



THE STATE TRADING CORPORATION OF INDIA LTD.

(A GOVT. OF INDIA ENTERPRISE)

Mogul's Court, 5th Floor, Basheerbagh, Hyderabad 500 001, India

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TENDER NO.: STC/HYD/GID/2017-18/02 DATED 02.01.2018

The State Trading Corporation of India Limited, Hyderabad Branch invites offers for import/supply and fabrication of following item(s)

S.No.	Name of the Equipment	Qty.
	ITEM 1: Consists of the following Imported Equipment	
1.	8-Capillary genetic analyzer with all essential accessories or equivalent or better	01 Nos
2.	<i>Compact PCR with 96-well</i>	02 Nos
3.	<i>RTPCR</i>	01 Nos
4.	<i>Table top High Speed Refrigerated Centrifuge - small</i>	02 Nos
5.	<i>Table top High Speed Refrigerated Centrifuge – Big</i>	01 Nos
6.	<i>Up right Ultra Low Deep Freezer</i>	01 Nos
7.	<i>Up right Deep Freezer -20°C</i>	02 Nos
8.	<i>Bone/Tissue Cryogenic pulverizer</i>	01 Nos
9.	<i>Flourimeter</i>	01 Nos
10.	<i>DNA Concentrator</i>	01 Nos
11.	<i>Automated DNA Extraction system</i>	01 Nos
12.	<i>Kits and consumables</i>	
	Item- 1B Consists of the following Indigenous Equipment	
1.	<i>Table top light weight PICO centrifuge- Mini</i>	1 Nos
2.	<i>Vertical cooling cabinet 2°C to 8°C</i>	2 Nos
3.	<i>Shaking water bath - Big</i>	2 Nos
4.	<i>Shaking water bath - Small</i>	1 Nos
5.	<i>Shaking incubator</i>	1 Nos
6.	<i>Mini Gel Submarine Gel System</i>	2 Nos
7.	<i>UV Gel Doc with printer</i>	1 Nos
8.	<i>Water purification system with 5 to 10 Liters per hour</i>	1 Nos
9.	<i>Ice maker flaker</i>	1 Nos
10.	<i>Shaking rotators / mixer</i>	2 Nos

11.	<i>PCR work station</i>	1 Nos
12.	<i>UPS 5 KV</i>	2 Nos
13.	<i>Analytical micro balance</i>	1 Nos
14.	<i>Micro finnPippettes</i>	5 SETS
15.	<i>Liquid Nitrogen container</i>	1 Nos
16.	<i>Vortex mixer</i>	3 Nos
17.	<i>Magnetic stirrer with hot plate</i>	1 Nos
18.	<i>Digital PH meter</i>	1 Nos
19.	<i>Hot air oven</i>	1 Nos
20.	<i>Autoclave</i>	1 Nos
21.	<i>Double door Refrigerators</i>	3 Nos
22.	<i>Cold room (4°c)</i>	1 Nos

AND

S.No.	Name of the Equipment	Qty.
1.	<i>Gas Chromatography with Head Space Autosampler with FID</i>	05 Nos
2.	<i>High Performance Thin Layer Chromatography with Scanner</i>	05 Nos
3.	<i>FTIR Spectrophotometer</i>	05 Nos
4.	<i>U.V.–VIS Spectrophotometer</i>	05 Nos
5.	<i>Automated HPLC System</i>	05 Nos
6.	<i>Advanced Stereomicroscope</i>	05 Nos

For details, please visit websites www.stclimited.co.in or www.eprocure.gov.in. Interested bidders must submit their bids online using e-Procurement portal of NIC (eprocure.gov.in) in the prescribed formats along with all necessary documents and information requested herein.

You are requested to submit your most competitive offer for the above product range. Bids against this tender shall be received only electronically through the e-procurement Portal of NIC (eprocure.gov.in/eprocure).

“No bids shall be accepted in hard copy or in any other form.”

Any further Corrigendum/Addendum to the tender documents will be uploaded by STC only on website i.e. www.stclimited.co.in, www.eprocure.gov.in and no press advertisement shall be published for the same

Please Note –

- ***Separate offers are to be uploaded for different items.***
- ***Name & Number of the Item to be clearly mentioned.***

TERMS AND CONDITIONS

- 1) **Price - You are required to provide FOB, CIF Indian Port & FOR Vijayawada (Krishna District, Andhra Pradesh) price as per Price Bid Format Attached (Schedule C)**

(Break-up of insurance, sea freight, Custom Clearance charges, Inland Insurance and Transportation Charges from Port to (Vijayawada, Andhra Pradesh) are to be given.

In case of local supplies the tenderer should give the **FOR Vijayawada (Krishna District, Andhra Pradesh)** Prices giving the break-up of local taxes & levies in the Price Bid format as per Schedule 'C'. In case of goods being offered in foreign currency, the tenderer should give the CIF/CIP Prices, Rate of Import Custom Duty on assessable value for the item quoted with ITC HS Codes and Proof of rate of Import Custom Duty, Custom Clearance charges, Inland Insurance & Transportation charges upto Vijayawada etc. in the Price Bid Format as per Schedule 'C'.

In case of Imported equipment the following will be provided by STC:-

- (i) Authorization in favour of nominated custom clearing handling agent of the supplier,
 - (ii) Payment of import custom duty (if and as applicable) (upon receipt of copy of Bill of Entry filed with customs).
- 2) **Country of Origin** Certificate Duly certified by Chamber of Commerce of the exporting country to be submitted at the time of shipment of goods.
- 3) **Delivery Schedule** – Immediate delivery is required and should be clearly specified in the offer.
- 4) **Payment terms** –.

I. For Imported Item

We operate on 100% TT Transfer/ LC basis. In case of LC, LC shall be established for 100% order value and 90% (Ninety Percent) payment under LC will be released against submission of documents pertaining to dispatch of goods along with satisfactory certificate of pre-dispatch inspection and balance 10% (ten percent) payment shall be payable after satisfactory installation/demonstration of the goods at the premises of end-user department and receipt of certificate for same from end user department.

Payment Against the letter of Credit/Wire Transfer for 90% of the value will be available against presentation of the following documents and also on proof of evidencing of shipment.

- a. Complete set of Original Clean Bill of Lading. The Bill of Lading shall be in the name of **THE STATE TRADING CORPORATION OF INDIA LTD., GENERAL IMPORTS DIVISION, MOGUL'S COURT, 5TH FLOOR, BASHEERBAGH, HYDERABAD 500 001, INDIA AND MARKED FREIGHT PREPAID.**

- b. Signed invoice in three copies giving letter of credit No., Order No. and date respectively. The invoice shall be in the name of : **THE STATE TRADING CORPORATION OF INDIA LTD., GENERAL IMPORTS DIVISION, MOGUL'S COURT, 5TH FLOOR, BASHEERBAGH, HYDERABAD 500 001, INDIA**
- c. Certificate of satisfactory Pre-dispatch inspection report
- d. Certificate showing goods of **ORIGIN** issued by Chamber of Commerce or Equivalent Body in Duplicate.
- e. Specification and Packing list – three copies.
- f. Manufacturer's guarantee certificate – three copies.
- g. Certificate from the manufacturer to the effect that the goods conform to the manufacturers standards and are new (Production Month in Year 2017/18) and free from any latent or patent defects and are strictly as per Specifications mentioned in STC's Order
- h. Insurance Policy/ Certificate showing STC as beneficiary - one original and two copies.
- i. Copy of FAX MESSAGE (Fax No.00-91-040-23236768) marked to General Imports Division, sent by the seller within 24 hours of issuance of Bill of Lading to buyer notifying the details of the BL No., Goods freighted, total invoice value, Name of the Shipping Line loading port and date of departure of the vessel and expected time of its arrival at the Indian Port.
- j. Certificate by the seller that the freightment consists complete requirement as per list of goods given in the Annexure-I enclosed with the order.
- k. Certificate from the seller that one set of non-negotiable documents mentioned under (a) to (l) above has been airmailed/couriered to the following within 10 Days of departure of the vessel in addition to one set of non-negotiable document sent with the vessel to:

THE STATE TRADING CORPORATION OF INDIA LTD., GENERAL IMPORTS DIVISION, MOGUL'S COURT, 5TH FLOOR, BASHEERBAGH, HYDERABAD 500 001, INDIA

Balance 10 (Ten) Percent payment under the LC shall be released/payable only after receipt of certificate of satisfactory installation, demonstration & training of the Equipment to be issued by the end-user department, after receipt and examination of equipment at their premises in India.

II. In case indigenous supply.

Payment for domestic supply via RTGS for 100% value will be available against presentation of the following documents

- a. Signed and stamped invoice (Three original) giving details of order number and date. The invoice shall be in the name of The State Trading Corporation of India Ltd. and the end-user department as consignee. Invoice shall be as per Annexure – I enclosed with our order.
 - b. RECEIPT (FOR) GOODS RECEIVED & INSTALLATION CERTIFICATE as per Annexure “c” from the end-user department.
 - c. Satisfactory Pre-Dispatch Inspection Report.
 - d. Specification and Packing List – Two copies.
 - e. Authorised Dealers / suppliers guarantee certificate – Two Copies.
- 5) **Validity of Price** – Your offer to be valid for acceptance by us up to 120 days from the Tender closing date.
- 6) **Airport/Port of Shipment.** – For Imported equipment supplier to mention Airport/Port of shipment
- 7) **Supplier’s RTGS Bank Details** also to be mentioned in the offer.
- 8) **Guarantee Period** – The equipment(s) quoted for shall carry a guarantee for 24 calendar months and the manufacturer shall have to provide after sales service, as and when required at a short notice. The Guarantee period shall start only upon satisfactory Installation & Demonstration of the equipment at the end –user’s premises. Also see Point (F) of Other Terms and Conditions.
- 9) **Inspection**
Articles supplied shall be strictly as per the approved specifications. Or else, such Articles shall be rejected and returned to the Bidder at his own cost for replacement within 30 days.
- 10) The detailed list of consumables and spares with FOR, Vijayawada prices, required for smooth functioning of the equipment, shall also be submitted along with tender offer.
- 11) **Submission of Samples**
Bidders are required to submit a sample & demonstrate the working of the equipment (quoted under the tender) to the technical evaluation team when called upon by STC. A separate communication will be issued to the bidders for presentation of the samples on defined date, place and time.

