DOMESTIC

TENDER ENQUIRY DOCUMENT

FOR PURCHASE OF MEDICAL EQUIPMENT FOR 07 NEW MEDICAL COLLEGES IN MADHYA PRADESH

On behalf of GOVT. OF MADHYA PRADESH

DIRECTORATE OF MEDICAL EDUCATION & RESEARCH HITES/PCD/MP/04/PRECLINICAL-GT/17-18

Through



HLL INFRA TECH SERVICES LIMITED

(Subsidiary of HLL Lifecare Ltd., a Govt. of India Enterprise) B-14 A, Sector-62,Noida-201 307 Phone: 0120-4071500; Fax: 0120-4071513 URL: <u>www.hllhites.com</u> Email: pcd@hllhites.com

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SECTION I

NOTICE INVITING TENDER (NIT)

Tender Enquiry No.: HITES/PCD/MP/04/PRECLINICAL-GT/17-18 Dated: 27.10.2017

(1) Procurement & Consultancy Services Division of HLL Infra Tech Services Limited (HITES), a fully owned subsidiary of HLL Lifecare Ltd. (HLL), for and on behalf of Govt. of Madhya Pradesh, Directorate of Medical Education & Research, invites sealed tenders, from eligible and qualified tenderers for supply of Medical Equipment in departments of Anatomy, Physiology, Biochemistry, Pathology, Microbiology, Pharmacology, Forensic Medicine & Community Medicine to 07 upcoming Medical Colleges/ Institutes in Madhya Pradesh as mentioned in this Tender Enquiry Document:

Sl No	RFx No	Equipments	Qty	Tender Processing Fee	EMD
1	3000002404	Items for Department of Anatomy	7 sets	2360	1,28,000
2	3000002405	Items for Department of Physiology	7 sets	2360	1,72,000
3	3000002406	Items for Department of Biochemistry	7 sets	2360	1,05,000
4	3000002407	Items for Department of Community Medicine	7 sets	2360	1,47,000
5	3000002409	Items for Department of Microbiology	7 sets	2360	58,000
6	3000002410	Items for Department of Pathology	7 sets	2360	1,75,000
7	3000002411	Items for Department of Forensic Medicine	7 sets	2360	3,60,000
8	3000002412	Items for Department of Pharmacology	7 sets	1180	28,000

<u>Note</u>: Tender processing Fee is inclusive of GST @18% (Our GSTIN: 09AADCH4882R1ZP) The bidder must quote for all the items in the BOQ of each Schedule, failing which the bid will be considered Non- Responsive.

(2) Tender timeline:

Sl. No.	Description	Schedule
a.	Last date for receipt of Pre-bid queries	07.11.2017,06.00 PM
b.	Pre-bid meeting date, time	08.11.2017, 11:00 AM 6 th Floor Conference Hall, DME, Satpura Bhawan, Bhopal.
d.	Closing date & time for submission of online bids	30.11.2017, 06:00 PM
c.	Closing date & time for submission of tender processing fee and EMD in physical form*	01.12.2017, 02:00 PM
e.	Time and date of opening of online bids	01.12.2017, 02:30 PM
f.	 Venue for :- Submission of tender processing fee, EMD in physical form. Tender Opening-Tech Bid 	HLL Infra Tech Services Limited, Procurement & Consultancy Services Division, B-14 A, Sector-62, Noida-201307

* Bidders have to submit Original Bank Instruments for tender processing fee and EMD within the above mentioned date and time

SPECIFIC Instructions for e-Tender Participation:-

- (3) The tenders are invited through the e-tender portal of HLL/HITES (<u>https://etender.lifecarehll.com/irj/portal</u>) only.
- (4) The prospective bidders have to register in the e-tender portal for participating in the tender. There is no registration fee. The instruction for registering in the portal along with video tutorial is available in the *Bidder Help Documents* provided in thee-tender portal login screen.
- (5) Bidders should have a valid Class 3 Digital Signature Certificate with signing and encryption keys.
- (6) On completion of the registration process, the bidders will be provided user ID and password within 72 hours (excepting non-working days). In order to submit the bids electronically bidders are required to have a valid Class 3 Digital Signature Certificate (signing and encryption/ decryption certificates).
- (7) Bidders can access the portal for viewing/ downloading the tender enquiry document& uploading tender(s) after the receipt of User ID & Password.
- (8) Bidders are requested to go through the *Bidder Help Documents* on e-tender portal before proceeding for bidding.
- (9) The bidders shall submit the required Tender Processing Fee (in form of Demand Draft or Banker's Cheque) and EMD (as per GIT clause no. 19.3) in physical form in favour of 'HLL Infra Tech Services Limited' at the scheduled time and venue. Tender processing Fee is required from all the bidders irrespective of their registration with NSIC or any other Govt. organisation
- (10) Tenderer may download the tender enquiry documents from the web site <u>www.hllhites.com</u> or <u>www.lifecarehll.com</u> or <u>www.eprocure.gov.in/cppp</u> or <u>https://etender.lifecarehll.com/irj/portal</u>.
- (11) The submission of tender online can only be done thru 'https://etender.lifecarehll.com/irj/portal.
- (12) All prospective tenderers may attend the Pre Tender meeting. The venue, date and time indicated above.
- (13) Tenderers shall ensure that their bids, complete in all respects, are submitted online through HLL eportal (as described above) ONLY. No DEVIATION is acceptable.

CEO HLL Infra Tech Services Limited

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A. PREAMBLE

1. Definitions and Abbreviations

1.1 The following definitions and abbreviations, which have been used in these documents shall have the meanings as indicated below:

1.2. **Definitions:**

- (i) "Purchaser" means Ministry of Health & Family Welfare Govt. of India.
- (ii) **"e-Tender"** means Bids / Quotation / Tender received from a Firm / Tenderer / Bidder online.
- (iii) **"Tenderer"** means Bidder/the Individual or Firm submitting Bids/Quotation/e-Tenders.
- (iv) **"Supplier"** means the individual or the firm supplying the goods and services as incorporated in the contract.
- (v) "Goods" means the articles, material, commodities, livestock, furniture, fixtures, raw material, spares, instruments, machinery, equipment, medical equipment, industrial plant etc. which the supplier is required to supply to the purchaser under the contract.
- (vi) "Services" means services allied and incidental to the supply of goods, such as transportation, installation, commissioning, provision of technical assistance, training, after sales service, maintenance service and other such obligations of the supplier covered under the contract.
- (vii) "Earnest Money Deposit" (EMD) means Bid Security/ monetary or financial guarantee to be furnished by a tenderer along with its tender.
- (viii) "Contract" means the written agreement entered into between the purchaser and/or consignee and the supplier, together with all the documents mentioned therein and including all attachments, annexure etc. therein.
 - (ix) "Performance Security" means monetary or financial guarantee to be furnished by the successful tenderer for due performance of the contract placed on it. Performance Security is also known as Security Deposit.
 - (x) "Consignee" means the Hospital/Institute/Medical College/ person to whom the goods are required to be delivered as specified in the Contract. If the goods are required to be delivered to a person as an interim consignee for the purpose of despatch to another person as provided in the Contract then that "another" person is the consignee, also known as ultimate consignee.
- (xi) "Specification" means the document/standard that prescribes the requirement with which goods or service has to conform.
- (xii) "Inspection" means activities such as measuring, examining, testing, gauging one or more characteristics of the product or service and comparing the same with the specified requirement to determine conformity.
- (xiii) "Day" means calendar day.

1.3 Abbreviations:

- (i) "TE Document" means Tender Enquiry Document
- (ii) "NIT" means Notice Inviting Tenders.
- (iii) "GIT" means General Instructions to Tenderers
- (iv) "SIT" means Special Instructions to Tenderers
- (v) "GCC" means General Conditions of Contract
- (vi) "SCC" means Special Conditions of Contract
- (vii) "DGS&D" means Directorate General of Supplies and Disposals
- (viii) "NSIC" means National Small Industries Corporation

- (ix) "PSU" means Public Sector Undertaking
- (x) "CPSU" means Central Public Sector Undertaking
- (xi) "LSI" means Large Scale Industry
- (xii) "SSI" means Small Scale Industry
- (xiii) "LC" means Letter of Credit
- (xiv) "DP" means Delivery Period
- (xv) "BG" means Bank Guarantee
- (xvi) "ED" means Excise Duty
- (xvii) "CD" means Custom Duty
- (xviii) "RR" means Railway Receipt
 - (xix) "BL" means Bill of Lading
 - (xx) "FOB" means Free on Board
- (xxi) "FCA" means Free Carrier
- (xxii) "FOR" means Free On Rail
- (xxiii) "CIF" means Cost, Insurance and Freight
- (xxiv) "CIP (Destinations)" means Carriage and Insurance Paid up to named port of destination. Additionally the Insurance (local transportation and storage) would be extended and borne by the Supplier from ware house to the consignee site for a period including 3 months beyond date of delivery.
- (xxv) "DDP" means Delivery Duty Paid named place of destination (consignee site)
- (xxvi) "INCOTERMS" means International Commercial Terms as on the date of Tender Opening
- (xxvii) "CMC" means Comprehensive maintenance Contract (labour, spare and preventive maintenance)
- (xxviii) "RT" means Re-Tender.
- (xxix) "GST" means Goods and Services Tax

2. Introduction

- 2.1 The Purchaser has issued these TE documents for purchase of goods and related services as mentioned in Section VI "List of Requirements", which also indicates, *interalia*, the required delivery schedule, terms and place of delivery.
- 2.2 This section (Section II "General Instruction Tenderers") provides the relevant information as well as instructions to assist the prospective bidders in preparation and submission of bids. It also includes the mode and procedure to be adopted by the purchaser for receipt and opening as well as scrutiny and evaluation of tenders and subsequent placement of contract.
- 2.3 The tenderers shall also read the Special Instructions to Tenderers (SIT) related to this purchase, as contained in Section III of these documents and follow the same accordingly. Whenever there is a conflict between the GIT and the SIT, the provisions contained in the SIT shall prevail over those in the GIT.
- 2.4 Before formulating the tender and submitting the same to the purchaser, the tenderer should read and examine all the terms, conditions, instructions, etc. contained in the TE documents. Failure to provide and/or comply with the required information, instructions etc. incorporated in these TE documents may result in rejection of its tender.

3. Availability of Funds

3.1 Expenditure to be incurred for the proposed purchase will be met from the funds available with the purchaser/consignee.

4. Language of Tender

- 4.1 The tender submitted by the tenderer and all subsequent correspondence and documents relating to the tender exchanged between the tenderer and the purchaser, shall be written in the English language, unless otherwise specified in the Tender Enquiry. However, the language of any printed literature furnished by the tenderer in connection with its tender may be written in any other language provided the same is accompanied by an English translation and, for purposes of interpretation of the tender, the English translation shall prevail.
- 4.2 The tender submitted by the tenderer and all subsequent correspondence and documents relating to the tender exchanged between the tenderer and the purchaser, may also be written in the Hindi language, provided that the same are accompanied by English translation, in which case, for purpose of interpretation of the tender etc., the English translations shall prevail.

5. **Eligible Tenderers**

This invitation for tenders is open to all suppliers who fulfil the eligibility criteria specified in 5.1 these documents.

Eligible Goods and Services 6.

6.1 All goods and related services to be supplied under the contract shall have their origin in India or any other country with which India has not banned trade relations. The term "origin" used in this clause means the place where the goods are mined, grown, produced, or manufactured or from where the related services are arranged and supplied. This being domestic tender goods should be manufactured or sourced at India.

7. **Tendering Expense**

7.1 The tenderer shall bear all costs and expenditure incurred and/or to be incurred by it in connection with its tender including preparation, mailing and submission of its tender and for subsequent processing the same. The purchaser will, in no case be responsible or liable for any such cost, expenditure etc. regardless of the conduct or outcome of the tendering process.

B. e-TENDER ENQUIRY DOCUMENTS

8. **Content of Tender Enquiry Documents**

In addition to Section I – "Notice inviting e-Tender" (NIT), the TE documents include: 8.1

Section II	- General Instructions to Tenderers (GIT)
Section III	– Special Instructions to Tenderers (SIT)
Section IV	– General Conditions of Contract (GCC)

- Special Conditions of Contract (SCC) Section V

- List of Requirements Section VI
- Technical Specifications Section VII
- Section VIII – Deleted
- Section IX - Oualification Criteria
- Section X – Tender Form
- Section XI - Price Schedules
- Section XII - Ouestionnaire
- Section XIII Bank Guarantee Form for EMD
- Section XIV – Deleted
- Section XV - Bank Guarantee Form for Performance Security/CMC Security

Section XVI – Contract Forms A Section XVII – Deleted Section XVIII – Proforma of Final Acceptance Certificate by the consignee Section XIX – Consignee List

8.2 The relevant details of the required goods and services, the terms, conditions and procedure for tendering, tender evaluation, placement of contract, the applicable contract terms and, also, the standard formats to be used for this purpose are incorporated in the above-mentioned documents. The interested tenderers are expected to examine all such details etc. to proceed further.

9. Amendments to TE documents

- 9.1 At any time prior to the deadline for submission of tenders, the purchaser may, for any reason deemed fit by it, modify the TE documents by issuing suitable amendment(s) to it.
- 9.2 Such an amendment will be notified in writing by registered/speed post or by fax/telex/e-mail, to all prospective tenderers, who have received the TE documents and will be binding on them.
- 9.3 In order to provide reasonable time to the prospective tenderers to take necessary action in preparing their tenders as per the amendment, the purchaser may, at its discretion extend the deadline for the submission of tenders and other allied time frames, which are linked with that deadline.

10. Clarification of TE documents

10.1 A tenderer requiring any clarification or elucidation on any issue of the TE documents may take up the same with the purchaser in writing on their letter head duly signed and scanned through email to <u>pcd@hllhites.com</u> and <u>bmenoida@hllhites.com</u>. The purchaser will respond to such request provided the same is received by the purchaser within the due date mentioned in the NIT. Any queries/representations received later shall not be taken into cognizance.

C. PREPARATION OF e-TENDERS

11. Documents comprising the e-Tender

- 11.1 The tender(s) shall only be submitted online as mentioned below:
 - (i) Technical Bid (Consisting of Techno-Commercial bids in excel format provided with the tender enquiry along with the supporting documents i.e. scanned copies of Tender Processing Fee, EMD, Eligibility Criteria & Technical Specifications viz. Product Specification Sheets/Brochures, OEM Certificate, etc.) has to be attached in the C-folder of e-tendering module. Bidders have to ensure that the documents uploaded in pdf format are legible.
 - (ii) Price Bid has to be submitted in the prescribed excel format provided with the tender enquiry.

Note:

- (i) The Tender Processing Feeand EMD, in favor of HLL Infra Tech Services Ltd, are to be submitted in physical form as per Section I, Notice Inviting Tender, of this tender enquiry.
- (ii) The bidders have to follow the steps listed in *Bidding Manual Attachment Mode* available in the *Bidder Help Documents* of e-tender portal login screen for uploading the Techno-Commercial Bid.

A) Details of Technical Tender (Un priced Tender)

Bidders shall furnish the following information along with technical tender:.

- i) Techno-Commercial Bid in excel format provided with the tender enquiry
- ii) Earnest money Deposit (EMD) furnished in accordance with GIT clause 19.1 alternatively, documentary evidence as per GIT clause 19.2 for claiming exemption from payment of earnest money.
- iii) Tender Form as per Section X (without indicating any prices).
- iv) Documentary evidence, as necessary in terms of clauses 5 and 17 establishing that the tenderer is eligible to submit the tender and, also, qualified to perform the contract if its tender is accepted.
- v) **Deleted.**
- vi) Power of Attorney issued by Competent Authority in favour of the person who is digitally signing/ uploading the tender(s).
- vii) Documents and relevant details to establish in accordance with GIT clause 18 that the goods and the allied services to be supplied by the tenderer conform to the requirement of the TE documents.
- viii) Performance Statement as per section IX along with relevant copies of orders and end users' satisfaction certificate.
- ix) Price Schedule(s) as per Section XI filled up with all the details including Make, Model etc. of the goods offered with prices blank (without indicating any prices).
- x) Certificate of Incorporation.
- xi) Self-Attested copies of VAT registration certificate and PAN Card.
- xii) Non conviction /no pending conviction certification issued by Notary on judicial stamp paper for preceding three years.
- xiii) Self-Attested copies of quality certificates i.e. US FDA /CE Certificate issued by competent authority, if applicable.
- xiv) Documentary evidence stating the status of bidder.
- xv) List of procurement agencies of repute to which the tendered product have been supplied during last 12 months.
- xvi) Self-attested copies of annual report, audited balance sheet and profit & loss account for preceding three years from the date of tender opening.
- xvii) Notarized affidavit that tenderer does not have any relation with the person authorized to evaluate technically or involve in finalizing the tender or will decide the use of tendered items.
- xviii) A self-declaration on Rs. 10/-non-judicial Stamp Paper that the rates quoted in the tender are the lowest and not quoted less than this to any Government Institution (State/Central/ other Institute in India).
 - xix) Copies of original product catalogues / data sheet must be enclosed of all quoted items.

B) <u>Price Bid:</u>

Prices are to be quoted in the prescribed Price Bid format in excel provided along with the tender enquiry in the e-tender portal. The price should be quoted for the accounting unit indicated in the e-tender document.

Note:

(i) The bidder has to be diligent while filling up the Techno-Commercial Bid and Price Bid provided in excel formats and must not tamper with the contents of the sheets.

- (ii) It is the responsibility of bidder to go through the TE document to ensure furnishing all required documents in addition to above, if any.
- (iii) The bidders have to follow the steps listed in *Bidding Manual Attachment Mode* available in the *Bidder Help Documents* of e-tender portal login screen for uploading the Price Bid.
- 11.2 A person signing (manually or digitally) the tender form or any documents forming part of the contract on behalf of another shall be deemed to warrant that he has authority to bind such other persons and if, on enquiry, it appears that the persons so signing had no authority to do so, the purchaser may, without prejudice to other civil and criminal remedies, cancel the contract and hold the signatory liable for all cost and damages.
- 11.3 A tender, which does not fulfill any of the above requirements and/or give evasive information/reply against any such requirement, shall be liable to be ignored.
- 11.4 Tender sent by fax/telex/cable shall be ignored.

12. Tender currencies

- 12.1 The tenderer supplying indigenous goods or already imported goods shall quote only in Indian Rupees.
- 12.2 Deleted
- 12.3 Tenders, where prices are quoted in any other way shall be treated as non -responsive and rejected.

13 Tender Prices

- 13.1 The Tenderer shall indicate on the Price Schedule provided under Section XI all the specified components of prices shown therein including the unit prices and total tender prices of the goods and services it proposes to supply against the requirement. All the columns shown in the price schedule should be filled up as required.
- 13.2 If there is more than one schedule in the List of Requirements, the tenderer has the option to submit its quotation for any one or more schedules. However, while quoting for a schedule, the tenderer shall quote for the complete requirement of goods and services as specified in that particular schedule.
- 13.3 All the items in the tender must be quoted (separate price for each item) by the bidder as the comparison/ranking will be based on the total value (including all taxes & duties and any other charges incurred till Consignee site).
- 13.4 While filling up the columns of the Price Schedule, the following aspects should be noted for compliance:
- 13.4.1 For domestic goods or goods of foreign origin located within India, the prices in the corresponding price schedule shall be entered separately in the following manner:
 - a) The price of the goods, quoted ex-factory/ ex-showroom/ ex-warehouse/ off-the-shelf, as applicable, including all taxes and duties like, Custom Duty and/or GST already paid or payable on the components and raw material used in the manufacture or assembly of the goods quoted ex-factory etc. or on the previously imported goods of foreign origin quoted ex-showroom etc;
 - b) Any taxes and duties including Custom duty and/or GST, which will be payable on the goods in India if the contract is awarded;
 - c) Charges towards Packing & Forwarding, Inland Transportation, Insurance (local transportation and storage), Loading& Unloading etc. would be borne by the Supplier from ware house to the consignee site for a period including 3 months beyond date of delivery, Loading/Unloading and

other local costs incidental to delivery of the goods to their final destination as specified in the List of Requirements and Price Schedule;

- d) The price of Incidental Services, as mentioned in List of Requirements and Price Schedule;
- e) The prices of Site Modification Work (if any), as mentioned in List of Requirements, Technical Specification and Price Schedule.
- f) The price of annual CMC, as mentioned in List of Requirements, Technical Specification and Price Schedule.

13.4.2 Deleted

13.5 Additional information and instruction on Duties and Taxes:

13.5.1 If the Tenderer desires to ask for GST or any other taxes to be paid extra, the same must be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such taxes and no claim for the same will be entertained later.

13.5.2 Deleted

- 13.5.3 Deleted
- 13.5.4 Deleted
- 13.5.5 Deleted

13.5.6 Goods and Services Tax (GST) :

If a tenderer asks for Goods and Services Tax to be paid extra, the rate and nature of Goods and Services Tax applicable should be shown separately. The Goods and Services Tax will be paid as per the rate at which it is liable to be assessed or has actually been assessed provided the transaction is legally liable to Goods and Services Tax and is payable as per the terms of the contract. If any refund of Tax is received at a later date, the Supplier must return the amount forth-with to the purchaser

- 13.6 Deleted
- 13.7 For insurance of goods to be supplied, relevant instructions as provided under GCC Clause 11 shall be followed.
- 13.8 Deleted
- 13.9 The need for indication of all such price components by the tenderers, as required in this clause (viz., GIT clause 13) is for the purpose of comparison of the tenders by the purchaser and will no way restrict the purchaser's right to award the contract on the selected tenderer on any of the terms offered.

14. <u>Indian Agent</u>

14.1 Deleted.

15. Firm Price

15.1 Unless otherwise specified in the SIT, prices quoted by the tenderer shall remain firm and fixed during the currency of the contract and not subject to variation on any account.Bidders are requested to quote BOQ wise unit price(**uniform unit prices must be quoted for same BOQ items across India**) and total price. If a firm quotes NIL Charges/ consideration, the bid shall be treated as unresponsive and will not be considered.

16. Deleted.

17 Documents Establishing Tenderer's Eligibility and Qualifications

17.1 Pursuant to GIT clause 11, the tenderer shall furnish, as part of its tender, relevant details and documents establishing its eligibility to quote and its qualifications to perform the contract if its tender is accepted.

18. Documents establishing good's Conformity to TE document.

- 18.1 The tenderer shall provide in its tender the required as well as the relevant documents like technical data, literature, drawings etc. to establish that the goods and services offered in the tender fully conform to the goods and services specified by the purchaser in the TE documents. For this purpose the tenderer shall also provide a clause-by-clause commentary on the technical specifications and other technical details incorporated by the purchaser in the TE documents to establish technical responsiveness of the goods and services offered in its tender.
- 18.2 In case there is any variation and/or deviation between the goods & services prescribed by the purchaser and that offered by the tenderer, the tenderer shall list out the same in a chart form without ambiguity and provide the same along with its tender.
- 18.3 If a tenderer furnishes wrong and/or misguiding data, statement(s) etc. about technical acceptability of the goods and services offered by it, its tender will be liable to be ignored and rejected in addition to other remedies available to the purchaser in this regard.

