



**UNIVERSITY COLLEGE OF MEDICAL SCIENCES
(UNIVERSITY OF DELHI)
& GURU TEG BAHADUR HOSPITAL
DILSHAD GARDEN, DELHI – 110 095
COLLEGE: 0091-11-22582972-74
FAX: 0091-11-22590495
WEBSITE: <http://www.ucms.ac.in>**

NOTICE INVITING TENDER

(Section – I)

On behalf of the Principal, UCMS, the undersigned is directed to invite the sealed tenders from registered manufacturers/authorised suppliers on DDP basis (Delivered Duty Paid) for the supply & installation of following items:-

Tender Group	Name of the Items (Detailed Specifications are given in Section IV of the Tender Document)
Anatomy	Embalming Machine
Physiology	Perimeter, Mosso's Erogograph, Pulmonary Function Testing machine with diffusion and body plethysmography,
Community Medicine	Ice Lined Refrigerator (ILR)
MRU	Liquid Nitrogen Container, Autoclave, Vacuum Pump for Media Filtration & Solid Phase Extraction (SPE), Centrifuge Machine, Gas Chromatography – Mass Spectrometer, UV-VIS Double beam Spectrophotometer with temperature control and data management system, Atomic Absorption spectrophotometer with fume hood, Semi – Micro Weighing Balance, Inverted Microscope with phase Contrast and CCD Camera, Refrigerated Out – swing Centrifuge, -150 ⁰ C Deep Freezer
Patho – Histo	Slide Warming Plate, Slide Filing Cabinet, Orbital Shaker (Non-incubated), Gross Station, Waste Tray for Manual Rotary Microtome, Block Filing Cabinet, Automated Tissue Processor with Fume Control Bench Top, Tissue Flotation Bath, Spectrum Gold Filter for existing Upright Trinocular Research Fluorescent Microscope with Digital Image Analysis system, Electrically operated glass etching hand held tool,
Patho – Hemato	Ultrapure Type I Water Purification System, Fully automated microplate ELISA Reader with printer, Projection System for 7 Headed teaching Microscope
Pathology – TT	Upright LED microscope with imaging system
Patho – Cyto	PH/ORP probe with Liquid gel and polymer electrolyte, Incubator (Table Top), Antigen Retrieval System
Biochemistry	Semi-Autoanalyser, Micro-Centrifuge, Gradient Thermal Cyler
Forensic Medicine	Height Weight Machine, Human Bone (Adult & Original), X-Ray View Box, Digital Weighing Balance
MIU	Plotter Printer, Photo Printer/Photo Inkjet Printer
Micro	Fluorescent Trinocular Microscope, Brightfeild Trinocular Microscope, Refrigerator Double Door, Binocular Microscope, B.O.D Incubator, Microwave Oven, Vertical Autoclave, VDRL Shaker Digital, Water Bath, Clinical Centrifuge Table Top, Inspissator, Egg Incubator

The Tender Document for items will be on **TWO BID** System consisting of Technical Bid and Price Bid. The bid(s) has to be submitted item-wise (**separate bid for each item, failing which, the bid shall not be opened/entertained**) containing two parts, Part-I as Technical Bid in one sealed envelope and Part-II as Price Bid in one sealed envelope. Both the sealed envelopes (for Technical as well as Price Bid) must be put in one big envelope and on all the three envelopes must be clearly mentioned all details of item (Tender Group, Name of Item, Tender No., Name & address alongwith mobile number of Bidder etc.). Any bidder may bid for any number of items against the purchase of single Tender Document but each offer must be submitted itemwise in two bid system. **Separate EMD must be enclosed with the Technical Bid for each item.**

The Tender Documents along with detailed specifications, terms and conditions can be downloaded from the College web site "<http://www.ucms.ac.in/tender.htm>" and the fee for tender documents of Rs.2000/- (Rupees two thousand only) must be enclosed with the technical bid. Tender document fee is not refundable. **NAME & ADDRESS OF BIDDER ALONGWITH THE TENDER GROUP & NAME OF ITEM MUST BE MENTIONED ON THE BACKSIDE OF DEMAND DRAFTS. THE BIDDER CAN PARTICIPATE FOR ANY NO. OF ITEMS AGAINST THE SINGLE TENDER DOCUMENT FEE.**

- a) Price of Tender Document: Rs.2000/- (Two Thousand only) Non-refundable.
- b) Date of commencement of sale of Tender Document: **23.11.2015**.
- c) Last date and time for receipt of Tender Document: **15.12.2015 up to 3:00 p.m.**
The tender should be addressed to "**The Principal, University College of Medical Sciences, Dilshad Garden, Delhi-110095**" and **may be dropped in tender box kept in the office of Sh. Rajesh Kumar, Asstt. Registrar (Central Stores), Room No. 11, Ground Floor, UCMS** or sent by registered post so as to reach the College on/before **15.12.2015 up to 3:00 Hrs.** No tender will be accepted after due date and time.
- d) Time and date of opening of Technical Bid: **16.12.2015 from 10.30** a.m. onwards.
- e) In case demonstration is required for any item(s), the Price Bids for such item(s) shall be opened after the demonstration.
- f) If any further amendment / changes made by the College, the same will be uploaded on College website only.
- g) Tender should be submitted separately for each item.

All Tender Documents must be accompanied with the Earnest Money Deposit (Refundable without interest), failing which the bid will be rejected. The Earnest Money Deposit is to be paid in the form of Demand Draft / Pay Order only in favour of "**The Principal, University College of Medical Sciences**" payable at Delhi and should be attached with Technical Bid. Name of firm and complete postal address of bidder alongwith the Tender Group & Name of item must be mentioned on the backside of Demand Drafts.

The College shall not be responsible for any delay in receiving bids/sending of Tender Document by post.

The College reserves the right to accept or reject or cancel any bid/item at any stage of procurement process without assigning any reason thereof. No correspondence in this regard shall be entertained.

Earnest Money shall be forfeited in case, it is found, at any stage that information/particulars regarding supply of tendered item(s) are false.

(S. K. DOGRA)
DEPUTY REGISTRAR

SECTION II.

INSTRUCTIONS TO BIDDERS

A. Introduction

1. Eligible Bidders/Tenderer

- 1.1 This invitation for bids is open to all reputed manufacturers or their sole authorised dealer (wherever manufacturers are not directly selling their product).
- 1.2 Tenderer/Bidder should not be under a declaration of ineligibility for corrupt and fraudulent practices issued by any Government Office.

2. Cost of Tender/Bidding:

- 2.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and the University College of Medical Sciences hereinafter referred to as “the purchaser”, will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

B. The Tender/Bidding Documents

3. Content of Tender/Bidding Documents

- 3.1 The goods required, bidding procedures and contract terms are prescribed in the bidding documents. In addition to the invitation for bids, the bidding documents include:
 - a) Tender Notice
 - b) Instructions to Bidders.
 - c) General Conditions of Contract;
 - d) Technical Specifications;
 - e) Schedule of Requirements;
 - f) Qualification Requirement;
 - g) Tender/Bid Form and Price Schedules;
 - h) Tender/Bid Security Form (Earnest Money form)
 - i) Contract Form;
 - j) Performance Security Form;
 - k) Performance Statement;
 - l) Manufacturer’s Authorization Form;
 - m) Capability Statement Forms; and
 - n) Service Support Details Form
- 3.2 The Tenderer/Bidder is expected to examine all instructions, forms, terms and specifications 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 Tenderer’s/Bidder’s risk and may result in the rejection of its bid.

4. Clarification of Tender/Bidding Documents:

- 4.1 A prospective Tenderer/Bidder requiring any clarification of the Tender/Bidding Documents may notify the purchaser in writing at the purchaser's mailing address indicated in the invitation for Tender/Bids, which must be received before 10 days from the last date of submission the bid

5. Amendment of Tender/Bidding Documents:

- 5.1 At any time prior to the deadline for submission of bids, the purchaser may, for any reason, whether at its initiative or in response to a clarification requested by a prospective bidder, modify the bidding documents by amendment.
- 5.2 All prospective bidders should keep in touch to the College website for any further amendments / changes and shall be binding on them.
- 5.3 In order to allow prospective bidders reasonable time in which to take the amendment into account in preparing their bids, the purchaser may, at its discretion, extend the deadline for the submission of bids.

C. Preparation of Bids/Tenders

6. Language of Bids/Tenders:

- 6.1 The Tenders/Bids prepared by the Tenderer/Bidder, as well as all correspondence and documents relating to the Tender/Bid exchanged by the Tenderer/Bidder and the purchaser, shall be written in English/Hindi language. Supporting documents and printed literature shall also be furnished in English.

7. Documents Comprising the Bid/Tender:

- 7.1 The Tender/ Bid prepared by the Tenderer/Bidder shall comprise the following components:
 - a) A Tender/Bid Form and a price schedule.
 - b) Documentary evidence establishing that the Tenderer/bidder is eligible to Tender/Bid and is qualified to perform the contract if its Tender/Bid is accepted;
 - c) Documentary evidence establishing goods eligibility and conformity to bidding documents.
 - d) In case of authorised agent, the Authorisation Certificate, issued by the Principal firm.
 - e) Earnest Money Deposit.
 - f) Copy of Registration Certificate of Sale Tax/DVAT etc.
- 7.2 The Tenders/Bids so prepared shall be submitted in two sealed envelopes in two parts as follows:

Part I. Technical Bid

Containing unpriced Bid consisting of complete technical package and unpriced commercial package including Bid Form duly filled and signed. No price detail is to be given in this bid. **NO ALTERNATE OFFER (FOR OTHER MODELS) SHALL BE ALLOWED, OTHERWISE, THE BID MAY BE TECHNICALLY REJECTED.**

Blank Price Schedule Format (Columns 1 to 4 only filled in) as submitted in Section VII (1) shall also be enclosed.

Part II. Price Bid

Containing prices, with detailed break up as per format enclosed, both in figures and in words. Authenticated copy of manufacturers rate list / prices be enclosed for justification of prices quoted to the College.

Item wise Technical Bid & Price Bid is to be submitted in separate envelopes.
Enclose separate EMD with Technical Bid for each item separately.

8. Tender/Bid Form:

8.1 The Tenderer/Bidder shall complete the bid form.

9. Tender/Bid Prices

- If rates are quoted in foreign currency, the rates must be on DDP (Delivered Duty Paid) basis including insurance of the item.

“Delivered Duty Paid” means that the seller delivers the goods when the goods are placed at the disposal of the buyer, cleared for import on the arriving means of transport ready for unloading at the named place of destination. The seller bears all the costs and risks involved in bringing the goods to the place of destination and has an obligation to clear the goods not only for export but also for import, to pay any duty for both export and import and to carry out all customs formalities.

- However, the custom clearance documents will be provided by the purchaser at the time of clearing the item. It includes Custom Duty Exemption Certificate (CERTIFICATE FOR AVAILING CUSTOMS DUTY EXEMPTION IN TERMS OF GOVT. NOTIFICATION NO.51/96-CUSTOM DATED 23RD JULY, 1996 AND CENTRAL EXCISE DUTY EXEMPTION IN TERMS OF GOVT. NOTIFICATION NO.10/97-CENTRAL EXCISE DATED 01ST MARCH, 1997), authorization letters, Bank Release Order etc.

9.1 The Tender/Bidder shall indicate on the price schedule the unit prices and total bid prices of the goods it proposes to supply under the contract for each item separately. In any column does not apply to the bidder, same should be mentioned as NOT APPLICABLE.

9.2 The Tenderer/Bidder's separation of price components will be solely for the purpose of facilitating the comparison of bids by the purchaser and will not in any way limit the purchaser's right to contract on any of the terms offered.

9.3 Fixed price: Prices quoted by the Tenderer/Bidder shall be fixed during the Tenderer/Bidder's performance of the Contract and not subject to variation on any account. A bid submitted with an adjustable price quotation will be treated as non-responsive and rejected.

10 Tender/Bid currencies;

10.1 Prices may be quoted in Indian National Rupees (INR) on FOR (Destination of purchaser) basis. In case of items priced in foreign currencies, converted INR value should be given on the publication date of NIT and it must be on DDP (Delivered Duty Paid, please refer point No.9) basis.

11 Documents Establishing Tender/bidder's Eligibility and Qualifications;

11.1 The Bidder shall furnish, as part of its bid, documents establishing the Tenderer/bidder's eligibility to bid and its qualifications to perform the contract if its bid is accepted.

11.2 The documentary evidence of the bidder's qualifications to perform the contract if its bid is accepted, shall be established to the purchaser's satisfaction:

- a) That, in the case of a bidder offering to supply goods under the contract which the Bidder did not manufacture or otherwise produce, the Bidder has been duly authorized (AS PER AUTHORISATION FORM IN SECTION XII) by the goods manufacturer or producer to supply the goods in India.
- b) That Bidder has the financial, technical and production capability necessary to perform the contract and meet the criteria outlined in the QUALIFICATION REQUIREMENTS SPECIFIED IN SECTION VI.
- c) If an Agent submits bids on behalf of more than one MANUFACTURER, unless each such Bid is accompanied by a Separate TENDER/BID FORM for each Tender/Bid and a separate EMD, when required for each Bid and AUTHORISATION from the respective Manufacturer, all such Bids will be rejected as non-responsive.
- d) The Tenderer/Bidder should have preferably executed similar single supply order of atleast to the extent of 10 times of the items being quoted. Copies of previous Purchase Order(s) for the same item issued by any Govt. organisation may be provided, if required by Purchaser.

- e) Income Tax Clearing Certificate for last three years.

12 Documents Establishing Goods Eligibility and Conformity to Tendering/Bidding Documents:

12.1 The Tenderer/Bidder shall furnish, as part of its Tender/Bid, documents establishing the eligibility and conformity to the bidding documents of all goods and services, which the Tenderer/Bidder proposes to supply under the contract.

12.2 The documentary evidence of conformity of the goods and services to the Tendering/Bidding documents may be in the form of literature, drawings and data, and shall furnish:

- a) A detailed description of goods essential technical and performance characteristics of the goods;
- b) A list giving full particulars, including available sources of all spare parts, special tools, etc. necessary for the proper and continuing functioning of the goods for a period of six years, following commencement of the goods used by the purchaser;
- c) An item-by-item commentary on the purchaser's technical specifications demonstrating the goods and services substantial responsiveness to those specifications or a statement of deviations and exceptions to the provisions of the technical specifications.
- d) A confirmation that if the Tenderer/Bidder offers system and/or other software manufactured by another company, such software operates effectively on the systems offered by the Bidder; and the Tenderer/Bidder is willing to accept responsibility for its successful operation; and
- e) A confirmation that the firm has already achieved ISO 9002 Certification system. Necessary Certification of ISO 9002 should be attached if applicable.
- f) Copy of Registration Certificate/Certificate of incorporation (as per the applicable law) may be enclosed.

12.3 For the purposes of the commentary to be furnished, the Bidder shall note that standards for workmanship, material and equipment, and references to brand names or catalogue numbers designated by the purchaser in its technical specifications are intended to be descriptive only and not restrictive. The Tenderer/Bidder may substitute alternative standards, brand names and/or catalogue numbers in its Tender/Bid, provided that it demonstrates to the purchaser's satisfaction that the substitutions are substantially equivalent or superior to those designated in the technical specifications.

13 Bid Security/Earnest Money Deposit:

13.1 The Tenderer/Bidder shall furnish, as part of its Tender/Bid security **Item-wise** for the amount mentioned at page no 41 for the respective item(s) as Earnest Money Deposit (separate EMD for each item(s)).

