Trouble shooting methods • IQ, OQ and PQ documents of the equipments. • Spare parts manual		
22.	Diffusion Cell Apparatus	• It should be ideal for transdermal and topical products • Number of Cells should be minimum 7 • Maximum10 programmable protocols with 12 sample interval • Certified glass and acrylic vertical diffusion cells with 5 ml, 7.5 ml and 12.5 ml sizes should be provided. • Temperature Range: 30.0°C to 40.0°C and its accuracy should be ± 0.1°C and its Resolution should be 0.1ºC • Should have Heater sensor • Flow rate of circulating pump should be 15 litres/min • Should have timer arrangement and should be in the range of 1 min to 999 hrs 59 min • Should have Printer interface • The supplier should provide the following documents to the user	1	11000.00

		• Operational manual and maintenance manual • SOP for equipment operation • Test certificates of 'MOC' • Calibration certificate(s) traceable to national standard and purchase reference • Trouble shooting methods • IQ, OQ and PQ documents of the equipments. • Spare parts manual		

23.	Halogen Moisture Analyzer	• Temperature range: 50-200˚c
		• Minimum sample weight: 0.5 g
		• Readability in balance: 1 mg
		• Temperature adjustment: intervals of 1˚C
		• Should be able to evaluate moisture and dry content in %, weight in g.
		• Switch-off criteria: automatic and manual
		• Readability moisture content: 0.01%
		• Repeatability (sd) with 2 g of sample: ± 0.10%
		• Repeatability (sd) with 10 g of sample : ± 0.015%
		• Language: English
		• Display should be clearly visible.
		• Printer should be available
		• The supplier should provide the following documents to the user
		  • Operational manual and maintenance manual
		  • SOP for equipment operation
		  • Test certificates of 'MOC'
		  • Calibration certificate(s) traceable to national standard and purchase reference.
		  • Trouble shooting methods
		  • IQ, OQ and PQ documents of the equipments.
		  • Spare parts manual
			1	4000.00

24.	Stability chambers	• Should have Internal volume of minimum 720L with internal glass doors	2	144000.00

		• Should comply with 21 CFR part 11
		• Should comply with GMP
		• Should have temperature range with humidity (10 to 70 ˚C)
		• Should have the Humidity range 10% to 80% RH.
		• Max-Noise level should be 4dB
		• Fluctuations- Temperature-Max.+/-0.1˚C and Humidity –Max+/-1.5% RH
		• Vapour pressure humidification system for fast response time with drift-free, capacitive humidity sensor.
		• Should have Electronically controlled humidification and dehumidification system.
		• Should have compressor cooling system with evaporator panels for ambient temperature up to 32˚C and should have motorized proportional valve control and No icing on evaporator panels up to +5˚C
		• Should have program controller for temperature, humidity and fan speed settings.
		• User friendly colour LCD screen with integrated electronic chart recorder for the process parameters and door openings with event recorder and real time clock.
		• Minimum storable program-25 programs.
		• Should have independent adjustable temperature safety device class 3.1 for full protection against chamber over-temperature, with audio-visual temperature alarm.
		• Should have standard Ethernet communication port for PC communication and programmable from PC using software.
		• Should have minimum 2 stainless steel rack and it should be extendable up to 5nos.
		• The supplier should provide the following documents to the user
		  • Operational manual and maintenance manual
		  • SOP for equipment operation
		  • Test certificates of 'MOC'
		  • Calibration certificate(s) traceable to national standard and purchase		

		reference • Trouble shooting methods • IQ, OQ and PQ documents of the equipments. • Spare parts manual		
25.	GC head space	• Standard Split/ Split less type Capillary injection port and FID-Microprocessor based GC with Advanced Flow Technology and Fast GC ready with FID • Capable of installing 3 injectors and 4 detectors on single GC • Large high power oven with temperature range of Ambient +4˚C to 450˚C in steps of 1˚C • Rapid column oven heating with rates from -250˚C to +250˚C • 20 ramp / 21 plateau column oven heating steps • Total column oven programming time of 9,999.99 mins • Ultra-fast column oven cooling from 450˚C to 50˚C in 3.4 mins • Standard Split / Split less capillary injector with temperature range of ambient +5˚C to 450˚C in steps of 1˚C. • High pressure Advance Flow Controller (AFC) for electronic control of carrier gas pressure and flow independently • Digital setting of septum purge gas standard • Capability of connecting micro-bore column of 0.1mmID for Fast GC analysis • Carrier gas pressure setting range from 0 to 970 kPa • Carrier gas flow setting range from 0 to 1,200 ml/min • 7 step pressure and flow programming each • Pressure / Flow programming rate of – 400 to 400 kPa / min and – 400 to 400 ml/min • Constant Pressure / Constant Flow and unique Constant Linear Velocity mode for carrier gas • Programmable split ratio setting from 1 to 9,999.9 • Built in advanced self-diagnostics function • Large LCD Graphic User Interface for displaying all GC parameters including acquired chromatogram.	1	78000.00