19. Earnest Money Deposit (EMD)

- 19.1 Pursuant to GIT clauses 8.1 and 11.1 A (i) the tenderer shall furnish along with its tender, earnest money for amount as shown in the List of Requirements. The earnest money is required to protect the purchaser against the risk of the tenderer's unwarranted conduct as amplified under sub-clause 19.7 below.
- 19.2 The tenderers who are currently registered and, also, will continue to remain registered during the tender validity period with Directorate General of Supplies & Disposals or with National Small Industries Corporation, New Delhi for the specific goods as per tender enquiry specification shall be eligible for exemption from EMD. Vague stipulations in the Registration Certificate such as "to customers' specification", etc. will not be acceptable for exemption from furnishing of earnest money. In case the tenderer falls in these categories, it should furnish copy of its valid registration details (with DGS&D or NSIC, as the case may be).
- 19.3 The earnest money shall be denominated in Indian Rupees or equivalent currencies as per GIT clause 12.2. The earnest money shall be furnished in one of the following forms:
 - i) Account Payee Demand Draft
 - ii) Fixed Deposit Receipt
 - iii) Banker's cheque and
 - iv) Bank Guarantee
- 19.4 The demand draft or banker's cheque or Fixed Deposit Receipt shall be drawn on any scheduled commercial bank in India or country of the tenderer, in favour of the "HLL Infra Tech Services Limited" payable at New Delhi. In case of bank guarantee, the same is to be provided from any scheduled commercial bank in India or country of the tenderer as per the format specified under Section XIII in these documents.
- 19.5 The earnest money shall be valid for a period of forty-five (45) days beyond the validity period of the tender. As validity period of Tender as per Clause 20 of GIT is 120 days, the EMD shall be valid for 165 days from Techno Commercial Tender opening date.
- 19.6 Unsuccessful tenderers' earnest money will be returned to them without any interest, after expiry of the tender validity period, but not later than thirty days after conclusion of the resultant

contract. Successful tenderer's earnest money will be returned without any interest, after receipt of performance security from that tenderer.

- 19.7 Earnest Money is required to protect the purchaser against the risk of the Tenderer's conduct, which would warrant the forfeiture of the EMD. Earnest money of a tenderer will be forfeited, if the tenderer withdraws or amends its tender or impairs or derogates from the tender in any respect within the period of validity of its tender or if it comes to notice that the information/documents furnished in its tender is incorrect, false, misleading or forged without prejudice to other rights of the purchaser. The successful tenderer's earnest money will be forfeited without prejudice to other rights of Purchaser if it fails to furnish the required performance security within the specified period.
- 19.8 Deleted

20. Tender Validity

- 20.1 If not mentioned otherwise in the SIT, the tenders shall remain valid for acceptance for a period of 120 days (One hundred and twenty days) after the date of tender opening prescribed in the TE document. Any tender valid for a shorter period shall be treated as unresponsive and rejected.
- 20.2 In exceptional cases, the tenderers may be requested by the purchaser to extend the validity of their tenders up to a specified period. Such request(s) and responses thereto shall be conveyed by surface mail or by fax/ telex/cable followed by surface mail. The tenderers, who agree to extend the tender validity, are to extend the same without any change or modification of their original tender and they are also to extend the validity period of the EMD accordingly. A tenderer, who may not agree to extend its tender validity after the expiry of the original validity period the EMD furnished by them shall not be forfeited.
- 20.3 In case the day up to which the tenders are to remain valid falls on/ subsequently declared a holiday or closed day for the purchaser, the tender validity shall automatically be extended up to the next working day.

21. Digital Signing of Tender

21.1 The tenderers shall submit their tenders as per the instructions contained in GIT Clause 11. Tenders shall be uploaded with all relevant tender documents in the prescribed format. The relevant tender documents should be uploaded by an authorised person having Class 3 digital signature certificate.

D. SUBMISSION OF TENDERS

22. Submission of Tenders

- 22.1 The tender shall be submitted online only.
 - (i) Pre-qualification and Technical compliance along with the Techno-Commercial Bid in excel format:
 - a) Scanned copies of tender processing fee and EMD
 - b) Manufacturer's authorization in case bid is submitted by an Indian agent (A declaration must be attached here in case directly quoted by a manufacturer or a document establishing the relation of the Indian office with the manufacturer in case quoted by Indian office of the manufacturer).
 - c) Tender Form as per Section X.
 - d) Compliance of all terms and conditions of TED like- warranty, CMC, delivery period, delivery terms, payment terms, Liquidated Damages Clause, Arbitration clause, etc
 - e) Declaration regarding Fall Clause and Deregistration, debarment from any Govt Dept/ Agencies
 - f) Copy of PAN.
 - g) Certificate of Incorporation/ or a Declaration in case the firm is being a proprietary firm.
 - h) Abridged Annual report of last 03 years (Balance sheet and Profit & Loss Account) completed till December 2016, in pdf format.

- i) Name, address and details of account with respect to bidder and/or beneficiary of L/C.
- j) Quality Control Requirements as per Section VIII
- k) Performance statement along with required PO copies and its corresponding end user's satisfactory performance certificate as per section IX.
- 1) Technical Bid along with clause-by-clause technical compliance statement for the quoted goods vis-à-vis the Technical specifications along with product catalogue and data sheet in the tender enquiry.
- m)The bidder should submit blank Proforma invoice from the foreign manufacturer along with his technical bid, duly mentioning the specifications and code number of the parts quoted.
- n) The original proforma invoices from the foreign principal will be applicable in case of 100% subsidiary companies incorporated in India also.

(ii) PRICE BID (ONLY ONLINE)

- a) The tenderers must ensure that they submit the Price Bid in prescribed format uploaded along with the tender enquiry. It is the responsibility of the bidder to ensure that the contents of the format are not tampered.
- b) The tenderers must ensure that they submit the on-line tenders not later than the closing time and date specified for submission of tenders.
- c) Along with price bid recent purchase order copies for the same model and technical configuration issued by institute of National importance and/or reputed central/state government hospitals should be uploaded in pdf form for reasonability of the offered price.
- d) The bidder should submit the copy of original proforma invoice from the foreign manufacturer along with the price bid.
- e) The supplier shall justify the present quotes based on previous purchase orders for similar project executed either in India or Globally. If they quote any new model or upgraded version of earlier model, they may mention the same in their tender.
- 22.2 The tenderers must ensure that they submit the on-line tenders within the scheduled closing date & time. They shall also ensure to submit the original Tender Processing Fee and EMD within its scheduled date & time.

23. Late Tender:

23.1 There is NO PROVISION of uploading late tender beyond stipulated date & time in the etendering system. However, if the necessary Tender Processing Fee and EMD in original are not submitted within the scheduled time, the tender shall be declared as late tender and online tender shall not be opened and shall be ignored.

24. Alteration and Withdrawal of Tender

24.1 The tenderer is permitted to change, edit or withdraw its bid on or before the end date &time.

E. TENDER OPENING

25. **Opening of Tenders**

25.1 The purchaser will open the e-tenders at the specified date and time and at the specified place as indicated in the NIT.

In case the specified date of tender opening falls on / is subsequently declared a holiday or closed day for the purchaser, the tenders will be opened at the appointed time and place on the next working day.

25.2 Authorized representatives of the tenderers, who have submitted tenders on time, may attend the tender opening provided they bring with them letters of authority from the corresponding tenderers.

The tender opening official(s) will prepare a list of the representatives attending the tender opening. The list will contain the representatives' names & signatures and corresponding tenderers' names and addresses.

25.3 This being a Two - Tender system, the <u>Techno - Commercial Tenders</u> are to be opened in the first instance, at the prescribed time and date as indicated in NIT. These Tenders shall be scrutinized and evaluated by the competent committee/ authority with reference to parameters prescribed in the TE document. During the Techno - Commercial Tender opening, the tender opening official(s) will read the salient features of the tenders like brief description of the goods offered, delivery period, Earnest Money Deposit and any other special features of the tenders, as deemed fit by the tender opening official(s). Thereafter, in the second stage, the Price Tenders of only the Techno - Commercially acceptable offers (as decided in the first stage) shall be opened for further scrutiny and evaluation on a date notified after the evaluation of the Techno-Commercial tender.

F. SCRUTINY AND EVALUATION OF TENDERS

26. Basic Principle

26.1 Tenders will be evaluated on the basis of the terms & conditions already incorporated in the TE document, based on which tenders have been received and the terms, conditions etc. mentioned by the tenderers in their tenders. No new condition will be brought in while scrutinizing and evaluating the tenders.

27. Scrutiny of Tenders

- 27.1 The Purchaser will examine the Tenders to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished and, whether the documents uploaded are in legible form.
- 27.2 The Purchaser's determination of a Tender's responsiveness is to be based on the contents of the tender itself without recourse to extrinsic evidence
- 27.3 Deleted
- 27.4 The tenders will be scrutinized to determine whether they are complete and meetthe essential and important requirements, conditions etc. as prescribed in the TE document. The tenders, which do not meet the basic requirements, are liable to be treated as non-responsive and will be summarily ignored.
- 27.5 The following are some of the important aspects, for which a tender shall be declared non-responsive during the evaluation and will be ignored;
 - (i) Tender validity is shorter than the required period.
 - (ii) Required EMD or its exemption documents have not been provided.
 - (iii) Tenderer has not agreed to give the required performance security of required amount in an acceptable form in terms of GCC clause 5, read with modification, if any, in Section V "Special Conditions of Contract", for due performance of the contract.
 - (iv) Poor/ unsatisfactory past performance.
 - (v) Tenderers who stand deregistered/banned/blacklisted by any Govt. Authorities.
 - (vi) Tenderer is not eligible as per GIT Clauses 5.1 & 17.1.
 - (vii) Tenderer has not quoted for the entire quantity as specified in the List of Requirements/ BOQfor the quoted schedule.
 - (viii) Tenderer has not agreed to other essential condition(s) specially incorporated in the tender enquiry, like delivery terms, delivery schedule, terms of payment, liquidated damages clause, warranty clause, dispute resolution mechanism applicable law.

28. Minor Informality/Irregularity/Non-Conformity

If during the preliminary examination, the purchaser find any minor informality and/or irregularity and/or non-conformity in a tender, the purchaser may waive the same provided it does not constitute any material deviation and financial impact and, also, does not prejudice or affect the ranking order of the tenders. Wherever necessary, the purchaser will convey its observation on such 'minor' issues to the tenderer by registered/speed post etc. asking the tenderer to respond by a specified date. If the tenderer does not reply by the specified date or gives evasive reply without clarifying the point at issue in clear terms, that tender will be liable to be ignored.

29 Discrepancies in Prices

- 29.1 If, in the price structure quoted by a tenderer, there is discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless the purchaser feels that the tenderer has made a mistake in placing the decimal point in the unit price, in which case the total price as quoted shall prevail over the unit price and the unit price corrected accordingly.
- 29.2 If there is an error in a total price, which has been worked out through addition and/or subtraction of subtotals, the subtotals shall prevail and the total corrected; and
- 29.3 If there is a discrepancy between the amount expressed in words and figures, the amount in words shall prevail, subject to sub clause 29.1 and 29.2 above.
- 29.4 If, as per the judgement of the purchaser, there is any such arithmetical discrepancy in a tender, the same will be suitably conveyed to the tenderer by registered / speed post. If the tenderer does not agree to the observation of the purchaser, the tender is liable to be ignored.

30. Discrepancy between original and copies of Tender

Not applicable being e-Tender.

31. Qualification Criteria

- 31.1 Tenders of the tenderers, which do not meet the required Qualification Criteria prescribed in Section IX, will be treated as non responsive and will not be considered further.
- 31.2 The Purchaser reserves the right to relax the Norms on <u>Prior Experience</u> for Start-ups and Micro & Small Enterprises in Public Procurement.

The Start-ups are defined in Annexure-A of the "Action Plan for Start-ups in India". The same is available on the website of Department of Industrial policy and Promotion (DIPP), Ministry of Commerce & Industry.

The Notification is available in the below link:

http://www.finmin.nic.in/the_ministry/dept_expenditure/ppcell/RelaxNorms_StarupMedEnterpris e25072016.pdf

The FAQs are available in the below link:

http://dipp.nic.in/English/Investor/startupindia/FAQs_StartupIndia_30March2016.pdf

Note:- Definition of Start-up (only for the purpose of Government schemes)

(Ref: Ministry of Finance Office Memorandum No. F.20/2/2014-PPD(Pt.) dated 25th July 2016.)

Start-up means an entity, incorporated or registered in India not prior to five years, with annual turnover not exceeding INR 25 crore in any preceding financial year, working towards innovation, development, deployment or commercialization of new products, processes or services driven by technology or intellectual property.

Provided that such entity is not formed by splitting up, or reconstruction, of a business already inexistence.

Provided also that an entity shall cease to be a Start-up if its turnover for the previous financial years has exceeded INR 25 crore or it has completed 5 years from the date of incorporation/ registration.

Provided further that a Start-up shall be eligible for tax benefits only after it has obtained certification from the Inter-Ministerial Board, setup for such purpose.

32. Conversion of tender currencies to Indian Rupees

32.1 Deleted.

33. Schedule-wise Evaluation

33.1 In case the List of Requirements contains more than one schedule, the responsive tenders will be evaluated and compared separately for each schedule. The tender for a schedule will not be considered if the complete requirements prescribed in that schedule are not included in the tender.

34. Comparison of Tenders

- 34.1 Unless mentioned otherwise in Section III Special Instructions to Tenderers and Section VI List of Requirements, the comparison of the responsive tenders shall be carried out on Delivery Duty Paid (DDP) consignee site basis.
- 34.2 Individual price for all the items in the tender must be quoted, failing which the tender is liable to be rejected. Comparison/ranking of price bids shall be based on the total tender price (sum total of all the items value) at Consignee Site basis

35. Additional Factors and Parameters for Evaluation and Ranking of Responsive Tenders

- 35.1 Further to GIT Clause 34 above, the purchaser's evaluation of a tender will include and take into account the following:
 - i) In the case of goods manufactured in India or goods of foreign origin already located in India, GSTor any other taxes which will be contractually payable (to the tenderer), on the goods if a contract is awarded on the tenderer; and

ii)Deleted.

- 35.2 The purchaser's evaluation of tender will also take into account the additional factors, if any, incorporated in SIT in the manner and to the extent indicated therein.
- 35.3 The Purchaser reserves the right to give the price preference to small-scale sectors etc. and purchase preference to central public sector undertakings as per the instruction in vogue while evaluating, comparing and ranking the responsive tenders.
 - i. In exercise of powers conferred in Section 11 of the Micro, Small and Medium Enterprises Development (MSMED) Act 2006, the Government has notified a new Public Procurement Policy for Micro & Small Enterprises effective from 1st April 2012. The policy mandates that 20% of procurement of annual requirement of goods and services by all Central Ministries/Public Sector Undertakings will be from the micro and small enterprises. The Government has also earmarked a sub-target of 4% procurement of goods & services from MSEs owned by SC/ST

entrepreneurs out of above said 20% quantity.

- ii. In accordance with the above said notification, the participating Micro and Small Enterprises (MSEs) in a tender, quoting price within the band of L 1+15% would also be allowed to supply a portion of the requirement by bringing down their price to the L 1 price, in a situation where L 1 price is from someone other than an MSE. Such MSEs would be allowed to supply up to 20% of the total tendered value. In case there are more than one such eligible MSE, the 20% supply will be shared equally. Out of 20% of the quantity earmarked for supply from MSEs, 4% quantity is earmarked for procurement from MSEs owned by SC/ST entrepreneurs. However, in the event of failure of such MSEs to participate in the tender process or meet the tender requirements and the L 1 price, the 4% quantity earmarked for MSEs owned by SC/ST entrepreneurs will be met from other participating MSEs.
 - iii. The MSEs fulfilling the prescribed eligibility criteria and participating in the tender shall enclose with their tender a copy of their valid registration certificate with District Industries Centres or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or any other body specified by Ministry of Micro and Small enterprises in support of their being an MSE, failing which their tender will be liable to be ignored.
 - iv. The Purchaser reserves the right to relax the Norms on <u>Prior Experience</u> for Start-ups and Micro & Small Enterprises in Public Procurement.

The Start-ups are defined in Annexure-A of the "Action Plan for Startups in India". The same is available on the website of Department of Industrial policy and Promotion (DIPP), Ministry of Commerce & Industry.

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Startup means an entity, incorporated or registered in India not prior to five years, with annual turnover not exceeding INR 25 crore in any preceding financial year, working towards innovation, development, deployment or commercialization of new products, processes or services driven by technology or intellectual property.

Provided that such entity is not formed by splitting up, or reconstruction, of a business already inexistence.

Provided also that an entity shall cease to be a Startup if its turnover for the previous financial years has exceeded INR 25 crore or it has completed 5 years from the date of incorporation/registration.

Provided further that a Start-up shall be eligible for tax benefits only after it has obtained certification from the Inter-Ministerial Board, setup for such purpose.

- 35.4 **Preference to Make in India**: As per the order issued by Department of Industrial Policy and Promotion (DIPP) vide No. P-45021/2/2017-BE-II dated 15.06.2017; the purchaser reserves the right to give preference to the local supplier. A copy of this order is enclosed at Appendix-A which will form a part of this TED for evaluation and ranking of bids. A local supplier (definition of 'local supplier' is given in clause 2 of the aforesaid order of DIPP) has to submit the following along with their tender(s) failing which their bid will be evaluated without considering such preference mentioned in the DIPP order dated 15.06.2017:
 - a. The local supplier at the time of tender, bidding or solicitation shall be required to provide self-certification that the item offered meets the minimum local content and shall give details of the location(s) at which the local value addition is made.
 b.In cases of procurement for a value in excess of Rs. 10 crores. the local supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

36. Tenderer's capability to perform the contract

- 36.1 The purchaser, through the above process of tender scrutiny and tender evaluation will determine to its satisfaction whether the tenderer, whose tender has been determined as the lowest evaluated responsive tender is eligible, qualified and capable in all respects to perform the contract satisfactorily. If, there is more than one schedule in the List of Requirements, then, such determination will be made separately for each schedule.
- 36.2 The above-mentioned determination will, interalia, take into account the tenderer's financial, technical and production capabilities for satisfying all the requirements of the purchaser as incorporated in the TE document. Such determination will be based upon scrutiny and examination of all relevant data and details submitted by the tenderer in its tender as well as such other allied information as deemed appropriate by the purchaser.

37. Contacting the Purchaser

- 37.1 From the time of submission of tender to the time of awarding the contract, if a tenderer needs to contact the purchaser for any reason relating to this tender enquiry and / or its tender, it should do so only in writing.
- 37.2 In case a tenderer attempts to influence the purchaser in the purchaser's decision on scrutiny, comparison & evaluation of tenders and awarding the contract, the tender of the tenderer shall be liable for rejection in addition to appropriate administrative actions being taken against that tenderer, as deemed fit by the purchaser.

G. AWARD OF CONTRACT

38. Purchaser's Right to accept any tender and to reject any or all tenders

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

39. Award Criteria

39.1 Subject to GIT clause 38 above, the contract will be awarded to the lowest evaluated responsive tenderer decided by the purchaser in terms of GIT Clause 36.

40. Variation of Quantities at the Time of Award/ Currency of Contract

- 40.1 At the time of awarding the contract, the purchaser reserves the right to increase or decrease by up to twenty five (25) per cent, the quantity of goods and services mentioned in the schedule(s) in the "List of Requirements" (rounded off to next whole number) without any change in the unit price and other terms & conditions quoted by the tenderer.
- 40.2 If the quantity has not been increased to the maximum of 25% of the tendered quantity at the time of awarding the contract, the purchaser reserves the right to increase the quantity further by up to the balance available twenty five (25) per cent of the tendered quantity of goods and services (rounded off to next whole number) without any change in the unit price and other terms & conditions mentioned in the contract during the currency of the contract.

41. Notification of Award

- 41.1 Before expiry of the tender validity period, the purchaser will notify the successful tenderer(s) in writing, by registered / speed post or by email (to be confirmed by registered / speed post) that its tender for goods & services, which have been selected by the purchaser, has been accepted, also briefly indicating therein the essential details like description, specification and quantity of the goods & services and corresponding prices accepted. The successful tenderer must furnish to the purchaser the required performance security within thirty days from the date of dispatch of this notification, failing which the EMD will forfeited and the award will be cancelled. Relevant details about the performance security have been provided under GCC Clause 5 under Section IV.
- 41.2 The Notification of Award shall constitute the conclusion of the Contract.

42. Issue of Contract

- 42.1 Promptly after notification of award, the Purchaser/Consignee will mail the contract form (as per Section XVI) duly completed and signed, in duplicate, to the successful tenderer by registered / speed post.
- 42.2 Within twenty one days from the date of the contract, the successful tenderer shall return the original copy of the contract, duly signed and dated, to the Purchaser/Consignee by registered / speed post. The successful tenderer should also submit Proforma Invoice from the foreign principal (if applicable as per contractual price) within 21 days from the date of NOA.
- 42.3 The Purchaser/Consignee reserves the right to issue the Notifications of Award consignee wise.
- 43. Non-receipt of Performance Security, Proforma Invoice and Contract by the Purchaser/Consignee
- 43.1 Failure of the successful tenderer in providing performance security, Proforma Invoice and / or returning contract copy duly signed in terms of GIT clauses 41 and 42 above shall make the tenderer liable for forfeiture of its EMD and, also, for further actions by the Purchaser/Consignee against it as per the clause 24 of GCC Termination of default.

44. Return of EMD

44.1 The earnest money of the successful tenderer and the unsuccessful tenderers will be returned to them without any interest, whatsoever, in terms of GIT Clause 19.6.

45. Publication of Tender Result

45.1 The name and address of the successful tenderer(s) receiving the contract(s) will be mentioned in the notice board/bulletin/web site of the purchaser.

46. Corrupt or Fraudulent Practices

- 46.1 It is required by all concerned namely the Consignee/Tenderers/Suppliers etc to observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Purchaser: -
 - (a) defines, for the purposes of this provision, the terms set forth below 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 Purchaser, and includes collusive practice among Tenderers (prior to or after Tender submission) designed to establish Tender prices at artificial non-competitive levels and to deprive the Purchaser of the benefits of free and open competition;
 - (b) will reject a proposal for award if it determines that the Tenderer recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;
 - (c) will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract by the purchaser if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing the contract.

SECTION - III SPECIAL INSTRUCTIONS TO TENDERERS (SIT)

Sl. No.	GIT Clause	Торіс	SIT Provision	Page No.
	No.			
А	1 to 7	Preamble	No Change	
В	8 to 10	TE documents	No Change	
С	11 to 21	Preparation of Tenders	Change	
D	22 to24	Submission of Tenders	Change	
Е	25	Tender Opening	No Change	
F	26 to 37	Scrutiny and Evaluation of Tenders	No Change	
G	38 to 45	Award of Contract	No Change	

The following Special Instructions to Tenderers will apply for this purchase. These special instructions will modify/substitute/supplement the corresponding General Instructions to Tenderers (GIT) incorporated in Section II. The corresponding GIT clause numbers have also been indicated in the text below:

In case of any conflict between the provision in the GIT and that in the SIT, the provision contained in the SIT shall prevail.