- 13.2 The bid security is required to protect the purchaser against the risk of bidder's conduct, which may warrant the security's forfeiture.
- 13.3 The bid security shall be denominated in Indian National Rupees and shall be in the form of a Demand Draft only payable in the name of "Principal, University College of Medical Sciences" payable at Delhi. **Separate Demand Drafts are to be submitted for each item(s).**
- 13.4 Any Tender/Bid not secured with EMD will be rejected by the purchaser as non-responsive. No tender shall be opened, if detail of EMD is not recorded on top/cover of technical bid.
- 13.5 Unsuccessful tenderer/bidder's tender/bid security will be discharged/returned as promptly as possible without any interest.
- 13.6 The successful tenderer/bidder's EMD will be returned (without any interest) upon the Tenderer/Bidder's supply of goods and furnishing the performance bank guarantee.
- 13.7 The EMD may be forfeited:
- a) If a tenderer/bidder withdraws its bid during the period of tender/bid validity specified by the tender/bidder on the tender/bid form; or
 - b) In the case of successful tenderer/bidder, if the tenderer/bidder fails:
 - i.) to supply the goods.
 - ii.) to furnish performance bank guarantee.
 - c) In case it is found at any stage that information/particulars regarding tendered item(s) is false.

14 Period of validity of Tenders/Bids:

- 14.1 Tender/Bids must be valid for 150 days after the date of opening of Price bid, prescribed by the purchaser. A tender/bid valid for a shorter period may be rejected by the purchaser as non-responsive.
- 14.2 In exceptional circumstances, the purchaser may solicit the tenderer/bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. The tender/bid security provided shall also be suitably extended. A tenderer/bidder may refuse the request without forfeiting its tender/bid security.

15 Format and Signing of Tender/Bid:

- 15.1 The Bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to bid the contract. The latter authorization shall be indicated by written power of attorney accompanying

the bid. All pages of the Bid, except for unamended printed literature, shall be initialled by the person or persons signing the tender/bid.

- 15.2 Any interlineations, erasure or overwriting shall be valid only if they are initialled by the person or persons signing the tender/bid.

D. Submission of Tenders/Bids

16 Sealing and Marking of Tenders/Bids:

- 16.1 Tenders shall be prepared and submitted in separate sealed envelopes (Technical and Price Bid) by superscribing all tender details and both must be contained in a separate envelope superscribed as Tender Group _____, Tender No _____ dated _____, DUE FOR OPENING ON _____ FOR SUPPLY OF _____ (name of equipment).

- 16.2 ALL TENDER DOCUMENT NON ADHERENCE to this may be liable for rejection the tender/bid. The full name of contact person, mobile no., postal address, telegraphic address and Fax/telephone no. of the tenderer shall be written at the bottom left corner of all sealed envelopes.

- 16.3 The Tenders/Bids prepared shall be submitted **item-wise** in two sealed envelopes in two parts as follows: -

Part I. Technical Bid

Containing priced tender/bid consisting of complete technical package of the concerned equipment only and unpriced commercial package including tender/bid form duly filled and signed. **THE SEPARATE DEMAND DRAFT OF EARNEST MONEY DEPOSIT MUST BE ENCLOSED IN THIS ENVELOPE.** The tender fee of Rs.2000/- (Rs two thousand only) must be enclosed with this bid by a separate demand draft in the favour of "Principal, University College of Medical Sciences" Payable at Delhi. No price details to be given in this tender/bid.

Blank Price schedule format (Column 1-4 only filled in) as submitted in Section - VII (1) shall also be enclosed.

Part II. Price Bid

Containing prices with detailed break up as per format enclosed, both in figures and in words. Authenticated copy of Manufacturers Rate list / prices be enclosed for justification of prices quoted to the College.

Item wise Technical Bid & Price Bid is to be submitted in separate envelopes.
Enclose separate EMD with Technical Bid for each item separately.

17 Deadline for submission of Tenders/Bids

- 17.1 Tenders/Bids must be received by the purchaser at the address specified not later than the time and date specified in the invitation for tender/bid (section I or Notice Inviting Tender). In the event of the specified date for the submission of Tenders/Bids being declared a holiday for the Purchaser, the Tenders/Bids will be received up to the appointed time on the next working day.
- 17.2 The purchaser may, at its discretion, extend this deadline for the submission of bids, in which case all rights and obligations of the purchaser and bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

18 Late Tenders/Bids:

- 18.1 Any tender/bid received by the purchaser after the deadline for submission of bids prescribed by the purchaser will be rejected.

19 Modification and Withdrawal of Tenders/Bids

- 19.1 The Tenderer/Bidder may modify or withdraw its Bid after the Bid's submission, provided that written notice of the modification or withdrawal is received by the purchaser prior to the date & time prescribed for submission of tenders/bids.
- 19.2 The tenderer/bidder's modification or withdrawal notice shall be prepared, sealed, marked and dispatched not later than the deadline for submission of tender/bids.
- 19.3 No tender/bid may be modified subsequent to the deadline for submission of bids.
- 19.4 No tender/bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the bidder on the bid form. Withdrawal of a bid during this interval may result in the bidder's forfeiture of EMD.

E. Tender/Bid Opening and Evaluation

20 Opening of Tenders/Bids by purchaser:

- 20.1 The purchaser will open technical bids, in the presence of tenderer/bidders representatives who choose to attend on the date and time as indicated in NIT (Section –I) at the following location:

“University College of Medical Sciences, Dilshad Garden, Delhi-110095”

The tenderer/bidder “representatives who are present shall sign a register evidencing their attendance. In the event of the specified date of Bid opening being declared a holiday for the Purchaser, the Bids shall be opened at the appointed time and location on the next working day.

- 20.2 The tenderer/bidders name, tender/bid withdrawals and the presence or absence of the requisite bid security and such other details as the purchaser, at its discretion, may consider appropriate will be announced at the opening.
- 20.3 Due to any modification(s) by the tenderer in the Tender/Bid at the time of opening the technical bid, shall not be considered or opened for further process, irrespective of the circumstances.
- 20.4 The Price Bid shall be opened only for the firm(s) whose Technical Bid is declared qualified/acceptable by the concerned Deptt. of the purchaser .

21 Clarification of Tender/Bids:

- 21.1 During the examination of tenders/bids, the Purchaser may, at its discretion, ask the tenderer/bidder for a clarification of its bid. The request can be in writing or telephonically for clarification and the response shall be in writing only and no change in the price or substance of the bid shall be sought, offered or permitted.
- 21.2 No communication with the bidder or his representative shall be entertained regarding the status of the procurement before completion of procurement process.

22 Preliminary Examination:

- 22.1 The Purchaser will examine the tenders/bids to determine whether they are complete, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order. TENDERS/BIDS FROM AGENTS, WITHOUT PROPER AUTHORISATION FROM THE MANUFACTURER AS PER SECTION XII SHALL BE TREATED AS NON-RESPONSIVE.
- 22.2 The purchaser after opening the technical bid will examine the documents establishing bidders eligibility and qualification, good eligibility and conformity to bidding documents.
- 22.3 Deviations from or objection or reservation to critical provisions such as those concerning Performance Scrutiny, Warranty, Force majeure, applicable law and taxes and duties will be deemed to be a material deviation.
- 22.4 The Purchasers determination of the technical responsiveness is to be based on the contents and documents of the bid itself without recourse to extrinsic evidence.

22.5 If a tender/bid is not technically responsive, it will be rejected by the Purchaser and may not be made responsive by the Tenderer/Bidder by the correction of the non-conformity. No further intimation/correspondence shall be made in this regard.

23 Evaluation and Comparison of Price Tenders/Bids:

23.1 The Tender/Bid evaluation will be done item wise.

23.2 The Purchaser's evaluation of a price bid will take into account the following:

1. Ex-factory/Ex-warehouse/Ex-showroom/Off the Shelf Price
2. Excise duty, if any
3. Packing and forwarding charges
4. Inland transportation, insurance and other local costs incidental to delivery.
5. Other incidental services, if any
6. Sales and other taxes payable
7. The costs below will also be added to the bid price for the purpose of evaluation.

a) Delivery Schedule:

The purchaser requires that the goods under this NIT shall be delivered within the time specified in the schedule of requirements. A delivery "adjustment" will be calculated for the bids at the rate of 2% of the ex-factory price including excise duties for each month of delay beyond the stipulated delivery period and this will be added to the bid price for evaluation. No credit will be given to early deliveries.

24 Contacting the Purchaser:

24.1 No tenderer/bidder shall contact the purchaser on any matter relating to its bid from the time of the bid opening to the time the contract is awarded. If the bidder wishes to bring the additional information to the notice of the purchaser, it should do so in writing.

24.2 Any effort by a bidder to influence the purchaser in its decisions on bid evaluation, bid comparison or contract award may result in the rejection of the bidder's bid.

F. Award of Contract

25 Award Criteria:

- 25.1 The purchaser will award the contract to the successful Bidder who is determined to be qualified to perform the contract satisfactorily and whose bid has been determined to be technically responsive and has been determined as the lowest evaluated Bid.

26 Purchaser's Right to Vary Quantities at Time of Award:

- 26.1 The purchaser reserves the right at the time of award of contract to increase or decrease the quantity of goods as per actual and services originally specified in the schedule of requirements (rounded off to the next whole number) without any change in price or other terms and conditions.

27 Purchaser's Right to Accept any Bid and to Reject any or all Bids

- 27.1 The purchaser reserves the right to accept or reject any tender/bid (without assigning any reason), and to annul the bidding process and reject all bids at any time prior to award of contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected tenderer/bidder or bidders of the grounds for the purchaser's action.

28 Signing / issuing the Contract:

- 28.1 The purchaser will issue the final purchase order / award in favour of successful bidder and the purchase order will be treated as FINAL CONTRACT between the Purchaser and Bidder, incorporating all necessary terms & conditions / agreement between the parties.
- 28.2 If the purchase order is issued & received by the bidder, it will be presumed that all terms & conditions given in the tender document are acceptable by the bidder.

29 Performance Bank Guarantee :

- 29.1 Before the payment, the successful bidder shall furnish the Performance Bank Guarantee in accordance with the conditions of contract, in the performance security form provided in the bidding documents or another form acceptable to the purchaser. The validity of Performance Bank Guarantee must be for complete warranty period from the date of satisfactory installation.
- 29.2 Failure of the successful tenderer/bidder to comply with all necessary requirements shall constitute sufficient grounds for the annulment of the award and forfeiture of the tender/bid security in which event the purchaser may make the award to the next lowest evaluated bidder or call for new tender/bids.

30 Corrupt or Fraudulent Practices

The College requires that tenderer/bidders/Suppliers/Contractors under contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the College:

- (a) Defines, for the purposes of this provision, the terms set forth as follows:
 - (i) “corrupt practice” means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution, and
 - (ii) “fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the College of the benefits of free and open competition,
- a) Will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question,
- b) Will declare a firm ineligible, either indefinitely or for a stated period of time, if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing a contract.
- c) If at any stage, any bidder or his supplier firm/Principal/partner etc. found Black-Listed/debarred/any kind of concealment/imposed of any kind of penalty, the College have the right to cancel the procurement even after issuing the purchase order.
- d) No bidder or their representative shall meet with any of our faculty member/official without any prior permission of competent authority of the College.

Section III.

General Conditions of Contract

TABLE OF CLAUSES

Clause Number	Topic
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Section III. (Contd.)

General Conditions of Contract : Details

1. Definition:

1.1 In this contract, the following terms shall be interpreted as indicated:

- a) “The contract” means the Purchase order or agreement entered between the purchaser and the supplier, as recorded in the contract from signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein;
- b) “The contract price” means the price payable to the supplier under the contract for the full and proper performance of its contractual obligations;
- c) “The goods” means all the equipment, machinery, and/or other materials, which the supplier is required to supply to the purchaser under the contract.
- d) “Services” means services ancillary to the supply of the goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training and other such obligations of the supplier covered under the contract;
- e) “GCC” means the General Conditions of Contract contained in this section.
- f) The “purchaser” or “buyer” means the University College of Medical Sciences.
- g) “The supplier” means the individual or firm supplying the goods & services under this contract.
- h) “Day” means calendar day.

2. Application:

2.1 These General conditions shall apply to the extent that they are not superseded by provisions in other parts of the contract.

3. Standards:

3.1 The goods supplied under this contract shall conform to the standards mentioned in the technical specifications, and, when no applicable standard is mentioned, to the authoritative standard appropriate to the goods country of origin and such standards shall be the latest issued by the concerned institution.

4. Use of Contract Documents and Information:

- 4.1 The supplier shall not, without the purchaser's prior written consent, disclose the contract, or any provision thereof or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the purchaser in connection therewith, to any person other than a person employed by the supplier in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- 4.2 The supplier shall not, without the purchaser's prior written consent, make use of any document or information except for purposes of performing the contract.
- 4.3 Any document, other than the contract itself, shall remain the property of the purchaser and shall be returned (in all copies) to the purchaser on completion of the supplier's performance under the contract if so required by the purchaser.

5. Patent Rights:

- 5.1 The supplier shall indemnify the purchaser against all third party claims of infringement of patent, trademark or industrial design rights arising from use of the goods or any part thereof in India.

6. Performance Bank Guarantee:

- 6.1 Before the payment, the successful bidder shall furnish the Performance Bank Guarantee to the Purchaser for an amount of 10% of the contract value, valid upto 60 days after the date of completion of performance obligations including warranty obligations. The validity of Performance Bank Guarantee must be commenced on or after the date of satisfactory installation.

In the event of any correction of defects or replacement of defective material during the warranty period, the warranty for the corrected/replaced material shall be extended to a further period of 24 months and the Performance Bank Guarantee for proportionate value shall be extended 60 days over and above the extended warranty period.

- 6.2 The proceeds of the Performance Bank Guarantee shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete its obligations under the contract.
- 6.3 The Performance Bank Guarantee shall be denominated in Indian National Rupees, issued by a Nationalised/Scheduled bank located in India which shall be in form of Bank Guarantee on Rs. 100/- Non-judicial stamp paper.

6.4 The Performance Bank Guarantee will be discharged by the purchaser and returned to the supplier after the date of completion of the supplier's performance obligations/warranty period, including CAMC obligations under the contract. In this regard, the concerned supplier has to take initiative by writing a request letter to the Purchaser.

7. Inspection and Tests:

7.1 Inspection and tests prior to shipment of Goods and at final acceptance are as follows:

i.) The inspection of the Goods may be carried out to check whether the Goods are in conformity with the technical specification attached to the contract and shall be in line with the inspection/test procedures laid down in the Technical Specifications and the General Conditions of Contract. Following broad test procedure will generally be followed for inspection and testing of machine. The supplier will dispatch the goods to the ultimate consignee after internal inspection testing alongwith the supplier's inspection report and manufacturer's warranty certificate. The purchaser may test the equipment after completion of the installation and commissioning at the site of the installation. For site preparation, the supplier should furnish all details to the purchaser sufficiently in advance so as to get the works completed before receipt of the equipment. Complete hardware and software as specified in section V should be supplied, installed and commissioned properly by the supplier prior to commencement of performance tests.

ii.) The acceptance test will be conducted by the purchaser, their consultant or any other person nominated by the purchaser, at its option. The acceptance will involve trouble-free operation for seven consecutive days. There shall not be any additional charges for carrying out acceptance tests. No malfunction, partial or complete failure of any part of hardware or excessive heating of motors etc. of all tender items or bugs in the software should occur. All the software should be completed and no missing modules/sections will be allowed. The supplier shall maintain necessary log in respect of the results of the tests to establish to the entire satisfaction of the purchaser, the successful completion of the test specified. An average uptake efficiency of 98% (to modify as considered appropriate for each case) for the duration of test period shall be considered as satisfactory.

iii.) In the event of the hardware and software failing to pass the acceptance test, a period not exceeding two weeks will be given to rectify the defects and clear the acceptance test, failing which the purchaser reserves the rights to get the equipment replaced by the supplier at no extra cost to the purchaser.

iv.) Successful conduct and conclusion of the acceptance tests for the installed goods and equipment shall also be the sole responsibility and at the cost of the supplier.

The purchaser or its representative shall have right to inspect and/or to test the goods to confirm their conformity to the contract. The technical specifications shall specify what inspection and tests the purchaser requires and where they are to be

conducted. The purchaser shall notify the supplier in writing of the identity of any representatives retained for these purposes.