		• High sensitive Flame Ionization Detector (FID) with temp range up to 450˚C and Dynamic range of 10^7 • FID minimum detection limit of 1.5pgC/sec (Dodecane) • Quartz FID nozzle for inertness and high speed FID acquisition rate of 250Hz (4ms). • Electronic control of all detector gases H2, Air and Make-up through Advanced Pressure Controller (APC) • Compatible software including complete GC control, dual channel real time chromatographic data acquisition and post-run analysis. • Software features should include high speed data acquisition and bulk analysis compatibility, full qualitative & quantitative processing functions, multi-function compatibility, GLP/GMP functions, Audit Trail, Validation Assistant, System Suitability, QA/QC functions, All-in-one file configuration for easy data transfer, customized report generator, networking capability, data management etc. • Auto injector: 1 No. • Long turret Assy: 1 No. • 1.5ml sample vial septa with cap 100pcs/set: 1 No. • The static headspace auto sampler should come with 60 position auto sampler, 10 position platen heaters, integrated Optimix equilibrium system, and completely heated sample pathway. • Entire system can be heated from ambient up to 300 ˚C in increments of 1˚C. Valve and loop configuration includes 1ml standard loop. System's gas flows and pressure are electronically monitored and controlled. • GC Interface Cable: 1 No • Reducing Union, 1.6L: 1 No • Adaptor Nipple -1.6U: 1 No • Vials, 22ml headspace, w/20mm top, 125 per pack: 5 No • Crimp Cap. For headspace septa and 20mm top headspace vials, 125 per pack. 5 No • Silicon rubber/Teflon face septa. For 20mm top headspace vials, 125 per pack.		

		(Recommended for temperatures over 100 degrees C) : 5 No • Hand crimper for 20mm top headspace vials: 5No • Tool, vial decapper 20mm neck: 5 No • Capillary column of fused silica 30 m, 0.32mm, 1.80 µm, low bleed, Max temp 360 ºC : 1 No • Capillary column with specification 60 m, 0.18mm, 0.10 µm: 1 No • CE and all other international standards certification is necessary • Data handling in accordance with the technical requirement of FDA regulation - 21CFR Part 11. • The supplier should provide IQ, OQ and PQ documents of the equipments.		
26.	Polarimeter	• Range : -355 to + 355 selection • Resolution : 0.01/0.001 • Reproducibility: 0.002 • Accuracy: ± 0.01 • Light Sources : LED/Interference filter 589.3nm • Beam Diameter: 4 mm • Tube Length : 20 to 220mm • Reading Time : 4-30 second selectable • Temperature : 5-40° C • Temperature Compensation : None, sugar, quartz, user defined • Optical Density Range : 0.0 to 3.0 OD • Interface : 2*RS232,parallel printer port • Power Supply : External 90-250V ~,50-60 Hz, Supplied with instrument • System should be automated with software feature	1	20000.00

		• Should have high resolution LED display with temperature and optical density displayed • Should have parallel printer port and barcode reader • Should conforms to USP/EP/BP/JP • Data handling in accordance with the technical requirement of FDA regulation - 21CFR Part 11. • The supplier should provide IQ, OQ and PQ documents of the equipments.		
27.	pH/Conductivity/TDS meter	• pH measuring range: -2.00 to 20.00 with resolution of 0.001 pH • Conductivity measuring range: 0.000 to 9.999 µS/cm; 10.00 to 99.99 µS/cm; 100.0 to 999.9 µS/cm ;1.000 to 9.999 mS/cm ; 10.00 to 99.99 mS/cm; 100.0 to 999.9 µS/cm; 1000 µS/cm with resolution of 0.001µS/cm; 0.01 µS/cm;0.001 mS/cm; 0.01 mS/cm; 0.1 mS/cm • ORP measuring range: -2000 to 2000 mV with resolution of 0.1 Mv With ±0.2 mV ±LSD accuracy • ISE measuring range: 1 X 10^{-6} to 9.99 X 10^{10} with resolution of 1;0.1;0.01;0.001 • TDS measuring range: 0.000 to 9.999 ppm; 10.00 to 99.99 ppm; 100.0 to 999.9 ppm; 1.000 to 9.999 ppt; 10.00 to 99.99 ppt;100.0 to 400.0 ppt actual TDS ppm with resolution of 0.001ppm; 0.01 ppm; 0.1 ppm; 0.001 ppt;0.01 ppt;0.1 ppt • Salinity measuring range: practical: 0.00 to 42.00 psu; natural sea water: 0.00 to	1	4000.00

		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 measuring range: -20˚ C to +120˚ C with resolution of 0.1˚ C • Resistivity in kOhms.cm : 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 • pH calibration points: more than 5 with 8 standard buffers and 5 custom buffers • ISE calibration points: 5 and five standard solutions and five user defined standards • Conductivity calibration: Auto standard recognition • Salinity calibration: Percent scale-1 point • 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, cal time stamp • Logging: 100 lots with 10,000 record/lot(AUTOMATIC , MANUAL AND AUTOHOLD 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 equipments.		
28.	Auto Titrator	• Range m V : -2000.0 TO 2000.0 m V PH : -2.000 to 20.000 PH ISE : $1x10^{-6}$ to $9.99x10^{10}$ Temperature : -5.0 to 105.0^0c/23 to 221^0F/265.2 to 378.2 K • Resolution m V : 0.1 m V PH : 0.1/0.01/0.001 PH ISE : 1, 0.1, 0.01 Temperature : 0.1^0c/0.1^0F/0.1K • Accuracy (@25^0c/77^0F) m V : ±0.1m V PH : ±0.001 ph ISE : ±0.5% monovalent ; ±1 % divalent Temperature : ±0.1^0C/±0.2^0F/±0.1K • Burette Sizes : 5, 10 and 25 ml • Burette Resolution : 1/40000 • Display Resolution : 0.001ml • Dosing Accuracy : ±0.1% of full burette volume • Methods : Load up to 100 methods • Burette auto detection : Burette size is automatically recognized when inserted into the unit • Programmable stirrer : Propeller type ,100 – 2500 RPM automatically held within 10% of the set value , resolution 100rpm • Flow rate : User selectable from 0.1 ml/min to 2 X burette volume/min • End point determination : Equivalence point (1^{st} or 2^{nd} derivative) or fixed PH/mV value. • PH calibration : up to five point calibration ,eight standard buffers and five customs buffers • m V Calibration : single point offset	1	8000.00