SUBMISSION OF e-TENDERS

- (i) All the necessary documents as prescribed in the NIT shall be prepared and scanned in different files (in PDF format as prescribed) and uploaded for on-line submission of Proposal.
- (ii) Except Tender Processing Fee and EMD, all document(s)/ information(s) including the Financial Proposal (i.e. FORMAT FOR SUBMISSION OF FINANCIAL PROPOSAL) should be uploaded **online only** in the prescribed format given in the website. No other mode of submission shall be acceptable.
 - i) The prospective bidders may scan the documents in low resolution (75 to 100 DPI) instead of 200 DPI. The documents may be scanned for further lower resolution (if possible). This would reduce the size of the Cover and would be uploaded faster.
 - ii) The Individual file size of uploading is restricted up to 5 MB. Bidders may upload multiple files (Not exceeding 5 MB individually) & give relevant file name indicating the contents.
 - iii) The file name of price bid should match the file of the price bid format uploaded by the purchaser in the portal. This can be downloaded from the **Notes & Attachment** under **Details** of item when the event is in **Display Mode**.

SECTION - IV

GENERAL CONDITIONS OF CONTRACT (GCC) TABLE OF CLAUSES

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1. Application

1.1 The General Conditions of Contract incorporated in this section shall be applicable for this purchase to the extent the same are not superseded by the Special Conditions of Contract prescribed under Section V, List of requirements under Section VI and Technical Specification under Section VII of this document.

2. Use of contract documents and information

- 2.1 The supplier shall not, without the purchaser's prior written consent, disclose the contract or any provision thereof including any specification, drawing, sample or any information furnished by or on behalf of the purchaser in connection therewith, to any person other than the person(s) employed by the supplier in the performance of the contract emanating from this TE document. Further, any such disclosure to any such employed person shall be made in confidence and only so far as necessary for the purposes of such performance for this contract.
- 2.2 Further, the supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC sub-clause 2.1 above except for the sole purpose of performing this contract.
- 2.3 Except the contract issued to the supplier, each and every other document mentioned in GCC subclause 2.1 above shall remain the property of the purchaser and, if advised by the purchaser, all copies of all such documents shall be returned to the purchaser on completion of the supplier's performance and obligations under this contract.

3. Patent Rights

3.1 The supplier shall, at all times, indemnify and keep indemnified the purchaser, free of cost, against all claims which may arise in respect of goods & services to be provided by the supplier under the contract for infringement of any intellectual property rights or any other right protected by patent, registration of designs or trademarks. In the event of any such claim in respect of alleged breach of patent, registered designs, trademarks etc. being made against the purchaser, the purchaser shall notify the supplier of the same and the supplier shall, at his own expenses take care of the same for settlement without any liability to the purchaser.

4. Country of Origin

- 4.1 All goods and services to be supplied and provided for the contract shall have the origin in India or in the countries with which the Government of India has trade relations.
- 4.2 The word "origin" incorporated in this clause means the place from where the goods are mined, cultivated, grown, manufactured, produced or processed or from where the services are arranged.
- 4.3 The country of origin may be specified in the Price Schedule

5. **Performance Security**

- 5.1 Within twenty one (21) days from date of the issue of notification of award by the Purchaser/Consignee, the supplier, shall furnish performance security to the Purchaser/Consignee for an amount equal to ten percent (10%) of the total value of the contract, valid up to sixty (60) days after the date of completion of all contractual obligations by the supplier, including the warranty obligations, initially valid for a period of minimum sixteen (16) months from the date of Notification of Award
- 5.2 The Performance security shall be denominated in Indian Rupees or in the currency of the contract as detailed below:

It shall be in any one of the forms namely Account Payee Demand Draft or Fixed Deposit Receipt drawn from any Scheduled bank in India or Bank Guarantee issued by a Scheduled bank in India, in the prescribed form as provided in section XV of this document in favour of the Purchaser/Consignee. The validity of the Fixed Deposit receipt or Bank Guarantee will be for a period up to sixty (60) days beyond Warranty Period.

- 5.3 In the event of any failure /default of the supplier with or without any quantifiable loss to the government including furnishing of consignee wise Bank Guarantee for CMC security as per Proforma in Section XV, the amount of the performance security is liable to be forfeited. The Administration Department may do the needful to cover any failure/default of the supplier with or without any quantifiable loss to the Government.
- 5.4 In the event of any amendment issued to the contract, the supplier shall, within fifteen (15) days of issue of the amendment, furnish the corresponding amendment to the Performance Security (as necessary), rendering the same valid in all respects in terms of the contract, as amended.
- 5.6 Subject to GCC sub clause 5.3 above, the Purchaser/Consignee will release the Performance Security without any interest to the supplier on completion of the supplier's all contractual obligations including the warranty obligations.

6. Technical Specifications and Standards

6.1 The Goods & Services to be provided by the supplier under this contract shall conform to the technical specifications and quality control parameters mentioned in 'Technical Specification' and 'Quality Control Requirements' under Sections VII of this document.

7. Packing and Marking

- 7.1 The packing for the goods to be provided by the supplier should be strong and durable enough to withstand, without limitation, the entire journey during transit including transhipment (if any), rough handling, open storage etc. without any damage, deterioration etc. As and if necessary, the size, weights and volumes of the packing cases shall also take into consideration, the remoteness of the final destination of the goods and availability or otherwise of transport and handling facilities at all points during transit up to final destination as per the contract.
- 7.2 The quality of packing, the manner of marking within & outside the packages and provision of accompanying documentation shall strictly comply with the requirements as provided in Technical Specifications and Quality Control Requirements under Sections VII and VIII and in SCC under Section V. In case the packing requirements are amended due to issue of any amendment to the contract, the same shall also be taken care of by the supplier accordingly.
- 7.3 Packing instructions:

Unless otherwise mentioned in the Technical Specification and Quality Control Requirements under Sections VII and VIII and in SCC under Section V, the supplier shall make separate packages for each consignee (in case there is more than one consignee mentioned in the contract) and mark each package on three sides with the following with indelible paint of proper quality:

- a. contract number and date
- b. brief description of goods including quantity
- c. packing list reference number
- d. country of origin of goods
- e. consignee's name and full address and
- f. supplier's name and address

8. Inspection, Testing and Quality Control

8.1 The purchaser and/or its nominated representative(s) will, without any extra cost to the purchaser, inspect and/or test the ordered goods and the related services to confirm their conformity to the contract specifications and other quality control details incorporated in the contract. The purchaser shall inform the supplier in advance, in writing, the purchaser's programme for such inspection and, also the identity of the officials to be deputed for this purpose. "The cost towards the transportation, boarding and lodging will be borne by the purchaser and/or its nominated representative(s) for the first visit. In case the goods are rejected in the first instance and the supplier requests for re-inspection, and if same is accepted by purchaser/consignee/PSA/PA, all subsequent inspections shall be at the cost of the supplier. The expense will be to and fro

Economy Airfare, Local Conveyance, Boarding and Lodging of the inspection team for the inspection period."

- 8.2 The Technical Specification and Quality Control Requirements incorporated in the contract shall specify what inspections and tests are to be carried out and, also, where and how they are to be conducted. If such inspections and tests are conducted in the premises of the supplier or its subcontractor(s), all reasonable facilities and assistance, including access to relevant drawings, design details and production data, shall be furnished by the supplier to the purchaser's inspector at no charge to the purchaser.
- 8.3 If during such inspections and tests the contracted goods fail to conform to the required specifications and standards, the purchaser's inspector may reject them and the supplier shall either replace the rejected goods or make all alterations necessary to meet the specifications and standards, as required, free of cost to the purchaser and resubmit the same to the purchaser's inspector for conducting the inspections and tests again.
- 8.4 In case the contract stipulates pre-despatch inspection of the ordered goods at supplier's premises, the supplier shall put up the goods for such inspection to the purchaser's inspector well ahead of the contractual delivery period, so that the purchaser's inspector is able to complete the inspection within the contractual delivery period.
- 8.5 If the supplier tenders the goods to the purchaser's inspector for inspection at the last moment without providing reasonable time to the inspector for completing the inspection within the contractual delivery period, the inspector may carry out the inspection and complete the formality beyond the contractual delivery period at the risk and expense of the supplier. The fact that the goods have been inspected after the contractual delivery period will not have the effect of keeping the contract alive and this will be without any prejudice to the legal rights and remedies available to the purchaser under the terms & conditions of the contract.
- 8.6 The purchaser's/consignee's contractual right to inspect, test and, if necessary, reject the goods after the goods' arrival at the final destination shall have no bearing of the fact that the goods have previously been inspected and cleared by purchaser's inspector during pre-despatch inspection mentioned above.

"On rejection, the supplier shall remove such stores within 14 days of the date of intimation of such rejection from the consignee's premises. If such goods are not removed by the supplier within the period mentioned above, the purchaser/consignee may remove the rejected stores and either return the same to the supplier at his risk and cost by such mode of transport as purchaser/consignee may decide or dispose of such goods at the suppliers risk to recover any expense incurred in connection with such disposals and also the cost of the rejected stores if already paid for."

- 8.7 Goods accepted by the purchaser/consignee and/or its inspector at initial inspection and in final inspection in terms of the contract shall in no way dilute purchaser's/consignee's right to reject the same later, if found deficient in terms of the warranty clause of the contract, as incorporated under GCC Clause 15.
- 8.8 Deleted..

9. Terms of Delivery

9.1 Goods shall be delivered by the supplier in accordance with the terms of delivery and as per the delivery period specified in the schedule of requirement. Please note that the time shall be the essence of the contract.

10. Transportation of Goods

- 10.1 Deleted.
- 10.2 Instructions for transportation of domestic goods including goods already imported by the supplier under its own arrangement:

In case no instruction is provided in this regard in the SCC, the supplier will arrange transportation of the ordered goods as per its own procedure.

11. Insurance:

- 11.1 Unless otherwise instructed in the SCC, the supplier shall make arrangements for insuring the goods against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the following manner:
 - i) in case of supply of domestic goods on Consignee site basis, the supplier shall be responsible till the entire stores contracted for arrival in good condition at destination. The transit risk in this respect shall be covered by the Supplier by getting the stores duly insured for an amount equal to 110% of the value of the goods from ware house to ware house (consignee site) on all risk basis. The insurance cover shall be obtained by the Supplier and should be valid till 3 months after the receipt of goods by the Consignee.
 - ii) Deleted.

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

12. Spare parts

- 12.1 If specified in the List of Requirements and in the resultant contract, the supplier shall supply/provide any or all of the following materials, information etc. pertaining to spare parts manufactured and/or supplied by the supplier:
 - a) The spare parts as selected by the Purchaser/Consignee to be purchased from the supplier, subject to the condition that such purchase of the spare parts shall not relieve the supplier of any contractual obligation including warranty obligations; and
 - b) In case the production of the spare parts is discontinued:
 - i) Sufficient advance notice to the Purchaser/Consignee before such discontinuation to provide adequate time to the purchaser to purchase the required spare parts etc., and
 - ii) The supplier shall be responsible for undertaking the supply of any such spare part for the proper up keeping of equipment for a period including the warranty
- 12.2 Supplier shall carry sufficient inventories to assure ex-stock supply of consumables and spares for the goods so that the same are used during warranty.

13. Incidental services

- 13.1 Subject to the stipulation, if any, in the SCC (Section V), List of Requirements (Section VI) and the Technical Specification (Section VII), the supplier shall be required to perform the following services.
 - a. Installation & commissioning, Supervision and Demonstration of the goods
 - b. Providing required jigs and tools for assembly, minor civil works required for the completion of the installation.
 - c. Training of Consignee's Doctors, Staff, operators etc. for operating and maintaining the goods
 - d. Supplying required number of operation & maintenance manual for the goods

14. Distribution of dispatch documents for clearance/receipt of goods

The supplier shall send all the relevant despatch documents well in time to the Purchaser/Consignee to enable the Purchaser/Consignee clear or receive (as the case may be) the goods in terms of the contract.

Unless otherwise specified in the SCC, the usual documents involved and the drill to be followed in general for this purpose are as follows.

A) For Domestic Goods, including goods already imported by the supplier under its own arrangement

Within 24 hours of despatch, the supplier shall notify the purchaser, consignee, and others concerned if mentioned in the contract, the complete details of despatch and also supply the following documents to them by registered post / speed post / courier (or as instructed in the contract):

- (i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
- (ii) Two copies of packing list identifying contents of each package;
- (iii) Insurance Certificate as per GCC Clause 11.

15. Warranty:

- The supplier warrants comprehensively that the goods supplied under the contract is new, unused and incorporate all recent improvements in design and materials unless prescribed otherwise by the purchaser in the contract. The supplier further warrants that the goods supplied under the contract shall have no defect arising from design, materials (except when the design adopted and/or the material used are as per the Purchaser's/Consignee's specifications) or workmanship or from any act or omission of the supplier, that may develop under normal use of the supplied goods under the conditions prevailing in India.
- The warranty shall remain valid for a minimum period of one year/standard warranty of manufacturer, after the goods or any portion thereof as the case may be, have been accepted by the consignee at the final destination.
- 15.3 In case of any claim arising out of this warranty, the Purchaser/Consignee shall promptly notify the same in writing to the supplier. The period of the warranty will be as per G.C.C clause number 15.2 above irrespective of any other period mentioned elsewhere in the bidding documents.
- 15.4 Upon receipt of such notice, the supplier shall, within 8 hours on a 24(hrs) X 7 (days) X 365 (days) basis respond to take action to repair or replace the defective goods or parts thereof, free of cost, at the ultimate destination. The supplier shall take over the replaced parts/goods after providing their replacements and no claim, whatsoever shall lie on the purchaser for such replaced parts/goods thereafter. The penalty clause for non-rectification will be applicable as per tender conditions
- 15.5 In the event of any rectification of a defect or replacement of any defective goods during the warranty period, the warranty for the rectified/replaced goods shall be extended till the completion of the original warranty period of the main equipment.
- 15.6 If the supplier, having been notified, fails to respond to take action to repair or replace the defect(s) within 8 hours on a 24(hrs) X 7 (days) X 365 (days) basis, the purchaser may proceed to take such remedial action(s) as deemed fit by the purchaser, at the risk and expense of the supplier and without prejudice to other contractual rights and remedies, which the purchaser may have against the supplier.
- 15.7 During Warranty period, the supplier is required to visit at each consignee's site at least once in 6 months commencing from the date of the installation for preventive maintenance of the goods

16. Assignment

16.1 The Supplier shall not assign, either in whole or in part, its contractual duties, responsibilities and obligations to perform the contract, except with the Purchaser's prior written permission.

17. Deleted.

18. Modification of Contract

- 18.1 If necessary, the purchaser may, by a written order given to the supplier at any time during the currency of the contract, amend the contract by making alterations and modifications within the general scope of contract in any one or more of the following:
 - a) Specifications, drawings, designs etc. where goods to be supplied under the contract are to be specially manufactured for the purchaser,
 - b) Mode of packing,
 - c) Incidental services to be provided by the supplier
 - d) Mode of despatch,
 - e) Place of delivery, and
 - f) Any other area(s) of the contract, as felt necessary by the purchaser depending on the merits of the case.
- 18.2 In the event of any such modification/alteration causing increase or decrease in the cost of goods and services to be supplied and provided, or in the time required by the supplier to perform any obligation under the contract, an equitable adjustment shall be made in the contract price and/or contract delivery schedule, as the case may be, and the contract amended accordingly. If the supplier doesn't agree to the adjustment made by the Purchaser/Consignee, the supplier shall convey its views to the Purchaser/Consignee within twenty-one days from the date of the supplier's receipt of the Purchaser's/Consignee's amendment / modification of the contract.

19. Prices

19.1 Prices to be charged by the supplier for supply of goods and provision of services in terms of the contract shall not vary from the corresponding prices quoted by the supplier in its tender and incorporated in the contract except for any price adjustment authorised in the SCC.

20. Taxes and Duties

- 20.1 Supplier shall be entirely responsible for all taxes, duties, fees, levies etc. incurred until delivery of the contracted goods to the purchaser.
- 20.2 Further instruction, if any, shall be as provided in the SCC.

21. Terms and mode of payment

21.1 Payment Terms

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

100% payment of the contract price shall be paid on receipt of goods in good condition and final acceptance upon the submission of the following documents:

(i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;

- (ii) Two copies of packing list identifying contents of each package;
- (iii) Inspection certificate issued by the nominated Inspection agency, if any.
- (iv) Final Acceptance Certificate' issued by the Consignee as per Section XVIII
- (v) Insurance Certificate as per GCC Clause 11
- 21.2 The supplier shall not claim any interest on payments under the contract.

- 21.3 Where there is a statutory requirement for tax deduction at source, such deduction towards income tax and other tax as applicable will be made from the bills payable to the Supplier at rates as notified from time to time.
- 21.4 Irrevocable & non transferable LC shall be opened by the Purchaser. However, if the supplier requests specifically to open confirmed LC, the extra charges would be borne by the supplier. If LC is required to be extended and/or amended for reasons not attributable to the purchaser/consignee, the charges thereof shall be borne by the supplier.
- 21.5 The payment shall be made in the currency / currencies authorised in the contract.
- 21.6 The supplier shall send its claim for payment in writing, when contractually due, along with relevant documents etc., duly signed with date, to respective consignees.
- 21.7 While claiming payment, the supplier is also to certify in the bill that the payment being claimed is strictly in terms of the contract and all the obligations on the part of the supplier for claiming that payment has been fulfilled as required under the contract.
- 21.8 While claiming reimbursement of duties, taxes etc. (like custom duty and/or GST or any other taxes) from the Purchaser/Consignee, as and if permitted under the contract, the supplier shall also certify that, in case it gets any refund out of such taxes and duties from the concerned authorities at a later date, it (the supplier) shall refund to the Purchaser/Consignee forthwith.

22. Delivery

- 22.1 The supplier shall deliver the goods and perform the services under the contract within the time schedule specified by the Purchaser/Consignee in the List of Requirements and as incorporated in the contract. The time for and the date of delivery of the goods stipulated in the schedule shall be deemed to be of the essence of the contract and the delivery must be completed not later than the date (s) as specified in the contract.
- 22.2 Subject to the provision under GCC clause 26, any unexcused delay by the supplier in maintaining its contractual obligations towards delivery of goods and performance of services shall render the supplier liable to any or all of the following sanctions:
 - (i) imposition of liquidated damages,
 - (ii) forfeiture of its performance security and
 - (iii) termination of the contract for default.
- 22.3 If at any time during the currency of the contract, the supplier encounters conditions hindering timely delivery of the goods and performance of services, the supplier shall promptly inform the Purchaser/Consignee in writing about the same and its likely duration and make a request to the Purchaser/Consignee for extension of the delivery schedule accordingly. On receiving the supplier's communication, the Purchaser/Consignee shall examine the situation as soon as possible and, at its discretion, may agree to extend the delivery schedule, with or without liquidated damages for completion of supplier's contractual obligations by issuing an amendment to the contract.
- 22.4 When the period of delivery is extended due to unexcused delay by the supplier, the amendment letter extending the delivery period shall, interalia contain the following conditions:
 - (a) The Purchaser/Consignee shall recover from the supplier, under the provisions of the clause 23 of the General Conditions of Contract, liquidated damages on the goods and services, which the Supplier has failed to deliver within the delivery period stipulated in the contract.
 - (b) That no increase in price on account of any ground, whatsoever, including any stipulation in the contract for increase in price on any other ground and, also including statutory increase in or fresh imposition of customs duty and/or GST or on account of any other tax or duty which may be levied in respect of the goods and services specified in the contract, which takes place after the date of delivery stipulated in the contract shall be admissible on such of

the said goods and services as are delivered and performed after the date of the delivery stipulated in the contract.

- (c) But nevertheless, the Purchaser/Consignee shall be entitled to the benefit of any decrease in price on account of reduction in or remission of customs duty and/or GST or any other duty or tax or levy or on account of any other grounds, which takes place after the expiry of the date of delivery stipulated in the contract.
- 22.5 The supplier shall not dispatch the goods after expiry of the delivery period. The supplier is required to apply to the Purchaser/Consignee for extension of delivery period and obtain the same before despatch. In case the supplier dispatches the goods without obtaining an extension, it would be doing so at its own risk and no claim for payment for such supply and / or any other expense related to such supply shall lie against the purchaser.
- 22.6.1 Passing of Property:
- 22.6.2 The property in the goods shall not pass to the purchaser unless and until the goods have been delivered to the consignee in accordance with the conditions of the contract.
- 22.6.3 Where there is a contract for sale of specific goods and the supplier is bound to do something to the goods for the purpose of putting them into a deliverable state the property does not pass until such thing is done.
- 22.6.4 Unless otherwise agreed, the goods remain at the supplier's risk until the property therein is transferred to the purchaser.

23. Liquidated damages

23.1 Subject to GCC clause 26, if the supplier fails to deliver or install /commission any or all of the goods or fails to perform the services within the time frame(s) incorporated in the contract including opening of office in India as per the undertaking given in the qualification criteria, the Purchaser/Consignee shall, without prejudice to other rights and remedies available to the Purchaser/Consignee under the contract, deduct from the contract price, as liquidated damages, a sum equivalent to 0.5% per week of delay or part thereof on delayed supply of goods, installation, commissioning and/or services until actual delivery or performance subject to a maximum of 10% of the contract price. Once the maximum is reached Purchaser/Consignee may consider termination of the contract as per GCC 24.*Since the Liquidated damages are in virtue of non-performance of services, it will attract GST or any other applicable taxes which in turn shall be deducted from the bidder.*

During the above-mentioned delayed period of supply and / or performance, the conditions incorporated under GCC sub-clause 22.4 above shall also apply.

24. Termination for default

- 24.1 The Purchaser/Consignee, without prejudice to any other contractual rights and remedies available to it (the Purchaser/Consignee), may, by written notice of default sent to the supplier, terminate the contract in whole or in part, if the supplier fails to deliver any or all of the goods or fails to perform any other contractual obligation(s) within the time period specified in the contract, or within any extension thereof granted by the Purchaser/Consignee pursuant to GCC sub-clauses 22.3 and 22.4.
- 24.2 In the event of the Purchaser/Consignee terminates the contract in whole or in part, pursuant to GCC sub-clause 24.1 above, the Purchaser/Consignee may procure goods and/or services similar to those cancelled, with such terms and conditions and in such manner as it deems fit and the supplier shall be liable to the Purchaser/Consignee for the extra expenditure, if any, incurred by the Purchaser/Consignee for arranging such procurement.

24.3 Unless otherwise instructed by the Purchaser/Consignee, the supplier shall continue to perform the contract to the extent not terminated.

25. Termination for insolvency

25.1 If the supplier becomes bankrupt or otherwise insolvent, the purchaser reserves the right to terminate the contract at any time, by serving written notice to the supplier without any compensation, whatsoever, to the supplier, subject to further condition that such termination will not prejudice or affect the rights and remedies which have accrued and / or will accrue thereafter to the Purchaser/Consignee.