- 7.2 The inspections and tests may be conducted on the premises of the supplier or its subcontractor(s) at point of delivery and/or at the goods final destination. Where conducted on the premises of the supplier or its sub-contractor(s), all reasonable facilities and assistance including access to drawings and production data shall be furnished to the inspectors at no charge to the purchaser.
- 7.3 Should any inspected or tested goods fail to conform to the specification, the purchaser may reject them and the supplier shall either replace the rejected goods or make all alterations necessary to meet specification requirements free of cost to the purchaser.
- 7.4 The purchaser's right to inspect, test and, where necessary, reject the goods after the goods arrival in the purchaser's country shall in no way be limited or waived by reason of the goods having previously been inspected, tested and passed by the purchaser or its representative prior to the goods shipment from the country of origin.
- 7.5 Nothing shall in any way release the supplier from any warranty or other obligations under this contract.

Manuals and Drawings

- 7.6.1 Before the goods and equipments are taken over by the Purchaser, the Supplier shall supply operation and maintenance manuals together with drawings of the goods and equipment. These shall be in such detail as will enable the Purchaser to operate, maintain, adjust and repair all parts of the equipment as stated in the specifications.
- 7.6.2 The manuals and drawings shall be in the ruling language (English) and in such form and numbers as stated in the contract.
- 7.6.3 Unless and otherwise agreed, the goods and equipment shall not be considered to be completed for the purpose of taking over until such manuals and drawing have been supplied to the Purchaser.
- 7.7 For the System & Other Software the following will apply:

The supplier shall provide complete and legal documentation of hardware, all sub-systems, operating systems, system software and the other software. The supplier shall also provide licensed software for all software products, whether developed by it or acquired from others. The supplier shall also indemnify the purchaser against any levies/penalties on account of any default in this regard.

7.8 Acceptance Certificates:

- 7.8.1 On successful completion of acceptability test, receipt of deliverables etc, and after the purchaser is satisfied with the working of the system, the acceptance certificate signed by the supplier and the representative of the purchaser will be issued. The date on which such certificate is signed shall be deemed to be the date of successful commissioning of the systems.

8. Packing

- 8.1 The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination as indicted in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, etc. during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remittance of the goods final destination and the absence of heavy handling facilities at all points in transit.
- 8.2 The packing, marking and documentation within and outside the packages shall be comply strictly with such special requirements as shall be provided for in the contract including additional requirements, in any subsequent instructions ordered by the purchaser.
- 8.3 Packing Instructions:

The supplier will be required to make separate packages for each consignee. Each package will be marked on three sides with proper paint / indelible ink, the following:

- i. Tender No.
- ii. Contract No.
- iii. Supplier's Name, and
- iv. Packing list reference number

9. Delivery and documents:

- 9.1 Delivery of the goods shall be made by the supplier in accordance with the terms specified by the purchaser in the notification of the Award / purchase order. The details of shipping and/or other documents to be furnished by the supplier are as below: -
- 9.2 Atleast 7 days before the delivery of the item, the supplier shall inform / notify in writing to the purchaser on Fax No.011-22582105 with full details of the shipment including contract person/number, Air Waybill/House Air Waybill, railway/air receipt number and date, description of goods, quantity, name of the consignee etc. The supplier shall also mail necessary documents to the purchaser's e-mail i.e. ucmscentralstore@gmail.com. If the supplier does not intimate to the purchaser in writing about the detail of despatching the item(s),

the demurrage/any penalty or any other charges may be imposed on the supplier.

10. Insurance:

- 10.1 For delivery of goods at site, the insurance shall be obtained by the Supplier in an amount equal to 110% of the value of the goods from “warehouse to purchaser’s place (final destinations) “on All Risks” basis including War Risks and Strikes.

11. Transportation:

- 11.1 Where the supplier is required under the contract to transport the goods to a specified place of destination within India defined as project site, transport to such place of destination in India including insurance, as shall be specified in the contract, shall be arranged by the supplier, and the related cost shall be included in the contract price.

12. Incidental services:

- 12.1 The following services shall be furnished and the cost shall be included in the contract price:
- a) Performance of the on-site assembly, commissioning and start-up of the equipment.
 - b) Furnishing the detailed operation and maintenance manuals for each item of supply at each location.
 - c) Maintenance and repair of the equipment at each location during the warranty period including supply of all spares. This shall not relieve the supplier of any warranty obligations under this contract.

13. Spare parts:

- 13.1 Supplier shall carry sufficient inventories to assure ex-stock supply of consumable and spare in India. Supplier shall ensure the availability of after sales service for a period of at least five years including the warranty period.

14. Onsite Comprehensive Warranty:

- 14.1 The supplier warrants that the goods supplied under this contract are new, unused, of the most recent or current models and they incorporate all recent improvements in design and materials unless provided otherwise in the contract.

14.2 This comprehensive warranty (onsite) shall remain valid for 60 months (5 years) from the date of satisfactory installation of item.

- 14.3 The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.

- 14.4 “Upon receipt of such notice, the Supplier, within 24 hours repairs or replace the defective goods or parts thereof, free of cost at the ultimate destination. The supplier shall take over the replaced parts/goods at the time of their replacement. No claim whatsoever shall lie on the Purchaser for the replaced parts/goods thereafter.
- 14.5 If the supplier, having been notified, fails to remedy the defect(s) within 24 hours, the Purchaser may proceed to take such remedial action as may be necessary, at the Supplier’s risk and expense without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.
- 14.6 The supplier shall guarantee a 98% uptime of computer systems/peripherals & all tender items or other equipment’s being supplied.
- 14.7 If any computer systems/tender items give continuous trouble, say three times in one month during the warranty period, the supplier must replace the system with new system without any additional cost to the purchaser.
- 14.8 Maintenance service
- i. Free maintenance services shall be provided by the supplier during the period of warranty.
 - ii. It is expected that the average downtime of the item (system) will be less than half the maximum downtime (i.e. defined as number of days for which an item of equipment is not usable because of inability of the supplier to repair it) as mentioned in the form of technical details. In case an item is not usable beyond the stipulated maximum downtime the supplier will be required to arrange for an immediate replacement of the same till it is repaired. Failure to arrange for the immediate repair/replacement will be liable for a penalty of Rs.100 per day per item. The amount of penalty will be recovered from the Performance Bank Guarantee during warranty period.

15. Payment

Payment for Goods and Services shall be made either through Letter of Credit (80%/20%)/FDD or in Indian National Rupees after submission of valid Performance Bank guarantee as well as after satisfactory installation.

16. Prices

16.1 Prices payable to the supplier as stated in the contract shall be fixed.

17. Change Orders

17.1 The purchaser may at any time, by a written order given to the supplier, make changes within the general scope of the contract in any one or more of the following:

- a) Drawings, designs or specifications where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
- b) The method of shipment or packing;
- c) The place of delivery; or
- d) The services to be provided by Supplier.

17.2 If any such change causes an increase or decrease in the cost of, or the time required for, the supplier's performance of any part of the work under the Contract, whether changed or not changed by the order, an equitable adjustment shall be made in the contract Price or delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the supplier for adjustment under this clause must be asserted within thirty (30) days from the date of the Supplier's receipt of the Purchaser's change order.

18. Contract Amendments

18.1 No variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

19. Assignment

19.1 The supplier shall not assign, in whole or in part, its obligations to perform under the Contract, except with the Purchaser's prior written consent.

20. Sub-contract

20.1 The supplier shall notify the Purchaser in writing of all subcontracts in his original bid otherwise the supplier shall not relieve from any liability or obligation under the Contract.

21. Delays in the Supplier's Performance

21.1 Delivery of the Goods and performance of Services shall be made by the Supplier in accordance with the time schedule specified by the Purchaser in the Schedule of Requirements.

21.2 If at any time during performance of the Contract, the Supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the Supplier's time for performance, with or without liquidated damages, in which case the extension shall be ratified by the parties by amendment of the Contract.

21.3 Except as provided in GCC clause 24, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of liquidated damages unless an extension of the time is agreed upon without application of liquidated damages.

22. Liquidated Damages

22.1 If the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Contract, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract price, as liquidated damages, a sum equivalent to 0.5% of the delayed goods or unperformed services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of 10 percent of contract price. Once the maximum is reached, the Purchaser may consider termination of the Contract.

23. Termination for Default

23.1 The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, terminate the contract in whole or in part;

- a) If the supplier fails to deliver any or all of the Goods within the period(s) specified in the Contract, or within any extension thereof granted by the Purchaser.
- b) If the supplier fails to perform any other obligation(s) under the contract.
- c) If the supplier, in the judgment of the purchaser has engaged in corrupt or fraudulent practices in competing for or in executing the contract.

For the purpose of this clause:

“Corrupt practice” means the offering, Giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution.

“Fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the University College of Medical Sciences, and includes collusive practice among Bidders (prior to or after bid submission designed to establish bid prices at artificial non-competitive levels and to deprive the University College of Medical Sciences of the benefits of free and open competition.

23.2 In the event the Purchaser terminates the Contract in whole or in part, the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or services similar to those undelivered, and the supplier shall be liable to the Purchaser for any excess costs for such similar Goods or services. However, the supplier shall continue the performance of the Contract, to the extent not terminated.

24. Force Majeure

24.1 Notwithstanding the provisions of GCC clauses 21, 22, 23, the supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the contract is the result of an event of Force majeure.

24.2 For purposes of this clause, “Force majeure” means an event beyond the control of the supplier and not involving the suppliers fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

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

25. Termination for Insolvency:

25.1 The purchaser may at any time terminate the contract by giving written notice to the supplier, if the supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the supplier, provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the purchaser.

26. Termination for Convenience;

26.1 The purchaser, by written notice sent to the supplier, may & terminate the contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the purchaser’s convenience, the extent to which performance of work under the contract is terminated, and the date upon which such termination becomes effective.

26.2 The goods that are complete and ready for shipment within 30 days after the supplier’s receipt of notice of termination shall be accepted by the purchaser at the contract terms and prices. For the remaining goods, the purchaser may elect;

- a) to have any portion completed and delivered at the contract terms and prices; and/or
- b) to cancel the remainder and pay to the supplier an agreed amount for partially completed goods and for materials and parts previously procured by the supplier.

27. Resolution of Disputes:

27.1 The purchaser and the supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the contract.

28. Governing Language:

28.1 The contract shall be written in the English language.

29. Applicable law:

29.1 The contract shall be interpreted in accordance with the laws of the Union of India.

30. Notices:

30.1 Any notice given by one party to the other pursuant to this contract shall be sent to other party in writing and confirmed in writing to the address specified in the tender notice.

30.2 A notice shall be effective when delivered or on the notices effective date, whichever is later.

31. Taxes and Duties:

31.1 The supplier shall be entirely responsible for all taxes, duties, license fees, octroi, road permits etc. incurred until delivery of the contracted goods to the purchaser. Supplier is also requested to submit the copy of registration certificate of Sale Tax or DVAT or any other taxes, whichever is applicable.

Section –IV

Complete Technical Specification of All Tender Items

S. No.	Tender Group	Page No.
1.	Anatomy	43
2.	Physiology	43-45
3.	Community Medicine	45
4.	MRU	45-55
5.	Patho – Histo	55-59
6.	Patho–Hemato	59
7.	Pathology – TT	60
8.	Patho– Cyto	61
9.	Biochemistry	61-63
10.	Forensic Medicine	64-65
11.	MIU	65
12.	Micro	65-72

SECTION –V

Scheduled of Requirement

For all tenders items the delivery period will be 4 to 6 weeks or as indicated in the final contract or purchase order.

SECTION – VI

QUALIFICATION REQUIREMENTS

1. The bidder should be a manufacturer/authorized representative of a manufacturer who must have designed, manufactured, tested and supplied the equipment(s) similar to the type specified in the “schedule of requirements” upto at least 50% of the quantity required in any one of the last 3 years. Such equipments must be of the most recent series models incorporating the latest improvements in design. The models should be in successful operation for about six months as on date of bid opening.
2. The bidder should furnish the information on all past supplies and satisfactory performance in proforma attached.
3. All bids submitted shall also include the following information.
 - i) Copies of original documents defining the constitution or legal status, place or registration and principle place of business of at the company or firm or partnership, etc.
 - ii) The bidder should furnish a brief write up, backed with adequate data, explaining his available capacity and experience (both technical and commercial) for the manufacture and supply of the required systems and equipment within the specified time of completion after meeting all their current commitments.
 - iii) The bidder should clearly confirm that all the facilities exist in his factory for inspection and testing and these will be made available to the Purchase or his representative for inspection.
 - iv) Details of Service Centers and information on service support facilities that would be provided during the warranty period (in Service Support form).
 - v) Reports on financial standing of the Bidder such as profit and loss statements, balance sheets and auditor’s report of the past three years, bankers certificates, etc.

SECTION - VII

1. PRICE SCHEDULE

Sl. No.	Description of item		Country of origin	Quantity and unit	UNIT PRICE							Grand Total on DDP/FOR basis (Col.5x13)	
	Tender Specification	Deviations with respect to Tender specifications			Ex-factory /Ex – warehouse/Ex-showroom/Off the self (a)	Excise duty if any (b)	Packing & forwarding (c)	Inland Transportation, Insurance and other local costs incidental to delivery (d)	Incidental Services (e)	Sale Tax & other taxes payable if contract is awarded (f)	Any Other Charges (if applicable) (g)		Unit Price A+b+c+d+e+f+g
[1]	[2]	[3]	[4]	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)

IF RATES ARE QUOTED IN INDIAN NATIONAL RUPEES (INR), THE RATES MUST BE ON FOR (DESTINATION OF PURCHASER) BASIS.

IF RATES ARE QUOTED IN FOREIGN CURRENCY, THE RATES MUST BE ON DDP (DELIVERED DUTY PAID) BASIS INCLUDING INSURANCE OF THE ITEM, PLEASE REFER POINT NO.9

Note: i) In case of discrepancy between unit price and total prices, THE UNIT PRICE shall prevail.

Total Bid Price in Rupees(Grand Total).....

In words.....

Bidder's Signature.....

Name

Business Address.....

Place:

Date:

Section VII (Contd.)

2. TIME SCHEDULE

Name of The Bidder _____

Item Sl. No.	Description of Item		Country of Origin	Unit	Quantity	Destination (consignees)	Delivery period require
	Tender Specification	Deviations with respect to Tender specifications					
[1]	[2A]	[2B]	[3]	[4]	[5]	[6]	[7]

SECTION –VIII

1. TENDER/BID FORM

Date.....
Tender No.....
Tender Group

To

(Name and address of purchaser)

Gentlemen and /or Ladies:

Having examined the Bidding Documents vide Tender No., we, the undersigned, offer to supply and deliver..... (Description of Goods and Services) in conformity with the said bidding documents.

We undertake, if our bid is accepted, to deliver the goods in accordance with the delivery schedule specified in the final award/contract.

If our bid is accepted, we will obtain the guarantee of a bank in a sum equivalent to 10 percent of the Contract Price for the due performance of the Contract, in the form prescribed by the Purchaser.

We agree to abide by this bid for a period of 150 days after the date fixed from bid opening and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely “Prevention of Corruption Act 1988”.

We understand that you are not bound to accept the lowest or any bid you may receive.

Dated this day of 2015

.....
(Signature)

.....
(In the capacity of)

Duly authorized to sign Bid for and on behalf of

.....

Section VIII. (Contd..)
2. BID SECURITY or EARNEST MONEY DEPOSIT

The bid security shall be denominated in Indian National Rupees and shall be in the form of a Demand Draft only payable in the name of “Principal, University College of Medical Sciences” payable at Delhi. **Separate Demand Drafts are to be submitted for each item(s).**

The Tenderer/Bidder shall furnish EMD(s)/Bid security **Item-wise** for the amount mentioned at page no 41-42 for the respective item(s).