		• ISE Calibration : up to five point calibration, seven standard solutions and five users defined standards • Potentiometric titrations : Acid base (PH or mv mode),redox , precipitation , complexometric , non aqeuos , ion selective , argentometric , back titrations and titre determination. • Measurement units: User specified expressions of concentration units to suit specific calculation requirements. • Real time & stored graph : m V volume or Ph- volume titration curve , 1st derivative curve or 2nd derivative curve , in pH mode , mv mode or ISE mode ; ph/mv/concentration values versus time – datalogging results . • Data storage : Up to 100 titration and PH/MV/ISE REPORTS • GLP Conformity: Instrumentation data storage and print capabilities. • Operating environment: 10 to 40^0c (50 TO 104^0F), up to 95%RH. • The supplier should provide IQ, OQ and PQ documents of the equipments.		
29.	KF Titrator	• Range : 100ppm to 100% • Resolution : 1 ppm (0.0001%) • Result Units : % ppm, mg/g ,µg/g , mg , µg, mg/ml ,µg/ml ,mg/pc , µg/pc • Sample Type : Liquid or Solid <u>End Point Determination</u> • Pre titration conditioning : Automatic • Background drifts correction : Automatic or user selectable value • Endpoint Criteria : Fixed mv persistence, relative drift stop or absolute drift stop • Dosing : Dynamic with optional pre – dispensing rate • Result statistic : Mean, standard deviation • Dosing assembly : Clip Lock Exchangeable burette system • Dosing pump : Stepper motor driven pump , which provides 40000 steps for single burette volume	1	8000.00

		• Dosing pump resolution : 1/40000 of burette volume • Air pump : Diaphram air pump system to allow the solvent in the titration vessel to be removed or replaced without opening titration vessel • Syringe: 5 ml precision ground glass with PTFE plunger motor driven 3 way, PTFE liquid contact material. • Dosing pump accuracy : ±0.1% of full burette volume • Tubing : PTFE with light block and thermal jacketing. • Titration vessel : Conical with operation volume between 50 to 150 ml. • Electrode : Dual platinum pin , polarization electrode with BNC connector. • Polarization current: 1,2,5,10,15,20,30 or 40 µA • Voltage range : 2mv to 1000mv • Voltage resolution : 0.1mv • Accuracy at 25^0c : ±0.1mv • External stirrer type : magnetic, optically regulated, digital stirrer • Speed : 200-2000 rpm • Resolution : minimum 100 rpm • Titration Methods : Up to 100 (standard and user) methods. • GLP Conformity : Good Laboratory and instrument data storage and printing. • Operating Environment : 10 to 40^0c up to 95%RH • The supplier should provide IQ, OQ and PQ documents of the equipments.		
30.	Refrigerated Centrifuge	• Table top centrifuge for high volume applications • Temperature range from -9ºC to 40 ºC • The fixed angle rotor should accommodate both round bottom as well as falcon tubes and should have adapter availability for 1.5 ml to 85 ml tube in the same rotor. Speed up to 11000 RPM • Separate adapter for 50ml falcon tube in the same rotor • Separate Fixed angle rotor with 30 positions for 1.5/2ml tubes and speed 14000RPM (20800xg) and adapters for 0.2/0.5 PCR tube	1	13000.00

		• The machine should comply with IVD conformity. • Ten acceleration & deceleration ramps for sensitive samples materials. • Centrifuge timer should start after the set RPM reached • Short spin key with selectable rotational speed • Standby Refrigeration for maintaining temperature when not in use • Should maintain 4°C at Max speed. • Automatic Rotor recognition to sense rotor type to set max allowable speed and with speed limitation for maximum safety • Quite operation with noise level <56dB(A) • 13.Optional Drum rotor with 16,400 x g for 60 x1.5/2.0 ml • Optional PCR strip rotor for spinning PCR strips • Fast temperature function for fast pre-cooling (15min) • A large Program memory • All rotors, lid, buckets and adapters should be autoclavable • Optional Swing out rotor for Deep well plates.		
31.	Hot Air Oven	• Capacity (Approximately)110 L • Working temperature range : ambient $+5^0$c to 300^0c • Dimensions (Approximately) Internal Dimensions (W x D x H) : 560 x 400 x 490 mm; 22" x 15.7" x 19.3" • Insulation: Glass wool/Equal material. • Number of Shelves required Standard: 2 Maximum: 6 • Load Per Shelf : 30 Kg (66 lbs) • Max. Total Load : 60 Kg (132 lbs) • Electrogalvanised steel body with white oven-baked epoxy power-coated finish. • Stainless steel, grade 304 chambers. • External Power Supply - 220-240V, AC, 50Hz, 1Ø • Alarm and safety function should be provided • Oven Power/Amp : 2140 W/ 9.4 A • Heating System-Forced Air circulating	1	2000.00