If demonstration of the goods is deemed essential to ascertain conformity with the tendered specifications, then confirmation reflecting willingness to arrange demonstration of the equipment offered free of charge at Vijayawada or any other location on a mutually agreeable date, prior to opening of priced bid.

12). **Schedule to Tender :-**

a	Date of Publication of Tender	02.01.2018
b	Last date for uploading the bid documents and receipt of filled up & duly signed downloaded tender documents containing (scan copies). (EMD in the form of DD to be submitted physically at STC, Hyderabad Office on or before last date) a) Cover # 1 Technical bid b) Cover # II Price Bid	24.01.2018 By 1500 HRS
c	Date & Time of Opening Technical bid.	24.01.2018 1530 HRS
d	Demonstration of Forensic equipment	05.02.2018 to 15.02.2018
e	Date of opening of Price Bid	25.02.2017 1300 HRS

13) **Offers invited under Two Bid System:**

All Bidders are required to submit their item-wise offers in two cover/part i.e. Technical Bid Part and Price Bid Part.

Please Note –

- *Separate offers are to be uploaded for different items.*
- *Name & Number of the Item to be clearly mentioned.*

A. Following documents are required to be uploaded online as part of Technical Bid Part

1. No Deviation Certificate for the Item being offered is to be uploaded as per format enclosed. Schedule “E”. Names & Numbers of the Item to be clearly mentioned.
2. Scanned Copy of Pay Order / Demand Draft/Bid Bond equivalent to 2% of total cost of items towards Earnest Money Deposit or Copy of NSIC Certificate mentioning the name of the item quoted. Name & Number of the Item to be clearly mentioned. Original DD should be submitted at STC, Hyderabad Office before date of close of tender i.e, 24.01.2018.
3. Detailed Technical offer & specifications of the equipment offered to be supplied.

4. An undertaking by the company stating that it has not been blacklisted by any central, union territory and state govt./organization or any Govt. procurement agency as well as convicted by any court of law and the period of blacklisting is not enforced till the date of validity of this offer being submitted.
5. Letter of Authority, in case the bid is being submitted by local agent of the foreign supplier, as per Schedule-A.
6. Rate uniformity certificate. (Schedule – G)
7. Bank details and delivery schedule.
8. Integrity Pact duly stamped and signed. (Schedule – H)
9. Proforma of past performance duly filled in and signed by the tenderer. (Schedule – F)

B. The” Price Bid” Part must contain Price Bid of the Item (Schedule- C, Format enclosed) which must be duly signed & stamped.

1. Price may be quoted separately for annual maintenance contract with warranty for 2 years and warranty for 3 years.
2. Conditions for AMC: Preventive maintenance visits once in six months and break down visits as and when required.

Please Note: Offers having conditions/deviations are liable to be rejected at the sole discretion of STC. Your Price Bids shall be opened only if your Technical Bid is found in order. Your technical and price bid shall be valid for at least 120 days.

SPECIAL INSTRUCTIONS TO THE TENDER NOTICE FOR COMPLIANCE OF THE TENDER PARTICIPANTS:-

- A. All equipment to be offered with installation, supervision and complete training to operating staff.
- B. Standard Products should be offered, be of latest models and meet **international specifications and norms of safety, environment, pollution etc.** Models and specifications should be clearly spelt out.
- C. It is mandatory to enclose Product literature with the bids.
- D. In case equivalent make/model/brand is offered, a comparative statement with the make/model/brand desired by customer should be enclosed with bid.
- E. Options on all machines to be offered for three year comprehensive warranty (parts, travel and labour included).
- F. Warranty/Guarantee on the items should be spelt out clearly.
- G. Service arrangements in / for India/ site should be mentioned clearly in the bids. Similarly services included in the price offered for equipment/machines should be mentioned.
- H. Specifications are indicative, better specification may be offered as optional.
- I. Names where ever mentioned are for reference purpose, equivalent or better specification/ brand may be offered.
- J. List of essential spares and consumables should be mentioned and prices offered for the same as optional items.

OTHER TERMS AND CONDITIONS

(A) Having regard to STC's Corporate Policy, offers from Principal Manufacturer/Distributor or their Authorized agents with Tender Specific authorization by their principal Manufacturer/Distributor in their favour as per Schedule 'A' enclosed only shall be considered. Offers otherwise submitted, if any, are thus liable to be rejected summarily.

(B) In case of imported equipment, the Authorized agents may quote the prices for and on behalf of their principal manufacturers in the respective foreign currencies. Accordingly, upon award of order STC shall be entering into direct contract with the Principal Manufacturer.

(C) Earnest Money Deposit

- i. All offers shall be submitted along with an Earnest Money Deposit (EMD) of 2% of total offer value in the Form of Pay Order / Demand Draft/ Bid Bond in favour of "The STC of India Ltd., Hyderabad". However, for sake of convenience the foreign suppliers may submit the requisite EMD through their Indian Agents in equivalent Indian Currency, should they so desire. The EMD DD/Payorder/Bid Bond to be placed in a sealed envelope along with a covering letter duly superscribing the Tender No. Item & Name of Item addressed to The Deputy General Manager, STC of India Ltd., Mogul's Court, 5th Floor, Basheerbagh, Hyderabad 500 001 and dropped in the Tender Box placed conspicuously on the 5th floor, Mogul's Court, Basheerbagh, Hyderabad 500 001.
- ii. The Bidders are also requested to provide the RTGS Bank details for future refunds/Payments. EMD's paid by Cheques are not acceptable. The format of Bid Bond is attached. (Schedule-D).
- iii. No interest will be applicable on the EMD payments
- iv. The units registered under Single Point Registration Scheme of NSIC are eligible for Exemption from payment of Earnest Money Deposit (EMD)
- v. The details of EMD entered during the bid submission, and those available in scanned copies, should tally with the EMD sent physically. Otherwise, the bid may be rejected.
- vi. Earnest Money Deposit (EMD) must reach STC before last date and time of bid submission
- vii. The EMD of the unsuccessful bidders would be returned within one month of signing of the Contract with the successful bidder.
- viii. EMD of the successful Bidder will be released only after the Bidder signs the Contract with STC and furnishes a Performance Bank Guarantee (PBG) in the format prescribed in the tender. Annexure
- ix. The EMD shall be forfeited by STC, in the following events: (a) Bidder withdraws its bid during the validity period specified in RFP or any extension thereof agreed by the bidder. (b) Bidder

does not respond to requests for clarification of its bid. (c) Bidder fails to provide required information during the evaluation process. (d) In case of a successful Bidder, the said Bidder fails to sign the Contract; or furnish Performance Bank Guarantee in time.

- (D) For the purpose of equitable comparison and evaluation of the offers, prices quoted in different currencies will be converted to a single currency viz., Indian Rupees as per the TT Selling Rate established by the State Bank of India as on the date of Price Bid Opening. The Comparison of prices & identification of L1 Bidder would be on FOR Destination Basis, duly delivered, commissioned etc. as the case may be on the date of opening of Price Bid.
- (E) The Financial Bids of the Tenderers whose Technical Bids are approved shall be opened subsequently.
- (F) Upon award of the Tender/Order to the successful bidder, a Performance Guarantee for due performance of the Contract, **valid up to the guarantee period** of the equipment, equivalent to 10% of the order value shall be submitted by the awardee in the prescribed format in favour of end-user department through a Nationalized Bank in India. As per Schedule B enclosed.
- (G) For Imported Item, STC would be selling the goods on High Seas Sales basis to the end user Department. All the custom Clearance documents including High Seas Sales Agreement along with Invoice etc. shall be submitted to the supplier's nominated Custom Clearing Agent.
- (H) The offers received (other than conditional offers) after opening of bid(s) shall be forwarded to the end-user department for their evaluation.
- (I) You are also requested to kindly give the details of after sales service arrangements in Telangana and India. The name of your Service representatives in Telangana and India along with his complete address and contact numbers may also be informed to us along with the offer so that the same could be notified to the end-user.
- (J) All the tools and facilities required for the inspection shall be arranged by the contractor free of cost.
- (K) No deviation, whatsoever, shall be acceptable. The tenderer has to certify that by duly signing and stamping the certificate as per Schedule
- (L) An undertaking/certificate stating that the rates quoted are uniform for all the Government Institutions in the country is to be provided. This certificate giving the reference of STC's Tender No. and Date along with your quoted item details may be submitted in original and the items if proprietary, a certificate to this effect may also be given.
- (M) In case of delay in supplies beyond the quoted delivery period, liquidated damages to the extent of 0.5% of the cost of the delayed supplies per week is applicable, subject to a maximum of 10%. Beyond this period, we reserve the right to either extend further or to cancel the contract.