SECTION – IX

FINAL CONTRACT

The purchaser will issue the final purchase order / award in favour of successful bidder and the purchase order will be treated as FINAL CONTRACT between the Purchaser and Bidder, incorporating all necessary terms & conditions / agreement between the parties.

Section X

PERFORMANCE BANK GUARANTEE

To: (Name of Purchaser)

WHEREAS (Name of supplier)

Hereinafter called “the Supplier” has undertaken, in pursuance of Purchase Order No. dated 201.... To supply (Description of Goods and Services) hereinafter called “the Contract”, costing Rs..... (value of Purchase Order)

AND WHEREAS it has been stipulated by you in the said Contract that the Supplier shall furnish you with a Bank Guarantee by a recognised bank for the sum specified therein as security for compliance with the Supplier’s performance obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the Supplier a Guarantee:

THEREFORE WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up to a total of (*Amount of the Guarantee in Words and Figures) and we undertake to pay you, upon your first written demand declaring the Supplier to be in default under the Contract and without cavil or argument, any sum or sums within the limits of (Amount of Guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the day of 201...

Signature and Seal of the Guarantors

Date.....

Address

SECTION XI

Proforma for Performance Statement

Bid No. Date of opening : Time : Hrs.

Name of the Firm

Order placed by (full address of & date purchaser)	Order No. & date	Description & quantity or of ordered equipment	Value or order	Date of completion of delivery As per Actual Contract	Remarks indicating reasons for late delivery	Has the equipment been satisfactorily functioning (Attach a certificate from Purchaser / Consignee)

Signature and Seal of the Bidder
.....

SECTION – XII

MANUFACTURERS' AUTHORIZATION FORM

No.....Dated:

To,

The Principal,
University College of Medical Sciences,
Dilshad Garden, Delhi-110095

Dear Sir,

Tender No.....

We Who are established and reputable manufacturers of
(name & descriptions of goods offered) having factories at
..... (address of factory) do hereby authorize
M/s.(Name and address of authorised dealer) to submit a bid, and sign
the contract with you against the above NIT.

We hereby extend our comprehensive onsite guarantee and warranty for a period of 5
(Five) years from the date of satisfactory installation for the goods and services
offered by the above firm against this Bid.

Yours faithfully

(Name)
(Name of Manufacturers)

Note: this letter of authority should be on the letterhead of the manufacturer and
should be signed by a person competent and having the power of attorney to bind the
manufacturer. It should be included by the Bidder in its Bid.

SECTION –XIII

CAPABILITY STATEMENT

1. Name and address of the bidderPhone:
2. Classifications
(Circle what is applicable)
 - 1) Manufacturer
 - 2) Authorised Agent
 - 3) Dealer
 - 4) Others please specify
3. Plant:
 - a) Location
 - b) Description, Type and size of building
 - c) Is property on lease or free hold? If on lease indicate date of expiry of lease in each case.
4.
 - a) Type of equipment manufactured and supplied during last 2 years

Name of Equipment	Capacity/ Size	Nos. Manufactured	Projects to which supplies are made	No. of orders on hand
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- b) Type of equipment manufactured, supplied, installed and commissioned during last 2 years

Name of Equipment	Capacity/ Size	Nos. Manufactured	Projects to which supplied installed and commissioned	No. of orders on hand
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5.
 - a) Types of equipment supplied during last 2 years other than those covered under 4 above.

Name of Equipment	Capacity/ Size and Model	Nos. Manufacturers & country of Origin	Total Nos. supplied in India	Projects to which supplies are made	No. of orders in hand
-------------------	--------------------------	--	------------------------------	-------------------------------------	-----------------------

- b) Type of equipment supplied, installed and commissioned during last 2 years other than those covered under 4(a) and (b) above.

Name of Equipment	Capacity/ Size and Model	Nos. Manufacturers & country of Origin	Total Nos. supplied in India	Projects to which supplies are made	No. of orders in hand
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6. Plant facilities: Sq. Meter (Remarks)
- a) Space available for manufacture
 - b) Space available for storage
 - c) Space available for inspection items offered
 - d) Space available for storage items offered
 - e) Are buildings fire resistant
 - f) Are premises approved by Municipal Yes/ No fire
Production?
 - g) Are buildings under municipal fire Production?
 - h) Are power and fuel supply adequate to meet production requirements?
 - i) Are adequate transportation facilities available?
 - j) Are safety measures adequate for performance of proposed contract?
 - k) Are adequate material handling available

7. Details of Testing facilities available

- a) List testing equipment available
- b) Give details of tests which can be carried out on items offered
- c) Details of the testing organization available.

8. Personnel/ Organization:

- 1. Production
- 2. Marketing
- 3. Installation and Commissioning
- 4. Service
- 5. Spare parts
- 6. Administrative

9. Nearest service centre to buyer:

Location Phone No.

10. Details of organization at Service Centre

- a) No. of skilled employees
- b) No. of unskilled employees
- c) No. of engineering employees
- d) No. of administrative employees
- e) List of special repair/workshop facility available
- f) The storage space available for spare parts
- g) Value of minimum stock of spares available at all the service centres in respective currency
- h) List of the models/types by number of equipment serviced by the centre in last 2 years

11. Names of two buyers to whom similar equipment are supplied installed and commissioned in the past and to whom reference may be made by the purchaser regarding the bidder's technical and delivery ability:

1.

2.

12. List of components usually subcontracted.....

13. Schedules for furnishing technical data and certified drawings after receipt of orders.....

14. Workload as percentage of total capacity for the current and 8 forthcoming financial year on quarterly basis.....

15. Number of weeks required to prepare a bid proposal.....

HARDWARE DOWNTIME

What is the minimum downtime you will guarantee on each of the following items. (This is defined as the number of days for which an item of equipment is not usable because of inability of the supplier to repair it)

Item	No. of days of max down time
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ALL TENDER ITEMS

Note:-

1. The average down time of each item should not exceed half the maximum down time.
2. If the maximum down time during use in warranty/maintenance 8 period exceeds the maximum down time as specified in the bid, the supplier should arrange immediate replacement. Failure to arrange for the immediate replacement shall render the supplier liable to a penalty as specified in the special conditions of contract.

Signature of Bidder

Business Address.....

SECTION XIV

SERVICE SUPPORT DETAILS

NEAREST SERVICE CENTRE							
PACK NO.	DESTINATION	LOCATION PHONE NO. TELEX NO.	STATUS OF OFFICEWORKING DAYS & HOURS	NO. OF SOFTWARE ENGINEERS	NO. OF HARDWARE STAFF	VAL. OF MIN. STOCK AVAILABLE AT ALL TIMES	LIST OF MODELS & TYPES OF PCs SERVICED IN LAST 2 YEARS

Signature and Seal of Manufacturer/Bidder

**University College of Medical Sciences
Dilshad Garden Delhi-110095**

List of items to be purchased through Open General Tender 2015-16

Tender Group	S.No.	Name of the Item	Quantity required (in nos)	EMD to be enclosed with Technical Bid (In INR)	Page No. of the specification in Tender Document
Anatomy	1.	Embalming Machine	1	3,000/-	43
Physiology	2.	Perimeter	10	9,000/-	43
	3.	Mosso's Erogograph	5	4,000/-	43
	4.	Pulmonary Function Testing machine with diffusion and body plethysmography	1	90,000/-	43-45
Community Medicine	5.	Ice Lined Refrigerator (ILR)	1	3,500/-	45
MRU	6.	Liquid Nitrogen Container	1	1,000/-	45
	7.	Autoclave	1	4,500/-	45-46
	8.	Vacuum Pump for Media Filtration & Solid Phase Extraction (SPE)	1	3,000/-	46
	9.	Centrifuge Machine	1	1,500/-	46-47
	10.	Gas Chromatography – Mass Spectrometer	1	1,50,000/-	47-50
	11.	UV-VIS Double beam Spectrophotometer with temperature control and data management system	2	90,000/-	50-51
	12.	Atomic Absorption spectrophotometer with fume hood	1	1,10,000/-	51-53
	13.	Semi – Micro Weighing Balance	1	8,000/-	53
	14.	Inverted Microscope with phase Contrast and CCD Camera	1	20,000/-	53-54
	15.	Refrigerated Out – swing Centrifuge	1	10,000/-	54-55
	16.	-150 ^o C Deep Freezer	1	40,000/-	55
Patho – Histo	17.	Slide Warming Plate	1	450/-	55-56
	18.	Slide Filing Cabinet	2	2,500/-	56
	19.	Orbital Shaker (Non-incubated)	1	3,000/-	56
	20.	Gross Station	1	80,000/-	56-57
	21.	Waste Tray for Manual Rotary Microtome	2	1,000/-	57
	22.	Block Filing Cabinet	2	3,000/-	57
	23.	Automated Tissue Processor with Fume Control, Bench Top	1	50,000/-	57-58
	24.	Tissue Flotation Bath	1	450/-	58
	25.	Spectrum Gold Filter for existing Upright Trinocular Research Fluorescent Microscope with Digital Image Analysis system	1	6,000/-	58
	26.	Electrically operated glass etching hand held tool	1	4,000/-	58-59
Patho–Hemato	27.	Ultrapure Type I Water Purification System	1	20,000/-	59
	28.	Fully automated microplate ELISA Reader with printer	1	10,000/-	59
	29.	Projection System for 7 Headed teaching Microscope	1	3,500/-	59
Pathology – TT	30.	Upright LED microscope with imaging system	1	35,000/-	60
Patho– Cyto	31.	PH/ORP probe with Liquid gel and polymer electrolyte	1	1,500/-	61
	32.	Incubator (Table Top)	1	700/-	61
	33.	Antigen Retrieval System	1	9,000/-	61
Biochemistry	34.	Semi-Autoanalyser	1	6,000/-	61-62
	35.	Micro-Centrifuge	1	20,000/-	62-63
	36.	Gradient Thermal Cyclor	1	20,000/-	63
Forensic Medicine	37.	Height Weight Machine	1	400/-	64
	38.	Human Bone (Adult & Original)	Pls. refer detailed specification	1,00,000/-	64
	39.	X-Ray View Box	10	900/-	64
	40.	Digital Weighing Balance	1	1500/-	64-65

Tender Group	S.No.	Name of the Item	Quantity required (in nos.)	EMD to be enclosed with Technical Bid (In INR)	Page No. of the specification in Tender Document
MIU	41.	Plotter Printer	1	15,000/-	65
	42.	Photo Printer/Photo Inkjet Printer	1	3,000/-	65
Micro	43.	Fluorescent Trinocular Microscope	1	40,000/-	65-67
	44.	Brightfeild Trinocular Microscope	1	20,000/-	67-68
	45.	Refrigerator Double Door	5	4,000/-	68
	46.	Binocular Microscope	21	20,000/-	68-69
	47.	B.O.D Incubator	2	10,000/-	69-70
	48.	Microwave Oven	2	700/-	70
	49.	Vertical Autoclave	1	3,000/-	70
	50.	VDRL Shaker Digital	2	3,000/-	70
	51.	Water Bath	2	4,000/-	71
	52.	Clinical Centrifuge Table Top	2	4,000/-	71
	53.	Inspissator	1	15,000/-	71-72
	54.	Egg Incubator	1	1,500/-	72

**University College of Medical Sciences
Open General Tender 2015-16**

Tender Group – Anatomy

S. No.	Name of Item	Specification
1.	Embalming Machine	<p>Embalming Machine - Machine meant for injecting the solution to the cadavers.</p> <p>Fluid Tank - The unit should be made of Stainless steel tank of 10 litre capacity with a reciprocatory pressure unit. Tank should have a safety valve, pressure gauge with rubber tubing for injection.</p> <p>Unit to be mounted on a portable trolley with castor wheels.</p> <p>Machine to be supplied by electric cord, plug and suitable to work on 220 V, 50 Hz, AC supply.</p>

Tender Group – Physiology

1.	Perimeter	<ol style="list-style-type: none"> 1. Perimeter Priestly Smith table model for table top use. 2. Used to measure the peripheral field of vision. 3. The apparatus comprises of a calibrated arc & revolving chart holder. 4. The object carrier which moves over the arc, contains five colours & five apertures of different diameters. 5. There is a calibrated scale and an adjustable chin rest. 6. All fitted over a sturdy base with receptacle for keeping charts. 7. Complete set required with 100 charts.
2.	Mosso's Ergograph	<ol style="list-style-type: none"> 1. Apparatus used to measure work done by forearm muscles in humans. 2. The apparatus consists of arm rest, finger holders, straps and recording unit with automatic ratchet. It should have the advantages of both the Dubois and Mosso's Ergograph. 3. The recording system follows the Dubois design; and the arm rest, finger holders and straps follow the Mosso's design. 4. Complete with one set of 5 kilo weight.
3.	Pulmonary Function Testing machine with diffusion and body plethysmography	<ol style="list-style-type: none"> 1. Spirometry & Flow volume parameters (FVC, FEV1, FEF25, FEF50, FEF75, PEF,PIF etc) 2. Slow vital capacity (ERV,IRV, IC,VT, VCI, VCEX, VCMAX) 3. Maximum Ventilation volume (MVV) 4. Graphic display of Flow/volume, Volume /time loop 5. Thoracic gas volumes & capacities including TGV, RV, TLC,FRC 6. Single breath diffusion capacity (DLCO) by Carbon Monoxide technique 7. Diffusion capacity of lungs: Intra-breath

8. Airway Resistance and Conductance- sReff, Reff, SRtot, Rtot etc
9. Maximal Inspiratory/Expiratory muscle strength
10. Pre & post Bronchodilator test
11. Body Plethysmograph:
 - a) Should have a wide cabin with internal volume range of 800-950 litres
 - b) Transparent glass walls to ensure visibility from all sides
 - c) Seat must be comfortable and adjustable in height
 - d) The arm for the breathing valve support must be flexible enough to allow tests execution even outside the cabin
 - e) Controlling station should be on a movable trolley
 - f) Compensation box for automatic compensation of pressure changes in environment
 - g) Intercom for communication with the patient
 - h) Facility for door closing & opening both by operator and patient
12. Should have precision bidirectional Pneumotach Transducer with
 Flow range: 0-20 L/s,
 Accuracy: 0.2-12 L/s, $\pm 2\%$
 Resistance: $< 0.5 \text{ cmH}_2\text{O/L/s}$ (0.05kpa/L/s at 10 L/s)

 Volume range: $\pm 20\text{L}$
 Accuracy: $\pm 3\%$ or $\pm 50 \text{ ml}$
 Resolution: 1 ml
13. Should have precision Pressure Transducers for box, mouth and flow
14. Box pressure sensor should be Piezoresistive range $\pm 1 \text{ cm H}_2\text{O}$, Resolution 0.05 cm H₂O
15. Mouth pressure sensor should also be Piezoresistive range $\pm 70 \text{ cm H}_2\text{O}$, Resolution 0.1 cm H₂O
16. It should also have Linear gas analyzers
 Carbon monoxide analyzer range 0-0.33 % CO, Accuracy $\pm 0.003\%$, Resolution: 0.0005%, Response time $< 350 \text{ ms}$
 Multi gas analyser for CO & CH₄
17. It should have a facility for automatic BTPS corrections, Gas control module with automatic filling circuit, Rapid and accurate calibration
18. Should be compatible with Windows 7/8 operating system
19. System should be compatible with ATS/ERS guidelines and meets all international safety standards, CE, ISO & US FDA
20. Should be supplied with Mobile Trolley including isolation transformer
21. Should have standard accessories, precision calibration syringe, connecting cables, PFT software and Manual.
22. Additional Accessories: Pulmonary filters-500, Pneumotach screens-2, nose clips-20, Pressure regulator kit-1 set & Sample tubes-2
23. Computer: Latest branded Core i-7 Processor, 4 GB RAM, 18.5" LED color display monitor, DVD Writer, Mouse, Windows-7, Deskjet color printer, 6 KA Online UPS.
24. Gases: Diffusion gas mixture cylinders-2
25. Proper demonstrations to be carried out before finalizing
26. Onsite training should be provided by the company experts for 7-10 days