		system. • All International standard Compliance to be provided. • CE Certification is required.		
32.	Sand Grinder	• Shell Volume 0.3 LTR. • Grinding Material Volume 0.3 LTR. • Feed Container Volume 0.5 Ltrs. • Drive Motor 3 HP • Agitator Specially designed Rotor for excellent grinding • Speed of the Agitator Upto 5000 RPM with a peripheral speed of 5 M/S to 20 M/S. • Shell Dia 100mm (Appx.) • Shell Length 100mm (Appx.) • M.O.C. SS-304 for all contact part • Beads type Zirconium beads • Beads (Diameter) 0.5 mm to 0.8mm • Electric Panel Complete electric panel with Switch / Starter / AMP/Volt Meter / Frequency Drive for speed control / Temp. Indicator for product temperature. The entire panel shall be housed in SS-304 body. • SPECIAL PROVISION A chilled Water Circulation Tank of 10Ltrs. shall be provided for circulation of chilled water in the Jacket. • Special Blow Gun is provided for removal of all the material from the container and systems. • The machine and panel shall be front mounted from ease of operation.	1	12000.00
33.	CO2 incubator/Cell culture incubator	• Direct Heating system with Six-Sided heating effect • Liter, 6.0 cu. ft on a minimal footprint with LCD display screen & controller. • IR CO2 sensor with automatic auto-zero programmable function to ensure accurate calibrated measurements. • Fan less Design, Seamless Chamber with RS -232 Communications port. • Perforated Shelving. 8-position shelving rack with 4 shelves. • Sealed inner glass door for atmosphere conservation. • Stackable up to two units high. • Large Volume humidification pan with	1	12000.00

		dedicated independent heater. • Inbuilt O2 control with 0.1 – 19 %. • Quick and comprehensive chamber cleaning made effortless. • HEPA filtration of gas supply inlets to minimize contamination risk. • CO2 Gas control with 0.2- 20%. • Should have a Seamless Chamber • 72 hrs continuous data logging provide a detail record of environmental ghhcondition. • Intuitive controller capable to quickly change the environmental condition & alarm settings. • Diagnostic interface to show system parameters & functions. • Access password protection & onscreen troubleshoot option • Dry heat sterilization without removing the C02 sensor		
34.	Inverted Microscope	• Inverted Tissue Culture Phase Contrast Microscope • Provision to observe ~121 mm roller bottles • 4-position objective nosepieces • Specimen stage 200x239 mm with stage insert • Automatic on / off via push buttons on the specimen stage • Binocular phototube 45°/20 (50:50) Upgradable to Photography • Tube suitable for eyepieces 10x/20 Broad Focus • Zeiss optics • Inter Pupillary Distance range 48-75mm • Eyepiece tubes to be swivelled either way for comfortable viewing angle of the operator • Transmitted-light illumination with 6V 30W halogen bulb & White light LED • Automatic stand-by for illumination • Pinhole diaphragm • Allen keys for adjusting phase contrast • External power unit 100...240VAC/50...60Hz with specific adapters • Infinity corrected objective range with W0.8 mounting thread	1	8000.00

		• Plan-Achromat 4x/0.1, 4x/0.1 Ph0, 10x/0.25 Ph1 • LD Plan-Achromat 20x/0.3 Ph1, 40x/0.5 Ph1, 20x/0.3 Ph2, 40x/0.5 Ph2 • LD condenser 0.4 (WD= 55mm) • 2-position filter slider for filters and 3-position Ph Slider • Mounting frame for Micro titer plates 96 positions, Petri dishes d=54 mm, Petri dishes d=65 mm, Petri dishes d=35 mm, Attachable stage enlargement 2x66 mm left and right • Interference filter green • Neutral-density filter • Object guide for X Y movement • Dust cover • CE Certification is required		
35.	Magnetic Stirrer	• Rugged Aluminium die casting housing or equalmaterial • Acid & Alkali resistant glass ceramic Top/ Rugged Aluminium Top or equal material • Digital speed control from 100-1200 RPM • Digital temperature control from 50°C-500°C • Capacity to hold 2 to 5L • A magnetic bead and stirrer remover is also needed • CE and all other international standards certification is necessary.	4	16000.00
36.	Centrifugal evaporator	• Stainless steel rotor chamber • Rotor speed: 1500 rpm to 1750 rpm • Temperature range: +30˚ C to + 60˚ C • Should contain heater rotor chamber (240W) • Should contain magnetic device system • Should contains electronic locking and safety device • Should contain vacuum Chemical Diaphragm Pump with emission condenser suction capacity • Should include angle rotors of different vial capacities like: • Angle rotors 24 X 1/5/2.2 mL , total 72 vials • Angle rotors 18 x 4ml to 7ml vials and adopter to use 1 mL vials	1	23000.00