(N) Without any protests or demur, supplier indemnifies STC and its Branches and shall always keep STC fully indemnified and agrees to hold STC and its Branches harmless against any loss, claim, proceedings, damage, demurrage, costs, penalties, taxes, duties liabilities, legal cases, short shipment, quantity/quality/weight/purity, marking/specifications, etc of the material, costs or expenses of whatsoever nature, costs to STC on account of supplier/ handling agent/ omissions /negligence /mistake/misconduct breach or default and or non-fulfilment of terms and conditions of this agreement. The supplier shall keep STC indemnified at all times against any claims/liabilities/proceedings, etc from any third party or otherwise arising out/or in connection with this Tender.

(O) **Arbitration:** Any dispute or difference whatsoever arising between the parties out of or relating to the construction, meaning, scope, operation or effect of this contract or the validity of 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. The supplier hereto agree that the courts and tribunals at Hyderabad, Telangana State shall have exclusive jurisdiction to settle any or all disputes which may arise out of or in connection with the Tender. All disputes arising out of this tender shall be decided in accordance with the Laws of India.

(P) STC may at its absolute discretion, reserve the right to shortlist, accept, disqualify, elect to abandon, reject any part or whole of the process without giving prior notice to the prospective party. STC reserve the right to cancel this tender in totality without assigning any reason at any point of time.

(Q) Fall clause

- i. The prices offered under the tender by the bidder shall in no event exceed the lowest price at which bidder sells the items of identical specification to any person/ organization.
- ii. If during the said period, the bidder reduces the offered price, sells or offers to sell such items to any person/ organization at a price lower than the price offered under the tender, it shall forthwith notify such reduction or offer of sale to the STC and the price payable under the contract for the items shall stand corresponding reduced.

(R) **EMD Exemption to MSEs** – In case of the bidder being a Micro or Small Enterprise (MSE), relevant registration certificate to that effect should be mandatorily submitted. It should also be clearly indicated whether the MSE is owned by SC or ST entrepreneur, wherever applicable. MSEs producing valid certificate of registration will be exempted from payment of EMD. If the price quoted by an MSE is within L1+15%, it will be allowed to supply a portion (at least 20 percent of total tendered quantity) of requirement provided the enterprise is able to match the L1 price and the L1 price is from a bidder other than an MSE. In case of two or more MSEs quoting price within L1+15%, order may be divided as deemed fit by STC.”

Micro or Small Enterprises (MSEs) producing valid certificate of registration are given exemption from payment of Earnest Money Deposit (EMD) only if the items being tendered for are being manufactured by them.

(S) **Forfeiture of Performance Guarantee:-** Performance Guarantee may be forfeited in the following cases :-

- a) When any terms and conditions of the contract are breached.
- b) When the tenderer fails to make complete supply satisfactorily.

(T) INTEGRITY PACT:

- i. Signing of Integrity Pact (IP) is mandatory for every bidder participating in this tender. A copy of the IP is enclosed (Schedule-), which may be deemed to have been signed by STC. A downloadable format of IP is available on the STC website under the link <http://www.stclimited.co.in/corporatecommitments/Integrity-pact.aspx>. The Bidder(s) and STC shall be bound by the provisions of IP in case any complaint relating to the tender is found substantiated.
- ii. The IP shall be executed on a plain paper and duly signed on each page by the same signatory who signs the bid document.
- iii. Any bid not accompanied by duly signed IP by the bidder shall be summarily rejected.
- iv. All sub-contractors/associates whose contribution in the tender is above 5 crore shall sign IP with STC after the tender is awarded to the successful bidder. All bidders shall inform their sub-contractors/associates accordingly.
- v. The Independent External Monitors (IEMs) for this tender shall be Mr. K.K. Sinha. All correspondence to them regarding implementation of IP should be addressed to : Mr (Name of IEM), IEM, C/o Chairman & Managing Director, State Trading Corporation of India Ltd., Jawahar Vyapar Bhawan, Tolstoy Marg, New Delhi – 110 001.

(U) Submission of Bids

- i. Bids against this Tender shall be received only electronically through the eProcurement Portal of NIC (eprocure.gov.in). No bids shall be accepted in hard copy or in any other form.
- ii. For submission of bids, bidders are required to get themselves registered with eprocure.gov.in website using Class II / Class III Digital Signature Certificate.
- iii. Earnest Money Deposit (EMD) must reach STC before last date and time of bid submission.
- iv. The bidders are required to upload softcopies of the two parts of the bid viz. Technical & Financial.
- v. A bidder may modify, substitute or withdraw its e-bid after submission before the last date and time of bid submission. No bids shall be modified, substituted or withdrawn by the bidder on or after the last date and time of bid submission.
- vi. STC may ask the bidders to submit any or all the documents in original submitted as part of their online bid anytime during the bid process.
- vii. For modification of e-bids, bidder has to detach its old proposal from e-tendering portal and upload/resubmit digitally signed modified bid.
- viii. For any queries relating to the process of online bid submission or queries relating to Procurement Portal (eprocure.gov.in), the bidders may contact CPP Portal Helpdesk on Tel No"s.: 1800-3070-2232, 91-7878007972 and 91- 7878007973.

HYDERABAD.
02.01.2017

BRANCH MANAGER
Tele No. – 040-23237389/23296460

UNDERTAKING TO BE SUBMITTED BY PRINCIPAL MANUFACTURER / DISTRIBUTOR

It is to certify that M/s _____
(Name & Address of Tenderer) is our Authorised Distributor / Dealer. They are Authorised to submit tender for _____ (Name of Item) to the State Trading Corporation of India Ltd., Hyderabad against their Tender Notice No _____
Dated _____.

The Equipment / Item is Guaranteed for minimum 2 year Comprehensive free onsite Guarantee with Spare Parts from the date of completion of satisfactory testing, commissioning installation and Authorised Distributor / Dealer shall during the Guarantee period replace the parts if any, or rectify any manufacturing defect found during the above period so as to make the machinery operative and in perfect condition.

They are also Authorised to provide Annual Maintenance Contract and repairs contract for the period as desired by the purchase officer after the expiry of 2 year comprehensive Guarantee They will be responsible to ensure adequate regular supplies of spare parts, consumables, non- consumables needed for the same whether AMC or otherwise.

In case of change of Authorised Distributor / Dealer, we will inform the purchase officer accordingly within 15 days of change of authorized distributor/ Dealer. The new Dealer / Distributor will be responsible for after sales & service and annual maintenance and repairs contract as above. In case of failure of Authorised Dealer / Distributor we will be responsible for providing after sales service of the equipment as per terms and conditions of tender and contract.

If there is any defect M/s _____ shall replace or upgrade the defective part/faulty which shall also be subject to same guarantee as the original equipment. M/s _____ shall bear all costs, travel, labour, material cost which are required on rectification of defects onsite during the guarantee period.

**SIGNATURE OF THE PRINCIPAL MANUFACTURER/ DISTRIBUTOR
WITH RUBBER STAMP**

Note: This Undertaking should be Typed & Signed by Principal Manufacturer/ Distributor on his Original Letter Pad

PERFORMANCE BANK GUARANTEE FORMAT

(To be executed by any Nationalised Bank in India having their Branch in the State of End-user Department on stamp paper of Rs.100/-)

Name & Address of the Buyers(End-user Department)

1. Against Tender No. _____ dated _____ and Contract No. _____
Dated - _____(hereinafter called the Contract entered into between the STC of India Ltd., Hyderabad which expression shall, unless repugnant to the context or meaning, thereof include its successors, representatives & assigns for and on behalf of _____ (hereinafter called the Buyers/End user Department) and M/s. _____(Name and Complete Address) (hereinafter called the Sellers) which expression shall, unless repugnant to the context or meaning, thereof include its successors, representatives & assigns this is to certify that at the request of the Sellers, we _____ Bank unconditionally and irrevocably guarantee to pay to the Buyers immediately on first demand, the amount of US \$/Rupees _____(@ 10% of contract value) without any protest or demur or reference to the Sellers if the Sellers fail to perform all or any of their obligations under the said contract. The decision of the Buyer/End user _____or The STC of India Ltd., Hyderabad duly communicated in writing to the bank that the sellers have failed to perform all or any of the obligations under the contract shall not be questioned and be final and conclusive. The said amount of US \$/Rupee _____ will accordingly forthwith be paid without any conditions or requirement of our proof whatsoever failing which interest @ 15% p.a. on monthly rest basis shall be payable by the Bank to Buyer.
2. It is fully understood that this guarantee is effective for a period upto _____ (24 Months + Delivery Period) and that we _____ Bank undertake not to revoke this guarantee during its currency (upto claim period) without the consent in writing of the Buyers.
3. We _____ Bank, further agree that the buyer shall have the fullest liberty, without affecting in any manner or obligations hereunder to vary/extend any of the terms and conditions of the said contract or/extend time of performance by the Sellers from time to time or to postpone for any time or from time to time any of the powers exercisable by the Buyers against the said sellers and/or forebear to enforce any of the terms & conditions relating to the said contract and we, _____ Bank shall not be released from its liabilities under this guarantee by reasons of any such exercise, variations or extension being granted to the said sellers or for any forbearance and/or commission on the part of the buyers, or any indulgence by the Buyers, to the said Sellers or by any other matter or thing whatsoever which under the law relating to the sureties would, but for this provision have the effect of so releasing us from our liability under

this performance guarantee. We further agree that the validity period of this Performance Bank Guarantee will be extended by us upon receipt of any such request in writing from the Buyer and any charges on account thereof shall be to the account of seller

4. We _____ Bank further agree that the guarantee herein contained shall not be affected / discharged by any change in the constitution of the said Sellers/Buyers/Bank.
5. The Guarantee will be governed by Indian Laws and will be subject to the jurisdiction of competent courts in the State of Buyer / End – user India alone.
6. No claim shall be admissible against the Buyer in respect of interest on Performance Guarantee regardless of the time of release.
7. The Bank further agrees that decision of the Buyer as to the failure on the part of _____ to fulfill their obligations as aforesaid /or as to the amount payable by the bank to the Buyer shall be final, conclusive & binding on the Bank.
8. This Guarantee will remain in force up to _____(24 Months + Delivery Period) and any demand in respect thereof should reach Bank not later than 10 (Ten) working days (claim period) from the expiry of above validity date.
9. Notwithstanding anything entered hereto Banks liability under this Performance Bank Guarantee shall not exceed _____(in words. Bank is liable to pay the guaranteed amount if Buyer same upon in written claim/demand on or before the expiry date.