		27. Th system should have world wide installation, acceptance and recognition in published research papers globally. Performance certificates should be provided from the users using the system in India?abroad.
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Tender Group – Community Medicine

1.	Ice Lined Refrigerator (ILR)	1. Temperature range : 2 to 8 degree centigrade 2. Vaccine Capacity: Around 50 Litres 3. Temperature Display: to be present 4. Holdover time: Around 12-18 hours 5. Defrost: Automatic preferable. 6. World Health Organization (WHO) / UNICEF / PQS approved
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Tender Group – MRU

1.	Liquid Nitrogen Container	<ul style="list-style-type: none"> • System should has the total capacity of total liquid nitrogen around 20-35 Liter. • System should have the storage capacity around 650 samples or more in 2 ml vial. • System should have static holding time 87 days. • System should come with compatible canister at least 6 in number. • System should have minimum neck opening around 3.8 inch to reduce the evaporation. • System should come with low level alarm system. • System should be with vacuum insulation. • System should come with mobility arrangement. • System should have international safety standard such as UL and C-UL. • Optional accessories should be quoted by vender to make this machine operational (LN2 level scale, Cryogloves, LN2 carry container 3-4 litre). • Quality Certification: System should have EU, CE and ISO certification. • User list with name, email and telephone number of user of the quoted model.
2.	Autoclave	<ul style="list-style-type: none"> • Capacity 25 Liters (approx). • Sterilization temperature 121/134 °C • System should be hydraulic tested up to 40 PSI , provided with heating element which are easily replaceable. • System should have steam lined construction, outer body made up of mild steel finished with paint,

		<p>inner chamber made up of stainless steel.</p> <ul style="list-style-type: none"> • System should also be fitted with pressure guage, stem released cocks, spring loaded safety valve etc. • System should be fitted water level indicator to indicate the level inside the boiler. • System should be fitted with paddle lifting device to open or to close the lid with the help of paddle • Quality Certification: System should have EU, CE and ISO certification. • User list with name, email and telephone number of user of the quoted model.
3.	Vacuum Pump for Media Filtration & Solid Phase Extraction (SPE)	<p>VACUUM PUMP GENERAL SPECIFICATIONS:</p> <ul style="list-style-type: none"> • Single Stage Oil – Free Diaphragm Pump • Suitable for Pumping Corrosive Gases and Vapors • All contact parts to be made of Chemically Resistant Fluoroplastics • PTFE – Sandwich Diaphragm • Direct Drive System for Ultra – low- vibration and noise <p>TECHNICAL SPECIFICATION</p> <ul style="list-style-type: none"> • Number of heads / stages 1 / 1 • Max. pumping speed at 50/60 Hz 0.7/0.85 m³/h • Ultimate vacuum (abs.) 100 mbar • Max. back pressure (abs.) 1.1 bar • Inlet connection Hose nozzle DN 10 mm • Outlet connection Hose nozzle DN 10 mm • Rated motor power 0.04 kW • Approx. Dimensions (L x W x H) 247 x 121 x 145 mm • Approx. Weight 5.0 kg <p>ACCESSORIES:</p> <ul style="list-style-type: none"> 1- Rubber vacuum tubing DN 10 mm 2- Chemistry vacuum regulator valve with manometer 3- Silencer DN 10 mm
4.	Centrifuge Machine	<ul style="list-style-type: none"> • Maximum speed: up to 6500 RPM • Swing type rotor heads with various size test tubes • Stepless speed regulator with zero start interlock

		<ul style="list-style-type: none"> • Speed holding accuracy 100 RPM • Digital speed indicator • Dynamic brake • 0-99 minutes digital countdown timer • Imbalance detector with cutoff • Safety lid interlock to prevent cover opening during centrifugation • Self-diagnosis for errors
5.	Gas Chromatography – Mass Spectrometer	<ul style="list-style-type: none"> • Fully automatic computer controlled GCMS with programmable electronic control and having capability of qualitative and quantitative analysis • Should have inbuilt GC main frame with Split / Split less Injection port GC with Pneumatic Flow Control capability Accommodates up to two capillary columns • Operating temperature range suitable for all columns and chromatographic separation • Temperature Range: Ambient +4°C to 450°C (Programmable up to 450 °C) heat up time should be >5 min. • Temperature Programming supports > 9 oven ramps or better • Setting : 1 deg C/min • Temperature Ramp Rate: 120 °C /min, 0.1 °C /min increments • Should Equipped with a cooling system, that enable the reduction of cool down time from 450 deg C to 50 deg C <5 minutes • Software Pneumatic Control up to 0.01psi or better <p style="text-align: center;">Mass Spectrometer</p> <ul style="list-style-type: none"> • Mass range 1.6 – 1050 amu in 0.1 amu steps • Scan speed >12,000 amu or better. • Ionization modes: Electronic Ionization(EI) and Positive and Negative Chemical Ionization (CI) • Ion source temp: upto 350 oC for better sensitivity for active compounds and should be programmable transfer temp 100 oC to 350 oC. • Mass analyzer should be based on Quadrupole with high ion transmission efficiency. • Quadrupole temp: optimizable as per the system requirement. • Vacuum Compensation and automatic leak testing with MS • The detector should have provision to reduce the random noise that occurs with ion transmission, improving the S/N ratio • Scan sensitivity Using helium as carrier gas S/N Ratio in simultaneous SIM and SCAN mode • EI full scan specs 1 µL injection of 1 pg/µL OFN at S/N 600:1 • PCI full scan specs 1 µL injection of 100 pg/µL benzophenone at S/N 600:1 • NCI full scan specs 2 µL injection of 100 fg/µL OFN S/N 1000:1 <p style="text-align: center;">Columns</p> <ul style="list-style-type: none"> • Capillary Column DB-5, 60 mt (or equivalent phase) (2 Nos.) • Capillary Column DB-35 Ultra inert, 60 mt (or equivalent phase) (2 Nos)

		<ul style="list-style-type: none"> • Capillary Column DB-WAX, 60 mt (or equivalent phase) (1 Nos) Head Space Auto sampler • With transfer line/direct injection technique • With at least 10 vials capacity or more. • Entire system heating from ambient up to 200 oC or better in increments of 1oC Vial temperature 50 oC – 200 oC or better. • Overlapped Thermostatting (Vials) 1 • Transfer Line temperature 50 oC – 200 oC or better • Operated through GC Software • Injection volume linearity be 99% correlation and Area Reproducibility ASDA 3% • Injectors should be either do single or simultaneous injections for both injection ports. • Includes all standard accessories like interface cable, reducing union, HSS Vials 22 ml with 20 mm round top, Crimps Caps, Silicon Rubber/Teflon face septa, Hand Crimper, De-capper etc Auto Injector • Sample vial Glass construction, 1.5 – 2.0mL, screw top, Teflon-coated septum. Should be supplied with minimum 15 vials capacity with septum & caps • Priority sample injection can be injected during a sample sequence, and then the sequence can be resumed. Pneumatic controls • Electronic pneumatic controls should be integral part of injector and detector modules No extra tubing and wires should be needed to operate electrical valves, and deliver carrier, detector and make-up gases to injectors and detectors. The digital carrier gas controller should allow operating in constant and programmed flow and pressure modes. Injectors (Two Numbers) • Split / Split less capillary Injector • Suitable for all capillary columns (50 pm to 530pm id) • Spilt less mode for trace analysis • Temperature Range 400°C • Split Ratio Setting Up to 1:900 (1 / 1 ratio increment) • Programmable Capillary Injection Unit. Should support the analysis of compounds with a high boiling point (straight-chain hydrocarbons with 100 carbon number) • Modes of operation : Spilt/Split less, temperature ramped Split less • OCI/PTV and Spilt/Split less capillary injectors with built in pneumatic Control thru software for digital setting of septum purge gas as standard • Temp. range : Room temp + 5 oC to 450 oC in steps of 1oC • Heating rate : 50oC to 450oC within 3 minutes • Cooling rate : 450oC to 50oC within 5 minutes • Heating program: max. Heating rate 120 oC /minute. • Should be configured with Back Flush option. • For 2 way split, for splitting flow between FID & MS detector Flame Ionisation Detector
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		<ul style="list-style-type: none"> • Type :High sensitivity auto-ranging • Temp. Range :Up to 450oC in steps of 1oC • Detection Limit : 3 pg C/sec or better. • Linear Dynamic Range :10⁶ • Suitable for both capillary & OCI/PTV column application; totally software controlled • Detector gas is controlled electronically by pneumatic Control thru software • Fast Automatic Flameout detection and efficient automatic re-ignition Electron capture detector (ECD) • High sensitivity and excellent selectivity • High operating temperature for maximum stability • PPC pneumatics – software flow control of makeup gas • Source 15 mCi ⁶³Ni • Temperature protect ~ 450 °C by software • Carrier gas Either Ar/CH₄ or N₂ • Operating temperature ~100 °C to 450 °C in 1 °C increments • Minimum detectable quantity < 0.05 pg perchloroethylene with argon/methane or nitrogen • Linearity > 10⁴ • Makeup gas Standard Turbo Molecular Pump • Vacuum System should be with turbo molecular pump having capacity of 250 L/min, with air-cooled high vacuum pump, with control and safety interlocks integrated into the system. Library • Latest Edition library (NIST library as well as Wiley Library). Certificate of originality of the libraries should be attached. <p style="text-align: center;">Software</p> <p>The software should be a single point control of GC- MSD system and its modules with an assistant bar showing operating procedures graphically and a wizard function that helps enter complicated parameters. These make it easy for even first-time users to use the software. In addition, should be controlling pretreatment accessories, such as headspace sampling unit, the software should allow continuous automatic operation, while using self-diagnostic function of the software validation assistance. If a data problem occurs, the analysis can also be automatically stopped to prevent wasting precious samples. Since measurement parameters and data analysis parameters can be controlled using a single method file and data files include instrument history information, it is capable of supporting GLP compliance and other requirements. Operating System should be Microsoft Windows 2000 / Windows XP / Windows Vista. Should have feature of Automatic Adjustment of Retention Time, creation of Automatic SIM table as standard software feature. It should also have features for data acquisition, control, chromatographic data evaluation and reporting sequencing</p> <p style="text-align: center;">Accessories</p> <ul style="list-style-type: none"> • Suitable On-line UPS with 60 minutes back up, for GCMS and HS system. • Filled Helium, Nitrogen, and Hydrogen Gas Cylinders & Zero Air Cylinder with regulators for the
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		<p>operation of GCMS with all above accessories.</p> <ul style="list-style-type: none"> • Gas purification System for all gases • Complete Gas station for connecting between Gas Cylinders & GCMS. • Intel Core i5 processor PC (HP/Dell), RAM = 8 GB, TFT Color Monitor = 19 inches, DVD Writer/Player, Two Speakers, Graphic Card with Licensed Microsoft Operating System (latest) with backup copies in DVD/ CD from factory itself. • Licensed Windows Based Software for system functions including control of all accessories, as well as for Data Processing & Data acquisition of System with original copy in CD/DVD with provision of future up gradation should be provided. • 0.5µl, 1 µl, 2 µl, 5 µl, 10 µl Syringes (2 each) • Ferrules for columns for use with FID (20 Nos); Ferrules for columns for use with MSD (20 Nos); Non-stick Inlet Septa (50Nos); Column nuts (2 Nos); deactivated liners (1 no); O-rings for liners (20 nos). • Filament (2 no's), Split Liners (10 No's.), Respective autosampler Vials 1000 no's each with Septa & Screw cap, Vacuum Pump Oil (1 Ltr) • Installation should include demonstration of application on real samples and training of staff. Necessary reagents etc. for demonstration should be provided by the vendor. • User manual • User list with name, email and telephone number of user of the quoted model. • Quality Certification: System should have EU, CE and ISO certification.
6.	<p>UV-VIS Double beam Spectrophotometer with temperature control and data management system</p>	<p>-Microprocessor based UV-VIS spectrophotometer for photometric analysis(Absorption and transmittance),spectral analysis, quantitative determination time scan, DNA/protein quantitation in stand alone and PC mode</p> <p>-Peltier based temperature control</p> <p>-Temperature range 15-50⁰C</p> <p>-High resolution LCD display with dedicated key pad</p> <p>-Photometric system-Double beam optics with silicon photodiode</p> <p>-Wavelength range 190-1100nm</p> <p>-Spectral band width 2nm over complete range</p> <p>-Resolution 0.1nm</p> <p>-Wavelength accuracy ± 0.2nm for entire range with automatic wavelength correction</p> <p>-Wavelength reproducibility±0.1nm</p> <p>-Photometric range:Absorbance0.10-2.0, Transmittance 0-200%</p> <p>-Photometric accuracy ±0.002abs(0-0.5abs) and±0.004abs(0.5-1.0abs)</p> <p>-Photometric repeatability ±0.001 abs(0-0.5abs) and±0.002 abs(0.5-1.0abs) and 0.15%T(0-100%)</p> <p>-Noise level 0.001 abs(500-700nm)</p> <p>-Display :four digit LCD display</p> <p>-Baseline flatness 0.001 abs(190-1100nm)</p>

		<ul style="list-style-type: none"> -Baseline stability<0.01 abs/h above 500nm -Scanning speed 1500 or more to 2nm per minute -Light source:20W halogen lamp and deuterium lamp(extra one lamp each in addition to the installed one), auto switchover according to wavelength -Built in validation, calibration and diagnostic program PC interphase:RS 232 -Application software for analysis -Branded computer:Intel core i5 processor,4GB DDR3rAM,500GBHDD , two or more USB ports in front and four at back,Internet keyboard, optical mouse,17inch LCD color monitor,Windows XP 7,MS office and antivirus software -Pendrive 8GB(2) -Branded laser printer(B&W) atleast 20ppm -Compliance certificate -2.0 KVA UPS certificate
7.	Atomic Absorption Spectrophotometer with fume hood	<ul style="list-style-type: none"> • Fully automated personal computer controlled integrated Atomic Absorption Double Beam Spectrometer. • System with Wavelength Range 190 – 900 nm, with automatic changeover between Flame & Furnace Mode along with Zeeman background correction for graphite furnace and Deuterium/ Zeeman background correction for flame. • Echelle grating/ Czerny Turner Type/ Diffraction grating used with dual blazed and ruling density [RLD (Reciprocal Linear Dispersion) 1.6 nm/mm] or Better • Spectral bandwidths of 3 different types programmable through software using auto slit selection mode. • 6 or more lamps position for flame and furnace with automatic lamp holder with computer controlled lamp selection, its alignment and automatic optimization of energy using cooled lamps. • Built in power supply for Ultra/EDL/Super/equivalent like special lamps to enhance sensitivity. • Selection of single beam for GFA mode. • The system should be integrated for both Flame & Furnace with built in Atomizer and changeover should be controlled through software. • The Detector used shall be Solid State Detector/ PMT (190 – 900 nm) having high quantum efficiency. • Graphite furnace System for Trace analysis facilities (sub ppb) with furnace Head, Power Supply (230 Volts/ 50 Hz), and Furnace Auto sampler (capacity at least 50 Samples). • Graphite Furnace Atomizer > 2600 oC or better. • Built in Camera/Optical sensor in Graphite Furnace to display actual sample introduction and method Optimization. • Total Gas Flow Control System to maintain gas flows (Ratio of fuel/oxidant) at set levels even when subjected to outside variations like nebulizer adjustments. • Two Burner Head should be supplied; one for Air Acetylene (100mm) & Other for N2O burner head (50 mm)