		• Angle Rotor 12 x 10mL to 15mL vials • Angle Rotor 8 x 30mL vials (round bottom) • Angle Rotor 6 x 50mL vials (round or conical bottom) • Separate Vials for the all Angle rotors should be provided • Low temperature cooling trap with capacity of -50˚ C/2 lit and should have glass lid for cooling trap • Should have a connection piece to connect hose to valve for connecting to freeze drier • The supplier should provide IQ, OQ and PQ documents of the equipments.		
37.	Chilled water circulator unit	• Chilled Water Circulator – 5 lts reservoir, • Ideal for Rotary Vacuum Evaporators • Temperature range -10°C to 25°C • Operating range: 0°C to 25°C • Flow rate: 3 l/min, 0.6 bar • Cooling capacity: 800 W at 15°C • Voltage: 230V (+/-15%) 50/60Hz • Power consumption: max. 1350 W • Ambient temperature: 15°C to 32°C • The supplier should provide IQ, OQ and PQ documents of the equipments.	1	5000.00
38.	Pulversier	• Table top model • Body made of food quality & non-magnetic Stainless Steel Sheet (SS316). • Strong capacity of reducing about 200 gm. of Quartz type of sample into 100 mesh in a minute • Suitable to operate on 230 / 250 Volts, Single Phase, AC Supply • Suitable for wide range of application e.g., Herbs, Spices, Fine Chemicals, Pharmaceuticals, food samples. • Adjustable particle size option (60 mesh to 120 mesh) of the final products • Preferred size of finished product: 100 mesh • Cooling provision to avoid overheating of	1	4000.00

		the sample. • Vibration free with less noise • 2 kg feed loading capacity • With 3 years warranty • The supplier should provide IQ, OQ and PQ documents of the equipments.		
39.	Tray Drier (Vacuum)	• Main Body/Vacuum chamber thick SS 316 plate with heavy duty SS 316 flange and stiffeners. • Door thick SS 316 plate (hemisphere shape) with heavy duty SS 316 flange. • Shelves Hollow type pads with SS 316 Sheet and Baffles. • Condenser (shell and tube) and Receiver SS 304 with Isolation valve and Flow glass in between to monitor condensation. • Trays (with out back folding) in SS 316 rounded corners and edges. • Explosion Vent/ Rupture Disc on vacuum chamber • Digital Temperature controller (FLP) with solenoid controlled Pneumatic operated valve at Hot water inlet. • Provision for Validation Port on Body. • Digital Temp. , Indicator (FLP) at H.W. inlet & outlet. • Digital type Vacuum gauge and Digital Temperature Indicator (FLP) in vapor line. • Pressure release valve in steam line. • View Glass/ Light glass provided on vacuum chamber Dorr, Body and Receiver. • Silicon Transparent gasket for door. • Nitrogen purging valve provided on Vacuum chamber. • Vacuum break valve provided on vacuum, chamber. • Drain valve for Vacuum chamber and Receiver. • Temperature Accuracy plus minus 2 to 3 degree • Finish; Internal 320 grit Mirror Polish and outer 180 grit mat finish. • Condenser and Receiver in SS 316 instead of SS 304 • Insulation on the vacuum chamber outer surface except door. The insulation is enclosed and covered with removable SS 304 panels.	1	9000.00

		• Skirting /wall panel all along the body/vacuum chamber flange. • Validation port with Censors. • SS 304 electrical heaters, circulation pump with Motors and controls. • Vacuum Pump (compatible oil free diapharm pump):1 No • No. of trays: 6 (minimum) • Capacity in kg: 12/18/12 • Tray volume in lts /cap. in kg: 10/2-3 • No. of heating shelf: 7 (minimum) • Distance between shelves in mm: 100 • Trays on each shelf: 1 only • Should have compatible condenser and receiver • Door gasket (silicon): 16mmsq • No if door bolts (40 mm dia): 8 (maximum) • The supplier should provide IQ, OQ and PQ documents of the equipments.		
40.	Ab coating machine with Strip cutter	Ab coating Machine • Should have uniform dispensing of reagents results in good line quality. • Weight of the machine should be approximately 5 kg. • Should have the maximum print length up to 30cm. • Should have two lines (2 printing heads) can be printed simultaneously. • Should have provision of variable speed for controlled dispensing of reagents. • Should have auto–reverse facility makes the operation automatic. • Should have pressure on the membrane is adjustable by a screw in the tip holder. • Should have the capacity upto 500µl in holding tank allows printing of 15 laminates before refilling. • Should have the capacity of total recovery of unused reagents. Strip Cutter • The maximum card with should have 120mm.	1 each	20000.00

		• Weight of the machine should be approximately 45 kg. • The required cutting speed is about 5000 cuts per hour. • The blades should be easily replaceable and are made of hardened alloy steel. • In normal operation, should have 1 million cuts can be made without the need for sharpening. • The number of strip that are cut is programmable and can be varied as per requirement from 1 to 9999. • The width of the strip should be programmable from 2mm to 12mm. • The machine should have have to cut laminate of width upto 10cm. • Keyboard entry for strip width definition. • Should provide emergency STOP switch. • One-year warranty against manufacturing defect..		
41.	-20°C Refrigerator	• Capacity 221 L Horizontal Model • Dimension approximately 595 x 640 x 1700 mm • Temp Range -20°C to -30°C(cooling performance -30°C at 35°C no load) (-5/-25°C and -5/-25°C) • Ambient temperature range: 10/35 ºC • Hermetic rotary compressor 200W • ABS Interior lining required • Exterior Lacquered steel or stainless steel finish • Digital temperature display • Connection 230V, 50Hz • Noise level (DbA) approximately 45.3 db (A) • Wheel base andlegs to be provided • Refrigerant: R600 / R134A or equal • Modules for shelves and drawers: Shelves 2 x 7, drawers 2 x 4, baskets 2 x 1 • Control unit: GramBioLine MPC 4.6, voltage-free contact, E-Sensor, acoustic door andtemperature alarms that can be programmed individually. Temperature alarmrecording and calibration function.	1	3000.00