FOR _____ BANK

ACCEPTED

Witness:-

Price Bid
ON THE LETTER HEAD OF THE COMPANY

Tender No. & Date :

Name of the Item quoted :

S.No. of Item in Tender Document :

HS Code of the equipment :

Rate of import custom duty and IGST :

Price Format for Imported Equipment

Details	Total Amount (in Foreign Currency) (Amount to be provided in words as well)
FOB Price (.....currency)	
Insurance Charges up to Port/ Airport (.....currency)	
Freight Charges up to Port/ Airport (.....currency)	
Total CIP Price (.....currency)	
Custom Clearing & Handling Charges (INR)	
Ex Works price (for items/ accessories supplied locally) (if any) (INR)	
Applicable GST for equipment supplied locally (if any) (INR)	
Inland Transport & Transit Insurance Charges from IGI Airport to end-user premises (INR)	
Total FOR Vijayawada (Krishna District, Andhra Pradesh) India Price	

Price Format for Indigenous Supplies

Details	Price (INR)
Ex Works price	
GST	
Inland Transportation & Transit Insurance Charges up to end-user premises in Vijayawada	
Total FOR Vijayawada Price	

We have carefully gone through the Terms and Conditions of the Tender Documents and hereby agree to abide by the same for the fulfillment of the contract. This is to also confirm that I am fully authorized by company for signing and submitting this price bid.

Place: SIGNATURE OF THE TENDERER
 Date: NAME & DESIGNATION OF TENDERER
COMPANY SEAL

BID BOND PROFORMA

Schedule "D"

(To be executed by any first class international Bank through its branch office in Hyderabad (India) on stamp paper of Rs.100/-).

M/s. State Trading Corporation of India Limited,
5th Floor, Mogul's Court,
Basheerbagh,
Hyderabad-500 001.

Dear Sirs,

1. WHEREAS M/s _____ (BIDDER) has offered to supply _____ to STC, and the bidder is required to submit a Bid Bond at the rate of US\$ _____ along with the offer as a guarantee for fulfillment of all the terms and conditions of subsequent sale. We (Bank with full address) hereby unconditionally and irrevocably guarantee and undertake to pay the amount demanded by STC not exceeding the sum of US Dollars only, in case the bidder fails to perform any or all the obligations, undertaken by him as per STC's acceptance, without any demur, protest and without any reference or recourse to the Bidder notwithstanding any dispute raised by the Bidder in any suit proceedings relating thereto pending before any court or tribunal our liability under these presents being absolute and unequivocal. The payment shall be made to STC across the Counter of the Bank on the same day of receipt of invocation of this Bid Bond. Any such demand in writing made by STC, shall be final, conclusive and binding on us irrespective of any dispute or difference raised by the bidder.
2. Notwithstanding anything mentioned herein before, our liability under this guarantee is restricted to US\$ _____ (US\$ _____ only) and it will remain in full force up to (one month from the last date of validity of offer). Unless a claim under the guarantee is filed against us on or before _____ all your rights under the said Guarantee shall be forfeited and we shall be relieved and discharged from all the liabilities there under. We, _____ (Bank) further agree that the Guarantee hereunder contained shall not be affected by any change in the terms of purchase originally offered by the bidder and any change in the Constitution of said Bidder/ STC/ Bank.
3. This bond will be governed by Indian Laws and will be subject to the jurisdiction of courts at New Delhi in India alone.

DATE

FOR

PLACE

BANK

N.B. Bid Bond to be furnished in US Dollars only. Bid Bond in Indian Rupees will not be accepted.

CERTIFICATE

Certified that the enclosed offer against Tender No. STC/GID/HYD/2017-18/02 dated 02.01.2018 is in total conformity with tender terms & conditions including special instructions and specifications without any deviation, whatsoever.

Place:

SIGNATURE OF THE TENDERER

Date:

NAME & DESIGNATION OF TENDERER

COMPANY SEAL

Proforma for performance (for a period of last five years)

Bid No. _____ Date of Opening _____ Time _____ Hours

Name of the Firm _____

Order placed by _____ (Full address of Purchaser)	Order No & Date	Description & Quantity of ordered Equipment Items.	Value of order	Date of completion of delivery		Remarks indicating reasons for late delivery, if any	Has the Equipment being Satisfactorily functioning (Attach a certificate from the Purchaser / Consignee)
				----- ----- As per contract /Actual			
1	2	3	4	5	6	7	8

Signature and seal of the Issuing Authority

Rate Uniformity Certificate

Declaration Form

I / We have gone through carefully all the tender conditions and Solemnly declare that I / we will abide by any penal action such as qualification or black listing or determination of contract or any action deemed fit taken by STC against us, if it is found that the statements, documents, certificates produced by us are false / fabricated.

We have not quoted / supplied the equipment quoted in this Tender to any agency / state in the country at the rate lower than the rate quoted in the tender.

If I / We quote lower rate than the rate quoted to STC/AP Police, Vijayawada to any other agency / State in the Country in future we will remit the differential cost to STC/AP Police, Vijayawada.

Signature :

Date :

Name of the
Firm and address :

INTEGRITY PACT**Between**

The State Trading Corporation of India Limited, a company incorporated under the Companies Act 1956 and having its registered office at Jawahar Vyapar Bhawan, Tolstoy Marg, New Delhi - 110001 hereinafter referred to as "STC",

And

....., a company registered under and having its registered office at, hereinafter referred to as "**The Bidder**".

Preamble

STC is an international trading company dealing in purchase, sale, export and import of various commodities.

STC has invited tenders for purchase of and intends to award contract/s for purchase of the same under laid down organizational procedures, STC values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relations with its bidders.

In order to achieve these goals, STC has appointed Independent External Monitors (IEMs), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 – Commitments of STC

- (1) STC commits itself to take all measures necessary to prevent corruption and to observe the following principles:-
 - (a) No employee of STC, personally or through family members, will in connection with the tender for or the execution of the contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which he/she is not legally entitled to.
 - (b) STC will, during the tender process treat all bidder(s) with equity and reason. STC will in particular, before and during the tender process, provide to all bidders/contractors the same information and will not provide to any bidder(s) confidential/additional information through which the bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
 - (c) STC will exclude from the process all known prejudiced persons.
- (2) If STC obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal Code (IPC) or Prevention of Corruption (PC) Act, or if there is a substantive suspicion in this regard, STC will inform its Chief Vigilance Officer and initiate disciplinary actions as per laid down procedures. 22

Section 2 – Commitments of the Bidder

- (1) The Bidder commits to take all measures necessary to prevent corruption and to observe the following principles during participation in the tender process and during the contract execution.
 - a. The Bidder will not, directly or through any other person or firm, offer, promise or give to any of STC's employees involved in the tender process or in the execution of the contract or to any third person any

- material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
- b. The Bidder will not enter with other bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
 - c. The Bidder will not commit any offence under the relevant IPC/PC Act. Further the Bidder will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by STC as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - d. The Bidder of foreign origin shall disclose the name and address of its Agents/representatives in India, if any. Similarly the Bidder of Indian nationality shall furnish the name and address of its foreign principals, if any. All the payments made to the Indian agent/representative will be in Indian Rupees only.
 - e. The Bidder will, when presenting the bid, disclose any and all payments made or committed or intended to be made to agents, brokers or any other intermediaries in connection with the award of the contract.
- (2) The Bidder will not instigate third persons/firms to commit offences outlined above or be an accessory to such offences.

Section 3- Disqualification from tender process and exclusion from future tenders/contracts

If the Bidder/Contractor, before award of the contract or during execution thereof commits a transgression through a violation of Section 2 above or in any other form such as to put its reliability or credibility in question, STC shall be entitled to disqualify the Bidder/Contractor from the tender process or to terminate the contract, if already signed, on that ground.

If the Bidder/Contractor commits a serious violation of Section 2 above or in any other form such as to put its reliability or credibility as Bidder/Contractor into question, STC shall also be entitled to exclude the Bidder/Contractor from participating in the future tender processes for duration as may be considered appropriate by it.

Section 4 - Compensation for Damages and Forfeiture of EMD

- i. If STC disqualifies the Bidder/Contractor from the tender process prior to the award of the contract according to Section 3, STC shall be entitled to demand and recover the damages equivalent to Earnest Money Deposit/Bid Security, by forfeiting the same as stipulated in the tender.
- ii. If STC terminates the contract according to Section 3, or if STC is entitled to terminate the contract according to Section 3, STC shall be entitled to demand and recover from the Bidder/Contractor liquidated damages as per contract or the amount equivalent to Performance Bank Guarantee stipulated in the tender.

Section 5 – Previous transgression

1. The Bidder/Contractor declares that it did not commit any transgressions in the last 3 years with any Company in any country with regard to any anti-corruption law or practice or with any other Public Sector Enterprise in India that could justify its exclusion from the tender process.
2. If the Bidder/Contractor makes incorrect statement on this subject, it may lead to disqualification from the tender process or termination of the contract if already awarded.