26. Force Majeure

- 26.1 Notwithstanding the provisions contained in GCC clauses 22, 23 and 24, the supplier shall not be liable for imposition of any such sanction so long the delay and/or failure of the supplier in fulfilling its obligations under the contract is the result of an event of Force Majeure.
- 26.2 For purposes of this clause, Force Majeure means an event beyond the control of the supplier and not involving the supplier's fault or negligence and which is not foreseeable and not brought about at the instance of , the party claiming to be affected by such event and which has caused the non performance or delay in performance. Such events may include, but are not restricted to, wars or revolutions, hostility, acts of public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes excluding by its employees , lockouts excluding by its management, and freight embargoes.
- 26.3 If a Force Majeure situation arises, the supplier shall promptly notify the Purchaser/Consignee in writing of such conditions and the cause thereof within twenty one days of occurrence of such event. Unless otherwise directed by the Purchaser/Consignee in writing, the supplier shall continue to perform its obligations under the contract as far as reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
- 26.4 If the performance in whole or in part or any obligation under this contract is prevented or delayed by any reason of Force Majeure for a period exceeding sixty days, either party may at its option terminate the contract without any financial repercussion on either side.
- 26.5 In case due to a Force Majeure event the Purchaser/Consignee is unable to fulfil its contractual commitment and responsibility, the Purchaser/Consignee will notify the supplier accordingly and subsequent actions taken on similar lines described in above sub-paragraphs.

27. Termination for convenience

- 27.1 The Purchaser/Consignee reserves the right to terminate the contract, in whole or in part for its (Purchaser's/Consignee 's) convenience, by serving written notice on the supplier at any time during the currency of the contract. The notice shall specify that the termination is for the convenience of the Purchaser/Consignee. The notice shall also indicate interalia, the extent to which the supplier's performance under the contract is terminated, and the date with effect from which such termination will become effective.
- 27.2 The goods and services which are complete and ready in terms of the contract for delivery and performance within thirty days after the supplier's receipt of the notice of termination shall be accepted by the Purchaser/Consignee following the contract terms, conditions and prices. For the remaining goods and services, the Purchaser/Consignee may decide:
 - a) To get any portion of the balance completed and delivered at the contract terms, conditions and prices; and / or
 - b) To cancel the remaining portion of the goods and services and compensate the supplier by paying an agreed amount for the cost incurred by the supplier towards the remaining portion of the goods and services.

28. Governing language

28.1 The contract shall be written in English language following the provision as contained in GIT clause 4. All correspondence and other documents pertaining to the contract, which the parties exchange, shall also be written accordingly in that language.

29. Notices

- 29.1 Notice, if any, relating to the contract given by one party to the other, shall be sent in writing or by cable or telex or facsimile and confirmed in writing. The procedure will also provide the sender of the notice, the proof of receipt of the notice by the receiver. The addresses of the parties for exchanging such notices will be the addresses as incorporated in the contract.
- 29.2 The effective date of a notice shall be either the date when delivered to the recipient or the effective date specifically mentioned in the notice, whichever is later.

30. Resolution of disputes

- 30.1 If dispute or difference of any kind shall arise between the Purchaser/Consignee and the supplier in connection with or relating to the contract, the parties shall make every effort to resolve the same amicably by mutual consultations.
- 30.2 If the parties fail to resolve their dispute or difference by such mutual consultation within twentyone days of its occurrence, then, unless otherwise provided in the SCC, either the Purchaser/Consignee or the supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided the applicable arbitration procedure will be as per the Arbitration and Conciliation Act, 1996 of India or amendments thereof. In the case of a dispute or difference arising between the Purchaser/Consignee and a domestic Supplier relating to any matter arising out of or connected with the contract, such dispute or difference shall be referred to the sole arbitration appointed by CEO HITES. The award of the arbitrator shall be final and binding on the parties to the contract subject to the provision that the Arbitrator shall give reasoned award in case the value of claim in reference exceeds Rupees One lakhs (Rs. 1,00,000/-)
- 30.3 Venue of Arbitration: The venue of arbitration shall be the place from where the contract has been issued, i.e., New Delhi, India.
- 30.4 Jurisdiction of the court will be from the place where the tender enquiry document has been issued, i.e., New Delhi, India

31. **Applicable Law**

The contract shall be governed by and interpreted in accordance with the laws of India for the time being in force.

32 Withholding and Lien in respect of sums claimed

Whenever any claim for payment arises under the contract against the supplier the purchaser shall be entitled to withhold and also have a lien to retain such sum from the security deposit or sum of money arising out of under any other contract made by the supplier with the purchaser, pending finalization or adjudication of any such claim. It is an agreed term of the contract that the sum of money so withheld or retained under the lien referred to above, by the purchaser, will be kept withheld or retained till the claim arising about of or under the contract is determined by the Arbitrator or by the competent court as the case may be, and the supplier will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention.

33. General/ Miscellaneous Clauses

- 33.1 Nothing contained in this Contract shall be constructed as establishing or creating between the parties, i.e. the Supplier/its Indian Agent/CMC Provider on the one side and the Purchaser on the other side, a relationship of master and servant or principal and agent.
- 33.2 Any failure on the part of any Party to exercise right or power under this Contract shall not operate as waiver thereof.
- 33.3 The Supplier shall notify the Purchaser/Consignee /the Government of India of any material change would impact on performance of its obligations under this Contract.
- 33.4 Each member/constituent of the Supplier/its Indian Agent/CMC Provider, in case of consortium shall be **jointly and severally liable** to and responsible for all obligations towards the Purchaser/Consignee/Government for performance of contract/services including that of its Associates/Sub Contractors under the Contract.
- 33.5 The Supplier/its Agent shall at all times, indemnify and keep indemnified the Purchaser/Government of India against all claims/damages etc. for any infringement of any Intellectual Property Rights (IPR) while providing its services under CMC or the Contract.
- 33.6 The Supplier/its Agent shall, at all times, indemnify and keep indemnified the Purchaser/Consignee/Government of India against any claims in respect of any damages or compensation payable in consequences of any accident or injury sustained or suffered by its employees or agents or by any other third party resulting from or by any action, omission or operation conducted by or on behalf of the supplier/its associate/affiliate etc.
- 33.7 All claims regarding indemnity shall survive the termination or expiry of the contract.
- 33.8 If any provisions of this tender enquiry or a contact formed on the basis of this tender enquiry are invalid or void under any of the existing provisions of Indian law, then such provisions will not affect other provisions of this tender enquiry/ contract.

SECTION – V

SPECIAL CONDITIONS OF CONTRACT (SCC)

The following Special Conditions of Contract (SCC) will apply for this purchase. The corresponding clauses of General Conditions of Contract (GCC) relating to the SCC stipulations have also been incorporated below.

These Special Conditions will modify/substitute/supplement the corresponding (GCC) clauses. Whenever there is any conflict between the provision in the GCC and that in the SCC, the provision contained in the SCC shall prevail.

The warranty and CMC period will be as mentioned in the list of requirement as per section VI of the tender enquiry.