		<ul style="list-style-type: none"> • Automatic Gas Flow adjustment during change over between air C₂H₂ and N₂O • All safety interlocks like Burner head Interlock, Drain Interlock etc to built-in. • Adjustable nebulizer to take analysis with acids, corrosive samples including HF. • Carbon filled PPS Spray Chamber to analyze all types of samples, has high mechanical strength and fast drainage characteristics • Fully Computer controlled Spectrometer for all major accessories including Graphite Furnace, Burner Heads, Auto sampler etc under software control • Integral Furnace Auto sampler with Graphite Furnace for 50 or more samples delivery up to 50µl with increment of 0.1 µl, automatic replicate analyzer. Auto Sampler should allow dilution. • Intel Core i5 processor PC (HP/Dell), RAM = 8 GB, TFT Color Monitor = 19 inches, DVD Writer/Player, Two Speakers, Graphic Card with Licensed Microsoft Operating System (latest) with backup copies in DVD/ CD. • Licensed Windows Based Software for AAS system functions including control of all accessories, both of single element or multi-elements methods for Flame/ Graphite Furnace as well as for Data Processing & Data acquisition of AAS System with original copy in CD/DVD with provision of future up gradation should be provided. • Printer HP Color Ink Jet Printer. • Auto parameter selection for method development, automatic selection of stored methods, automatic selection of flame conditions. Graphite furnace and MHS/HVG Techniques, Burner head position is stored with method, auto optimization of flame, online sensitive context help, and user selectable statistics for SD/ Percentage RSD, built in reporting user format, mouse operation, and software available in CD form. • Gas Pressure Regulators: One each • Double Stage Gas Pressure Regulators with Stainless Steel Diaphragm, for Ultra High Purity Grade gases each for Acetylene, Nitrous Oxide and Argon with necessary SS tubing and fittings for connecting these to Gas Cylinders. • Vendor should quote MHS/HVG for analysis of hydride forming element. • Vendor should quote Individual coded HCL Lamp Zn, Co, Cu, Al, Ni, Ca, Cr and Mg, • Ultra/EDL/Super/equivalent like Special lamp for As, Hg, Cd, Pb. • Vendor should quote Indian component part like C₂H₂ gas Cylinder with regulator, N₂O gas Cylinder, Ar gas cylinder with regulator, Fume Hood (SS) with fan and fitting hardware required for quoted AAS unit. • NIST traceable Standards (like from sigma etc) for each element separately 100 ml (1000ppm) each. • Compatible 20 KVA on Line UPS with at least 30 min back up for Flame and for Furnace mode. • Vendor should quote Following Imported Items: <ul style="list-style-type: none"> ➤ N₂O regulator with Heated Assembly system. ➤ Air Compressor Oil Free, Noise less, with air purifiers and moisture trap Circulating Refrigerated Chiller • Installation should include demonstration of application on real samples and training of staff. Necessary reagents etc. for demonstration should be provided by the vendor.
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		<ul style="list-style-type: none"> • O-Ring kit for Nebulizer, Burner Head O ring, Gasket End Cap O ring, Nebulizer spacer, Gasket End cap Corkprene, Cleaner N2O burner head, Contact Cylinders (5 No's.), sample capillary 2 no's for each volume, Graphite tubes 20 no's, Autosampler cups for graphite furnace 1000 no's for each volume.. • Vendor should quote fume hood for sample preparation. It should be One-piece molded fiberglass liner and pre-set baffle, working space approx. 125 cm X 60cm, should have international certification such as - ASHRAE 110-1995, CFR 29, Part 1910, NFPA 45-2011, SEFA 1-2010 etc. system should be supplied with solid epoxy resin. Sash should be tempered safely glass. Vender will be responsible for ducting approximately 80 running feet of FRP along with arrangement to prevent bird entry in pipe exhaust. Blower should be compatible to provide suction of 100 CFM. Air flow volumetric rate 595 CFM. • User manual • User list with name, email and telephone number of user of the quoted model. • Quality Certification: System should have EU, CE and ISO certification.
8.	Semi-Micro Weighing Balance	<ul style="list-style-type: none"> • Electronic semi microbalance having maximum capacity of approx. 120g. • Readability: 0.01 mg • Repeatability (sd) : ~ 0.04 mg • Linearity: ~ 0.1 mg • Sensitivity temperature drift (10-30°C): 2 ppm/ °C • Stabilization time: ~ 8 s • Weighing pan dimensions: ~ ø 80 mm • Should have fully automatic time and temperature-controlled internal adjustment. • Should be made up of single mono-bloc block rust-proof metal alloy. • Should have tare facility. • Built in date and time function. • High-precision weighing cell with constant accuracy over the entire weighing range. • Connectivity to pc as well as printer. • AC adapter to run on main supply with overload protection. • Should be Programmable 3 Smart Keys for shortcut access to applications. • Quality Certification: System should have EU, CE and ISO certification. • User list with name, email and telephone number of user of the quoted model.
9.	Inverted Microscope with Phase Contrast and CCD Camera	<p>Microscope Body: Microscope body with Infinity optical corrected system, facility for 2way either (100/0,80/20)or (100/0, 50/50) light distribution, up/down focusing with course and fine knobs, side port for attaching digital camera upgradable to one additional port for another camera, binocular tube with built-in Bertrand lens and dark slide shutter along with dioptre adjustment facility.</p> <p>Condenser: Universal turret condenser with long working distance of 72 mm or more and with NA 0.3-0.5, adjustable field iris diaphragm & with 6 positions for optical devices.</p> <p>Illumination: 12 V 100W pre-centered Halogen Illumination or LED.</p> <p>Eyepiece: Paired 10X Eyepiece with F.O.V 22-25 mm or better and dioptre adjustment facility on both eyes.</p>

		<p>Nosepiece: Quintuple/Sextuple revolving nosepiece to accommodate 5/6 objective lenses at a time. Mechanical Stage: Attached XY mechanical stage with flexible right-hand controls; Universal holder for the attachment terasaki plate, slide, 35 mm dia petri dish, tissue culture flasks. Objectives: High performance long working distance objective lenses 4X, 10X, 20X, 40X, and 60X suitable for bright field and Phase Contrast application. Achromate 4X (N.A~ 0.10) Fluorescence grade 10X PH (N.A~ 0.25 or better) for BF and PH Fluorescence grade 20X PH (N.A~ 0.45 or better) for BF and PH with iris correction ring. Long working distance fluorescence grade 40X (N.A~ 0.60 or better) for BF and PH with iris correction ring. Long working distance fluorescence grade 60X (N.A~ 0.70 or better) for BF with iris correction ring. Digital camera: Digital high resolution color camera capable of handling bright field, phase contrast images. Should with 2/3" high density CCD chip with 5 mega pixels or higher. Live frame rate, at least 30 fps or higher. Binning should be 2X2, 3X3, 4X4 in full colour with exposure of 1/20,000s to 8s in manual mode. Software should come along with camera for acquiring, measurements, time lapse imaging, multi channel imaging, merging & capturing of images. Should capable to take image on Monochrome & color mode. Data Collection: Latest branded computer with Windows 7 professional or better, intel i5 processor, 4 GB RAM, DVD writer, 1TB HDD 2.0" TFT monitor along with UPS and multimedia kit.</p> <p>Software: Software should be capable to capture and transfer the image. Also capable of recording movie. Annotation, point to point measurement, scale bar and calibration features should be incorporated. Quality Certification: System should have EU, CE and ISO certification. User list with name, email and telephone number of user of the quoted model. Note: * The Microscope, camera & software should be from the same make for better compatibility and up gradation. * Onsite Technical demonstration after technical bid.</p>
10.	Refrigerated Out-swing Centrifuge	<ol style="list-style-type: none"> 1. Acceleration time to max. speed between 10-15s. 2. SOFT function to Accelerate and decelerate gently. 3. Must have "At set rpm" function which enables timer countdown to be started only when selected speed is achieved. 4. Must have digital display of time, speed (rpm/rcf) and temperature. 5. Should have temperature range in between -5°C to +40°C. . 6. Able to switch display between rcf and rpm speed setting. 7. Separate short spin key. 8. Low noise levels less than 55db at max speed. 9. Automatic motorised locking when lid almost closed. 10. Suitable branded voltage stabilizer with required power as required by the instrument 11. Rotor

		<ul style="list-style-type: none"> (i) Swing head 8 x 15 ml rotor with adaptor for 7ml and 5ml with approx. speed of 4500 rpm • Quality Certification: System should have FDA approved or EU-CE and ISO certification. • User list with name, email and telephone number of user of the quoted model.
11.	-150° C deep freezer	<ul style="list-style-type: none"> • Inner Temperature should be maintained continuously minimum -150°C. • Capacity: 120 Liters and above. • Pt1000 Temperature sensor. • Microprocessor temperature control with LED Digital Display & keypad input for accurate temperature control (1°C increments). • Interior & Exterior of Acrylic finish baked steel. • One outer door with latch integrated lock & Inner lid. • Alarms: High, Low temperature, Power failure alarm, Door open alarm and malfunction buzzer alarm. • Should have high efficiency oil separator that effectively separates lubricant oil from refrigerant that prevents clogging of compressor. • Foamed in place polyurethane insulation minimum 168mm thick. • Alarm lamp with intermittent buzzer sound (for Temp., Filter, Power failure etc) • Remote alarm interface. • Microprocessor controlled Filter clogged check function. • Self-diagnostic function. • Compressor based cooling. • CFC-free, HCFC free. • Access port. • Preferable Accessories: LN2-backup system. • Stabilizer: Should be supplied with suitable voltage stabilizer of sufficient capacity. • Machine should work on single phase 220 V 50 Hz power supply • Quality Certification: System should have EU, CE and ISO certification. • User list with name, email and telephone number of user of the quoted model.

Tender Group – Patho – Histo

1.	Slide Warming Plate	<ul style="list-style-type: none"> - Temperature range – room temperature to 80⁰ C - Programmable temperature control in increments of 1⁰ C - Digital temperature display - Black, scratch resistant surface - Capable of holding at least 40 slides at one time - Size – 600 mm x 150 mm or similar
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		<ul style="list-style-type: none"> - Inclusive of security mechanisms against overheating - 220 V-240 V/ 50 – 60 Hz
2.	Slide Filing Cabinet	<ul style="list-style-type: none"> - Holding Capacity - 50,000 slides of size (25x75mm) in vertical position - Wheels for movement - Double door with chrome plated handle and lock - Made of aluminum / stainless steel
3.	Orbital Shaker (Non-incubated)	<ol style="list-style-type: none"> 1. Stainless steel platform with corrugated rubber mat to prevent slipping and spillage 2. Platform size: 12-15 inches x 12 – 15 inches 3. Speed range – 10-150 rpm 4. Continuous run of 5. Safe for cold room/ fridge use 6. Orbit – 15 mm or higher 7. Microprocessor control of speed and time 8. Manual control by front panel for override of earlier speed 9. Operation: 220 V/ 50 Hz 10. Certification- CE/ UL essential
4.	Gross Station	<ul style="list-style-type: none"> ▪ Retractable acrylic side splash shields ▪ Units with fixed-height work surface ▪ Fixed-height units to have a work surface height -factory set to user specification ▪ Work surface height within range of 33.5 to 45.5" (85.1 to 115.6 cm); 36" (91.4cm) ▪ Deep sink with cold/hot water faucet ▪ Hands-free proximity sensing controls for cold/hot water faucet, built-in table rinse, and disposal ▪ Manual control of taps essential ▪ Abundant light directed to the work surface ▪ Vacuum breaker-protected water supply ▪ Integral centimeter ruler on front lip of tabletop, magnetic instrument bar and paper towel dispenser ▪ Built-in end table rinse that washes down work surfaces quickly ▪ Programmable microprocessor allows clock time to be changed and the filter replacement alarm to be reset ▪ Recirculation exhaust with formaldehyde neutralizing filters and an integral blower ▪ Standard Type 304 or 316 stainless-steel work surfaces and panels ▪ Extruded corrosion resistant aluminum frame designed to distribute weight evenly, stand up to heavy use, resist corrosion, add durability and minimize unit weight ▪ Unit to fit through a standard 32" (81.3cm) doorway ▪ The two assemblies link firmly with easy-to-assemble integral cam latches ▪ Unit to connect to the facility cold/hot water supplies and drain ▪ Units to have hard wired to the facility electrical system • 220 – 240V, 50Hz, • 19mm hot and cold water supply lines with shutoff valves and 33 mm drain line must be supplied

		<ul style="list-style-type: none"> ▪ 13mm industrial-grade flexible hoses with 19mm female hose fittings are supplied for connection to water supply lines ▪ 38mm I.D. reinforced flexible hose is provided for connection to facility drain line. ▪ Camera should be of high QUALITY capable of IMAGES as below: <ul style="list-style-type: none"> ○ 440.000 pixel images. ○ 18 time optical zoom ensuring images of specimen from 2x3 cm up to 40x60 cm. ○ 3 preset color filters for different types of specimen ▪ Certification : ISO, FDA/CE is mandatory ▪ Additional Accessories to be included: <ol style="list-style-type: none"> a) Online UPS – 3 KVA with inbuilt batteries b) Blue Vinyl/Polyethylene Dissecting Board c) 1 no. Magnifying lens mounted on adjustable arm. d) Magnetic Instruments bar e) Replacement Filters- 6 nos.
5.	Waste Tray for Manual Rotary Microtome	<p>Section waste tray to fit with existing manual microtome (make Leica, model no RM2125)</p> <ol style="list-style-type: none"> 1. Anti-static surface 2. Easy to clean
6.	Block Filing Cabinet	<ul style="list-style-type: none"> - Holding Capacity - 20,000 blocks in numerical manner - Block type – block embedded in embedding rings/ disposable cassettes - Wheels for movement - Double door with chrome plated handle and lock - Made of aluminum / stainless steel
7.	Automated Tissue Processor with Fume Control, Bench Top	<ol style="list-style-type: none"> 1. Fully programmable automatic tissue processor with microprocessor control 2. Carousel type, bench top model with lid, movable on rollers 3. Capable of running 2 cassette holding baskets simultaneously 4. Programmable display and touch pad keyboard 5. Electromagnetic motors for agitation and transport of cassette baskets 6. Both automatic and manual operation modes. 7. Number of reagent stations -09 (nine) 8. Reagent containers -9 in number, poly propylene / metal, must be solvent/reagent resistant, with individual lids 9. Capacity of reagent containers: minimum of 1.8 litres 10. Cassette holding baskets - 2 in number, each with holding capacity of minimum 100 cassettes, preferably more 11. Electrically heated wax baths - 3 in number 12. Temperature range of wax baths: 50-65⁰C 13. Cut off temperature of wax bath: 75⁰C (±4⁰C) 14. Wax bath container should be double walled metal. 15. Separate temperature control of each paraffin bath. 16. Microprocessor control of immersion time per station.