Section 6 – Equal treatment of all Bidders/Contractors/Subcontractors

1. The Bidder/Contractor undertakes to demand from all Subcontractor(s) a commitment in conformity with this Integrity Pact, and to submit it to STC before signing of the contract, if awarded in its favour.
2. STC will enter into agreements with identical conditions as this one with all bidders, contractors and subcontractors.
3. STC will disqualify from the tender process any bidder/contractor who does not sign this Pact with STC or violates its provisions.

Section 7 – Criminal charges against Bidder(s)/Contractor(s) /Subcontractor(s)

If STC obtains knowledge of conduct of a bidder, contractor or subcontractor or of an employee or a representative or an associate of the bidder, contractor or subcontractor which constitutes corruption, or if STC has substantive suspicion in this regard, STC will inform the same to its Chief Vigilance Officer.

Section 8 – Independent External Monitor /Monitors

1. STC has appointed competent and credible Independent External Monitor(s) (IEMs) for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
2. The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the CMD, STC.
3. Bidders/Contractors accept that the Monitor has the right to access, without restriction, all project documentation of STC including that provided by the Bidder/Contractor. The Bidder/Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to its project documentation. The same will also be applicable to Subcontractor. The Monitor shall treat the information and documents of STC and the Bidder/Contractor/Subcontractor with confidentiality.
4. STC will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between STC and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
5. As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of STC and request the Management to discontinue or take correction action or to take other relevant action. The Monitor may in this regard submit non binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in specific manner, refrain from action or tolerate action.
6. The Monitor will submit a written report to the CMD, STC within 8 to 10 weeks from the date of reference or intimation to him by STC and should the occasion arise, submit proposals for correcting problematic situations.
7. If the Monitor has reported to the CMD STC a substantiated suspicion of an offence under relevant IPC/PC Act, and the CMD STC has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commission.
8. The word Monitor would include both singular and plural.

Section 9 – Pact Duration

This pact begins when both parties have legally signed it. It expires for the Bidder/Contractor twelve months after the last payment under the contract, and for all other bidders six months after the contract has been awarded.

If any claim is made/lodged during this time by either party, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by CMD, STC.

Section 10 – Other provisions

- 0 This Integrity Pact is an independent agreement between the parties and is subject to Indian Law. The arbitration clause if any in the tender / contract shall not apply to this agreement. Place of performance and jurisdiction is the Registered Office of STC. i.e. New Delhi.
- 1 Changes and supplements to this Pact as well as termination notices to be issued, if any, shall be made in writing. Side agreements have not been made.
- 2 If the Bidder/Contractor is a partnership firm or a consortium, this agreement shall be signed by all partners or consortium members.
- 3 Should one or several provisions of this agreement turn out to be void, the remainder of this agreement shall remain valid. In such a case, the parties will strive to come to an agreement to their original intentions.

(For & On behalf of STC)

(For & on behalf of The Bidder/Contractor)

(Office Seal)

(Office Seal)

Place:

Date:

Witness 1 : Name & Address

Witness 2 : Name & Address

Technical specifications of DNA equipment (Lab at Temporary FSL, Tech Towers & for Mobile)

Item No: 1. DNA Sequencing Equipment for Laboratory Model for Case Analysis

Consists of the following Imported Equipment's:

SL. NO	NAME OF THE EQUIPMENT	TECHNICAL SPECIFICATIONS	QUANTITY (Nos)
1.	<i>8-Capillary genetic analyzer with all essential accessories or equivalent or better</i>	<p>Automated Genetic Analyzer with array of 8-capillary, upgradable to array of 24- capillary <i>and supported by Genemapper/Genemaker or equivalent software</i> for Autosomal STRs, X-STRs, Y-STRs and mitochondrial sequencing data collection for Forensic DNA Profiling work.</p> <p>The system and all major accessories validated as per the SWGDAM guidelines for forensic DNA testing. Capillaries should be lined internally with new generation of polymer optimized for its performance for medium to high throughput DNA sequencing and fragment analysis requirements.</p> <p>System should operate by using virtual filters and peltier cooled charged coupled device (CCD) camera.</p> <p>Vendor should supply windows operating system with branded Desktop Computer (2-5 terabyte capacity, 25" TFT LCD monitor) for Data collection and analysis software.</p> <p>All essential accessories and consumables should be supplied along with the equipment.</p>	<i>1</i>
2.	<i>Compact PCR with 96-well</i>	<p>The system should be validated as per the SWGDAM guidelines primarily for HID mode.</p> <p>Compact PCR with 96-well format thermal cycling block. Temperature accuracy of +/- 0.25⁰C, temperature range 4^oC to 99.9^oC and high speed ramping sample block between 95^oC to 55^oC with LCD display. Heated lid to prevent any condensations or refluxing of the contents. 800 Programmed methods for hot start PCR, Cycle sequencing, long PCR, Touchdown PCR and unlimited protocols on USB drive.</p>	2
3.	<i>RTPCR</i>	<p>The system should be validated as per the SWGDAM guidelines primarily for HID mode.</p> <p>RTPCR, with Peltier based thermal cycling system that support standard 96 well format plate or 0.2ml tubes with an advanced optical configuration that supports broad range of fluorophore including FAM, SYBR Green I, VIC, JOE. NED, TAMARA, Cy3, ROX, Teaxs Red and Cy5. The</p>	<i>1</i>

		<p>optical system with five excitation filters, five emission filters and a CCD camera and should be able to do multiplexing applications. The instrument should be supplied with powerful and user friendly software for stream lining DNA quantization workflow with specially designed templates. Software should enable rapid DNA sample quality assessment with degradation index calculation, HID specific quality flags and analysis summary. It should guide selection of downstream PCR amplification kits based on the male: female ratio and IPC CT flags. It should also speed up analysis workflow with dilution calculation process and eliminate need for manual calibration.</p> <p>- Quantification (RTPCR) kits with staggered delivery (at an interval of 6 months each) for three years (for approx. sample no. 3,000 for 3 years) @ 500 for every six months.</p>	
4.	<i>Table top High Speed Refrigerated Centrifuge - small</i>	Table top refrigerated (-10°C to 40°C) high speed and extremely low noise centrifuge supported by microprocessor based temperature and rpm (up to 14,000 rpm) controllers with rotor 24 X 1.5 ml/ 2.0 ml micro centrifuge tubes holding capacity and sample tube adaptors (0.2 ml to 0.4 ml)	2
5.	<i>Table top High Speed Refrigerated Centrifuge – Big</i>	Table top refrigerated (-10°C to 40°C) high speed and extremely low noise centrifuge (with maximum volume 3000 ml with 4 X 750 ml swing out rotor and 850 ml with 6 X 50 ml Angle rotor) supported by microprocessor based temperature and rpm (range 200 to 15,300 rpm) (maximum RCF 25,407 X g) controllers with LCD display screen: A) Angle Rotor 6X50 ml with Hermetic lid and adaptors for 15 ml tubes holding capacity. B) Angle Rotor 48X1.5 / 2.2 ml with lid and adaptors for 0.2 ml to 0.4 ml tubes. C) Swing bucket rotor 4 X 750 ml, 4,500 rpm, 4279 x g with adaptors 106x5 ml, 84x10 ml, 56x15ml, 28x50 ml conical adaptors. D) 96 well Microtiter plate rotor (4 plates) and PCR plate/ Deepwell plate rotor.	1
6.	<i>Up right Ultra Low Deep Freezer</i>	Freezer should be supplied with HC refrigerant based compressor. Freezer insulation-Vacuum Panel Insulation. Temperature peak variation should be +6.5/-0.8°C. 1 min door opening recovery-26 mins or better. Warm up time (-80 to -50°C) should be 300 mins or better. Average uniformity at -80°C should be 4°C or better. Average stability at -80°C should be 2.3°C or better. 730 Liters capacity, -40°C to -86°C Up right Ultra Deep Freezer with low noise, Digital display of voltage and	1

		temperature. Cascaded refrigeration system with 4 – internal compartments and supported by 5 KV stabilizer.	
7.	<i>Up right Deep Freezer -20° C</i>	Non- CFC, 500 liters capacity up right deep freezer with four compartments with low noise. Digital display of voltage and temperature and supported by 5 KV stabilizer. Uniformity and Stability should be 3°C or better.	2
8.	<i>Bone/Tissue Cryogenic pulverizer</i>	<p>The system should offer processing of a wide variety of forensic samples such as hard tissues, teeth and bones disruption to release high-quality DNA and protein for subsequent purification and analysis. Should offer fast simultaneous disruption of up to 48 or 192 samples in minutes through high-speed shaking with tungsten heads which heat and grind samples. Should have provision of effective disruption and homogenization using liquid nitrogen or in frozen condition. Should have provision for complete isolation & sealing of samples while processing so that there is no chance of cross contamination.</p> <p>The instrument should include adapters:</p> <ul style="list-style-type: none"> <input type="checkbox"/> 10 sets of Steel (2 x 10 ml) adapters with compatible Tungsten Carbide Beads. <input type="checkbox"/> One Adapter set for disruption of up to 48 samples in 2 ml micro centrifuge. <p>Tubes along with compatible Stainless Steel Beads.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Adapters and grinding beads for higher throughput should be included as <p>Additional accessories.</p> <p>Grinding jar/ adapters can be used to process large samples and should be automatable. System should have the Digital settings and control of disruption time (10 seconds – 99 minutes) and vibration frequency (3–30 Hz).</p>	1
9.	<i>Flourimeter</i>	Quantification of DNA in low volumes (1-2 µl) for quick accurate and sensitiveness with storage capacity of 500 or more readings. Wavelength range should be between 200 to 300 nm.	1
10.	<i>DNA Concentrator</i>	Compact bench top model induction motor with no noise and vibration. Free from contamination and loss of sample, maintenance free with Microprocessor Digital PID control wide selection rotor with 30 X1.5 ml/2.0 ml tubes.	1
11.	<i>Automated DNA Extraction system</i>	<p>The system should be HID validated.</p> <p>Fully automated DNA extraction system which should provide</p> <ul style="list-style-type: none"> - high quality DNA yield - free of PCR inhibitors and suitable for down stream applications such as Quantitative RT-PCR, PCR and STR analysis. 	1