SECTION - VI

LIST OF REQUIREMENTS Part I

	1	r	Part I	1		1
Sch.	RFx No &	SI.		Qty. for	Qty. for Chindwara,	Total
No	Item Name	No.	Equipments	Vidisha&	Dataia, Khandwa,	Requirement
INU	Item Name	140.		Ratlam	Shahdol& Shivpuri	for 07 colleges
		1	Drill machine	3	2	16
		2	Hand saw	3	3	21
		3	Band saw for sectioning body and limbs	1	1	7
				3	2	
		4	Brain knife	3	2	16
		5	Plastic tanks for storing soft and dissected	10	8	60
			parts			
		6	Trolley Table (Steel)	2	2	14
		7	X-ray Viewing lobby	4	3	7
		8	X-Ray plates/MRI/CAT scan/USG	1	1	7
			Dissecting instruments for cadaveric			
	3000002404	9	dissection	1 set	1 set	7
	Items for	10	Cabinet for slides (1000)	5	4	30
1	Department of		× /			
	Anatomy	11	Paraffin embedding bath	1	1	7
		12	Hot plates for flattening sections	1	1	7
		13	Hot air cover for drying slides (45°C)	1	1	7
		14	Marking pencils	1 set	1 set	7
		15	Skeletons articulated	7	5	39
		16	Bones (dis-articulated) sets	30	15	135
			`````			
		17	Multimedia Projector with screen	2	2	14
		18	Movie camera with projection screen	1	1	7
		19	Incubators	1	1	7
		20	Specimen Jar	1 set	1 set	7
		21	Charts, Diagrams, Models, Slides etc.	1 set	1 set	7
			Complete student Nerve Muscle Expe			to 22)
			Sherrington Starling kymograph (electrically			(0 11)
		1		2	2	14
		-	driven)	2		14
		2	Myograph stand	2	2	14
		3	Inductorium( Induction coil)	2	2	14
		4	simple key	2	2	14
		5	short cirulating key	2	2	14
		6	pohl'scommutalor	2	2	14
		7	Vibrating interrupter	2	2	14
		8	Muscle trough	2	2	14
		9	Muscle lever	2	2	14
		10	Muscle grip of femur clamp	2	2	14
		11	Hook and weight set	2	2	14
	3000002405	12	Heart lever (simple &Starling)	2	2	14
	Items for	13	Frog board for dissection	2	2	14
2	Department of	14	Enamel tray	2	2	14
	Physiology	15	Frog board cork lined with boss head	2	2	14
	1.1,0101065	13	0	<i>2</i>	<u>ک</u>	14
		16	Low voltage unit for tapping 2 and 4 volts	2	2	14
			for stimulation			
		17	Electromagnetic time marker	2	2	14
		18	Tuning fork, timemarker, 100/sec	2	2	14
		19	Electrodes	2	2	14
		20	X-blocks	2	2	14
		21	Spirit lamps	2	2	14
		21	Isometric Lever	2	2	14
		23	Marey's tambour	2	2	14
		24	Apparatus for passive movement	1	1	7
		25	Knee hammer	40	30	230
		25	Tuice numier	-		
		26	Bicycle Ergometer	1	1	7

Sch. No	RFx No & Item Name	Sl. No.	Equipments	Qty. for Vidisha& Ratlam	Qty. for Chindwara, Dataia, Khandwa, Shahdol& Shivpuri	Total Requirement for 07 colleges
		28 29	Schematic eye Maddox rod	2	1	<u>9</u> 7
		29	Tuning fork to test hearing 32-10000	1	1	/
		30	cps(sets-100, 256, 512 hz)	20	15	115
		31	Dynamometer	2	1	9
		32	Otorhinolaryngoscope	1	1	7
		33	Sterilizer electrical	1	1	7
		34	Instrument trolley	1	1	7
		35	Stop watch	20	15	115
		36	Colorimeter, photoelectric	1	1	7
		37	pH meter electric	1	1	7
		38	Oxygen cylinder with trolley	1	<u> </u>	7
		39	CO2 cylinder with trolley	1	1	7
		40	Electronic stimulator	1	l	7
		41	Water distillation steel with spare heating elements	1	1	7
		42	All glass distillation apparatus double stage	1	1	7
		43	Voltage stabilizer	1	1	7
		44	Microslides and glasswares	1 set	1 set	7
		45	Multimedia Projector with screen	2	2	14
		46	Double Demonstration eye piece	4	3	23
		47	Von frey's Hair aesthesiometer	2	2	14
		48	Benedict Roth Recording Spirometer	1	1	7
		49	Stage incubator	1	1	7
		50	Westergren's pipette for E.S.R. on stand(with space pipette) Optional	30	20	160
		51	Hemoglobin-meter Sahli's or Hellige	60	50	370
		52	Stethoscopes, demonstration with multiple ear pieces	4	2	18
		53	Venous pressure apparatus	2	1	9
		54	Clinical thermometer Digital	60	40	320
		55	Centrifuge, high speed with tachometer	1	1	<u> </u>
		56	Models and Charts	1 set	1 set	7
		57	Demonstrations eye piece with pointer	4	3	23
		58	Hemocytometer	60	50	370
		59	Wintrobe's pipette for ESR and PCV with stand	30	20	160
		60	Spirometer	20	15	115
		61	Stethograph	20	15	115
		62	Douglas bag, complete	20	1	9
		63	Ophthalmoscope	1	1	7
		64	Phakoscope	1	1	7
		65	Perimeter with charts (Lister's)	5	2	20
		66	Compass	20	20	140
		67	Thermo-aesthesiometer	20	20	140
		68	Algometer	20	15	115
		69	Newtons color wheel	1	1	7
		70	Color perception lantern Edridge green	2	1	9
		71	Sphygmomanometer (digital)	60	50	370
		72	Stethoscopes	60	50	370
		73	Van Slyke's apparatus manometric	1	1	7
		74	Basal metabolism apparatus	1	1	7
		75	Mosso'sErgograph	10	8	60
	3000002406 Items for	1	Analytical Balance :upto 200g/1gm increment	2	2	14
3	Department of	2	Urinometers	20	20	140
	Biochemistry	3	Hot air oven(more than 200 L)	2	20	14

Sch. No	RFx No & Item Name	Sl. No.	Equipments	Qty. for Vidisha& Ratlam	Qty. for Chindwara, Dataia, Khandwa, Shahdol& Shivpuri	Total Requirement for 07 colleges
		4	Digital colorimeters	5	5	35
		5	Glucometer with strips (For POCT)	2	2	14
		6	Thermometers 0-250°C	5	5	35
		7	Boiling water baths, with lids having 8-12 Holes	2	2	14
		8	Constant temperature water bath Tank Capacity: (Temperature range 5 to 800 Celsius)	1	1	7
		9	Centrifuge clinical	2	2	14
		10	pH meters of wide range digital	5	5	35
		11	Fixed volume pipettes 1ml,0.5ml,0.2ml,0.1ml and 0.02ml (each)	5	5	35
		12	Bottle dispensers	20	10	90
		13	All glass distillation apparatus	1	1	7
		14	Vortex mixers	2	2	14
		15	Incubator	2	2	14
		16	Variable and fixed volume micro auto pipettes 1 set	1	1	7
		17	Glass ware as required by standard lab. Like pipettes, beakers and concial flasks, etc.	1	1	7
		18	Fume cupboard	1	1	7
		19	Multimedia Projector with screen	2	2	14
		1	Barometer, Fotin	1	1	7
		2	Filter, Pasteur chamberland, complete set	1	1	7
		3	Filter, berke fed	1	1	7
		4	Hydrometers, spirit	3	2	16
		5	Hydrometers, milk	3	2	16
		6	Hydrometers, wet and dry BULB	3	1	10
		7	Museum jars			7
		8	Weighing Balance Small	1 set 3	1 set 1	11
		<u> </u>	Weighing machine adult	8		46
		10	Salters baby weighing machine	4	6 2	18
		10	Baby weighing machine	3	2	16
		11	HarpendersCallipers (for shindfold thickness)	4	3	23
		13	Height mesuring stand	4	3	23
		13	Models, charts, diagrams etc.	1	1	7
	2000002 107	14	Chloroscope	10	10	70
	3000002407	15	Horrocksapparteas	3	3	21
4	Items for Department of	17	MUAC tapes	10	10	70
4	Community	17	Haemoglobinometer	5	5	35
	Medicine	10	BP Apparatus (Digital)	10	10	<u> </u>
	eurenne	20	Stethoscope	10	10	70
		20	Kata Thermometer	3	3	21
		21	Globe Thermometer	3	3	21 21
		22	Anemometer	4	3	23
		23	Sound level meter	4	3	23
		24	Soli testing kit	4	1	7
		25	Water sampling bottle from any depth	1	1	7
		20	Needle Shredder	3	3	21
		27	Vaccine carrier	5	5	35
		28	Craft water testing kit	1	1	
		30	Protective devices for occupational safety	3 sets	3 sets	21
		31	Ear muffs	3 sets 4	<u> </u>	21 28
		31	Ear mulls Ear plugs	4	4	28
		32	Safety helmet	4	4	<u>28</u> 28
		-	· · ·			
		34	Goggles	4	4	28

5         Safety boots         4         4         4         28           36         Swine flu ki         4         4         28           37         Gloves         4         4         28           38         Triple layer surgical mask.         4         4         28           39         High efficiency mask.         4         4         28           40         Lang sleved culfed gown.         4         4         28           41         Protective cyce wear         4         4         28           42         Disposable delivery kit         4         4         4         28           43         Teatment kis as per national health         3 cach         3 cach         21           44         Treatment kis as per national health         3 cach         3 cach         21           45         Iofine testing kit         10         10         70         70           47         Silde set for eatomology         5         5         38         23           48         Meaguin catching kit         1         1         7         23         21         23           50         Johar aldation thermoneter         3         3	Sch. No	RFx No & Item Name	Sl. No.	Equipments	Qty. for Vidisha& Ratlam	Qty. for Chindwara, Dataia, Khandwa, Shahdol& Shivpuri	Total Requirement for 07 colleges
5         3000002409 Busine for the system of the syst							
5         38         Triple layer surgical mask         4         4         28           39         High Officiency mask         4         4         28           40         Long ideeved cuffed gown         4         4         28           41         Protective eye wear         4         4         28           42         Cap         4         4         28           43         Disposable delivery kit         4         4         28           44         Treatment kits as per national health programs         3 cauch         21           45         Lakine testing kit         10         10         70           46         Cincometer         10         10         70           47         Silises of ar entomology         5         5         35           48         Mosquito catching kit         4         3         21           51         Solar natiation thermometer         3         3         21           52         Firsk Ad Kit         1         1         7           53         Spirometer         3         3         21           54         Addionetry         1         1         7           <							
5         Jiele clinicary mask         4         4         28           40         Long sleved outford gown         4         4         28           41         Protoctive eye wear         4         4         28           42         Cap         4         4         28           43         Disposable delivery kit         4         4         28           43         Disposable delivery kit         4         4         28           44         Treatment kits as per national health         3 each         3 each         21           45         Iodine testing kit         10         10         70         70           46         Glacometer         10         10         70         70           47         Sida est for entomology         5         5         35         35           48         Mosquito caching kit         1         1         7         75           48         Mosquito caching kit         1         1         7         75           49         Clinical Thermometer         3         3         21         1           54         Addiometry         1         1         7         7							
5         40         Long sleeved cuffed govn.         4         4         42           41         Drotective eye wear         4         4         4         28           42         Cap         4         4         4         28           42         Capsuble delivery kit         4         4         4         28           43         Disposable delivery kit         4         4         4         28           44         Teraument kits us per national health programs         3 cuch         3 cuch         21           45         Iodine testing kit         10         10         70         75         55         35           46         Gluce reating kit         4         3         3         21         7           47         Stide saft crating kit         4         3         3         21         7           50         Sing psychrometer         3         3         3         21         7           51         Spicometer         3         3         21         7         7           51         Optical inscale activities and one each for RHTC         4         4         28         21           58         Optinhalmoscope							
5 41. Protective eye wear             42. Cap             44             44							
5 42							
43         Disgossible delivery kit         4         4         4         28           44         Teament kits as per national health 45         10         10         70         21           45         Iodine testing kit         10         10         70         70           46         Glacometer         10         10         70         70           47         Slide set for entomology         5         5         55           48         Mosquito catching kit         4         3         23           49         Clinical Thermometer         10         10         70           50         Sing psychrometer         3         3         21           51         Solar radiation thermometer         3         3         21           52         First Aik Kit         1         1         7         7           55         Outscope         3         3         21         7           54         Audiometry         1         1         7         7           55         Outscope         3         3         21         1           7         Sobiacod civitis and one each for RHTC         4         4         28 <td></td> <td></td> <td></td> <td>· · · · · · · · · · · · · · · · · · ·</td> <td></td> <td></td> <td></td>				· · · · · · · · · · · · · · · · · · ·			
5         300002409 Performant Microbiology         3         ach bille state (a)         3         ach bille (b)         3         ach bille (c)         3         ach bille (c)         3         ach bille (c)         3         ach bille (c)         10         70           45         Iodine testing kit         10         10         70         70         70           47         Stide set for entomology         5         5         35         35           49         Clinical Thermometer         3         3         21           50         Solar radiation thermometer         3         3         21           51         Solar radiation thermometer         3         3         21           52         First Aid Kit         1         1         7           53         Spirometer         3         3         21           54         Audiometry         1         1         7           55         Obthalmoscope         2         2         14           7         Public Address system (2 portable for field 57         8         2         1           7         Mathemedia Projector with Screen         2         2         14           8         Mattern				I.			
6         4*         programs         5 each         5 each         21           4         5         Iodine testing kit         10         10         70           45         Iodine testing kit         10         10         70           46         Glucometer         10         10         70           47         Slide set for entomology         5         5         35           48         Mosquio catching kit         4         3         23           49         Chincal Thermometer         10         10         70           50         Sing psychrometer         3         3         21           51         Solar radiation thermometer         3         3         21           52         Otoscope         3         3         21           54         Audiometry         1         1         7           55         Otoscope         2         2         14           7         Public Address system (2 patable for field         9         14           58         Centrifuge clinical         1         1         7           59         Multimedia Projector with Screen         2         2         14 <t< td=""><td></td><td></td><td>43</td><td></td><td>4</td><td>4</td><td>28</td></t<>			43		4	4	28
46         Glucometer         10         10         70           47         Slide set for entomology         5         5         35           49         Clinical Thermometer         10         10         70           49         Clinical Thermometer         3         3         21           51         Solar radiation thermometer         3         3         21           52         First Aid Kit         1         1         7           53         Spirometer         3         3         21           54         Audiometry         1         1         7           55         Otoscope         3         3         21           54         Audiometry         1         1         7           55         Otoscope         2         2         14           7         based activities and one each for RHTC         4         4         28           & WHTC)         -         4         Anaccrobic appartus         2         2         14           7         by Multimedia Projector         2         2         14         1           7         V.D.R.J shaker         2         2         14         1 </td <td></td> <td></td> <td>44</td> <td>programs</td> <td></td> <td></td> <td></td>			44	programs			
5         5         5         35           48         Mosquito catching kit         4         3         23           49         Clinical Thermometer         10         10         70           50         Sling psychrometer         3         3         21           51         Solar radiation thermometer         3         3         21           52         First Aid Kit         1         1         7           53         Spirometer         3         3         21           54         Audiometry         1         1         7           55         Obscope         3         3         21           56         Ophthalmoscope         2         2         14           7         based activities and one each for RHTC         4         4         28           40         Centrituge clinical         1         1         7           58         Centrituge clinical         1         1         7           59         Multimedia Projector with Screen         2         14         4           2         Distilled water plant         1         1         7           5         Micrometer stage			45				
5			46				
6         49         Clinical Thermometer         10         10         70           50         Sling psychrometer         3         3         21           51         Solar radiation thermometer         3         3         21           52         First Aid Kit         1         1         7           53         Spirometer         3         3         21           54         Audiometry         1         1         7           55         Oroscope         3         3         21           56         Ophtalmoscope         2         2         14           9         Public Address system (2 portable for field         7         7           50         Oscocepe         3         3         3         21           50         Multimedia Projector with Screen         1         1         7           50         Multimedia Projector with Screen         2         1         9           4         Micrometer stage         2         1         9           4         Micrometer stage         2         1         9           5         Objord Thermometers of different         1         1         7			47				
5         Sing psychrometer         3         3         21           51         Solar radiation thermometer         3         3         21           51         Solar radiation thermometer         3         3         21           52         First Aid Kit         1         1         7           53         Spirometer         3         3         21           54         Audiometry         1         1         7           55         Otoscope         3         3         21           56         Opthalmoscope         2         2         2           7         Public Address system (2 portable for field         7         7         2           58         Centrifuge clinical         1         1         7           58         Centrifuge clinical         1         1         7           59         Multimedia Projector with Screen         2         2         14           2         Distilled water plant         1         1         7           3         Micrometer stage         2         1         9           5         Multimedia Projector         2         2         14           6         <			48		4		
5         Solar radiation thermometer         3         3         21           52         First Aid Kit         1         1         7           53         Spirometer         3         3         21           54         Audiometry         1         1         7           55         Otoscope         3         3         21           56         Ophthalmoscope         2         2         14           7         Public Address system (2 portable for field         7         7           56         Ophthalmoscope         2         2         14           7         Public Address system (2 portable for field         7         7           59         Multimedia Projector with Screen         2         2         14           2         Distilled water plant         1         1         7           3000002409         1         Anaecrobic apparatus         2         2         14           7         V.D.R.L shaker         2         1         9         9           6         PH Meter         2         2         14         1         7           10         Digital Thermometers of different temperatures         1 set							
5         First Aid Kit         1         1         7           53         Spirometer         3         3         21           54         Audiometry         1         1         7           55         Obscope         3         3         21           56         Ophthalmoscope         2         2         14           Public Address system (2 portable for field SVBTC)         4         4         28           58         Centrifuge clinical         1         1         7           58         Centrifuge clinical         1         1         7           58         Centrifuge clinical         1         1         7           59         Multimedia Projector with Screen         2         2         14           2         Distilled water plant         1         1         7           3         Micrometer sege         2         1         9           4         Micrometer stage         2         1         9           5         Multimedia Projector         2         2         14           7         V.D.R.L shaker         2         2         14           7         Dicolory Counter							
53         Spirometer         3         3         21           54         Audiometry         1         1         7           55         Otoscope         3         3         21           56         Ophthalmoscope         2         2         14           Public Address system (2 portable for field based activities and one ach for RHTC & UHTC)         4         4         28           57         Somoonum         Scintrifuge clinical         1         1         7         59           58         Centrifuge clinical         1         1         7         7         59         Multimedia Projector with Screen         2         2         14           7         Mater plant         1         1         7         7         9         14           1         Anaecrobic apparatus         2         2         14         9           4         Micrometer stage         2         1         9         14         9           6         PH Meter         2         2         14         9         14         9           10         Digital Thermometers of different temperatures         1         1         1         7         14         9							
5         54         Audiometry         1         1         1         7           55         OptiMalmoscope         2         2         14           Public Address system (2 portable for field &UHTC)         4         4         28           58         Centrifuge clinical         1         1         7           58         Centrifuge clinical         1         1         7           59         Multimedia Projector with Screen         2         2         14           2         Distilled water plant         1         1         7           3         Micrometer stage         2         1         9           5         Multimedia Projector         2         2         14           2         Distilled water plant         1         1         7           3         Micrometer stage         2         1         9           5         Multimedia Projector         2         2         14           9         Colony Counter         1         1         7           10         Digital Thermometers of different temperatures         1 set         1 set         7           10         Candle Jar & Desicator         2         2							
5         Otoscope         3         3         21           56         Ophthalmoscope         2         2         14           Public Address system (2 portable for field based activities and one each for RHTC &UHTC)         4         4         28           57         Based activities and one each for RHTC &UHTC)         4         4         28           58         Centrifuge clinical         1         1         7           59         Multimedia Projector with Screen         2         2         14           1         Anaecrobic apparatus         2         2         14           3         Micrometer stage         2         1         9           5         Multimedia Projector         2         2         14           6         PH Meter         2         2         14           7         V.D.R.L shaker         2         2         14           9         Colony Counter         1         1         7           10         Digital Thermometers of different temperatures         1 set         1 set         7           11         Vortex Mixer         2         2         14           2         Candle Jar & Desicator         2         2				*		3	
56         Ophthalmoscope         2         2         14           Public Address system (2 portable for field based activities and one each for RHTC &UHTC)         4         4         28           58         Centrifuge clinical         1         1         7           59         Multimedia Projector with Screen         2         2         14           1         Anaecrobic apparatus         2         2         14           2         Distilled water plant         1         1         7           3000002409         Here         2         2         14           7         V.D.R.L shaker         2         2         14           7         V.D.R.L shaker         2         2         14           7         V.D.R.L shaker         2         2         14           7         Oclony Counter         1         1         7           10         Digital Thermometers of different temperatures         1 set         1 set         7           11         Vortex Mixer         2         2         14         1           12         Candle Jar & Desicator         2         2         14           13         Macropipettes – Multi channel & Single channel							
6         Public Address system (2 portable for field based activities and one each for RHTC &UHTC)         4         4         28           5         Centrifuge clinical         1         1         7           58         Centrifuge clinical         1         1         7           59         Multimedia Projector with Screen         2         2         14           6         Micrometer sye pieces         2         1         9           4         Micrometer sye pieces         2         1         9           5         Multimedia Projector         2         2         14           6         PH Meter         2         2         14           7         V.D.R.L shaker         2         1         9           9         Water bath         2         2         14           9         Colony Counter         1         1         7           10         Digital Thermometers of different temperatures         1 set         1 set         7           11         Vorex Mixer         2         2         14           2         Colony Counter         1 set         1 set         7           10         Digital Thermometers of different temperatures							
57         based activities and one each for RHTC &UHTC)         4         4         28           58         Centrifuge clinical         1         1         7           59         Multimedia Projector with Screen         2         2         14           1         Anaecrobic apparatus         2         2         14           2         Distilled water plant         1         1         7           3         Micrometer stage         2         1         9           4         Micrometer stage         2         14         9           5         Multimedia Projector         2         2         14           6         PH Meter         2         2         14           7         V.D.R.L shaker         2         1         9           8         Water bath         2         2         14           9         Colony Counter         1         1         7           10         Digital Thermometers of different temperatures         1 set         1 set         7           11         Vortex Mixer         2         2         14           12         Candle Jar & Desciator         2         2         14			56	* *	2	2	14