		• Insulation (mm) : 50 mm (cyclopentane) or equal material • Energy consumption:2.2 kWh/24h. • Refrigeration capacity at -25 ºC: R600a 156 Watt / R134a 149 Watt • Defrost system: Smart defrost with automatic evaporation of defrost water. • Air system: for mounting on a plinth as optional extras or equal. • CE Certification is required.		
42.	Planetary Centrifugal Mixer	• Capable of mixing highly viscous material (up to 100 million cps) and high solid content viscous material (Approximately 1:1ratio). • Mixing capacity(Approximately): 5gm to 250gm • Method memory: Should be able to store atleast 5 methods. • Sensors: door sensor, vibration sensor, revolution sensor. • Operation condition: Should be operable in Indian lab conditions (10°C to 35°C & 20-85% RH Approximately). • Mixing rpm(Approximately): up to 2500 rpm • Mixing container materials suitable for mixing pharmaceuticals. • Mixing containers for 100ml, 150ml, 200 ml, 250ml, 300ml, 350ml should be provided. • Adapters for processing smaller volumes of semi-solids (like 3ml, 5ml, 10ml, 50 ml, 100ml, 200ml) for both cups and syringes.	1	22000.00
43.	Electrospinning machine	• Nano fiber coating purpose 1-100 nm (nanometer) • Hood along with temperature controller	1	18000.00

		• Stationary Target • Infusion pump with PC control • Spool rotation and oscillation mechanism with controller • High voltage power supply suitable for electrospinning unit, necessary cables and connectors • Spare parts, syringe • Temperature range of 20-60ºC • Exhaust fan • Complete Covering set up (rack) • Safety Precaution • Collectors suitable for various purposes (suitable for coating of sutures) • Spinning chamber • Control unit (controls the motor and power supply)		
44.	Electric Autoclave	• Vertical top loading • Chamber volume : 160 L • Chamber dimension: 500mm diameter x 750mm depth / separate compartments at different levels. • Timer range : 0-99 hrs 59 min • Temperature range : 45 to 137oC • Maximum pressure : 36.98 PSI • Sterilization temperature : lowest at 121oC and highest at 135oC • Temperature cut off and dual pressure adjustable system • Low water level control system • LCD display : pressure, temperature, time and faults • Fast cooling by cooling coil. • Loading capacity : Erlenmeyer flask • 250ml – 3 x 21, 500ml -3 x 14, 100ml – 3 x 8, 2000ml-2 x 5,3000ml – 2 x 4, 5000ml -1 x 2. • Loading capacity : Schott duran flask • 250ml - 3 x 32, 500ml -3 x 21, 1000ml-3 x 15, 2000ml-2 x8, 5000ml- 2x 4. • CE certification is necessary	1	28000.00
45.	Shaker Incubator	• Shaker speed: 25 - 500rpm • Shaker orbit : 15-25mm • Speed accuracy : ±1% of maximum speed • Temperature uniformity : ±0.250c at all temperature range	1	12000.00

		• Temperature display : 0.10c • Temperature range : ambient+ 50c - 800c • Capable of holding different size of flask like 125ml, 250ml, 500ml, 1L, 2L, 2.8L • Universal platform 46 cm wide x 46 cm depth • Timer – 0.1 - 99.9 hrs. + Continuous operation • Automatic restart: starts automatically after door opening and closing or power failure. • Alarms: audible and visible • Triple-eccentric counterbalanced drive mechanism • Non-volatile memory • CE and all other international standards certification is necessary		
46.	Water Bath	• Filling volume : 8 -10 litres • Working temperature range : ambient +50c to 1000c • Temperature stability : ±0.20c • Temperature Display : LED, oC/F switchable • Digital Timer: 1 minute to 99 hrs. 59 min • Dry running protection - Automated heating element cut off, audible and visual warning. • Accessories – Flat lid, gable cover, external circulation equipment, test tube rack to be included • Display resolution : Minimum 0.10c • CE and all other international standards certification is necessary	1	6000.00
47.	Digital colony counter	• Digital display :4 digit ,9999 max.count • Dish size: 110mm. • Magnification : x 1.7 • Audible confirmation of each count. • Standard accessories to be included (Marking pens and magnifier lens)	1	8000.00
48.	Dry Bath	• Temperature range : from 130c below RT to 990c • Timing range: 1min to 99hrs 59min + continuous. • Temperature control accuracy : ±0.2oC • Table top model • Temperature resolution : Minimum 0.1oC • Heating speed : 50c per minute • Mixing frequency: 300 – 1500 rpm. • Microprocessor programmable temperature,	1	6000.00