		<ul style="list-style-type: none"> - Quick and easy run set up with ready to use pre filled cartridges. Closed system with minimum risk of cross contamination is preferable. - Process 10+ samples at a time. <p>The system should able to process all the forensic samples.</p> <ul style="list-style-type: none"> - Automated DNA Extraction Kits with staggered delivery (at an interval of 6 months each) for three years (for approx. sample no. 3,000 for 3 years) @ 500 for every six months. 	
12.	<i>Kits and consumables</i>	<ul style="list-style-type: none"> - Autosomal STR kits (24+ loci) with staggered delivery (at an interval of 6 months each) for three years (for approx. sample no. 6,000 for 3 years) @ 1000 for every six months. - Y-STR kits with staggered delivery (at an interval of 6 months each) for three years (for approx. sample no. 600 for 3 years) @ 100 for every six months. - X-STR kits with staggered delivery (at an interval of 6 months each) for three years (for approx. sample no. 600 for 3 years) @ 100 for every six months. - FTA cards and Buffer with staggered delivery (1500 samples (4-circled) for 3 years) @ 500 for each year. - Buccal Swab collectors (600 samples for 3 years) @ 200 for each year. 	

Item- 1B. Consists of the following Indigenous Equipment's:

SL. NO	NAME OF THE EQUIPMENT	TECHNICAL SPECIFICATIONS	QUANTITY
1.	<i>Table top light weight PICO centrifuge-Mini</i>	Table top non-refrigerated compact and low noise centrifuge with microprocessor based controllers for temperature and speed (200 – 14,000 rpm) with quick spin facility with adaptors having 24 X 1.5/2.0 ml tubes.	1
2.	<i>Vertical cooling</i>	Non – CFC, 500 liters capacity Midi cool (2°C to 8°C) with temperature setting controllers with glass door and powder	2

	<i>cabinet 2°C to 8°C</i>	coated metallic shelves. Digital display of temperature settings.	
3.	<i>Shaking water bath - Big</i>	Shaking water bath of 30 liters with +5°C to 99°C temperature variability along with digital PID controller supported by universal racks of 50 ml to 2 Liters and over temperature, current protection capability.	2
4.	<i>Shaking water bath - Small</i>	Shaking water bath of 5 liters with +5°C to 99°C temperature variability along with digital PID controller and over temperature, current protection capability.	1
5.	<i>Shaking incubator</i>	Shaking incubator with digital PID control for +7°C to 80°C temp. 0 to 300 rpm electronically controlled shaking mechanism. Should accommodate 50ml tubes and flasks up to 2 liters along with universal racks for various flasks and tubes with suitable stabilizer.	1
6.	<i>Mini Gel Submarine Gel System</i>	Mini Gel system (small 12.5 x6 cm)with gel tank, direct connect power supply, standard gel casting set and long gel casting set, 120v, micro casting set for four gels, including casting stands, four 6 x 6 cm gel trays and 4 combs.	2
7.	<i>UV Gel Doc with printer</i>	UV-Gel Documentation instrument to visualize and check quality of isolated DNA in Agarose / Polyacrylamide gel stained with ethidium bromide dye. Supported by highly configured computer system with image capturing CCD camera facility with 3 mega pixel or above and image analysis soft tools.	1
8.	<i>Water purification system with 5 to 10 Liters per hour</i>	Two stage water purification system with 5 to 10 liters per hour. Source water- Tap water, Pretreatment system should be supplied by vendor. Ultra-pure de-ionized with absolute zero conductivity. Water quality should be 18.2 Ω. The system should have UV-UF. Tank capacity with 30 Lits. Volume dispensing option will be preferable.	1
9.	<i>Ice maker flaker</i>	Fully automated microprocessor controlled, compact design, stainless steel body, noiseless, low water level detection, CFC free compressor with 50 kg per 24 hours capacity and with wheel for easy mobility.	1
10.	<i>Shaking rotators / mixer</i>	To rotate/ shake the sample vials of different sizes (2 ml / 50 ml tubes) for a given time period.	2
11.	<i>PCR work station</i>	For preparing PCR reaction mix under sterilized conditions with proper lighting. Built in 254 nm UV light programmability option for decontamination and auto UV light switch off function will be preferable. The system should be antimicrobial coated stainless steel having large work area. The size of the cabinet should be 4 ft.	1
12.	<i>UPS 5 KV</i>	UPS with zero maintenance batteries with high backup time (minimum 2 hours) with warranty 5 years	2
13.	<i>Analytical micro balance</i>	Measure 1mg to 200 gm with digital display with sensitivity 3.01 mg	1

14.	<i>Micro finnPipettes</i>	Adjustable volumes <ul style="list-style-type: none"> - 0.2µl to 2 µl - 2µl to 20µl - 20µl to 200 µl - 200µl to 1000 µl and - 1 ml to 5 ml 	5 <i>sets</i>
15.	<i>Liquid Nitrogen container</i>	Double walled cryo can with sturdy, portable lower evaporation loss, long holding time with insulated and vacuum jacketed with 20 ltrs capacity.	1
16.	<i>Vortex mixer</i>	Vortex from 0 to 300 RPM with dual mode (continuous and touch mode), 220 V, 50 Hz, with rubber cup, plate adopter with rubber disk (96 x 0.2 ml).	3
17.	<i>Magnetic stirrer with hot plate</i>	Two liters capacity with 50 to 1500 rpm, temperature up to 500°C with digital timer, PID control stainless steel housing (7 X 7 inches) with support stand.	1
18.	<i>Digital PH meter</i>	To know the PH of the reagents/ chemicals with accuracy and precision with ease of use and with low maintenance. The pH range should be from 2 to 16 with an accuracy of +/- of 0.1.	1
19.	<i>Hot air oven</i>	Hot air oven with Microprocessor based, air circulation fan, three sides heating elements with double walled unit inner chamber made up of stainless steel and outer made up of mild steel with powder coating. Temperature range 50°C to 250°C and accuracy +/- 1°C. Chamber size (L x B x H) 600 X 600 X 900mm with three trays. The system should be CE certified.	1
20.	<i>Autoclave</i>	Vertical floor standing autoclave with top loading with 100 ltrs. Capacity, temperature, pressure range is 140°C, 4 bar to sterilize the plastic ware etc.	1
21.	<i>Double door Refrigerators</i>	Non – CFC, 250liters capacity with 2°C to 8°C, with temperature setting controllers.	3
22.	<i>Cold room (4°C)</i>	The chamber with 10 x 15 x 10 ft. dimensions, with 220 V with adjustable racks with maintaining 4°C continuously, to preserve the biological samples for longer periods	1

Item No: 2. DNA Sequencing Equipment of Portable Model for Indexing Purpose.

Consists of the following Imported Equipment:

SL. NO	NAME OF THE EQUIPMENT	TECHNICAL SPECIFICATIONS	QUANTITY
1.	<i>DNA Sequencing equipment Portable model</i>	<p>Capillary System having 1-8 sample loading capacity with NDIS – approved STR based chemistry to generate DNA Profile from a fresh/forensic sample in a fully automated manner in a short span of 100 min +/- 10 min.</p> <p>Extraction to profile generation in a cartridge/chip with self contained reagents having shelf life of about 6 months or above.</p> <p>To be compatible for any commercially available cotton swab/collection device with or without RFID.</p> <p>Should be capable of utilizing in a Forensic Science Laboratory or in non-laboratory conditions in a mobile mode at the incident site to generate a DNA profile.</p> <p>User access should be restricted by PIN code/fingerprint/password/facial recognition or any biometric ID system.</p> <p>To be supplied with appropriate Software allowing administrative users to control the instrument remotely and securely to review the result. Software should allow multiple systems at different locations to be monitored and managed by user(s) at a central terminal.</p> <p>The system should be rugged, robust, tested for vibrations/shockproof for mobile operations.</p> <p>Minimally trained persons should be capable of operating the instrument and free cartridges/chips should be provided for 250 sample analysis for training.</p> <p>The vendor should supply essential accessories and consumables such as cartridges/chip and kits along with the equipment.</p>	<i>1</i>
2	<i>Kits / Cartridges</i>	<p>The Kits / Cartridges (Autosomal STR kits) for staggered delivery @ 1000 samples for every 6 months upto 3 years (total 6000 samples) along with other accessories and consumables.</p>	

Technical specifications/equipments for upgradation of 5 RFSLs

1. GAS CHROMATOGRAPHY WITH HEAD SPACE AUTOSAMPLER WITH FID

Name of the equipment	<u>GAS CHROMATOGRAPHY WITH HEAD SPACE AUTOSAMPLER WITH FID</u>
Specifications	<p><u>G C Main frame:</u></p> <ul style="list-style-type: none"> • Gas chromatograph with advanced / Electronic flow control for simultaneous Pressure, Temperature and Flow programming. • Gas Chromatograph with the Split-split less Capillary injector. • AFC (Digitized Flow Controller) • Graphical user interface with large LCD display (best display) • System should have constant linear Velocity mode • Auto Ignition • Split ratio programming with battery protected memory • High speed / fast GC analysis • Self-diagnostic function • GLP/GMP support • Fast data transfer, acquisition speed 250Hz (4ms) - able to "catch" very sharp peaks <p><u>Column Oven :</u></p> <ul style="list-style-type: none"> • Programmable Oven temperature with ramping with Fast oven cooling speed 450 deg to 50 deg Within 3.4 minutes • Temperature range + 4°C to 450°C • Standard Oven Volume • Temperature accuracy : +/- 1% • Temperature Deviation : < 2 °C Max • Temperature variation Coefficient : < 0.01 °C / °C • Temperature programming steps : up to 20/adequate • System should have the capability to accommodate: Mini Bore to Micro bore capillary Columns. <p><u>Flame Ionization Detector (FID) :</u></p> <ul style="list-style-type: none"> • Operating Temperature Range: upto 450°C • Detection Limit : 1.8pgC/s (dodecane) • Dynamic Range : up to 10⁷ • Auto Ignition, extinguishing and re-ignition features <p><u>Capillary Split/ Splitless Injector with following capabilities:</u></p> <ul style="list-style-type: none"> • Temperature Range : +5°C to 450°C • Easy adjustment of Split vent • Septum Purge facility • Facility with charcoal trap in Splitvent <p><u>Head Space:</u></p> <ul style="list-style-type: none"> • Sample Injection Method: Sulfinert Sample Loop 1mL.