59         Multimedia Projector with Screen         2         2         14           59         Multimedia Projector with Screen         2         2         14           2         Distilled water plant         1         1         7           3         Micrometer eye pieces         2         1         9           4         Micrometer stage         2         1         9           5         Multimedia Projector         2         2         14           6         PH Meter         2         2         14           9         Colony Counter         1         1         7           10         Digital Thermometers of different temperatures         1 set         1 set         7           11         Vortex Mixer         2         2         14           9         Digital Thermometers of different temperatures         1 set         1 set         7           11         Vortex Mixer         2         2         14           12         Candle Jar & Desicator         2         2         14           13         Micropipettes – Multi channel & Single channel         1 set         1 set         7           13         Brearaffin embedding bath with Modu			57	based activities and one each for RHTC	4	4	28
5 3000002409 Items for Department of Micrometer stage               2               2               1             4			58	Centrifuge clinical	1	1	7
5         300002409 Items for Department of Microbiology         2         Distilled water plant         1         1         7           6         3000002409 Items for Department of Microbiology         3         Micrometer stage         2         1         9           7         V.D.R.L shaker         2         2         14           7         V.D.R.L shaker         2         1         9           8         Water bath         2         2         14           9         Colony Counter         1         1         7           10         Digital Thermometers of different temperatures         1 set         1 set         1 set         7           11         Vortex Mixer         2         2         14         1         1         7           10         Digital Thermometers of different temperatures         1 set         1 set         7         1           11         Vortex Mixer         2         2         14         1         1         7           13         Micropipettes – Multi channel & Single channel         1 set         1 set         1 set         7         1           3         Paraffin embedding bath with Module         2         2         14         1			59	Multimedia Projector with Screen	2	2	14
3000002409 Items for Department of Microbiology         3         Micrometer stage         2         1         9           5         Multimedia Projector         2         1         9           5         Multimedia Projector         2         2         14           6         PH Meter         2         2         14           7         V.D.R.L shaker         2         1         9           8         Water bath         2         2         14           9         Colony Counter         1         1         7           10         Digital Thermometers of different temperatures         1 set         1 set         7           11         Vortex Mixer         2         2         14           12         Candle Jar & Desicator         2         2         14           13         Anicropipettes – Multi channel & Single channel         1 set         1 set         7           13         Paraffin embedding bath with Module         2         2         14           2         Hot plates         2         2         14           3         Paraffin embedding bath with Module         2         2         14           4         Ultrapure water sol			1	Anaecrobic apparatus	2	2	14
5 300002409 Items for Department of Microbiology               4 Micrometer stage               2 1			2	Distilled water plant	1	1	7
5         Multimedia Projector         2         2         14           6         PH Meter         2         2         14           6         PH Meter         2         2         14           7         V.D.R.L shaker         2         1         9           8         Water bath         2         2         14           9         Colony Counter         1         1         7           10         Digital Thermometers of different temperatures         1 set         1 set         1 set         7           11         Vortex Mixer         2         2         14           12         Candle Jar & Desicator         2         2         14           13         Micropipettes - Multi channel & Single channel         1 set         1 set         7           13         Micropipettes - Multi channel & Single channel         1 set         1 set         7           2         Hot plates         2         2         14           3         Paraffin embedding bath with Module         2         2         14           4         Ultrapure water solutions - Distilled water         1         1         7           5         Water bath			3	Micrometer eye pieces	2	1	9
5         300002409 Items for Department of Microbiology         6         PH Meter         2         2         14           7         V.D.R.L shaker         2         1         9           8         Water bath         2         2         14           9         Colony Counter         1         1         7           10         Digital Thermometers of different imperatures         1 set         1 set         7           11         Vortex Mixer         2         2         14           12         Candle Jar &Desicator         2         2         14           13         Micropipettes – Multi channel & Single channel         1 set         1 set         7           13         Micropipettes – Multi channel & Single channel         1 set         1 set         7           2         Hot plates         2         2         14           3         Paraffin embedding bath with Module         2         2         14           4         Ultrapure water solutions - Distilled water plant         1         1         7           5         Water bath         1         1         7         14           4         Digital SLR         1         1         7			4	Micrometer stage		1	9
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$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			7	V.D.R.L shaker	2	1	9
	5		8	Water bath	2	2	
610Digital Thermometers of different temperatures1 set1 set1 set711Vortex Mixer221412Candle Jar & Desicator221413Micropipettes – Multi channel & Single channel1 set1 set713Specimen Identification Solutions1112Hot plates22143Paraffin embedding bath with Module22143Paraffin embedding bath with Module22144Ultrapure water solutions - Distilled water plant1175Water bath1176Centrifuge machine55357Cabinet for 1000 slides20201408Digital SLR1179Digital Automatic camera11710Standalone paraffin dispensing module cold plate holding more than 100 cassettes117			9	· · · · · · · · · · · · · · · · · · ·	1	1	7
Image: 12 Candle Jar & Desicator221413 Micropipettes - Multi channel & Single channel1 set1 set1 set713 Specimen Identification Solutions1112 Hot plates22143 Paraffin embedding bath with Module22144 Ultrapure water solutions - Distilled water plant1175 Water bath11176 Department of Pathology6 Centrifuge machine55357 Cabinet for 1000 slides20201408 Digital SLR1179 Digital Automatic camera11710 Standalone paraffin dispensing module cold plate holding more than 100 cassettes117			10	•	1 set	1 set	7
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61 set1 se			12		2	2	14
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64Ultrapure water solutions - Distilled water plant11730000024105Water bath1117Items for Department of Pathology6Centrifuge machine55357Cabinet for 1000 slides20201408Digital SLR1179Digital Automatic camera11710Standalone paraffin dispensing module cold plate holding more than 100 cassettes11711Stand alone cold plate117			3	*	2	2	14
$ 6  \begin{vmatrix} 300002410 \\ Items for \\ Department of \\ Pathology \end{vmatrix} \begin{array}{c c c c c c } \hline 5 & Water bath \\ \hline 6 & Centrifuge machine \\ \hline 7 & Cabinet for 1000 slides \\ \hline 7 & Cabinet for 1000 slides \\ \hline 9 & Digital SLR \\ \hline 9 & Digital Automatic camera \\ \hline 10 & Standalone paraffin dispensing module cold \\ \hline 11 & Stand alone cold plate \\ \hline 11 & Stand alone cold pl$			4		1	1	7
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6Department of Pathology7Cabinet for 1000 slides20201409Digital SLR1179Digital Automatic camera11710Standalone paraffin dispensing module cold plate holding more than 100 cassettes11711Stand alone cold plate117					5	5	35
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11Stand alone cold plate117			10	Standalone paraffin dispensing module cold		1	
			11		1	1	7
				Troughs for staining	1	1	

Sch. No	RFx No & Item Name	Sl. No.	Equipments	Qty. for Vidisha& Ratlam	Qty. for Chindwara, Dataia, Khandwa, Shahdol& Shivpuri	Total Requirement for 07 colleges
		13	Coplin jars	24	24	168
		14	Water bath eletric (Tissue Floatation)	2 2	2	14
		15	Balance, Chemical with weights	6	2 6	14
		16	Magnifying lens			42
		17	Blood pressure instrument	5	5	35
		18 19	Laboratory Counter	8	6	46
		20	Laboratory stirrer Automatic timer	1 5	<u> </u>	7
				-		35
		21 22	Balance for weighing organs	1	1	7 7
			Saws, wire for cutting bones	-	1	
		23	Slide boxes for 100 slides for students	200	200	1400
		24 25	Drill for boring glass	2 2	2 2	14
			X-ray viewing box			14
		26	Sternal puncture needle Adult size	2	2	14
		27	Sternal puncture needle child size	2 2	2	14
		28	Liver Biopsy needle		2	14
		29	Stop watch	6	6	42
		30	pH Meter electic	5	5	35
		31	Museum jars	1 set	1 set	7
		32	Haemacytometers	90	60	480
		33	Syringes disposable one set from 10 cc (of each) to 2 cc	30	30	210
		34	Urinometers	9	9	63
		35	Glasswares	1	1	7
		36	Cold Plate for Modular Tissue Embedding System	1	1	7
		37	LED wireless projector	3	3	21
		1	Anthropometric Set :	2	2	14
			A) Folding Metal Rod Upto 7 Ft	2	2	14
			B) Osteometric Board	2	2	14
			C) Craniometer	2	2	14
			D) Mandibulometer	2	2	14
			E) Goniometer	2	2	14
			F) Vernier Calipers	2	2	14
			G) Equipment for Reporting Height	2	2	14
			H) Weighing Machine Dial Type Human	2	2	14
		2	Consumable for medico legal work			
			Disposable Cap-Mask-Gown, Gloves Etc.	1460	1460	10220
			Cotton Rolls, Suture Materials Etc.	1000 each	750 each	7250
				365/20 lit		
	3000002411 Items for		Formalin/rectified spirit,lugol's iodine	each	300/15 lit each	2230/115 lit
7	Department of		Swabs, Preservative Bulbs etc.	1000 each	1000 each	14000
,	Forensic Medicine		Viscera bottles(plastic, jointless with capacity of 500/200/100 ml), Tissue bottles	2900/1100	2900/1100/ 1100,1100	20300/7700/ 7700,7700
			with capacity of 2 lit.	1100,1100		
			Syringe (5, 10, 50 ml)	1000	1000	7000
			Preservative Salts	240 kg	240 kg	1680 kg
			packing gauze than & sealing wax	120	120	840
		3	Multimedia Projector, CPU & Projection Screen	2	1	9
		4	Digital SLR Camera With Accessories	1	1	7
		5	X-Ray View Box Two In One	6	4	32
		6	Stop Watch	4	4	28
		7	Digital pH Meter	1	1	7
		8	Chemical Balance	1	1	7
		9	Distillation Plant	1	1	7
		9	Centrifuge	1	1	7
		10	Continuge	1	1	1

Sch. No	RFx No & Item Name	Sl. No.	Equipments	Qty. for Vidisha& Ratlam	Qty. for Chindwara, Dataia, Khandwa, Shahdol& Shivpuri	Total Requirement for 07 colleges
		11	Slide Warming Table	2	1	9
		12	Hot Plate	2	1	9
		13	Glass Cutting Pencil	2	2	14
		14	Spectroscopic Lens With Adjustable Slit	2	2	14
		15	Dissection Set Complete	2	2	14
		16	Digital BP Instrument	2	2	14
		17	Stethoscope	2	2	14
		18	Abrasive Powder	1	1	7
		19	L Modes	1 set of 50	1 set of 50	2
		20	Block Holder	1 set of 50	1 set of 50	2
		21	Stryker Type Autopsy Saw With Accessories	5	3	25
		22	Weighing Machine For Organs	4	3	23
		23	Weighing Machine For Fetus	3	2	16
		24	Dissection Set Complete	5	5	35
		25	Brain Knife	8	6	46
		26	Hack Saw	5	4	30
		27	Rib Shear Left & Right	3 Each	4 Each	16
		28	Measuring Tape( Steel Tape Roll)	6	4	32
		29	Magnifying Lens	6	4	32
		30	X- Ray View Box (4 In 1)	4	2	18
		31	Tooth Extractor Left & Right	2	1	9
		32	Hand Set Heat Sealer	1	1	7
		33	Instrument Trolley	3	2	16
		34	Stretchers for shifting dead bodies	3	2	16
		35	Rectal Thermometer	4	4	28
		36	Water Bath For Tissue Floatation	1	1	7
		37	Victim examination table	1	1	7
		38	Screen of size 6x 2 feet each	3	3	21
		39	Hymenoscope	2	2	14
		40	Colposcope	2	2	14
		41	Sims Speculum	4	4	28
		42	Cuscos Speculum	2	2	14
		43	Sponge holding forceps	4	4	28
		44	Toothed forceps	4	4	28
		45	Ovum forceps	2	2	14
		46	Proctoscope	4	4	28
		47	Torch	1	1	7
		48	Paraffin Bath Embedding	1	1	7
		1	Special Drug Delivery systems like Metered Dose Inhalers, Spacers, Rotahalers, Nasal	15 sets	10 sets	80
			sprays, Transdermal patches, , Insulin pen	15	10	00
	3000002412	2	Digital Sphygmomanometer	15	10	80
8	Items for	3	Critical Flicker Fusion Apparatus	2	2	14
	Department of	4	Pupillometer	2	2	14
	Pharmacology	5	Charts/photographs/models and videos.	5 sets	3 sets	25
		6	Stop watch	4 5	3	23
		7	Weighing Machine 0-100kg.		3 8	25
		8	Stethoscope	10	ð	60

## Part II: Required Delivery Schedule:

## a) For Indigenous goods or for imported goods if supplied from India:

60 days from date of Notification of Award to delivery at consignee site. The date of delivery will be the date of delivery at consignee site. Tenderers may quote earliest delivery period.

Installation and commissioning shall be done within 30 days of receipt of the stores/ goods at site or within 30 days of handing over the site for installation, whichever is later.

For delayed delivery and/ or installation and commissioning liquidated damages will get applied as per GCC clause 23.

Note:

i) The delivery schedule for different sites may be staggered based on the site readiness; the supplier should get confirmation of site readiness from the purchaser before delivery to each site.

#### Part III: Scope of Incidental Services:

Installation & Commissioning, Supervision, Demonstration, Trial run and Training etc. as specified in GCC Clause 13

#### Part IV:

Site Modification Work (if any) as per details in Technical Specification.

#### Part V:

Warranty period as per GCC clause 15. **Part VI:** 

#### **Required Terms of Delivery and Destination:**

#### a) For Indigenous goods or for imported goods if supplied from India:

At Consignee Site(s)

Insurance (local transportation and storage) would be extended and borne by the Supplier from ware house to the consignee site for a period including 3 months beyond date of delivery.

#### **Destination/Consignee details:**

A list of Consignee is given in Section XXI.

## Section – VII <u>Technical Specifications</u> <u>Schedule No. 1</u> Anatomy Group Tender Items

	Technical Specifications
	Schedule No. 1
	Anatomy Group Tender Items
1	Drill Machine
	Drill Machine (Electrically Operated hand Drill)
	Universal hand drill; comprise saggital saw head piece, mini hand drill, transverse saw, triple drill guide130 angles as
	well as open gear hand machine drill with S.S. chuck and key.
	These are precision designed in line with defined safety standards and for cadaver use.
2	Hand Saw (SS)
	Hand Saw (S.S)
	Hand saw with high carbon steel blades made at HRD to 52 degrees, hard and durable, anti rust and smoothness,
	which leads to less friction, blades chrome plated blades.
	Specifications :
	For HRC, Blade materials reaches 52 degrees and teeth reaches 60 degrees ( $\pm$ 3) Chrome treatment, antirust, smooth
	resulting in less friction.
	Elegant Handles, ergonomic Special Teeth Design, sharp at edges.
	Versatile assortments
3	Band saw for sectioning body and limbs
5	Band saw for sectioning body and limbs
	Band saw for sectioning body and innos
4	Brain knife
	Brain Knife Stainless steel, non rust standard - length 12"
5	Plastic tanks for storing soft & dissected parts
	Plastic tanks for storing soft & dissected parts
6	Trolly Table (steel, Light)
U	Trolley Table of Stainless steel / Instrument trolley with three shelves with guard rails on three side
	With swivel castors
	Small:- 66x44x87cm (LxWxH)
	Large:- 91x45x82cm (LxWxH)
7	X-ray Viewing lobby
	X-Ray viewing lobby
	4 panel side by side X – Ray View box illuminator
	Standard features: 2 lamps (F15IT8/D) per panel, roller gravity film holding systems, durable steel construction, thin
	3" profile, chip Resistenat hospital white finish, continuous bottom film ledge, even vue reflective system, UL and
	cUL listed, Centralized cluster on/off switching; FAS - film activated switching, MS - Master Switch, HGP -
	Hospital Grade Plug Specs: surface wall mount.
	4 panel side by side 56"X17" viewing area overall Dimensions:
	56" L 21" H3 3/8 D.
	illumination: 2000cd/m2. Approximate weight 84 lbs.
0	V Dow mlotos/MDI/CAT/USC
8	X-Ray plates/MRI/CAT scan/USG
	X-Ray plates
	panel side by side X – Ray View box illuminator
	Standard features: 2 or 1 lamps (F15IT8/D) per panel, roller gravity film holding systems, durable steel construction,
	thin 3" profile, chip Resistenat hospital white finish, continuous bottom film ledge, even vue reflective system, UL
	and cUL listed, Centralized cluster on/off switching; FAS – film activated switching, MS – Master Switch, HGP –
	Hospital Grade Plug Specs: surface wall mount.
	Troshim crase ring sheep, entrate war month.

	Illumination: 2000cd/m2. Approximate weight 84 lbs.							
9	Dissecting Instruments for Cadaver							
,	Technical Specifications							
	Student Anatomy Dissecting Kit							
	Should contain most widely used instruments of high quality. Dissection Kit contents:							
	· Scalpel with screw lock blade							
	· Narrow blade scalpel 1.5" blade							
	· Forceps 4.5" Blunt and Toothed.							
	· Forceps 4.5" with curved, fine points							
	· Dissecting scissors, Iris 4.5"							
	· Probe and hook chrome							
	· Dissecting scissors with one point sharp & one point blunt 5.5"							
	· Teasing needle straight							
	· Teasing needle bent							
	· Ruler 6" and 12" (SS)							
	· Dissecting chain and hook chrome							
	Bone cutter							
	Wheel barrow							
	Trays (steel)							
	a) 2 feet X 3 feet, 10 numbers							
	b) 1 feet X 1 feet, 10 numbers							
	Retractors for abdomen dissection							
	Probes Hammer and Chisel.							
	Hammer and Cmsei.							
10	Cabinet for slides (1000)							
10	Cabinet for slides (1000) (Aluminium/SS)							
11	PARAFFIN EMBEDDING SYSTEM							
	Technical Specifications							
	Should have single module design.							
	Electronically controlled for dependability and performance.							
	The heating function should be controlled by accurate digital thermostat							
	Low and flat work-surface to facilitate operator efficiency.							
	User friendly membrane switches.							
	4-liter capacity paraffin reservoir which minimizes refilling frequency.							
	Forceps warmer and illuminated paraffin dispenser.							
	Warming oven with removable shelf and double hinged lid for convenient access to preheated base mould.							
	Wax bath complete with drainage shelf, debris screen, and hinged lid.							
	Heated work area which provides a flat working surface with the excess paraffin draining under the surface into the							
	wax bath; complete with a hand and foot switch for activating the dispensing head.							
	Bright illuminations for convenient working.							
	The cold plate should have 170 sq. in. (1100cm2) of efficient refrigerated cooled working surface with removable stainless steel drainage tray beneath.							
	Tactile membrane touch-pad for easy temperature setting and monitoring.							
	Height of Work Surface: Work stage 2.75"(7cm) above countertop							
	Wax Reservoir Dimension (approx): .75"(L) x 4.75"(W) x 4"(D) (19.5 x 12 x 9.5cm)							
	Wax Reservoir Dimension (approx): $1.75$ (L) x $4.75$ (W) x $4$ (D) (15.5 x $12$ x 5.5cm) Wax Bath Dimension (Approx): $10.25$ "(L) x $8.5$ "(W) x $1.75$ "(D) ( $26$ x $21.5$ x 4cm)							
	Warming Oven Dimension (approx): $6.5^{\circ}(L) \ge 7.5^{\circ}(W) \ge 1.75^{\circ}(D) (20 \times 21.5 \times 400)$							
	Cold Plate Dimension (Approx): $11.75^{\circ}(L) \times 14.5^{\circ}(W)$ (29.5 x 36.6cm)							
	<b>Temp Ranges:</b>							
	wax Reservoirs: $40^{\circ}$ - $10^{\circ}$ C + $1/2^{\circ}$ C							
	Wax Reservoirs: 40° - 70°C +/-2°C Work Surface: 40° - 70°C +/-5°C							

	Wax Bath: 40° - 70°C +/-2°C
	Cold Plate working surface: ambient to -5°C
	Accessories, spares and consumables
	Spare Bulb – 3
	Thermostats – 1
	Power input to be 220-240VAC, 50Hz
	Standards, Safety and Training
	CE or BIS approved product.
12	HOT PLATE – ELECTRICAL
	Description of Function
	Used to heat glassware or its contents.
	Technical Specifications
	Durable cast-iron heating element that heats up fast
	Thermostatic control from simmer to boil
	Durable and easy-to-clean spray plastic finish
	Variable heat control
	Stainless steel body with top having the diameter 30cm
	Temperature and working indicator light
	Maximum surface Temperature - 300 °C
13	Hot air cover for drying slides (45°C)
	Hot air cover for drying slides (45°C); Temperature Range Ambient +5 °C - 250 °C
	Shelves: 2-3 Stainless steel - removable with air circulation.
14	Marking pencils (VIBGYOR)
	7 colour marking pencils (VIBGYOR)
15	HUMAN SKELETON ARTICULATED (REAL BONES)
15	Description of Function
15	Description of Function           Mounted skeleton, one with the various parts connected in such a way as to demonstrate normal relationships and
15	<b>Description of Function</b> Mounted skeleton, one with the various parts connected in such a way as to demonstrate normal relationships and allow motion between components as in the living body.
15	Description of Function           Mounted skeleton, one with the various parts connected in such a way as to demonstrate normal relationships and allow motion between components as in the living body.           Technical Specifications
15	Description of Function         Mounted skeleton, one with the various parts connected in such a way as to demonstrate normal relationships and allow motion between components as in the living body.         Technical Specifications         The articulated skeleton should be ideal for teaching the basics of human anatomy.
15	Description of Function         Mounted skeleton, one with the various parts connected in such a way as to demonstrate normal relationships and allow motion between components as in the living body.         Technical Specifications         The articulated skeleton should be ideal for teaching the basics of human anatomy.         Adult Male & Female - 2 set each
15	Description of Function         Mounted skeleton, one with the various parts connected in such a way as to demonstrate normal relationships and allow motion between components as in the living body.         Technical Specifications         The articulated skeleton should be ideal for teaching the basics of human anatomy.         Adult Male & Female - 2 set each         Child Male & Female - 2 set each
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 	Lamp Life (Normal):- 5,000 hours							
	Screen should be white in colour and good quality with automatic with remote controlled. Minimum size 5x6 Ft.							
18	Movie camera with projection screen							
	Included Components Rechargeable Battery Pack,							
	Micro USB Cable, Operating Guide,							
	Waterproof Case, Adhesive Mount							
	Image Stabilization should be available							
	Digital Zoom 3							
	Optical Sensor Resolution 10 Megapixels or more							
19	Incubator							
	Outside made up of mild steel with paint							
	Inside made up of Aluminum/ SS							
	The double walled door with asbestos gasket lining is fitted on heavy brass cast							
	Temperature range Ambient to 80 Degree Centigrade with thermostat control							
	Heating elements are placed in the ribs at the bottom and sides							
	Size: 350x350x350 mm approx.							
	No. of trays - 2(14x14x14 ")							
	Displays for temperature should be available.							
20	Specimen Jar with Lids - for Wet Specimen							
	Small- 200x125x125 mm - 100 Nos.							
	Medium - 250x250x 250 mm or 360 x 150x 100 mm - 50 Nos.							
	DELS							
	odel of Man or Woman(Normal Size)Adult Showing superficial dissection on one side. And other							
	intact. Arms and legs are detachable. The internal organs in abdominal & thoracic wall are shown in situ and they are chable.							
	uman Torso with Head Life size. (Male or Female)							
	Height 38 inches excluding arms & legs. Showing superficial dissection on one side and other side intact. The internal							
	ns in abdominal & thoracic wall are shown in situ. Half of the skull cap can be removed and brain can be taken out.							
	incipal Structures found within tissue Cells							
4. He	ead and NeckLongitudinal Section of Head and Neck							
5. Br	ain with Skull							
	rain in 4 Parts							
	ervous system							
	id sagittal Section through the Brain							
	ructure of the Cerebellum.							
	A Superior View. An Interior View. A Sagittal View							
	Sagittal section through the Medulla Oblongata and pons showing							
	The Cranial Nerve Nuclei of Gray Matter The Autonomic Nervous System							
	Spinal Cord with Spinal Nerves							
	Spinal nerves of the hand Anterior View							
	Spinal nerves of the leg. (Distribution of Nerves from Lumber & sacral Plexuses)							
	Posterior view of the brain Stem							
	Lymphatic System							
	es of Neurons							
	Aultipolar Neuron. Bipolar Neuron. Unipolar Neuron							
27. A	Ascending Pathway: The Dorsal Column Descending Pathway: The Pyramidal System (2 Models)							
	iscontaing Futilitudy. The Dorbar Column Descontaing Futilitudy. The Fyrainidal System (2 - Models)							
	Somaesthetic pathway							
29. R 30. T	Somaesthetic pathway Relationshoip of the Lymphatic System to the Cardio vascular system. The cervicle sympathetic Ganglia							
29. R 30. T 31. H	Somaesthetic pathway Relationshoip of the Lymphatic System to the Cardio vascular system. The cervicle sympathetic Ganglia Human Eye Vertical SectionGreatly Enlarged Showing Muscle, Optic Nerves, Crystaline Lens, Iris, Cornea etc							
29. R 30. T 31. H 32. H	Somaesthetic pathway Relationshoip of the Lymphatic System to the Cardio vascular system. The cervicle sympathetic Ganglia							

34. Ear Large Size Dissectible in 4 parts
35. Structure within the inner ear including the cochlea & Vestibular Apparatus
36. Ear Sagittal Section On board. (External, middle & Inner Ear)
37. Larynx Anterior View, Posterior View, Side View, Cut away Side View & Sagittal Section (5 Models)
38. Functional Model of Larynx
39. LarynxDeep side-View
40. The PharynxPosterior View
41. PharynxSagittal Section
42. Tonsils Pharyngeal, Palatine & Lingual Tonsil
43. Teeth (Lower jaw) with structure shown
44. the Structure of tooth
46. The Tongue Dorsal Surface
47. Pituitary Gland Hypothalamus
48. Thyroid & Parathyroid Glands
49. Sagittal Section through Nasal Cavity and Pharynx Viewed From medical Side
50. Lungs One side sectioned with Respiratory Tract, Bronchial Tubes, Arteries & Veins
51. Pulmonary circulation
52. The Respiratory System
53. Liver Enlarged showing Gall Bladder
54. Liver with Gall Bladder & Pancreas (On Stand)
55. Blood Supply of the Liver
56. Duct System with Gall Stones in common sites
57. Duct Hepatic Portal System
58. Endocrine System
59. Pancreas Enlarged
60. Structure of the pancreas
61. StomachEnlargedwith duodenum, sectioned showing details
62. An Anterior view of Abdominal arota& its principles branches
63. Spleen Normal size with details
64. Gall bladder, Pancreas & Duodenum
65. Blood supply of the Intestine
65. Rectum (Anal Canal)
67. Large Intestine
68. Small Intestine.
69. The Digestive System
70. Heart EnlargedSeparable in 4 Parts
74. Principal Arteries of the body.
75. Principal Veins of the body.
76. Veins that drain the head & Neck
70. Venis that drain the head & Neck 77. An Anterior view of the Veins that the upper right extremity
78. Veins of the lower Extremities.
79. Circulatory System
80. Relationship of the lymphatic system to the Cardio vascular system.
81. Fetal Circulations
82. A Schematic Model of Circulatory System
83. Arteries of the Neck and Head. Major branches of the right Common carotid and right subclavian arteries
84. An Anterior view of the Major Arteries of the Upper Extremity
85. Arteries of the pelvic Region
86. Arteries of the right lower Extremity (Anterior view & posterior view)
87. Urinary System With Kidney and Urinary Bladder
88. Kidneyin 2 Partson stand
89. Blood supply of the kidney
90. Urinary BladderSectioned
91. testisX Section
92. Cross Section of the Penis Anterior view (Oblique section)
93. Structure of the Penis showing the Attachment, Blood & Nerve supply and the arrangement of the erectile tissue
94. Longitudinal Section of the Female Urethra

95. Organs of the Male Reproductive System.(A Sagittal View)
96. Organs of the Female Reproductive System (A Sagittal Section)
97. The Size & Position of the Uterus in s full term Pregnant Woman in a Sagittal Section
98. UterusSagittal Sectionwith fallopian tube with details
99. Uterus in section showing sperm & Ovum in process of Fertilization.
100. Ovarian Cycle, Fertilization and the Morphofenic events of the first week.
101. Blood supply of the uterus.
102. Vascular Supply to the Uterus