		<p>17. Spiral agitation or vacuum on all reagent stations for quality tissue processing</p> <p>18. Additional selectable options for agitation of cassette holding basket in non-submerged state prior to reagent changeover for reduced reagent carry over: desirable.</p> <p>19. Automatic cut off device at the end of processing cycle, with cassette holding basket in second and third wax bath until it is removed.</p> <p>20. Automatic immersion of tissue baskets in case of power failure by built in battery.</p> <p>21. Manual basket removal during power failure.</p> <p>22. Safety indication for non-melted paraffin wax.</p> <p>23. In case of solidification of wax due to power failure, unit should wait for solidified wax to melt before resuming program where it stopped.</p> <p>24. Possible process interruption for reloading or removal of specimens.</p> <p>25. Programmable start delay for at least 7 days.</p> <p>26. No of programs storable in memory: at least 9</p> <p>27. The system should display information about instrument running status.</p> <p>28. In built fume extraction system comprising of activated charcoal filter and exhaust fan.</p> <p>29. Operation: 220-240V/50-60 Hz</p> <p>30. Certification – essential, CE/ US FDA certificates, should be supplied with the instrument.</p> <p>31. Essential accessories</p> <ol style="list-style-type: none"> Online UPS – 2 KVA or higher capacity capable of supporting function for at least 2 hours duration. Carbon filters – 01 in number in addition to that fitted in the instrument Tissue basket – 01 in number
8.	Tissue Flotation Bath	<ul style="list-style-type: none"> - Temperature range – room temperature to 70⁰ C - Programmable temperature control in increments of 1⁰ C - Digital temperature display - Black color interior - Double layered container - With stainless steel lid - Inclusive of security mechanisms against overheating - Size – minimum 200 (Dia) x 70(Depth) x 40 (Rim) mm - 220 V-240 V/ 50 – 60 Hz - User friendly emptying system – optional
9.	Spectrum Gold Filter for existing Upright Trinocular Research Fluorescent Microscope with Digital Image Analysis system	<p>Specification for Spectrum Gold filter for existing Upright Trinocular Research Fluorescent Microscope with digital image Analysis system</p> <ol style="list-style-type: none"> Shemrock/ chroma/ equivalent Exciter 534 nm Emitter 572 nm Dichroic 552 nm Transmission avg >93% Suitable for Alexa Flour 532 or similar wave length.
10.	Electrically operated glass etching hand held tool	<ol style="list-style-type: none"> Pen shape for ergonomic efficiency Casing- anodized aluminium

		<ol style="list-style-type: none"> 3. Capable of deep engraving, marking and labeling of glass 4. Weight less than 100 gms 5. Motor to switch off when not held in hand 6. Operation: 220V/ 50 Hz <p>Essential accessories: 10 tips compatible with the instrument</p>
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Tender Group – Patho–Hemato

11.	Ultrapure Type I Water Purification System	<ol style="list-style-type: none"> 1. Integrated ultrapure water purification system which gives Type I water and should consist of pre filtration unit, RO cartridge, EDI with activated carbon beads and polishing cartridge along with 30L PE tank and softener, direct ultra pure water purification unit ,tank etc 2. The quality of water should be suitable for use in HPLC, GC-MS and molecular biology 3. Flow rate upto 1L/min 4. Output quality upto 18.25 megaohm 5. Conductivity at 25°C: 0.05 µS/cm 6. Resistivity at 25°C 18.2 MΩ·cm 7. TOC (µg/l) < 5 ppb 8. Bacteria count, cfu/ml < 1 9. Particulates (size > 0.22 µm): < 1/ml 10. Pyrogens < 0.001 EU/ml 11. RNase < 0.01 ng/ml 12. DNase < 4 pg/µl 13. Alarm for filter replacement 14. User manual 15. Quality certification: System should have EU, CE and ISO certification.
12.	Fully Automated Microplate ELISA Reader with printer	<ol style="list-style-type: none"> 1. 8-12 measuring channel & 1 reference channel 2. Wave length range of 400-750nm with provision for fitting additional filters. 3. Should have a minimum resolution of 0.001 OD and linearity up to 3.0 OD. 4. Read within 10-15 seconds 5. Variable speed plate shaking capability 6. Read 96 well micro plates 7. At least 25 user defined programmes 8. Data memory of at least last 15 plates 9. Work on 180-260 V AC 10. Single channel pipette with adjustable volume (10-1000 µl) 11. Integrated thermal printer 12. Ability to read flat, U or V bottom plates 13. USB 2 port for external computer control 14. Voltage stabilizer
13.	Projection System for 7 Headed teaching Microscope	<p>48 inches full HD flat TV H5 1 00 Series 5 HOM I Graphic Card 2GB with 1 VGA and HDMI port cable</p>

Tender Group – Pathology – TT

14.	Upright LED microscope with imaging system	<ul style="list-style-type: none"> ➤ Microscope Frame: Upright microscope with built-in Koehler illumination for transmitted light LED (pre centered) with lifespan of at least 50,000 hrs or more. ➤ Observation tube and Eyepieces: Trinocular observation tube with three way light distribution (100:0/20:80 or 50:50/0:100). Eyepiece of 10X magnification with F.O.V 22mm or higher -2 nos with both side diopter adjustment facility. ➤ Mechanical Stage: Ceramic coated coaxial stage with right-hand drive control with two slide holder. ➤ Condenser: Swing – out condenser ➤ Nosepiece: Reversed Sextuple (Six position) revolving nosepiece. ➤ Objectives: For Bright field: Plan Achromat 2X N.A 0.06, Plan Achromat 4X N.A 0.10, Plan Achromat 10X N.A 0.25, Plan Achromat 20X N.A 0.40, Plan Fluor / Plan semi Apochromat 40X N.A 0.75 (spring loaded), Plan Fluor / Plan semi Apochromat 100X N.A 1.3 oil immersion (spring loaded). ➤ Digital CMOS / CCD Camera system: <ul style="list-style-type: none"> ➤ High resolution scientific CMOS/CCD color camera ➤ Chip size should-be (36X23mm) / 2/3"with appropriate relay lens ➤ Resolution of at-least 12.0 MP or more ➤ Minimum 30 frame per second live display ➤ Projected area to be at least 70% of field of view. ➤ Camera should be capable to capture BF images. ➤ Microscope, camera and software should be from same manufacturer. ➤ Image Analysis Software: Compatible software for Image analysis, overlaying multiple image, automated multi wavelength capturing, side by side image comparison, snap /movie acquisition, and time lapse at specified interval, interactive measurement functions. Microscope, camera and software should be from same manufacturer. ➤ Work station: Latest BRANDED computer with i5 processor, HDMI compatible 1GB graphic card for fast data transfer, HDMI port, 8GB RAM, 1 TB HDD, DVD RW, with windows 8 OS, 18 inch TFT screen, Branded 64" Color LED TV display monitor with HDMI Port , wireless keyboard, wireless mouse and 2 KVA offline UPS. ➤ The Microscope should have Safety measure to avoid accidental contact of Objective and slide to prevent the damage to the sample and objective both. ➤ CE,ISO and EC (European conformity) / UL/FDA (CDRH) certification ➤ Essential accessories/ installation terms: <ul style="list-style-type: none"> ➤ Wall mounted installation (of 64 inch LED frame) with wooden frame and sliding doors ➤ Table to house the microscope, computer, UPS. ➤ Cushion stool for person handling microscope
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Tender Group – Patho– Cyto

15.	PH/ORP probe with Liquid gel and polymer electrolyte	<ol style="list-style-type: none"> 1 Digital Pen/Probe model with LCD display 2. pH range 0.0-14.0 3. Readability:- +-0.01 4. Accuracy:- +- 0.01 5. Suitable for automatic calibration and auto reorganization of the pH of buffers & chemical between pH 4.0-9.2 at temperature 20-50 														
16.	Incubator (Table Top)	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">S. NO.</th> <th style="text-align: center;">Specification</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1.</td> <td>Size Inside Chamber (WxDxH)300mmx300mmx300mm</td> </tr> <tr> <td style="text-align: center;">2.</td> <td>S.S digital</td> </tr> <tr> <td style="text-align: center;">3.</td> <td>Air Circulating Fan</td> </tr> <tr> <td style="text-align: center;">4.</td> <td>Microprocessor PID control</td> </tr> <tr> <td style="text-align: center;">5.</td> <td>Temp- Ambient to 90±0.5⁰C</td> </tr> <tr> <td style="text-align: center;">6.</td> <td>220/230 volts</td> </tr> </tbody> </table>	S. NO.	Specification	1.	Size Inside Chamber (WxDxH)300mmx300mmx300mm	2.	S.S digital	3.	Air Circulating Fan	4.	Microprocessor PID control	5.	Temp- Ambient to 90±0.5 ⁰ C	6.	220/230 volts
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17.	Antigen Retrieval System	<ol style="list-style-type: none"> 1. Microwave-based system 2. Programmable time and temperature control 3. Oven capacity – 20 to 30 ltrs 4. Digital display of time and temperature 5. Suitable to work on 220 V, single phase, 50 Hz, AC supply 														

Tender Group – Biochemistry

1.	Semi-Autoanalyser	<ol style="list-style-type: none"> 1. Lamp: Tungsten Halogen Lamp 2. Monochromatic and Bichromatic Measurements 3. Photometric range: 0 – 3.0 A⁰ with resolution of 0.0001 A⁰ 4. Zero drift and filter check facility, facility for light source off. 5. 8 wavelength filters(± 10nm) : 340, 405,450,505/510,550,578,630, 680nm 6. LCD/ LED display 7. Operating environment : 15-30⁰ C , Humidity- upto 80% 8. Assays: Absorbance, End Point, Fixed time, Kinetic , Turbidimetry 9. Blanking: option for Automatic, Water blanking, Reagent Blanking 10. Temperature control: RT, 25, 30, 37⁰ C 11. Calibration: single point, 2 point & multipoint with display, Calibration types: linear, point to point 12. Aspiration volume: 200µl -1000µl & option for vol calibration 13. Test methods: 200 user defined programmes 14. Quality control: Automatic QC calculations, L-J Chart, graph display, results, daily and monthly
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		<p>data view</p> <ol style="list-style-type: none"> 15. Should be FDA approved/ CE certified 16. Memory: minimum of 10000 sample results & minimum of 100 QC results (with retention memory for at least 2 QC values per day) 17. Desirable: Option for short and long continuous washing programme for reaction cuvette/ flow cell 18. Built in thermal printer 19. CMC/ AMC as per the institutional rules 20. Accessories: UPS with atleast ½ hr battery backup, thermal printer rolls 25, suction tube 02 and peristaltic pump tube 02, fuse 02. 21. Free installation & Demonstration
2.	Micro-Centrifuge	<p>Performance:</p> <ul style="list-style-type: none"> • Temperature range of -10°C to + 40°C, which is modifiable during the operation run • Centrifuge must have a “fast cool“ function where cooling process can be shortened • Must have a standby cooling and heating mode up to 8 hours which enables cooling or heating even when not in operation. • Should have automatic temperature start up at a specific time to automatically pre-prepare temperature before centrifugation • Must be able to maintain at 4°C at max. speed with maximum temperature control accuracy. • Max speed of not less than 15,000 rpm with maximum speed control accuracy. • Acceleration time to maximum speed should not be more than 15s for all rotors at max load and a deceleration time of not be more than 15s with the standard 30 x 1.5/2ml rotor, but has option to accelerate and decelerate gently for sensitive samples • Timer for run can be set up to 99minutes continuous • Preference for “At set rpm” function which enables timer countdown to be started only when selected speed is achieved <p>General features:</p> <ul style="list-style-type: none"> • Must have digital display of time, speed and temperature • Programmable time and speed using jog dials • Must be able to store at least 20 routine procedures with programmable buttons for frequently used programs in the first level • Able to switch display between rcf and rpm speed setting • Separate short spin key • Low noise levels less than 65db at max speed • Brushless maintenance free drive • Automatic motorised locking when lid almost closed <p>Safety features:</p> <ul style="list-style-type: none"> • Must follow international safety standards set by IEC • Rotor should be made of anodised aluminium to ensure chemical resistance

		<ul style="list-style-type: none"> • Chamber must be of stainless steel material • Rotor must be autoclavable to completely eliminate any contaminating material • Aerosol tightness of lid / chamber / rotor will be preferred to prevent contamination of biological samples • Automatic imbalance detection • Automatic rotor recognition <p>Rotors:</p> <ul style="list-style-type: none"> • Fixed angle rotor to accommodate 1.5/2ml tubes • Fixed angle rotor to accommodate 15/50ml Falcons® or blood collection tubes when sleeves and adapters are used • Fixed angle rotor accommodating PCR strips
3.	Gradient Thermal Cycler	<ul style="list-style-type: none"> • Gradient Thermal Cycler with Peltier heating and cooling based system. Power Supply: 220 -230 volt, 50–60 Hz • The dual block should also have gradient capability which can be independently controlled for both the blocks. • Should have a maximum ramp rate of 5 ° C or more/second and average ramp rate of 3.0 ° C/sec or more. • Should have adjustable heated lid and also block & calculated temperature control modes. • Should have a temperature range of 0-100 ° C • Should have a temperature accuracy of ± 0.2 ° C or less • Should have temperature uniformity of ± 0.4 ° C or less well to well within 10 seconds of arrival at 90 ° C. • Should have a gradient range of 30-100 ° C and use dynamic ramping for gradient. • Should have a LCD display and have USB ports. • Should have a memory of >1000 programs with further expansion through a USB Flash drive for transfer of files. • Programmable, power-saving auto standby option when instrument is idle. • Option of using the instrument through a PC should be there. • Should be licensed for research. • Should be supplied with 1 KVA online UPS with one hour power back-up • Should have FDA and European CE Certification <p>Original company literature from principal company, manufacturer must be supplied; clearly verifying all specifications.</p>

Tender Group – Forensic Medicine

1.	Height Weight Machine	<ul style="list-style-type: none"> ➤ Height Adjustable Up to 8 Ft. ➤ Weight Measuring Capacity Up to 0 to 150 Kg. ➤ Standard Foot Space for Standing. ➤ Aluminum Water Proof Strips. ➤ Easy to Move and Portable in Nature. 														
2.	Human Bone (Adult & Original)	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%; text-align: center;">NAME OF ITEM/S</th> <th style="width: 30%; text-align: center;">Qty. (in nos.)</th> </tr> </thead> <tbody> <tr> <td>i. Adult's Human Skull (male)</td> <td align="center">10</td> </tr> <tr> <td>ii. Adult's Human Skull (female)</td> <td align="center">10</td> </tr> <tr> <td>iii. Adult's Human Pelvis (male)</td> <td align="center">10</td> </tr> <tr> <td>iv. Adult's Human Pelvis (female)</td> <td align="center">10</td> </tr> <tr> <td>v. Adult Human Disarticulated Skelton Male</td> <td align="center">01</td> </tr> <tr> <td>vi. Adult's Human Disarticulated Skeleton Female</td> <td align="center">01</td> </tr> </tbody> </table>	NAME OF ITEM/S	Qty. (in nos.)	i. Adult's Human Skull (male)	10	ii. Adult's Human Skull (female)	10	iii. Adult's Human Pelvis (male)	10	iv. Adult's Human Pelvis (female)	10	v. Adult Human Disarticulated Skelton Male	01	vi. Adult's Human Disarticulated Skeleton Female	01
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3.	X-Ray View Box	<ol style="list-style-type: none"> 1. Should have double film size(28"x34")capacity. 2. The equipment should have high level of control luminance, without flicker, from a unit that is easy to clean and maintain. 3. The X-Ray viewing screen illumination should dimmable LED of minimum 60000 hours life and shall work on single phase power supply. 4. Should have minimum 10000 Lux output adjustable. 5. Should have individual brightness and ON/OFF controls. 6. The front panel diffuser should be of a glare free type. 7. Should have clip less mechanism to hold and secure the X-Ray negative film when in use. 8. LED lamp should provide a uniform level of illumination across the entire front panel diffuser and should be controlled by electronic step –less dimming controls to provide flicker free dimming from maximum brightness to OFF. 9. Individual light control for each plates. 10. Equipment shall be elegant and compact. 11. Body should be made up of mild steel powder coated. 12. Should be grounded properly. 														
4.	Digital Weighing Balance	<ol style="list-style-type: none"> 1. Maximum capacity: 220gm 2. Weighing platform dimensions: 90mm 3. Readability : 0.1mg 4. Repeatability : 0.1mg 5. Linearity: 0.2mg 														

		6. Settling time: 2 s 7. Sensitivity Temperature Drift: 2ppm/deg. centigrade 8. Weight of Balance: 4.7kg(ME)/ 4.5 kg(ME-E) 9. Approved by weight and measure department by Govt. of India/State.
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Tender Group – MIU