- Number of vials: Standard number or more
- Leak check function for all vials
- Vial warming temperature: Room temperature +10 to 300°C, in 1°C units with accuracy of ±0.1°C
- Transfer Line temperature: Room temperature +10 to 350°C, (set in 1°C units with accuracy of ±0.5°C)
- Electronically controlled Carrier Gas
- Electronically controlled Vial Pressurized Gas Control

Complete System Control and Data Acquisition Software :

- Software Compatible with Windows 7 or better
- Software should have has Security (log-in , User and group)
- Audit trail , System check , Software integrity &
- System Suitability test as standard functions
- System Check: Automatically checks all the system parameters including electronics
- **Flexible Report format**, i.e, for Method, chromatogram, Peak table , Quantization result
Calibration curve, Status Log , texts, graphics.
- Ease of Operation Single Point user friendly access through Icons.
- Real time Display of all Chromatograms with Data exchange facilities
- Software has Calibration Facility with Bracketing without Overlap and Bracketing by Grand average
- Built-in weekly Scheduler for automation the system for one complete week in addition daily automation.
- GLP/GMP Compliance
- Should compliance 21 CFR Rule 11 certification.

Installation Accessories :

- Suitable Branded - Pentium i-5 Computer, HP LaserJet Printer
- 6KVA Online UPS with 1 hour Battery backup for GC system
- Filled Hydrogen, Nitrogen, Zero Air Cylinders
- Double Stage Gas Regulators for all the above cylinders
- Gas Panel for GC should include Molecular sieve, Moisture & Oxygen traps with necessary tubing's, Nuts & Ferrules.
- GC column – EB1 (30m x 0.25 mm id) or equivalent.
- Comprehensive warranty – 3 years

Mandatory Requirements : Warranty & Service:

- Instrument should be strictly with 3 -Years Comprehensive Warranty from date of installation (including Spares, Consumables & Service).

Training: Hands on training should be given to the staff members during installation until the satisfaction of the scientist. Demo of various

	specifications should be given by the successful bidder before placing the order. A live demo nearby and analysis of our samples will have to be done by the bidder at his cost. Please provide complete details of your customer support laboratory in India
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2. HIGH PERFORMANCE THIN LAYER CHROMATOGRAPHY

Name of the equipment	HPTLC with Scanner and Photo Recording Unit
Specifications	<p><u>HPTLC SYSTEM MANAGER:</u></p> <p>Software to control, document and manage all the instrumental steps of HPTLC analysis incl. application, development, scanning and photorecording. Communicates in both directions with all connected instruments. 32 bit analysis. Upgradable periodically. Methods can be created and stored. Single report per analysis. Enables analysis report to include all related data such as time, date, name of the analyst / sample / place etc. Random report no. - to prevent mix-up of two prints of same analysis. GLP compliant. 3rd generation.</p> <p><u>SEMI AUTOMATIC SPOT / BAND APPLICATOR:</u></p> <p>5th Generation. Sprays sample to layer. Stand alone or System Manager Control. 4 mode applicator 1) Quantitative analysis 2) Micro-preparative chromatography (190mm band length & 500µl sample in one go) 3) Superimpose – int. std.orderivatization reagent in same method 4) in – situ clean-up (sample application at 110mm on y axis). Sample syringe – 100µl (for analytical work) 500µl (for micropreparative work). Sample position on X & Y axis freely selectable. Automatic rate of sample dispensing. Method storage – 10 built-in or infinite through system manager. Method entry – Manual or download from System Manager. Can auto – test instruments (self-diagnosis).</p> <p><u>CHROMATOGRAM DEVELOPMENT CHAMBERS:</u></p> <p>All glass, moulded, one piece, bubble free chamber for TLC/ HPTLC. Bottom divided into two equal halves with a sloping divider. Chamber top and bottoms (both outside the chamber and inside the two troughs) should be perfectly parallel to each other.</p> <p>Chamber ground finish on top for good seal and at bottom for perfect level. Heavy chamber to minimise effects of vibration. One piece joint less moulded chambers prevent leakage and tough to handle while cleaning. Stainless steel rust proof lid with overhang to completely seal the chamber. Appropriate sizes for 20x20 cm, 20x10 cm and 10x10 cm plates.</p>

PHOTO RECORDING UV CABINET:

UV Cabinet with a digital camera mount.

Enables to inspect the plate as well as keep a record by photodocumentation. Images transferrable to PC. Digital camera required. Image can be attached to System Manager report. Image annotation software included.

Dual wavelength 254 nm + 366 nm with guaranteed minimum intensity, as follows: UV lamp at 17 cm distance. Short wave UV (254 nm) 1600, long wave (366 nm) 1000,. Visible light (<400nm) 0.4. Full protection to viewer's eyes and skin from UV light for safety. High tech 50 kHz power supply for flickerless, instant illumination. Portable darkroom. Auto switch off after 10 min. Thermal sensor and tilt sensor built in.

FOR DERIVATIZATION

20 X 10 cm one piece, moulded Dip Tank with lid

MULTIPURPOSE CHAMBER FOR METHOD DEVELOPMENT

Multipurpose Chamber for a) Method development b) Rapid screening of samples c) Horizontal development. Chamber comprises layer scraping module and development module. Uses 10 x 10 cm glass plates. Can run six mobile phases on one plate, side by side at the same time, with or without saturation. New method developed in 3 – 4 runs. With mobile phase creation guide. For screening, run same sample with 6 different mobile phases.

TLC SCANNER WITH DATA EVALUTION :

Computer controlled Scanner / Densitometer for automatic spectrum scanning for identity check as well as purity check; Automatic quantitative measurement by absorbance & fluorescence; All TLC / HPTLC plate sizes acceptable; Scan speed 100mm/sec @ 25µm resolution; Wavelength range 190-900 nm; Monochromator flushing by nitrogen; Data sampling rate – 4000 / sec; Special optics Macro / Maicro for HPTLC measurements; Spectrum scan speed 100 nm / sec; Max 999 spectra / plate; Visible pilot slit image / scan compartment illumination with UV to check sample alignment with scan beam; D2, Hg, W lamps + self diagnostic + Service dialog + Universal filter for fluorescence all built-in; scan slit size variable; bandwidth selectable 5 or 20 nm.

Data evaluation 32 bit software (latest version), Excellent S/N ratio. High reproducibility; Controlled by System Manager, Automatic / Manual data integration, Auto baseline correction. Spot check facility. 3D display with data storage. Calibration - single level, multilevel, linear / non-linear. Statistics CV / CI. Reproducibility check facility. Auto calculation of data from wts and dil. factors, Computer generated random no. for each report (GLP compliance). Lamp use tracking. 2 level digital user manual. Service Dialog + self diagnostics + Tutorial all built – in. Meets GLP. Optional IQ-OQ and 21 CFR Rule 11 certification.

	<p>Software should be latest version and future upgradable</p> <p>General conditions: - Specifications of high cost instruments: should be preferably confirmed using the website of the manufacturer or directly by the manufacturer. Good support from Indian base is essential.</p> <p>Maintenance: A good team of service engineers, trained by the manufacturer is essential. Detailed information of service engineers and their product training to be provided. AMC or CMC rates should be offered reasonably.</p> <p>Live product demo where applicable, with our samples is necessary. The same may be arranged at supplier's cost.</p> <p>Training: In view of the long life of the instrument, training should be offered wherever requested by us. It can be arranged preferably at our lab or supplier's application lab.</p> <p>Analysis support: Since we deal with complex samples, support for analysis should be given by the supplier by sending their application.</p> <p>Equipment should be future proof and manufacturer is expected to offer upgrade whenever available rather than change models.</p> <p>A live demo nearby and analysis of our samples will have to be done by bidders at their cost. Please provide complete details of your customer support lab. in India and training charges, if any in the next three years after the installation.</p>
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3. FTIR SPECTROPHOTOMETER

Name of the equipment	FTIR SPECTROPHOTOMETER
Specifications	<ul style="list-style-type: none"> • Highest Signal to noise ratio of 30,000:1 peak to peak or better in its class of general use instrument. • The FTIR should have a measuring wave number range of 7300 cm-1 to 350 cm-1 with a best spectral resolution of 0.5 cm-1 • Automatic moisture Protection for the beam splitter. • Sample compartment should have non Hygroscopic window Material. • The moving mirror mechanism should be non-contact, frictionless Flexible Joint Support mechanism with electro-magnetic drive to ensure smooth movement of moving mirror. • Purging with Dry Nitrogen should not be an essential criterion. • Sealed interferometer with reusable Silica gel desiccant. • The beam splitter should be Germanium coated/equipment/ better coated KBr with anti-humidity coating.