103. Tubal Ligation involves removal of a portion of each uterine tube.
104. Structure of the Breast and Mammary glands (A sagittal section and anterior view partially setioned)
107. Bone Structure Cross Section
108. Hair StructureCross Section
Anatomy & Physiology of Pregnancy
109. Human Ovum Enlarged
110. Structure of Human Spermatozoon
111. Spermatogenesis and Oogenesis
112. Uterus in section showing Sperm and Ovum in Process of fertilization
113. Foetal Surface of Placenta
114. Maternal Surface of Placenta
115. Breast adult well developed hemispherical type.
116. Breast in Pregnancy (Made of Silicon Material German-Make) Looks natural, Feels natural.
117. Gradual Development of Uterus from 1st month to 9 months (9 Models)
118. Model showing First, Second & third stage of Labour.
MODEL ON ANATOMY (DISSECTION OF UPPER & LOWER EXTRIMITIES)
Made of fibre glass
Material for Understanding dissection
1. Superficial branches of cervical plexus.
2. Dissection of the right mammary gland.
3. Contents of axilla exposed by reflexion of pectoralis major nodes. and the fascia, and removal of fat and lymph. Part of
auxiliary vain has been removed to display the medial cutaneous nerve of forearm and unlar nerve.
4. Lymph nodes and lymph vessels of axilla and mamma.
5. Dissection of auxiliary artery and its branches.
6. Dissection of lower part of posterior triangle of neck showing the supraclavicular part of branchial plexus.
7. Dissection of superficial muscles and nerves of the back.
8. Superficial veins at bend of elbow in a specimen in which the median vein was large.
9. Superficial lymph vessels and lymph nodes of front of upper limb.
10. Superficial lymph vessels of back of upper limb.
11. Superficial veins and nerves of front of upper lumb.
12. Superficial veins and nerves of back of upper lumb.
13. Deltoid muscle and lateral aspect of arm.
14. Dissection of scapular region and back of arm to show the auxiliary and turned. The lateral head spiral groove on the
humerus for the radial nerve
15. Anastomosing arteries around the scapula.
16. Dissection of left cubital fossa. The fat has been removed and the bicipital aponeurosis cut sway with the rest of the
deep fascia.
17. Dissection of back shoulder and arm. The lateral head of triceps has been divided and turned aside to expose the spiral
groove on the humerus for the radial nerve
18. Dissection of superficial muscles, arteries, and nerves of front of forearm. Part of the redial artery was removed to
show the muscles deep to it.
19. Deep dissection of muscles, and nerves of front of forearm. The division of the branchial artery is slightly lower than
usual.
20. Deep dissection of front of forearm. The elbow is partially flexed, the forearm semi-pronated. The superficial muscles
are cut short and turned aside. The deeper parts are still further displayed by the separation of the flexor digitorum
superficial from the flexor carpi ulnaris.
21. Superficial dissection of palm to show the palmar aponeurosis. The deep fascia has been removed from the thenar and
hypothenar eminences.
22. Structure in palm displayed by removal of palmar aponeurosis. In this specimen the radialisindicis and the

princepspollicis arteries took origin from the superficial palmar arch.

23. Superficial dissection of back of forearm.

24. Deep dissection of back of forearm.

25. Dissection of right forearm triangle.

26. Dissection of adductor canal in the right thigh. A portion of the sartorius has been removed.

27. Scheme of adductor group of muscles and obturator nerve.

28. Dissection of left gluteal region. Gluteus maximus and gluteus medius have been removed, and quadratusfemoris has been reflected. In the specimen, the inferior gluteal artery was medial to the internal pudendal instead of lateral to it.

29. Left popliteal region after removal of the deep fascia- the muscles and fat being left undisturbed

30. Dissection of left popliteal fossa. The upper boundaries have been pulled apart and the aponeurosis to which the two heads of the gastrocnemius are attached has been split and the heads separated. For deeper dissection.

31. Dissection of left popliteal fossa. The two heads of the gastrocnemus and portions of the semimembranosus and semitendinous have been removed. For more superficial dissection.

32. Left popliteal artery and its branches.

33. Dissection of gluteal region and back of thigh.

34. Synovial sheaths of dorsum of foot.

35. Dissection of font and lateral side of leg.

36. Dissection of dirsum of foot.

37. Dissection of showing synovial sheaths of tendons of lateral aspect of foot.

38. Superficial dissection of leg viewed from posteromedial side, showing veins and nerves. Note the numerous anastomosis between the great and the small saphenous veins.

39. Superficial dissextion of leg viewed from posterolateral side showing veins and nerves. In the specimen were numerous large anastomosing channels between the small and the great saphenous veins.

40. Deep dissection of back of leg.

41. Dissection of medial side of ankle, showing the relations of the flexor retinaculum. (model no.-1), dissection of leg and foot showing synovial sheaths.(model no.-2)

42. Superficial dissections of sole of foot to show plantar sponeurosis. The skin and superficial Fascia, except the superficial transverse ligament, have been removed, and the fobrous flexor sheaths partially opened.

43. Superficial dissection of sole of foot. The plantar aponeurosis has been removed. The abductor digitiminimi and the abductor hallucis have been pulled aside

44. Dissection of sole of foot. Most of the flexor digitorumbrevis has been removed.

45. Deep dissection of sole of foot

#### Systematic embryology models of:

1. Tongue

2. pharyngeal arches

3. Foetal Circulation

4. rotation of gut

5. Development of hepatobiliary system

6. inter atrial & inter artrial septum development of heart

7. Development of Face

	Schedule No. 2
-	Physiology Group Tender Items
	Complete student Nerve Muscle Experimental Assemblies One set form 1 to 22)
1	Sherrington Starling kymograph (electrically driven)
	Should run on electric motor,
	Speed should be adjustable with the minimum 2.5 mm/sec to maximum 640 mm/sec,
	Shaft with the groove on one side and screw lift at the top,
	Gear for adjusting the speed,
	Clutch to change the gear,
	Contact button with the striker or contact arms,
	Drum 15 x 15 cm,
	Levelling screw.
	The product should be CE or FDA or BIS Certified
2	Myograph stand & Muscle stand:
	Myograph stand

_	
	For the study of the velocity and intensity of muscular contraction
	Muscle stand
	Heavy triangular base of iron, Iron stand rod, Sliding plate with groove and handle, Screw and handle to fix the plate
	shaft
3	Induction coil
	Fixed primary coil two end connected to two terminals on the top of the vertical platform sliding secondary coil with
	pointer at base
	Tow terminals of secondary coil
	Base may be of wood or heavy metallic bar with scale
	Electromagnet with central brass pillar with screw
	Tall brass pillar bearing the Neef's hammers.
	Tall brass pillar with terminal at base
	The upper make and break screw planted on metal base
	Hammer strip attached to tall brass pillar
4	simple key & Primary key Mercury key
_	
5	short circulating key & DuBoisReymond Key
2	nabl'scommutalon
6	pohl'scommutalor Vulcanite base
	With rocking metallic cradle
	Six cup like depression filled with mercury Six terminal attached to cups
	Two narrow copper strips connecting the diagonally opposite corner cup
7	Vibrating interrupter
1	Clamping plate
	Thumb screw
	Vibration scale
	Mercury cup
	Base board
8	Muscle trough Lucas
0	Made of non conductive material
	Can be mounted on stand
	Bottom with two holes closed with corks one for fixing tissue other for drawing fluid with rubber tube and clamp
	Sliding strip or socket with lever mounted on it
	Two screw to fix copper wire and two electrode
9	Muscle lever
10	Muscle grip of femur clamp
11	Hook and weight set
12	Heart lever (simple & Starling)
	A holder and screw to fix the lever on a stand
	Two bars at right angle to each other
	Horizontal with socket to which lever is attached vertical bar to hold spring
	The other end of spring is attached to lever
	Arrangement to change tension in spring
10	
13	Frog board for dissection
	Heavy base

	Central rod
	Board, lever and electromagnet fixed on rod
14	Enamel tray
15	Frog board cork lined with boss head
-	
16	Low voltage unit for tapping 2 and 4 volts for stimulation
	Low voltage unit for tapping 2 and 4 volts for stimulation
17	Electromagnetic time marker
	Coil wound round soft iron bar
	Coil connected to screw
	Soft iron plate with spring
	Tension of screw can be regulated by screw
	Writing lever attached to plate Bar and holder to fix the instrument on stand
	Bar and noider to fix the instrument on stand
18	Tuning fork, time marker, 100/sec
10	Tuning fork, time marker, 100/sec.
19	Electrodes
	Copper wire placed in holder made of non conductive material (cork, Plastic ect)
	With screw
	Shielded electrode two wire parallel to each other in layer of non conductive material
	Polarizable or non Polarizable electrode
20	X-blocks
	X-blocks- Standard, Open Sided with Stand
01	
21	Spirit lamps
	Brass sheet die pressed, with woven wick in metal holder, screw Capacity 100 ml
22	Isometric Lever
	Isometric Lever
23	Mary's tambour
	Mary's Tambour Traditional (5cm to 10cm diameter)
24	Apparatus for passive movement
	CPM is used to treat joints of the lower limb after an injury, disease or following surgery.
	Based on a concept originated by SALTER IN 1970, this device has varied applications namely treatment of intra
	articular fractures, septic arthritis, ligaments tendon healing and also following total joint replacement to ensure a sufficient range of motion.
	To prevent stiffening, the jouint have to be moved continuously which results in the following.
	Minimize swelling and pain after operation
	Ensures faster recovery and shortened hospital stay
	Prevents extra articular contractures and adhesions.
	Ext/Flex Angle indicator at knee position
	Compact and elegant construction
	Electronic controls enable all adjustment of angle to be made on the front panel.
	Smooth and silent movement
	Digital timer with alarm
	Patient safety switch for stopping and reversing the motion.
	Specifications
	Treatment time 0 – 99 minutes

	Reset time 1 to 5 seconds
	Angle Extension 0
	Power 230V/AC/50Hz, 75VA
25	Knee hammer
43	Knee hammer
26	Bicycle ergometer
20	Bicycle ergometer
	Work Load Range: 10 – 600Watt
	Independent Rpm: 20 – 130rpm
	Work Load range
	Dependent RPM
	Lap Time: 9h 59min 59sec
	Load Steps : 1 – 99 Watt
	Time Steps : 1 – 99 Min
	Load Programs: Manual
	1 Load/Step
	PWC 170, 150, 130
	HR Steady State
	Safety Protection
	Automatic Load: Heart rate
	Reduction: Blood pressure
	Blood Pressure D
	Acoustic signal: ECG Alarm Signal
	Manual : By Stop Button
	Check: Calibration
	Dynamic
	Static
	Adjustments (Height): 83cm – 110cm
	Saddle: 68cm – 108mm
	Handle bars: free rotation
	Accuracy of load: 2% or 3 Watt
	Input/output
	External Control: RS – 232
	Inputs: Analogue control
	Start signal
	Heart rate
	Blood pressure s
	Blood pressure D
	ECG Alarm
	Outputs: work load
	Pedaling Speed
	Step Marker
	Power supply: $110 - 240V$ , $50 - 60Hz$
	Power consumption: 100VA
	Safety Standard: class 1, CE
	Dimensions (cm): Base plate 79X48
	Weight: approx 46Kg
27	Olfactometer
	Olfactometer
	choice arena olfactometer (OLFM), complete; 12"X12"X1", 4 – port/4choice arena olfactometer w/removable lid.
	Main body and all inlet and outlet ports made from solid UHMW – Poly ethylene (PE) with 3/8" thick clear
	plexighas removable lid.

HLL Infra Tech Services Limited

	System includes an insect inlet adapter (Note: specify inset size at time of order) and all (4) glass, 2 piece
	combination internal odor source (IOS) adapter and insect isolation traps which collect insects responding to an odor
	source and prevents them from returning into the arena. Unit also includes a 2-choice adapter insert which allows the olfactometer to be converted to a two choice system by
	blocking off half of the arena area.
	Olfactometer is supported by $(4) - 6$ " removable legs.
28	Schematic eye
	Schematic eye
20	
29	Maddox rod Maddox rodfor screen test;
	- Maddox rod lens; red/white/green rim and amp;
	handle material: copper handle; length: 70mm,
30	Tuning forks to test hearing 32-10,000 cps (sets)
	Tuning fork to test hearing 32-10000 cps(sets-100, 256, 512 hz)
31	Dynamometer
	Dynamometer
	Especially suitable for use in rehabilitation centers/physiology labs; Real time mode: immediately shows the patients current strength
	Peak/Max Mode: shows the maximum strength of a patient's grip
	Average Mode: calculates the average strength from two grips
	Counting mode: counts the numbers of presses which exceed a previously defined strength limit;
	Integrated AUTO – OFF function after 1 minute to preserve the batteries;
	As part of a rehabilitation program, this permits medical staff to monitor the fitness of the patients hands and carry
	out controlled training exchangeable springs facilitate fast switching of the capacity (Additional spring sets for 20Kg
	and 40Kg are included with delivery); safe, comfortable use thanks to non slip rubber grips
	Stable case for safe, easy transport and for storage of the additional spring sets as standard, WXDXH: 350X265X85mm
32	Otorhinolaryngoscope
	Otorhinolaryngoscope - ENT Set
33	steriliser Electric
	Sterilizer Electric, (Medium Size) 300X150X100mm
34	Instrument trolley
54	Instrument Trolley of stainless steel with three shelves with guard rails on three side
	-With swivel castors
	Small:- 66x44x87cm (LxWxH)
	Large:- 91x45x82cm (LxWxH)
35	Stop watches
	Stop watches reading at 1/5 second with LED/LCD display reading at 1/5 display
36	Colorimeters photoelectric
	Calorimeters
	· Filter photo Colorimeter Digital Photo.
	· Colorimeter with 8 filters, mains operated.
37	pH Meter
	Should be microprocessor based for fast and accurate pH measurement with soft touch control panel
	Should have 3 point calibration with auto buffer recognition pH range should be 0-14

	pH and temperature on LCD display
	Refillable triode 3 in 1 epoxy body combination pH electrode
	Accuracy up to 0.01pH
	Accessories:
	Standard buffers 4,7,10, PH 250ml each
	Electrode 1 set extra electrode cleaning solution
	The supplier should be ISO certified for quality standards.
<b>38</b>	OXYGEN CYLINDER "B" TYPE
	OXYGEN CYLINDER "B" TYPE
	A container designed as a refillable cylinder used to hold compressed medical oxygen (O2) under safe conditions at high pressure (e.g., 50 - 200 Bar).
	It is typically filled with O2 when delivered from the gas supplier and includes a valve stem, an opening/closing valve, and will be graded according to size (capacity) and colour-coded to denote O2 content.
	The cylinder may be made of steel, aluminium (Al) or other ferrous or non-ferrous materials and must be used together with a pressure regulator in order to release the O2 at the correct working pressure.
	O2 is used as an essential life support gas, for anaesthesia, and for therapeutic purposes.
	GENERAL
	USE
	Clinical purpose
	A container designed as a refillable cylinder used to hold compressed medical oxygen (O2) under safe conditions at high pressure; O2 is used as an essential life support gas, for anaesthesia, and for therapeutic purposes.
	Used by clinical department/ward
	All
	TECHNICAL CHARACTERISTICS
	Technical characteristics (speciic to this type of device)
	Color coded, light weight. The cylinder may be made of steel, aluminium (Al) or other ferrous or non-ferrous
	materials oxygen cylinder for providing oxygen therapy Mounted with pressure reducer and low-meter provision of
	capacity upto 15 Litters per minutes and outlet for secretion aspiration.
	Should have membrane pressure reducer with
	Should be seamless cylinder of water capacity 10 litres.
	Settings
	Flowmeter for controlling unlow of oxygen.
	Mobility, portability - yes; on its trolley; for Ambulances - to be supplied bare without trolley.
	Accessories & Spares - humidifier, key and low meter
	Certifications
	Cylinder should have ISI mark and ISO certificate for quality standard or BIS equivalent; IS 3224. Cylinder should have explosive safety certificate and should be provided along with each cylinder during installation.
)	CO2 Cylinder with Trolley
)	Electronic stimulator
,	<b>Electronic summator</b> Channel: Dual, isolated between channels Pulse intensity: Adjustable 0-80 mA peak into 500 $\Omega$ load each channel,
	constant current Pulse Rate: 1Hz-160 Hz (adjustable), 1Hz/step (1-20 Hz), 5Hz/step (20-160 Hz)
	Pulse Width: $50 \ \mu\text{s} - 260 \ \mu\text{s}$ (adjustable), HZ/step (1-20 HZ), SHZ/step (20-100 HZ)
	$\frac{10 \ \mu\text{s}}{\text{step}}$
	Patient Compliance meter: Shows the treatment times in hours.
	Timer: 15, 30, 60 minutes and continuous mode
	Water Distillation Apparatus still
	Water Distillation Apparatus still Electric · Automatic sensors made available to keep the system in standby mode,
	Water Distillation Apparatus still Electric $\cdot$ Automatic sensors made available to keep the system in standby mode, when system is not in
_	when system is not in
	when system is not in         Operation         · Output Ltrs/Hr: 10 lt /hr double distilled
	when system is not in Operation

_	wastage of water
	• Power: 230v, 50/60Hz, 2 phase, 12KW approximately
	Water distillation still, with spare heating elements
42	ALL GLASS DISTILLATION APPARATUS
42	Technical specifications:
	The glassware should be made of high quality borosilicate glass to withstand high heat.
	Apparatus capacity should be of 4 litres/Hr.
	Should be double stage.
	Should be double stage. Should have metallic stand and other accessories.
	Stand should be made of rust free material.
	Standards heating elements of 2.5-3KW to be used.
	An automatic cut off device should be attached.
	Heater should be of quartz for immediate output of distilled water. Apparatus should consist of high quality Borosilicate Boiler with built in water leveller.
	Output water should be pyrogen-free with conductivity less than 1 micro siemen, ph 6.9-7, distillate temp 65-75 deg
	C.
	C. Metal stand.
	Automatic cut off device or safety control module.
	Power input to be 220-240 VAC, 50 Hz. Manufacturer should have ISO & CE certification for quality standards.
	Manufacturer should have ISO & CE certification for quality standards.
42	
43	Voltage Stabilizer
4.4	Minarali dan and ala ammana
44	Microslides and glassware
	Microslides :- 1000
	Glass wares:
	Glass wares of following capacity as required by standard lab. All items should be made of Heat resistant
	Borosilicate Glass
	Pipettes-1ml - 10 Nos
	Pipettes-2ml - 10Nos
	Pipettes-5ml - 200 Nos
	Pipettes-10ml - 200 Nos
	Beakers-100ml - 100 Nos
	Beakers-250ml - 200 Nos
	Beakers-500ml - 50 Nos
	Beakers-1000ml - 10 Nos
	Conical Flask-100ml - 50 Nos
	Conical Flask-250ml - 200 Nos
	Conical Flask-500ml - 50 Nos
	Conical Flask-1000ml - 20 Nos
	Conical Flask-2000ml - 10 No.
	Test Tube (glass) -10ml - 500 Nos
	Test Tube (glass) -15ml - 500 Nos
	Test Tube (glass) -20ml - 200 Nos
	Centrifuge tubes - 15ml - 500 Nos
	Centrifuge tubes (graduated) - 15ml - 500 Nos
	Reagents Bottles - 100ml - 100 Nos( AmberColour and white colour each)
	Reagents Bottles - 250ml - 100 Nos
	Reagents Bottles - 500ml - 50 Nos
	Dropping Bottles- 100ml- 50 Nos.
	Measuring Cylinder - 100ml - 20 Nos
	Measuring Cylinder - 500ml - 10 Nos
	Measuring Cylinder - 1000ml - 5 No.

45	Multimedia Projector with screen
	Size:- portable with HDMI & USB input
	Type:-Optical Zoom / Focus(Automatice)
	Focal Length:- 16.9 - 20.28 mm
	Zoom- Up to 5x or more
	Lamp Life (Normal):- 5,000 hours
	Screen should be white in colour and good quality with Minimum size of 6x5 Feet.
46	Double Domonaturation and piece
40	Double Demonstration eye piece           Double Demonstration eye piece
	For simultaneous viewing with adjustable pointer and eye piece, detachable and rotable, moves in all direction eye
	pieces on extension tube can be focused independently.
47	Von frey's Hair aesthesiometer
	·
	Horse hair carried in a holder; hair length adjustable with graduated tube and protective
48	BENEDICT ROTH RECORDING SPIROMETER [BMR APPRATUS]:
	For determination of basalmetabolism, by measurement of oxygen consumption.
	The 6 liter capacity float is fitted with chain compensated counter balance. A thermometer is fitted on the float. movements of the float are recorded by means of a gravity writing ink pen, adjustable by a lever at the bottom.
	Valves are enclosed and are easily accessible Soda lime container, with screw connection in the center chamber.
	Drain cocks to all the tubes and container. sampling cock is provided at the mouth-piece to connect the subject to the
	spirometer or the atmosphere.
	The recording cylinder (12"x 6") is of the lift-off type, and is driven by an electrical unit, giving two speeds viz :one
	revolution in 20 minutes, and one rev. Nos 4 minutes. speed change through a lever. Pilot lamp to act as indicato The
	unit is fitted on portable metal frame ,and is supplied complete with valves, tubes, mouthpiece, nose clip ,ink writing
	pen ,and 50 charts.
4.0	
49	Stage Incubator - Electric CO2 Microscope Stage Incubator
49	Temperature range should be 3°C above room temperature to 50°C
49	Temperature range should be 3°C above room temperature to 50°C Temperature control accuracy should be as follows:
49	Temperature range should be 3°C above room temperature to 50°C Temperature control accuracy should be as follows: ±0.3°C (Chamber temperature feedback)
49	Temperature range should be 3°C above room temperature to 50°C         Temperature control accuracy should be as follows:         ±0.3°C (Chamber temperature feedback)         ±0.2°C (Specimen temperature feedback)
49	Temperature range should be 3°C above room temperature to 50°C         Temperature control accuracy should be as follows:         ±0.3°C (Chamber temperature feedback)         ±0.2°C (Specimen temperature feedback)         Should have Electric Heating Technology
49	Temperature range should be 3°C above room temperature to 50°C         Temperature control accuracy should be as follows:         ±0.3°C (Chamber temperature feedback)         ±0.2°C (Specimen temperature feedback)
49	Temperature range should be 3°C above room temperature to 50°C         Temperature control accuracy should be as follows:         ±0.3°C (Chamber temperature feedback)         ±0.2°C (Specimen temperature feedback)         Should have Electric Heating Technology         Should have Chamber temperature feedback and Specimen temperature feedback
49	Temperature range should be 3°C above room temperature to 50°C         Temperature control accuracy should be as follows:         ±0.3°C (Chamber temperature feedback)         ±0.2°C (Specimen temperature feedback)         Should have Electric Heating Technology         Should have Chamber temperature feedback and Specimen temperature feedback         CO2 range should be 0 to 100%
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<b>49</b> 50	Temperature range should be 3°C above room temperature to 50°C         Temperature control accuracy should be as follows:         ±0.3°C (Chamber temperature feedback)         ±0.2°C (Specimen temperature feedback)         Should have Electric Heating Technology         Should have Chamber temperature feedback and Specimen temperature feedback         CO2 range should be 0 to 100%         Manufacturer should have ISO certification for quality standards         Wastergen's Pipettes for E.S.R. On Stand (with space pipettes)(Optional)
	Temperature range should be 3°C above room temperature to 50°C Temperature control accuracy should be as follows: ±0.3°C (Chamber temperature feedback) ±0.2°C (Specimen temperature feedback) Should have Electric Heating Technology Should have Chamber temperature feedback and Specimen temperature feedback CO2 range should be 0 to 100% Manufacturer should have ISO certification for quality standards
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50	Temperature range should be 3°C above room temperature to 50°C         Temperature control accuracy should be as follows:         ±0.3°C (Chamber temperature feedback)         ±0.2°C (Specimen temperature feedback)         Should have Electric Heating Technology         Should have Chamber temperature feedback and Specimen temperature feedback         CO2 range should be 0 to 100%         Manufacturer should have ISO certification for quality standards         Wastergen's Pipettes for E.S.R. On Stand (with space pipettes)(Optional)         Wastergen's Pipettes for E.S.R. on stand (with space pipettes)(Optional)         Wastergen's Pipettes for E.S.R. on stand (with space pipettes)(Optional)         Wastergen's Pipettes for E.S.R. on stand (with space pipettes)(Optional)         Image: Comparator Holder –         1.       The Haemoglobinometer Sahli's type, should be square tube type and the kit should consist of the following:-         Comparator Holder –       It should be black in colour and the windows should have the following dimensions :-         a.       Height : 3 cms (Minimum)         b.       Width: 0.5. cms (Minimum)
50	Temperature range should be 3°C above room temperature to 50°C         Temperature control accuracy should be as follows:         ±0.3°C (Chamber temperature feedback)         ±0.2°C (Specimen temperature feedback)         Should have Electric Heating Technology         Should have Chamber temperature feedback and Specimen temperature feedback         CO2 range should be 0 to 100%         Manufacturer should have ISO certification for quality standards         Wastergen's Pipettes for E.S.R. On Stand (with space pipettes)(Optional)         Wastergen's Pipettes for E.S.R. On Stand (with space pipettes)(Optional)         Wastergen's Pipettes for E.S.R. On Stand (with space pipettes)(Optional)         Wastergen's Pipettes for E.S.R. On Stand (with space pipettes)(Optional)         Wastergen's Pipettes for E.S.R. On stand (with space pipettes)
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50	Temperature range should be 3°C above room temperature to 50°C         Temperature control accuracy should be as follows:         ±0.3°C (Chamber temperature feedback)         ±0.2°C (Specimen temperature feedback)         Should have Electric Heating Technology         Should have Chamber temperature feedback and Specimen temperature feedback         CO2 range should be 0 to 100%         Manufacturer should have ISO certification for quality standards         Wastergen's Pipettes for E.S.R. On Stand (with space pipettes)(Optional)         Wastergen's Pipettes for E.S.R. on stand (with space pipettes)(Optional)         Wastergen's Pipettes for E.S.R. on stand (with space pipettes)(Optional)         Wastergen's Pipettes for E.S.R. on stand (with space pipettes)(Optional)         Wastergen's Dipettes for E.S.R. on stand (with space pipettes)(Optional)         Wastergen's Pipettes for E.S.R. on stand (with space pipettes)(Optional)         Wastergen's Pipettes for E.S.R. on stand (with space pipettes)(Optional)         Wastergen's Pipettes for E.S.R. on stand (with space pipettes)(Optional)         Wastergen's Pipette for E.S.R. on stand (with space pipettes)(Optional)         Wastergen's Pipettes for E.S.R. on stand (with space pipettes)(Optional)         Wastergen's Pipettes for E.S.R. on stand (with space pipettes)(Optional)         Wastergen's Pipettes for E.S.R. on stand (with space pipettes)(Optional)         It haemoglobinometer Sahli's type, should be square tube ty

	• The kit should also be supplied with the following standard accessories:
	1. Square Hb tubes: 01 no.
	<ol> <li>Hb pipettes: 01 no.</li> </ol>
	3. HCL N/10: 500ml
	4. Dropper: 01 no.
	5. Glass stirrer: 01 no.
52	Stethoscopes, demonstration with multiple ear pieces
	Stethoscopes, demonstration with multiple ear pieces
53	Venus pressure apparatus
	Venus pressure apparatus
54	Clinical Thermometer (Digital type)
	Clinical thermometer (Mercury based instruments to be replaced with suitable( alternative)
55	CENTRIFUGE CLINICAL FOR 12 TUBESS
	1 Description of Function
	Centrifuges are required in the Laboratory to separate various components of Blood and any other liquid sample for
	analysis
	Operational Requirements
	Aerodynamic compact construction for vibration free performance
	Table top version
	Technical Specifications
	Tube Capacity :No. <b>12 or more</b> :Size 5 – 15 ml
	Should have a digital timer
	Body should be made of strong fabricated & corrosion resistant steel
	Control panel – for start/stop switch, dynamic brakes, step less speed regulator with zero start switch & speed
	indicator with timer and protective fuses.
	Door interlock