		time, mixing frequency control. • Cooling speed : 2-30c / min between 990c and RT.0.5-10c/min between RT and 130c below RT • Interchangeable blocks for 1.5ml plastic tubes, Elisaplates, MTP plates, test tubes, 50/15ml tubes and PCR tubes (96 x 0.2 ml) • CE Certification		
49.	Weighing Balance (320 gm)	• Readability : 0.1mg • Capacity : 320g • Operating temperature : 0-450c • Pan size : 90mm • Weighing units : g.mg,ct,oz,dwt • Glass closed system with automatic internal calibration • Weighing chamber height: 230mm. • Response time: < 2.5 seconds. • Repeatability: < ± 0.0001 g. • Linearity: < ± 0.0002 g. • CE and all other international standards certification is necessary	1	4000.00
50.	Water purification system (Pure-Type2/ulrapure -Type1 water)	• Capacity: 10ltr/hrs. type 2 grade water • Conductivity meter before and after RO to measure the performance of the system. • Mixed bed ion electro deionization module with auto regeneration • Carbon beads at cathode of the EDI module to prevent scaling of the module. • It should not require softening pre-treatment before Electrode ionization module • Pump with unique temperature feedback mechanism • Feed water acceptance upto 2000micro Siemens conductivity, Fouling Index (SDI) < 12, Total Chlorine < 3 ppm. • TYPE 2 Product Water Specifications Resitivity : > 5 Meg Ohm.cm (typically 10-15) Conductivity : < 0.2uS/cm (typically 0.067 to 0.10) TOC : <30 ppb Bacteria : <1cfu/mL (with UV lamp) Silica : 99.9% rejection Water Recovery : 15-18% • TYPE 1 Product Water Specifications	1	14000.00

		Resitivity : 18.2 Meg Ohm.cm (@ 25 degree C) Conductivity : < 0.055uS/cm TOC : <10 ppb Bacteria : <0.1cfu/mL Pyrogen : <0.01Eu/mL RNase : <0.003 ng /mL Flow Rate : 0.5 L /min Particulates : > 0.22u : <1 P/mL		
51.	Ultra probe Sonicator	• POWER SUPPLY Net power output: 500 Watts Frequency: 20 kHz • SEALED CONVERTER Piezoelectric lead zirconate titanate crystals (PZT) • STANDARD PROBE Tip diameter: 1⁄2" (13 mm) with threaded end and replaceable tip. Processing capability: 250 microliter to 1000ml Length: 53⁄8" (136 mm) Weight: 3⁄4 lb. (340 g) Titanium alloy Ti-6Al-4V • ELECTRICAL REQUIREMENTS: 230V/50Hz. • OPTIONAL STEPPED MICROTIPS a) Tip diameter: 2 mm Intensity: Ultra high Batch volume: 150uL to 5 ml Length: 116 mm b) Tip diameter: 3 mm Intensity: Very high Batch volume: 250uL to 10 ml Length: 136 mm c) Tip diameter: 6 mm Intensity: High Batch volume: 10 ml to 50 ml Length: 113 mm • TEMPERATURE PROBE: For monitoring sample temperature up to 100°C. Made of Stainless steel. • SPECIAL FEATURES • Energy Set point: The energy set point continuously monitors the amount of energy in Joules (watts x seconds), that is being delivered to the probe, and terminates the	1	26000.00

		ultrasonics when the desired amount of energy has been dispensed. • Wattmeter: Digitally displays the actual amount of power in watts that is being delivered to the probe. • Automatic Tuning and Frequency Control: Eliminates the need for constant adjustment of the power supply. • Integrated Temperature Controller: Precludes harmful overheating of the sample and guarantees process integrity by terminating the ultrasonics when the sample temperature reaches a predetermined limit. It allows process control and monitoring from 1°C to 100°C. • Real Time Display: All set and run parameters are continuously displayed on the screen, providing operating mode confirmation without process interruption. • Variable Power Output Control: Allows the ultrasonic vibrations at the probe tip to be set to any desired amplitude. Selected output level is clearly displayed on the screen. • Elapsed Time Indicator: Monitors both the elapsed time and the duration of processing. • Independent On/Off Pulser: Enables safe treatment of temperature-sensitive samples at high intensity, and provides mixing by repeatedly allowing the sample to settle back under the probe after each burst. Both on and off cycles are independently controllable from 1 second to 59 seconds. **Note:** • Units should be shipped complete and ready for operation with a 1⁄2" (13 mm) probe with replaceable tips, tool kit, and		

		instruction manual. • Unit should be supplied with high quality Sound Proof Enclosure & Lab Jack • National and other international standards certification is necessary wherever applicable		
52.	Gel Rocker	• Speed range: 4 to160 rocks/minute. • Shaking angle: adjustable through 200 to horizontal. • Ambient operating range : +4 to 650c • Maximum load: ~ 15.4 lbs. • Rocking range : 20mm up down • Timer: 0 to 2 hours or continuous. • Double platform shaker • CE and all other international standards certification is necessary	1	4000.00
53.	Elisa Reader	• Detection method: UV-Visible Absorbance, Fluorescence, Time-resolved Fluorescence, and Luminescence • It shoud read spectral scanning & well area scanning • It should have two PMT detectors (one is for monochromator and another one is for filter systerm) • It must be able to integrate the instrument with robotics for future upgradation • Wave length – Monochromator (Xenon lamp) • Wavelength Range - 200-1000 nm ±1 • Read-out Range - Up to 4 Abs • Plates –1, 6, 12, 24, 48, 96-384 well plates • Plate Shaking – Orbital & Linear (or) both. Adjustable 3 speeds: low, mid, high • Incubation Range - +2o C to 45o C (It should be through natural heat converstion to avoid temperature gradient) • Measurement Speed – 6S with 96-well plate,10S with 384 well plate • Reading Option – Micro plate & Cuvette • Luminescence sensitivity: < 7 amols ATP typical • Luminomery shoud have three measurements mode, Normal, Filter and monochoromator based.	1	36000.00

		• Dynamic range of lumunescence is > 6 decades • Reagents dispensor with the the dispersing range from 1µl – 10 ml (accuracy of ± 1µl or 2%) • The maximum volume of the dispensor is 10 ml • Memory – 100 inbuilt protocols in stand-alone mode • Analysis software to be supplied with unlimited user system license • The instrument should have USB port for the easy data transfer & • CE and all other international standards certification is necessary		

HLL LIFECARE LIMITED
Corporate R & D Centre,
Akkulam, Thiruvananthapuram - 695017
Tender No.HLL/CRD/PUR/159/2012-13/3559

Minimum Eligibility Criteria for qualifying in the Technical Bid

PRE-QUALIFICATION CONDITIONS
(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 ……..