1.	Plotter Printer	<ul style="list-style-type: none"> • Capable of borderless printing large poster on Roll Paper and Water resistant Cloth Media (Cotton-Polyester) (upto A '0" size) • Roll paper size 20 inch to 44 inch wide • PC Compatible – Window XP/7/8 • Resolution 2400 x 1200 dpi or more • Ten or more colour printing with individual high capacity (300ml or more) pigment ink • Speed : Economy mode – 10 or more sq. meter/hr • Memory: 256 MB ore more • Connectivity: Parallel and serial high speed USB • Essential accessories – <ul style="list-style-type: none"> - Essential software for best quality printing - Operating Manual/CD • Power: 220 ± 20 volts • Voltage Stabilizer – 1.0 KVA (Branded)
2.	Photo Printer/Photo Inkjet Printer	<ul style="list-style-type: none"> • Capable of Printing on glossy/Luster and matte paper • 720 x 720 dpi or more • Semi-Auto Paper Loading • USB – High speed • Software – Windows XP/Window 7 • Printing Paper size – Upto 6" x 8" inches or more, <ul style="list-style-type: none"> - Capable of printing on Roll paper • Printing Speed – 5 prints per minute or more • Voltage: 220 ± 20 volts • Essential accessories <ul style="list-style-type: none"> - Paper tray/spacers - Operating Manual - Essential software

Tender Group – Micro

1.	Fluorescent Trinocular Microscope	Specification for Upright Trinocular Research Fluorescent Microscope with Digital Image Analysis System Magnification - 40x -1000x for observation
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		<p>Optical system - infinity optical system with uniform illumination</p> <hr/> <p>EYEPIECE TUBE - TRINOCULAR TUBE WITH INCLINATION ANGLE OF 10-30° ALONG WITH 80:20/50:50 LIGHT DISTRIBUTION PORT FOR SIMULTANEOUS VIEW AND ATTACHING DIGITAL CAMERA AND DOUBLE PORT TO ATTACHED SECOND CAMERA.</p> <hr/> <p>EYEPIECE LENS - 10X (2PCS) WITH BOTH SIDES DIOPTRIC ADJUSTMENT ATLEAST (F.O.V. 25MM) OR HIGHER SHOULD BE ANTI FUNGUS TYPE.</p> <hr/> <p>OBJECTIVE - HIGH PERFORMANCE OBJECTIVE SUITABLE FOR BRIGHT FIELD, FLUORESCENCE MICROSCOPE Plan Achromat 4x NA 0.10, WD 30.00 mm or better Plan Achromat 10x NA 0.25, WD 10.50 mm or better Plan Fluor 20x NA 0.50, WD 2.10 mm or better Plan Fluor 40x NA 0.75, WD 0.66 mm spring loaded or better Plan Fluor 100x NA 1.30, WD 0.16 mm, Oil, Spring loaded or better NOSE PIECE - SEXTUPLE NOSEPIECE. TO ACCOMADATE SIX OBJECTIVES</p> <hr/> <p>COARSE/FINE FOCUSING - FINE 0.1MM PER ROTATION/COARSE 13.8MM PER ROTATION. COARSE MOTION TORQUE ADJUSTABLE. REFOCUSING STOPPER SHOULD BE INCORPORATED.</p> <hr/> <p>MECHANICAL STAGE - SUPER HARD CERAMIC COATED SURFACE, STAGE HANDLE HEIGHT & TENSION SHOULD BE ADJUSTABLE. LOW POSITIONED COAXIAL X(78MM) AND Y(54MM) MOTION CONTROL ON RIGHTHAND SIDE WITH CAPACITY TO HOLD TWO SLIDE GLASS AT A TIME.</p> <hr/> <p>IMAGE CAPTURE BUTTON - IMAGE CAPTURE BUTTON INBUILT FOR QUICK IMAGE CAPTURING CONDENSER - ABBE CONDENSER</p> <hr/> <p>ILLUMINATION - 12V-100W HALOGEN LAMP PRECENTERED AND PREFOCUSED.</p> <hr/> <p>FLUORESCENCE ATTACHMENT:- 120 / 130W MERCURY/METAL HALIDE ILLUMINATION SHOULD HOLD SIX FLUORESCENCE FILTER BLOCKS IN ROTATING TURRET, PRE-CENTERED LIGHT WITH 2000 HRS LAMP LIFE. Lamp should be out-side of the Microscope body.</p> <hr/> <p>SEMROCKOR/EQUIVALENT FILTERS</p> <hr/> <p>DAPI- Exciter 387nm, Emitter 415nm, & Dichroic 409nm with Transmission avg >93% 415-950nm. SPECTRUM GREEN - Exciter 494nm, Emitter 527nm, & Dichroic 506nm with Transmission avg >93% 513-950nm. SPECTRUM RED - Exciter 586nm, Emitter 628nm, & Dichroic 605nm with Transmission avg >90% 415-950nm.</p> <hr/> <p>DIGITAL CAMERA SYSTEM: (A) Digital Monochrome camera for fluorescence imaging</p>
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2.	Brightfeild Trinocular Microscope	<p><u>BRIGHTFIELD TRINOUCLEAR MICROSCOPE WITH PHOTOGRAPHIC ATTACHEMENT</u></p> <ul style="list-style-type: none"> - Body – Almunium Die cast with ergonomic design - Magnification 40-1500X - Illumination: Should provide universal power supply (100v-240v) for 6v 20w Illuminator, fitted with aspheric fields lens, must have dust cover & plano-concave mirror unit. - Objectives: Should have 4x(N.A.0.1), 10 X (N.A. 0.25), 40 X (N.A. 0.65) & 100 X (N.A. 1.25) objectives. <ul style="list-style-type: none"> • Objective lenses should be plano-achromatic – for flat and sharp images in the entire field of view. • Parafocality & centring should be maintained during interchangeability of objectives.

		<ul style="list-style-type: none"> - Eye piece lens: Should be 10 X widefield colour compensating & F.N. 18mm, Eye piece lenses must be guarded. - Trinocular observation tubes with binocular tube inclination of 30 or 45 degree & 360 Degree rotatable and with inter-pupillary distance adjustment range appx. 50-75mm - Trinocular eye piece tube should be attached with a digital colour camera <ul style="list-style-type: none"> • The photographic unit should have a control unit for focusing & viewing On built in LCD (Microimage projection system) • Optical images can be clicked in scene mode and stored. - Condenser : Abbe condenser, N.A. (1.25), with aperture iris diaphragm. <p>Optical assemblies including eyepiece, objectives & observation tube should be antifungal treated.</p> <ul style="list-style-type: none"> - Stage : mechanical stage movement 76 X 40mm, with scale. <ul style="list-style-type: none"> • Stage size 120 X 132 mm or 155 X 134. - Should be an ISO 9001-2000 certified company - Tenderer must have a service network & users list.
3.	Refrigerator Double Door	<ol style="list-style-type: none"> 1. Vertical double walled 2. Double doors 3. Capacity:- 350 - 400 Ltr. Approx. 4. Accuracy = 1.0⁰C 5. Frost Frees auto 6. Safety fuse, shock protection and locking facility 7. Inbuilt voltage stabilizer
4.	Binocular Microscope	<p>Salient and Unique Features Fixed Koehler Binocular Laboratory Microscope for Transmitted Light Bright field studies with HAL Illumination and LED Warm light illumination and Eyepiece with 100x Dry objective The microscope should be capable of Bright field and should be upgradeable to Phase contrast and Fluorescence microscopy.</p> <p>The microscope should have the following technical features:</p> <ul style="list-style-type: none"> * Ergonomically designed rugged stand for longtime comfortable usage. Carrying handle fully integrated into the stand. * Microscope should be with Infinity Color Corrected System Optics with anti-fungus treatment. * Built-in Transmitted light Modular designed illumination with 6V 30W halogen lamp with easy lamp changing and should have provision to replace the same with white light Long Life LED- warm-light, 3200K illumination by the user. Both can be used alternatively * Intensity level display by means of a 5-element Display on both sides of the stand via live blue LEDs. Protects lamp life by ensuring that all instruments are turned off when not in use. External main power supply with electronic main control from 110V to 240V.

		<ul style="list-style-type: none"> * Quadruple reverse nosepiece tilted backwards (to accommodate 4 objectives) with precision click stops for easy rotation. Allows easy access to stage and protects objectives. * ABBE Condenser with numerical aperture 1.25 with built-in aperture diaphragm. * Long-Life Stage coating Dimensions (width x depth) 140 x 135 mm; Slide Stage should have ball bearing specimen holder and should have right handed coaxial X and Y movement controls on the right hand side and specimen holder with spring clip on the left side; The traveling range of the stage should be 75 x 30mm with vernier marking. easy to read vernier scales for precise and fast repositioning of sample. * The stage focus movement range should be 15mm or more with coaxial coarse and fine focus knobs on either side of the stand. The minimum step size of the fine focus should be 2 micron or better. Focus stop mechanism to protect slide damage should be available. * Inclined Binocular tube with 30deg swiveling eyepiece tube and adjustable viewing suitable for eyepieces up to field of view 20mm height of at least 40mm (Siedentopf tube, viewing heights 385 to 425mm). Interpupillary distance should be variable between 48 to 75 mm or better. Binocular tube should be fully made of metallic and should not have any plastic covers. * Paired Eyepieces with 10x magnification, field of view 18mm and should be suitable for spectacle wearers. Both eyepieces should be with front focusable eye lenses with ± 5 dioptre correction. * High contrast Fully Plan Achromatic objectives, 4x/0.10, 10x/0.25, 40x/0.65 and 100x/1.25 oil. 40x and 100x front optics are spring loaded. All the objectives should be of parfocal corrected for easy specimen focusing in various magnifications. * Microscope should be upgradeable for Dark field, Phase contrast and incident light LED fluorescence techniques. * Microscope should include daylight and green filters, immersion oil and dust cover
5.	B.O.D Incubator	<ul style="list-style-type: none"> • B.O.D. Incubator size 10 cub. feet temperature range +5°C to 55°C. • Double door, inner door made of glass. • Thermostat regulated with automatic switch over from cold to hot & vice versa. • Pilot light to indicate the working unit. • Fitted with 60 Watt bulb in chamber with independent switch out side, with separate dial thermometer and temperature control knob. • Fitted with circulation fans. • Inside chamber and racks made of stainless steel. • Glass dial thermometer inside the chamber. • Should be an ISO 9001-2000 certified Company

		<ul style="list-style-type: none"> • Tenderer must have service network and users list <p>Safety Care: Built in temp deviation audio visual alarm. Safety thermostat for over shoot temp. Cut off system HRC fuses for compressor heater & main, time delay circuit for safety of compressor.</p>
6.	Microwave Oven	<ul style="list-style-type: none"> • <u>30-35-Ltr</u> • 5 star • Should have timer display • Should have Power option display • Option to set timer • Different power output option
7.	Vertical Autoclave	<ol style="list-style-type: none"> 1. Should be a vertical autoclave having inner dimensions of 350 x 550mm. 2. Should be double walled with outer stainless steel 304 & inner stainless steel 18 SWG sheet. 3. Lid should be made of S.S.plate & tightened by radial locking system with foot lifting arrangement to open the lid. 4. Should be fitted with joint less silicon rubber gasket. 5. Should be equipped with pressure gauge, steam release valves and safety valve. 6. Should be fitted with water level arrangement to indicate water position inside the boiler. 7. Should be fitted with automatic low water level cut of devise. 8. Should be fitted with a digital timer and a digital temperature indicator. 9. Should have an automated pressure switch which can be set from 5 psi to 20 psi \pm 2 psi & should have drain. 10. Should have SS perforated basket. 11. Should have a cord & plug to work on 220 volts and 50 cycle AC supply. 12. Should be fitted with 3 KW ISI marked immersion type heating element. 13. Autoclave to be supplied with 4 no's silicon rubber joint less gasket and 6 no's 3 KW ISI marked immersion type heating element. <p>Manufacturer/Supplier should have ISO certification for quality standards.</p>
8.	VDRL Shaker Digital	<ul style="list-style-type: none"> • Should have platform size 12"x12" Approx. • Should have dimension of 300 x 300 x 125mm Apporx. • Speed range should be 80-200 RPM • Digital count down timer should have 15 min – (With automatic switch off) • Shaking Orbit should be 10 mm • Weight, not more than 3 Kg • Power supply should be 220-240 V, 50 Hz
9.	Water Bath	<p>Inner size of the water chamber: - 400 X 300 X 175 mm (LxBxD) Aprox.</p> <p>Capacity: 20-25 lts</p> <p>Temperature range: ambient to 100oC</p> <p>Accuracy: \pm 0.1 - 0.5oC</p>

		Temperature control method: Sensor: Mount: Inner body: Outer body: Flange: Insulation: Display and controller: Input voltage:	Microprocessor PID controlled PT. 100 Table top. S.S. (304) M.S. with powder coating. S.S. (304) PUF insulation Digital 220V, 50 Hz.
10.	Clinical Centrifuge Table Top	<ol style="list-style-type: none"> 1. Routinely used table top model 2. Should have digital display of speed / timer 3. Should have speed regulator step less 4. Maximum speed should be up to 4000 RPM to 5000 RPM 5. Should be able to detect imbalance 6. Should have lid lock for safe run. 7. Should be able to adapt various capacity rotors. 8. Rotors 9. 24x15ml angle head for holding tubes 	
11.	Inspissator	<ol style="list-style-type: none"> 1. A shallow stainless steel tray should be rested inside a tank containing water. 2. The whole undersurface of the tray must be in contact with water at a constant temperature which ensures that the temperature of the McCartney bottles with media is also constant. 3. The surface of the tray is a series of sloping steps (at 9 degree angle above the horizontal) and will hold 162 universal containers. 4. A blanket should be placed over the containers to exclude draughts and a quilted cover provides thermal insulation. 5. Both blanket and quilt are made from insect-resistant materials. 6. The temperature of the water under the tray is must be controlled by a digital immersion thermostat. 7. Accuracy and reproducibility of set temperature are ensured with the digital display 1. of actual and, at the touch of a button, set temperature. 8. The control unit should be mounted on a bridge plate over one end of the bath, from which heater; stirrer and temperature sensors project down into the bath. 9. All moving parts should be incorporated in the control unit which removable for servicing. 10. The tray and tank are made of stainless steel and are fitted in an outer case of laminated wood. 11. A constant level device is fitted maintain the water level despite evaporation losses. 12. Std temperature must be 85°C; 13. Operating temp. Range should be: ambient to 90°C.; 14. It should have LED temperature display and Display resolution: 0.1c; 15. Voltage regulators of appropriate rating should be included for each item ton cope with 160-260 V.8 16. Uniformity: tray surface + or - 0.7c; 17. Heater power should be (approx.) 1.4Kw, 230V; 18. Tank capacity should be (approx.) 45 lit. 	

		<ul style="list-style-type: none"> 19. Working area should be approx 820/594 mm (length/width) 20. Overall dimensions should be approx 1040/600/380mm (l/w/h) 21. Over temperature protection should be fixed cut-out; 22. Electrical power: 220-240V 50/60 Hz, 1.5kW (approx.) 23. Approx.weight: 25-35 kgs. 24. Voltage regulator of appropriate rating should be included for each item to cope with 160 - 260 V. 25. The instrument should be rust free
12.	Egg Incubator	<ul style="list-style-type: none"> 1. Outer body should be made of MS sheet, duly pre-treated & finished with epoxy powder coated paint. 2. The inner chamber should be made of aluminium sheet. 3. Door should be with double glass viewing windows to facilitate easy inspection of interior. 4. The chamber trays should have with manual tilting mechanism. 5. Water tank should be provided at bottom made of stainless steel 304 rust proofs and a water outlet should be provided in the tank. 6. Water heater is fixed in the tank. 7. Air circulating fan should be present to ensure uniform temperature inside the chamber. 8. Thermostat regulated with automatic switch over from cold to hot & vice versa. 9. Pilot light to indicate the working unit. 10. Fitted with 60 Watt bulb in chamber with independent switch outside, with separate dial thermometer and temperature control knob. 11. Fitted with circulation fans. 12. It Should have digital display of temprature . 13. Temperature range should be ambient to 70°C ± 0.5°C controlled by imported thermostat. 14. Control penal should be provided along with thermostat control knob, pilot light, main ON/OFF switch etc. 15. Warranty should be 5 years from the date of installation. 16. Equipment is suitable to work on 230 volts, 50 Hz, single phase, AC supply. 17. It should have capacity of 100 eggs incubation.