	<ul style="list-style-type: none"> • Highly stable interferometer with Dynamic Alignment Mechanism so as to get the spectrum under stabilized and optimum conditions. Also ensures short warming up time. • Sequential display of diagnostic results should be monitored continuously by status monitor function so as to ensure and optimized measuring conditions. • Accessories are automatically identified and optimum measurement conditions are to be set. • Small installation space without compromising the sensitivity. • For general Forensic science application inbuilt spectral library of more number of spectra for Organic, Inorganic and polymer substances with peak data. • Powerful software, completely compliant to GLP with following Features <ul style="list-style-type: none"> ➤ Real time Display of spectra ➤ Compact measurement menus ➤ Simple measurement mode ➤ Atmospheric correction mode ➤ Continuous measurement mode • Standard Data processing functions like Kramers- Kronig, ATR Correction, Purity / Compare function, Kubelka – Munk Conversion, Search Function, Quantitation, Macroprogramming etc. • ATR accessory with single beam diamond crystal Quantitation software to be provided with single / multi-point calibration, Multi-linear regression (Multi-Component analysis) capability. Software should have built-in Spectral search function with different algorithms. There should be a provision to create user defined database. <p><u>Sampling Accessories to be supplied with instrument:</u></p> <ol style="list-style-type: none"> 1. NaCl demountable cell for Mull sample or for Nujol base sample. 2. KBr Press, Agate Mortar, Pestle, Pellet Holder, KBr Powder set for Pellet Preparation. <p>Best suitable with License O.S.Branded PC, Printer and suitable UPS. (equivalent or better than HP/Dell)</p> <p><u>Training:</u> Hands on training should be given to the staff members during installation until the satisfaction of the scientist. Demo of various specifications should be given by the successful bidder before placing the order. A live demo nearby and analysis of our samples will have to be done by the bidder at his cost. Please provide complete details of your customer support laboratory in India</p>
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4. UV-VIS SPECTROPHOTOMETER

Name of the equipment	DOUBLE BEAM UV-VIS SPECTROPHOTOMETER
Specifications	Microprocessor based UV-VIS Spectrophotometer with high resolution LCD display with PC Software and dedicated soft keypad, for operation on 220V / 50Hz.

	<ul style="list-style-type: none"> • Stand-alone operation or complete control through PC with PC software supplied as standard • True double beam optics with aberration corrected concave blazed holographic grating in Czerny – Turner mounting for high energy throughput and high quality monochromatic light • Wide wavelength range of 1,100 nm to 190 nm • High resolution 1 nm spectral bandwidth over entire wavelength range • Wavelength setting and display in steps of 0.1nm • Wavelength accuracy of + 0.1nm for D2 spectral line • Wavelength reproducibility of + 0.1nm • Variable wavelength scanning speed of 3,000 nm/min to 2 nm/min or better. • Ultra low stray light at 220nm with NaI filter • Wide Photometric range of -4 to +3.5Abs and 0 to 400 %T • High Photometric Accuracy of ± 0.002 Abs at 0.5 Abs • High Photometric Repeatability of $<+0.001$ Abs at 0.5 Abs (equivalent or better specifications for forensic samples) • Very low baseline drift • High baseline flatness of ± 0.0006 Abs over entire wavelength • Dual source – high intensity Tungsten-Halogen and Xenon flash lamp/ Deuterium lamp with automatic changeover • High sensitivity matched pair Silicon Photodiode detector • Sufficient number of USB ports for high speed PC and printer connectivity, data storage and transfer through USB pen drive • Built in validation program, diagnostic and security functions • Large sample compartment compatible with wide range of accessories • Two pairs of Quartz cells of 10 mm path length to be included as part of equipment. <p>Should be supplied with International standard Branded PC, Printer and suitable UPS with licensed O.S.</p> <p>Training: Hands on training should be given to the staff members during installation until the satisfaction of the scientist. Demo of various specifications should be given by the successful bidder before placing the order. A live demo nearby and analysis of our samples will have to be done by the bidder at his cost. Please provide complete details of your customer support laboratory in India</p>
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5. AUTOMATED HPLC SYSTEM

Name of the equipment	AUTOMATED HPLC SYSTEM
Specifications	<ul style="list-style-type: none"> • It should have a Quaternary Gradient high precision pump. • It should have a facility flow rate resolution of 3nl/min. • The flow rate should be between 0.001 to 10 ml/min from micro to semi-preparative flow rates. • Flow rate accuracy should be $\pm 1\%$ or $\pm 0.5\mu\text{l}/\text{min}$ of set value, whichever is better. • Flow rate precision should be less than $\pm 0.1\%$ RSD.

	<ul style="list-style-type: none"> • Pressure setting range should be 1-40 MPa. • It should employ active check valves that allow stable delivery of even non-polar organic solvents such as hexane. • It must have a leak sensor as safety feature. • It should have functions for maintenance and validation which are accessible by a dedicated operation button. • On-Line Degassing Unit 1 No • Membrane degassing unit upto 5 flow lines. • Maximum operating flow rate upto 20ml/min per flow line. • An internal capacity of 170 µl per flow line that allows a significant decrease in time required for replacing mobile phases and stabilization. • It must have a leak sensor as a safety feature. • Self-cleaning capability that extends vacuum pump life by drawing in air when the pump is running. • Photo-Diode Array Detector 1 No • Wavelength range 190 nm - 800 nm. • Number of Diode Elements : 512 or better • High Resolution & High Sensitivity Mode (1.2nm & 8nm) • Wavelength accuracy ± 1 nm. • Wavelength Precision 0.1nm. • Drift Less than 5×10^{-4} AU/Hour. • Noise Level $\pm 0.6 \times 10^{-5}$ AU. • Linearity 2.0AU. • PDA data collection in full range and simultaneously monitor all possible wavelengths (online-while acquisition is on) • Peak Purity analysis through Ratio-chromatogram. • Spectrum view, Wavelength scanning. • Temperature controlled flow cell. • A leak sensor and lamp replacement protection system (power to lamp automatically turned OFF) should be provided. • Low Pressure Hg Lamp for wavelength accuracy check or HO membrane. • <u>Auto-Sampler with cooler</u> • Sample injection volume should be variable between 0.1 µl to 100 µl. • Injection system should have variable injection volume type with zero sample loss during injection. • Very fast injection time nearly 10sec/sample for 10ul injection. • Adequate number of samples to be processed automatically, random access. • Sample cooler with de-humidifying function under temperature control from 4-45°C. • Flow line rinse capability both before and after sampling should be possible • Needle aspiration speed should be variable from 0.1 to 15ul/sec or
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adequate.

- Rinse aspiration rate should be variable from 1 to 35ul/sec or adequate.
- Carry over must be within 0.005 % (Napthalene, Chlorhexidine)
- Injection volume accuracy within 1%
- The injection precision should be less than 0.2% of RSD value
- It should have a leak sensor, automatic rack and vial recognition as safety feature
- 1.5 mL Sample Vials along with cap & Septa 500 No's to be included with crimper.

- **Date Management System**

- Operation of the system should be easy and intuitive via a state-of-the-art Windows 7 or better software with Graphical User Interface
- It should cover full digital instrument control with self-diagnosis functionality.
- Method file capability should have all LC analysis parameters, data processing parameters, report format, etc.
- The reporting format should be flexible and easy to use in any desired format
- Software must have its own log files for complete audit trails
- System suitability, System security as well as System check functions must be provided which comply with Good Laboratory Practice (GLP) and Regulatory Conformity
- Software should have a Data Base support either with SQL or Oracle for data security & compliance.
- Security features of software must comply fully with FDA, 21 CFR Part 11 guidelines.
- Reports can be output in PDF format
- Full instrument control from PC

Installation Accessories

- C-18 & C-8 Column – 1 each 250 mm x 4.6 mm i.d x 5 um
- Branded latest Specifications PC & HP laser Jet Printer
- 3 KVA UPS with one Hour Battery back-up --- 1 No
- Sample & Solvent filtration assembly with Aqueous & Organic Membranes (100 no. each) along with Vacuum Pump for filtration & degassing of mobile phase & sample.

Warranty : Instrument should be strictly with **3 Years Comprehensive Warranty** from the date of Installation (Including all Spares, Consumables & Labor)

Others

- The supplier must provide training for the users of the instruments at site.
- The supplier must demonstrate that it has a proven appropriate set-up and capability to provide after-sales service efficiently and effectively.
- Software upgrades like version ups, if any, should be done without any cost.
- All modules must be GLP compliant
- A declaration of System Validation certificate must be provided.

	<p>Training: Hands on training should be given to the staff members during installation until the satisfaction of the scientist. Demo of various specifications should be given by the successful bidder before placing the order. A live demo nearby and analysis of our samples will have to be done by the bidder at his cost. Please provide complete details of your customer support laboratory in India</p>
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6. ADVANCED STEREOMICROSCOPE

Name of the equipment	<u>ADVANCED STEREOMICROSCOPE</u>
Specifications	<p>High Definition 10X Eyepieces with</p> <ul style="list-style-type: none"> • 5- way or more bright LED illumination–Provides incident oblique and transmitted light for high quality illumination and contrast of any application with the time and cost savings of NO replacement bulbs • High Definition Output – Fast, live, high resolution images from real time specimen viewing on HD Displays without a computer • Compatible with LAS – Compatible with the full range Application Software Modules, e.g. Multifocus, Measurement and Extended Annotation. • 4.4:1 Zoom – Zoom magnification from 8x -35x for high resolution images • Integrated 10.0 Mega-Pixel CMOS Camera – for excellent color images with max. resolution of 2048x1536