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 parameters? : Yes/ No

5. Do you have previous experience in Supply, Installation and Commissioning : Yes/No

All the information provided herein are true and correct.

Place:
Date:

Name and Signature of the Applicant
(With Office Seal)

SCHEDULE ï C

HLL LIFECARE LIMITED
Corporate R & D Centre,
Akkulam, Thiruvananthapuram - 695017

Tender No.HLL/CRD/PUR/159/2012-13/3559

QUESTIONNAIRE

(General information of the supplier)

1. Name & Address of the supplier with :

(a) Telephone No.
(b) Fax No.
(c) E ï 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 supplier / 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. Name & Address of your Banker(s) :

9. Any other details :

All the information provided herein is true & correct.

Place:
Date:

Name and Signature of the Applicant
(With Office Seal)

HLL LIFECARE LIMITED

Corporate R & D Centre,
Akkulam, Thiruvananthapuram - 695017

Tender No.HLL/CRD/PUR/159/2012-13/3559

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 supply the machine within the stipulated delivery time mentioned in the Purchase order.

4. Period of validity of tender: The tender will remain open for acceptance for 60 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 Supply Order, and even fails to complete the supply within the extended period if any given in writing by HLL Lifecare Limited, Thiruvananthapuram, it will be within HLLôs 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.

ii). In such cases, the Security Deposit of the successful tenderer will be refunded soon on getting a demand from the tenderer. The HLL Lifecare Limited, will not be liable for payment of any compensation for any loss that the contractor may be put to or alleged to have been put to on account of such termination.

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 Excise Duties, Sales Tax, VAT/CST etc. should be shown separately. Rates quoted should be strictly as per HLL's format- Schedule-F (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 eligible bidders, 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 supplier (s) premises shall be visited by the purchaser for inspection/evaluation.

11. PAYMENT:

a) Within 30 days after Supply & Installation of equipment.

12. WARRANTY

Period of warranty shall be twelve months from the date of installation as certified jointly by the supplier and the Purchaser.

13. TECHNICAL EVALUATION OF FIRST STAGE BIDS

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.

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

14. OPENING AND EVALUATION OF SECOND STAGE BIDS

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.

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.

15. 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.

16. OPERATIONAL ACCEPTANCE:

Performance Test: The performance test shall be conducted by the supplier 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.

17. Mode of Transport:

a) Transportation of domestic goods including goods already imported by the supplier to be done by the supplier 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 supplier shall not make part-shipments and/or transhipment without the express/prior written consent of the purchaser. The supplier 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.

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

21. ñAny 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 partiesòin case the matter is referred for arbitration.

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

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

Vice President (R&D)
Ph No: +91 471 2774700
Fax No: +91 471 2774702
Email : crdc@lifecarehll.com

HLL LIFECARE LIMITED
Corporate R & D Centre,
Akkulam, Thiruvananthapuram - 695017

Tender No.HLL/CRD/PUR/159/2012-13/3559

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 equipment 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.

The supplier shall have no right to change the conditions stipulated in the supply order.

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

HLL LIFECARE LIMITED
Corporate R & D Centre,
Akkulam, Thiruvananthapuram - 695017

Tender No.HLL/CRD/PUR/159/2012-13/3559

DECLARATION

We confirm having read and understood all the specifications, instructions, forms, terms and conditions and other requirements of the above tender (both expressed and implied) in full and that we agree to abide by all without any deviation.

Seal of the Applicant

Signature
Name and Address of the applicant

HLL LIFECARE LIMITED
(A Government of India Enterprise)
CORPORATE R & D CENTRE,
AKKULAM, SREEKARIYAM P.O,
THIRUVANANTHAPURAM-695017
Email: crdc@lifecarehll.com
Website: www.lifecarehll.com
PH: +91 471 2774700
FAX: +91 471 2774702

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

HLL LIFECARE LIMITED
Corporate R & D Centre,
Akkulam, Thiruvananthapuram - 695017
Tender No.HLL/CRD/PUR/159/2012-13/3559

A. Supply Part – _____ (Equipment Name)

Sl No	Item Description	Rate (Rs.) / Unit	Amount (Rs.)
i.	Basic Price		
ii.	Excise Duty		
iii.	Taxes		
iv.	Freight Charges		
v.	Others if any		
vi.	Grand Total (Rs.)		

B. Installation Part - _____ (Equipment Name)

Sl No	Item Description	Rate (Rs.) / Unit	Amount (Rs.)
i.	Installation Cost		
ii.	Service Tax		
iii.	Grand Total (Rs.)		

** Detailed split up rate details may also be incorporated along with your offer.

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

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

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