	Maintenance-free brushless drive motor with exact speed preselection and display. Speed range 100 to 6000 rpm and
	above, accuracy 1 rpm.
	RPM : Up to 4000-6000
	System Configuration Accessories, spares and consumables
	Centrifuge complete with Swig and basic rotors and four buckets- 01 set., Tachometer-01 No.
	Tube Holders as appropriate
	Power Supply
	Power input to be 220-240VAC, 50Hz as appropriate fitted with Indian plug
	Voltage stabilizer/CVT of appropriate ratings meeting ISI Specifications
	Standards, Safety and Training
	The supplier should be ISO certified for quality standards.
	Should be FDA /CE/ UL / BIS approved product
56	NAME OF CHART
56	
	CHARTS ON Physiology         1. The Muscular System
	2. The Skeletal Systems
	3. The Vertebral Column
	4. Rib, Vert, System & hyoid Bone
	<ul><li>5. The Nervous System</li><li>6. The Brain</li></ul>
	7. The Anatomy of the Brain 8. The Spinel pervec
	8. The Spinal nerves
	9. The Autonomic nervous System
$\left  - \right $	10. The vascular System and Viscera         11. The Heart
	12. The Lymphatic System

	13. The Human Skull
	14. Skull External and Internal Surfaces
	15. The Head and Neck
	16. The Respiratory System
	17. The Eye
	18. The structural Anatomy of the eye
	19. The Eye. Anterior & Posterior chambers
	20. The Ear, Nose & Throat
	21. The Ear - Organs of hearing & Balance
	22. Pharynx & Larynx
	23. Anatomy of the inner ear
	24. Temporomandibular Joint (TMJ)
	25. The Skin
	26. The Female Reproductive System
	27. The Male Reproductive System
	28. Pregnancy & Birth
	29. Female Reproductive Systems (Ant. &Patho)
	30. The Female External Genitalis (Ant.&Patho)
	31. Body surface area & body weight
	32. Birth Weight
	33. Obstetrical Table
	34. Critical Stages of foetal development. 1st.lunar month - 10th lunar month
	35. The Endocrine System
	36. The Shoulder and Elbow (Ligament)
	37. Shoulder, Arm, Elbow, forearm & Head
	38. The Hand and Wrist (Ligament)
	39. Male, Female pelvis, Sacrum, Coccyx, Hip and Knee
	40. Hip Thighs, Knee and Leg
	41. The Foot and Ankle (Ligament)
	42. Ankle and Foot
	43. Skeletal Maturation & Growth
	44. The Digestive System
	45. The liver
	46. The Urinary Tract
	47. The Kidney
	48. The Prostate
	49. The portal System
	50. Gastroesophageal Disorders and Digestive Anatomy
	51. Origins, Development & Structure Cells
	52. Soft Tissues of the Lower Limb
	53. Soft Tissues of the Foot
	54. Bones of the pelvis and Lower Limb
	55. Varicose Veins
	56. (a) External Morphological Features in Male Female (b) Sex Differentiating Features in Skull (One Chart)
	57 (a) Sex Differentiating Features in Mandible.
	(b) Sex Differentiating Features in hip Bone.
	(c) Sex Differentiating Features in Sacrum (One Chart)
	58 (a) Sex Differentiating Features in Articulated pelvis In addition to those present in hip bone & sacrum.
	(b) Sex Differentiating Features in Femur (One Chart)
	59 (a) Estimation of Age-Ages of Eruption of teeth
	(b) International system of numbering the Teeth (One Chart)
	60 (a) Aged of appearance and fusion of different Ossification of bones
	(b) Multiplication factor for different bones. for calculation of persons of different parts of India (One Chart).
57	Demonstration eye piece:
57	10x and 15x magnification with pointer
	Tox and Tox mughtifoution with pointor

58	Haemocytometer (New Improved Neubauer's Chamber with RBC and WBC Pippets)
	Thick glass slide with central depressed plat form separated on either slide form remain platform by deep moats.
	Level of this platform exactly 0.1mm lower than the general surface of slide.
	Depressed platform is ruled in squares central depressed platform is divided in to two parts by a length wise moat
	and from surrounds slide by two breadth wise moats.
	16 square large block is demarcated from its neighbor by an extra interrupted line
	Central large square divided in to 25 square.
59	Wintrobe Tube for ESR and PCV with stand:
	It is a heavy cylindrical tube of uniform bore with flat bottom
	Graduated on both side form above downward and form upward form lower end
	Metal stand which can hold 6 tubes
	With pastures pipette long capillary pipette above 110mm long fitted with rubber teat
60	Spirometer Simple
	Consist of metallic vessel inverted on jacket of water
	A wide air passage going through center of jacket connected to tube with mouth piece
	Other end is connected to mouth piece by corrugated impervious tubing
	Counter weight attached to chain running over pulley balancing weight of bell
	Capacity 6 Liters.
	Pointer or scale marked on wheel fixed over pulley.
61	Stethograph
	60cm long and 2cms diameter corrugated and impervious tube made of canvas with rubber one end closed other end
	open
	Metal chain at both ends one chain with hook
	Open end connected with pressure tube to tambour
62	Douglass bag
	Made up of impervious flexible sheet Which can be placed on back of person
63	Opthalmoscope
	Consist of cancave mirror with a hole in centre
	Martonopthalmoscope three mirror 2 concave mirror 1 large and other is small
	Plane mirror for retiniscopy
	Three mirror attached that central hole come in same place
	Series of lenses
	Series of hole arranged to measure diameter of pupil
	Source light of light on back side
64	Phakoscope(Helmholtz)
	Consist of triangular box the base of which is about 35cm long and other two sides of 18cm each
	Height of the box is about 10cm
	Painted black inside
	Mounted on stand
	Three angles of box are truncated and provided with holes of adequate size
	The truncation leave a distance of about 10cm between the apex and the centre of the base
	At one of truncated angle two prism are placed
65	Perimeter with charts
	Should have a calibrated arc, revolving chart holder.
	Should be able to rotate in any direction and fix at any position with a tightening screw. The arc should be graduated
	from 0° to 90° with a movable test object.
	At the back of the arc arrangement should be provided for fixing of chart which has concentric circles corresponding
	to the degrees of arc.
	Adjustable chin rest.
	The above mentioned should be fitted over a sturdy base with receptacle for keeping charts.
	Accessories:
	Different sized (2mm & 5mm), shaped (round & square) and coloured (five different) objects.
	Should be supplied with 20 packets of charts (100 charts/packet).
	Circular black disc to read the meridian in which the arc in shape of a semicircle with radius 330mm
	Adjustable chart rest and a detachable lever in a bar is fixed in front of metallic arc

	Metallic graduated scale with a movable pin punch point to mark on perimeter
66	Compass
	Two limb of compass with graduated arc
	Limb is bifurcated to possess two point one blunt for the touch and the other sharp for pain
67	Temperature Aesthesiometer
	Metal tube with conical tip and two limbs
<b>68</b>	Algometer
	Broad blunt knob attached to spring which can be pressed
	With scale to measure pressure
69	Newtons color wheel
	Coloured (different colour)disc mounted on stand
	With a handle or disc which can be rotated with electricity
70	Colour Perception Lantern Edridge Green
	Metallic instrument
	It stimulate various natural condition
	For different colour
	Rain
	Mist
	Fog
	Dust
	Dawn
	Two red, two green, a yellow, a blue and a purplecolour mounted on three disc
-	
71	Sphygmomanometer
	Sphygmomanometer
	With digital manometer and armlet rubber bag or Riva Rocci cuff; Air pump; and Aneroid manometer.
72	
72	Stethoscopes
72	
	Stethoscopes
72 73	Stethoscopes         Stethoscopes         Van Slyko's apparatus manometric
	Stethoscopes         Stethoscopes         Van Slyko's apparatus manometric         Apparatus for analyzing gases in microlitre samples of blood or other solutions
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	Schedule No: 3
	<u>Items for Biochemistry Department</u>
1	Analytical Balance :upto 200g/1gm increment
	Description of Function
	Electronic Balance is required for precision weighing of Lab samples.
	Operational Requirements
	Microprocessor based single pan Analytical Balance with High accuracy & precision is required.
	Reading of the weight by digital display.
	Electronic top loading balances with transparent case
	The balance should have functions of piece counting, percent weighing, formulation, dynamic weighing with
	automatic and manual start and provision for data interface
	Technical Specifications
	Weigh accurately up to 3rd decimal place of one gm.
	Weighing capacity 210 gm
	Settling time 2 second
	Suitable internal and external adjustment weights.
	LCD Display
	Power Supply
	Power input to be 220-240VAC, 50Hz fitted with Indian plug
	Resettable overcurrent breaker shall be fitted for protection
	Standards, Safety and Training
	Should be FDA or CE or BIS approved product
2	Urinometers
	Urinometers calibrated, Digital (Mercury based instruments to be replaced with other alternatives)
	Urinometers (set requires a small amount of urine for testing, Reads specific gravity from 1.000 to 1,040)
	Ormonieters (set requires a sman amount of unne for testing, Reads specific gravity from 1.000 to 1,040)
3	HOT AIR OVEN
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6	Thermometer Digital
U	Thermometer- Digital Thermometers 0-250° C
	I nermometers 0-250° C
7	Boiling Water baths
	Useful for dual purpose. It is a combination of serological and routine rectangular water bath with holes and
	concentric rings.
	Standard double wall construction.
	Immersion heaters are provided for heating to attain temperature range from 5° C above ambient to $110^{\circ}$ C $\pm 1^{\circ}$ C.
	Should having lids and 8-12 Holes.
	Digital temp. Indicator-cum-Controller. The equipment to work on 220v AC 50 Hz single phase.
	Should be CE or FDA or BIS approved product
0	
8	Constant temperature water bath Tank Capacity: (Temperature range 5 to 80 degree Celsius)
	Useful for dual purpose. It is a combination of serological and routine rectangular water bath with holes and
	concentric rings.
	Standard double wall construction.
	Inner chamber made out of highly polished stainless steel sheet and exterior made out of thick mild steel duly
	finished power coated paint.
	Immersion heaters are provided for heating to attain temperature range from 5° C above ambient to 80° C $\pm$ 1°C.
	Digital temp. Indicator-cum-Controller. The equipment to work on 220v AC 50 Hz single phase.
	Chamber size in mm & inches L x W x H 300 x 225 x 175 mm Approx Capacity appox 15 ltrs. Approx.
	Should be CE or FDA or BIS approved product
9	CENTRIFUGE
-	Description of Function
	Centrifuges are required in the Laboratory to separate various components of Blood and any other liquid sample for
	analysis
	Operational Requirements
	Aerodynamic compact construction for vibration free performance
	Table top version
	Technical Specifications
	Tube Capacity :No. $24 - 36$ :Size $5 - 15$ ml
	Should have a digital timer /RPM adjustor
	Body should be made of strong fabricated & corrosion resistant steel
	Control panel – for start/stop switch, dynamic brakes, step less speed regulator with zero start switch & speed
	indicator with timer and protective fuses.
	Door interlock
	Maintenance-free brushless drive motor with exact speed preselection and display. Speed range 100 to 6000 rpm and
	above, accuracy 1 rpm.
	RPM : Up to 6500-7000
	System Configuration Accessories, spares and consumables
	Centrifuge complete with Swig and basic rotors and four buckets- 01 set.
	Tube Holders as appropriate
	Environmental factors
	The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of
	15-90%
	The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of
	15-90%
	Power Supply
	Power input to be 220-240VAC, 50Hz as appropriate fitted with Indian plug
	Voltage corrector/stabilizer of appropriate ratings meeting ISI Specifications.( Input 160- 260 V and output 220-240
	V and 50 Hz)
	Standards Cofety and Typining
	Standards, Safety and Training The supplier should be ISO certified for quality standards.

	Should be FDA or CE or UL or BIS approved product
10	PH meters
10	Digital pH meter
	· Digital with LCD display
	· PH range from 4-14
	· Replacable electrode
	· Resolution 0.1
<u> </u>	$\cdot$ Accuracy $\pm 0.01$
11	Fixed volume pipettes 1ml,0.5ml,0.2ml,0.1ml and 0.02ml (each)
	Samplers (Fixed volume pipettes) different volume range
	1ml,0.5ml,0.2ml,0.1ml and 0.02ml
12	Bottle dispenser
	It should be designed for performance handling of liquids from a large variety of bottles and flasks, the dispensers
	combine the latest in dosing technology, high tech materials and ergonomic design. As a result, users benefit from
	universal chemical compatibility, ease of operation, superior safety and low maintenance.
	Volumes range 0.25 to 100 mL Superior chemical resistance
	Long lasting performance stability
	Comfortable and convenient in use
	Solid, yet simple construction
	Instant volume setting
	In-lab calibration
	Autoclavable at 121°C fully assembled
	Supplied with bottle adapters
14	ALL GLASS DISTILLATION APPARATUS
	Technical specifications:
	The glassware should be made of high quality borosilicate glass to withstand high heat.
	Apparatus capacity should be of 4 litres/Hr.
	Should be double stage.
	Should have metallic stand and other accessories.
	Stand should be made of rust free material.
	Standards heating elements of 2.5-3KW to be used.
	An automatic cut off device should be attached.
	Heater should be of quartz for immediate output of distilled water. Apparatus should consist of high quality
	Borosilicate Boiler with built in water leveller.
	Output water should be pyrogen-tree with conductivity less than 1 micro siemen, ph 6.9-7, distillate temp 65-75 deg
	Output water should be pyrogen-free with conductivity less than 1 micro siemen, ph $6.9-7$ , distillate temp $65-75$ deg
	C.
	C. Automatic cut off device or safety control module.
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	Incubator is a closed chamber which heats/chill a sample at a preset temperature for long term for application like
	culture growth etc.
	Operation requirement
	Microprocessor /Microcontroller /Microcomputer controlled system.
	Technical specification
	Capacity: 120L with 2 compartments having light in each compartment with UV light.
	Interior chamber: Stainless steel for easy cleaning and decontamination.
	Minimum turbulence and no cross contamination.
	Adjustable safety thermostat for temperature, with inbuilt temperature sensor.
	Internal glass door for the observation.
	With minimum two adjustable shelves one with shaking facility (lower shelf).
	Audiovisual alarm to indicate when temperature deviates more than 1°C from set point, and when program or time
	has finished, Alarm may be muted.
	Peltier heating with continuous air circulation and heating by natural /forced convection for homogenous temperature
	distribution.
	Temperature range: +5 deg. C above ambient to 37 deg C and variable shaking speed.
	There should be a membrane key pad with LCD/LED to set and display operating parameters. Current status,
	running time and alarm conditions for time and temperature.
	System Configuration Accessories, Spares and consumables.
	Flask holding tray of different volume 25 -500ml.
	Power Supply
	Power input to be 220-240VAC 50Hz fitted with Indian plug
	<b>Standards, Safety and Training</b> Should be complaint to ISO 13485: Quality systems-Medical devices-Particular requirement for the application of
	ISO 9001 applicable to manufactures and service providers that perform their own design activities
	150 9001 applicable to manufactures and service providers that perform then own design activities
17	Variable and fixed volume auto pipettes
1/	SINGLE CHANNEL PIPETTES
	Spring Loaded Tip Cone for connecting tips very tightly
	<ul> <li>Adjustment opening for adjusting pipettes to a specific liquid and volume</li> </ul>
	Control Button with very low operating force, color indication for pipette volume
	<ul> <li>Control Button with very low operating force, color indication for pipette volume</li> <li>Tip ejector with very low operating force, positioned for perfect ergonomics</li> </ul>
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18	Glass wares:
10	Glass wares of following capacity as required by standard lab. All items should be made of Heat resistant
	Borosilicate Glass
	Pipettes-1ml - 50 Nos
	Pipettes-2ml - 50 Nos
	Pipettes-5ml -50 Nos
	Pipettes-10ml - 50Nos
	Beakers-100ml - 200 Nos
	Beakers-250ml - 200 Nos
	Beakers-500ml - 100 Nos
	Beakers-1000ml - 20 Nos
	Conical Flask-100ml - 100 Nos
	Conical Flask-250ml - 200 Nos
	Conical Flask-500ml - 50 Nos
	Conical Flask-1000ml - 20 Nos
	Conical Flask-2000ml - 10 No.
	Test Tube (glass) -10ml - 500 Nos
	Test Tube (glass) -15ml - 500 Nos
	Test Tube (glass) -20ml - 200 Nos
	Centrifuge tubes - 15ml - 500 Nos
	Centrifuge tubes (graduated) - 15ml - 500 Nos
	Reagents Bottles - 100ml - 500 Nos
	Reagents Bottles - 250ml - 100 Nos
	Reagents Bottles - 500ml - 50 Nos
	Measuring Cylinder - 100ml - 20 Nos
	Measuring Cylinder - 500ml - 10 Nos
	Measuring Cylinder - 1000ml - 5 No.
19	Fume cupboard
	Fume cupboards is a fume cabinets which localised the fume extraction systems fitted in laboratories to protect users
	from harmful substances that could be inhaled. It should have a cabinet with a moveable front window made out of
	safety glass. It should properly functioning the fume hood exhausts hazardous gases, dusts, mists, vapors from a
	combined location. Cabinet Structure: Material: All steel (1.0mm cold-rolling steel or 1.0mm stainless steel) covered
	with electrostatic spraying after folding, welding, polishing, acid cleaning, phosphorization and chemical resistance.
	It should have all the accessories that is required.
20	Multimedia Projector with screen
	Size:- portable with Remote control USB & HDMI input
	Type:-Optical Zoom / Focus(Automatice)
	Focal Length:- 16.9 - 20.28 mm
	Zoom- Up to 5x or more
	Lamp Life (Normal):- 5,000 hours
	Screen should be white in colour and good quality with automatice movement with remote control screen size of 5x6 Feet

	<u>Schedule No: 4</u>	
	Group Tender Items for Department of Community Medicine	
1	Barometer, Fotin	
	Barometer, Fotin	
	· Entire construction of metal.	
	• The metric and English system scales read from 25" to 32" and 64 to 81 cms respectively with reflector behind	
	scale and cistern.	
	• The Vernier is worked by a milled head of the side operating with rack and pinion and reads 0.1" 0.1 cm.	
	· Mounted on wood with Aluminium pipes and Aluminium fitting with soda glass tube but w/o thermometer.	
2	Filter, Pasteur chamberland, complete set	
	Filter, Pasteur chamberland, complete set	

	$\cdot$ Made of porcelain tube that contains a ring of enameled porcelain through which inflow pipe fits the core of a
	porcelain pipe made up of metal pipe with holes through which water flows out and is collected
3	Filter, berke fed
	Filter, berkefed · Container capacity: 8 lit. Typical output per day : 80 lit.
	CandleTwo in no. 2.75"x5" Imperial Supersterasyl ATC ceramic candle4, empty weight: 2.7 kg
4	Hydrometres, spirit
	Hydrometres, spirit
	· 270mm long, covering a range span of 0.050°, sub-divided in 0.001°
5	Hydrometres, milk
	· 160mm long.
	· Scale calibrated in °SG, sub-divided every 0.001 and adjusted at 15.6°C (60°F).
6	Hydrometers, wet and dry BULB
	Hydrometers, wet and dry BULB
	· Wooden Thermometer easy to use, read fast
	• 270 x 80 x 10 mm; range:-10-50° C; Accuracy: 1°C
	· Material: wood
7	Museum Jar
7	All Sizes (Small 200x125x125 mm- 20, Medium 360x 150x100mm- 10)
	An Sizes (Sman 200x123x123 mm- 20, Medium 300x 130x100mm- 10)
8	Weighing Balance Small, 2 Kg
0	Balance for weighting food stuff Capacity 2 Kg
	$\cdot$ Capacity: 2Kg. + 10g.
	· Size: 16cm x 14cm x 12cm
	· Unit Weight: 750gms. Approx
9	Weighing machine adult
	Weighing machine adult- digital with LCD display
	Digital, Capacity 150 kg + 0.5 kg
	· Size: 320mm X 62mm
10	· Net weight 2.5 kg approx
10	Salters baby weighing machine
	Salters baby weighing machine
	· Capacity 10 Kg. + 100 gm ,material: metal
11	Baby weighing machine
	Hanging Type baby weighing machine
	· Capacity 10 Kg. + 100 gm, material: metal
12	Harpenderscallipers
	Harpenderscallipers (for skinfold thickness)
	• Dial graduation: 0 mm - 20 mm, Measuring range 0 mm – 80 mm measuring preasure 10gms/mm2
	Repeatability 0 mm - 20 mm Accuracy 99%
	· Accessories - carrying case
13	Height magnuing stand
13	Height measuring stand
	Frame work of height measuring stand is constructed with good quality S.S material.
	Fully folding stand with light weight.

	100% accuracy with inches, millimeter and in centimeters measuring.
	Maximum height measuring capacity is 210cm.
	Waxiniun neight nicasuring capacity is 210cm.
14	Models aborts diagrams 1 Sat
14	Models, charts, diagrams - 1 Set Annexure-A
	Alliexure-A
15	Chloressone
15	Chloroscope Standard Equipment
16	Horrock's Apparatus
10	Should be suitable to find out the dose of bleaching powder (chlorine) required for disinfection of
	water.
	Contents of apparatus:
	1. 6 white cups with 200 ml capacity each.
	2. 1 black cup
	3. 2 metal spoons
	4. 7 rods
	5. 1 pipette
	6. 2 droppers
	7. Starch-iodine indicator solution
17	MUAC tapes
-	Mid Upper Arm Circumference
18	Haemoglobino meter(Manual)
	• The Haemoglobinometer Sahli's type, should be square tube type and the kit should consist of the following:-
	· Comparator Holder –
	1. It should be black in colour and the windows should have the following dimensions :-
	a. Height : 3 cms (Minimum)
	b. Width: 0.5. cms (Minimum)
	· Colour comparator
	Square Hb Tube graduated on both sides for measurement of haemoglobin in percentage and gram %
	· 20 MicolitreHb – Pipette
	Amber coloured acid vial
	· Glass Stirrer
	Dropper with Teat
	Cleaning Brush
	The kit should also be supplied with the following standard accessories:
	1.     Square Hb tubes: 01 no.
	<ol> <li>Hb pipettes: 01 no.</li> <li>HCL N/10: 500ml</li> </ol>
	S.         HCL N/10: 500mi           4.         Dropper: 01 no.
	<ul> <li>4. Dropper: 01 no.</li> <li>5. Glass stirrer: 01 no.</li> </ul>
19	BP Apparatus (Digital)
	Manual without Mercury
20	Stethoscope
	бишовор
21	Kata Thermometer
22	Globe Thermometer
23	Anemometer
	Should be able to measure the speed of the wind, or of any current of gas
	Digital LCD display
24	Sound level meter
	1. Multi-Function Environment Meter which has the functions of sound level meter
	2. Sound level meter measuring range - 35 to 130dB, +/-3.5dB at 94db.

	2. Link Marcon in 2012 20.000 here 1/50/ and inc
	3. Light Meter measuring range - 20 to 20,000 lux, +/-5% reading.
	4. Measuring Rate: 1.5 times per second.
	5. Should have an LCD display for parameter display.
	6. Should work on battery power source with charger.
25	Soil testing kit
	Portable, battery back-up, Printer Interface, Micro controller based technology
	Toruste, outery outer up, Trinter interfuce, intero controller outer teennoiseg
26	Water sampling bottle from any depth
20	Water sampling bottle from any deput
27	
27	Needle Shredder
• • •	· ·
28	Vaccine carrier
	Technical Specifications
	Vaccine Storage Capacity 1-2 litres( any capacity within this range is acceptable
	Weight fully loaded should be less than 5 Kg
	Weight empty with empty ice pack should be less than 3 kg
	External surface being HDPE-(High Density Polyethylene) and internal lining of HDPE/HIPS.
	Insulation material CFC-free Polyurethane
	Insulation thickness: 30-50 mm
	Cold Life without opening 36 hours at 43 deg C (OR BETTER)
	Each vaccine carrier shall contain ice packs of WHO PQS Performance specification, E05/IP01.1 The
	specifications are as given below:
	Water Content: 0.3 Litres.
	External Dimensions: $163x90x33 \text{ mm} \pm 1\text{mm}$
	Empty weight: 75 to 80 gram.
	Robustness: The Ice Packs samples shall withstand a two metre drop on every face, edge and corner when in a frozen
	state (-10 deg C to -20 deg C). It will then successfully pass the leakage test after thawing.
	Leakage Test: No leaks when 40 Kg lateral force is applied.
	Features: Effective reinforcements to restrain walls against swelling. Removable cap for filling ;cap to have
	effective internal water seal to resist 40 kg lateral force with no leakage.
	Manufacturer's recommended filling line to be clearly indicated.
	Freezing Characteristics:
	Shall not display super cooling characteristics when filled with de mineralised water and frozen in flat, horizontal
	contact with evaporator at - 8 deg C.
	Maximum thickness of the icepack, when frozen solid and laid flat on an evaporator surface, shall not exceed the
	unfrozen thickness by more than 10%. The internal dimension of the unit should be sufficient to accommodate the
	largest tolerances of the standard ice packs.
	In addition to the existing lid of the vaccine carrier a foam pad to be provided to serve as a temporary Lid to hold the
	vaccine vials during immunization sessions. The pad will:
	* be soft foam , minimum 30 mm thickness;
	* fit tightly inside the neck of the carrier on top of the ice packs, under the Lid
	*Vaccine Carrier should not have any slit cut into it for insertion of vaccine vial. However, puff insulation should be
	retained.
$\vdash$	Accessories
┝──┤	
<u> </u>	Vaccine Carrier-01
	Ice Packs-04
	Foam Pad-01
29	Craft water testing kit
	BDI- E26 water and soil analysis kit(7 parameters)
	3.5" digital LCD display, covering all 7 parameters, battery operated, with complete acessories
	ABS brief case
30	Protective devices for occupational safety
31	Ear muffs

32	Ear plugs
33	Safety helmet
34	Goggles
35	Safety boots
36	Swine flu kit
50	Swille Hu Kit
37	Gloves
	All sizes( 5, 5.5, 6, 6.5, 7, 7.5)
38	Triple layer surgical mask
50	
39	High efficiency mask
40	
40	Long sleeved cuffed gown
41	Protective eye wear
	×
42	Сар
43	Disposable delivery kit
43	Disposable derivery kit
44	Treatment kits as per national health programs
45	As per standards
45	Iodine testing kit
46	Glucometer(Digital)
	For fast and virtually pain-free test
	• For accurate results
	Simple auto coding via coding chip     Automatic on/off
	Category glucose monitor
	Fasting post prandial and general flagging
	Result in just 5-10 seconds
	• 100 strips free should be suppled
47	Slide set for entomology
	05 sets, set of 50 in Box
48	Mosquito catching kit
40	Olinical Thomastor
49	Clinical Thermometer Digital
50	Sling psychrometer
51	Solar radiation thermometer
52	First Aid Kit
34	
53	Spirometer(Manual Type)
	Consist of metallic vessel inverted on jacket of water
	A wide air passage going through center of jacket connected to tube with mouth piece
	Other end is connected to mouth piece by corrugated impervious tubing
	Counter weight attached to chain running over pulley balancing weight of bell Capacity 6 Liters.
	Cadacity of Liters

	Pointer or scale marked on wheel fixed over pulley.
54	Audiometry
55	Standard Make
55	Otoscope
56	With light source
50	Ophthalmoscope           Consist of cancave mirror with a hole in centre
	Martonopthalmoscope three mirror 2 concave mirror 1 large and other is small
	Plane mirror for retiniscopy
	Three mirror attached that central hole come in same place
	Series of lenses
	Series of hole arranged to measure diameter of pupil
	Source light of light on back side
57	Public Address system (2 portable for field based activities and one each for RHTC &UHTC)
•••	Portable, Minimum area coverage up to 100 sq.m, Battery cum Mains Operated
58	<b>CENTRIFUGE CLINICAL FOR 12 TUBES</b>
	Description of Function
	Centrifuges are required in the Laboratory to separate various components of Blood and any other liquid sample for
	analysis
	Operational Requirements
	Aerodynamic compact construction for vibration free performance
	Table top version
	Technical Specifications
	Tube Capacity :No. 12 :Size 5 – 15 ml
	Should have a digital timer
	Body should be made of strong fabricated & corrosion resistant steel
	Control panel – for start/stop switch, dynamic brakes, step less speed regulator with zero start switch & speed
	indicator with timer and protective fuses.
	Door interlock
	Maintenance-free brushless drive motor with exact speed preselection and display. Speed range 100 to 3000 rpm and
	above, accuracy 1 rpm.
	RPM : Up to 3000 rpm
	System Configuration Accessories, spares and consumables
	Centrifuge complete with Swig and basic rotors and four buckets- 01 set.
	Tube Holders as appropriate Environmental factors
	The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of
	15-90%
	The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of
	15-90%
	Power Supply
	Power input to be 220-240VAC, 50Hz as appropriate fitted with Indian plug
	Voltage corrector/stabilizer of appropriate ratings meeting ISI Specifications.(Input 160- 260 V and output 220-240
	V and 50 Hz)
	Standards, Safety and Training
	The supplier should be ISO certified for quality standards.
	Should be FDA or CE or UL or BIS approved product
59	Multimedia Projector with screen
	Size:- portable with Remote control, USB & HDMI input
	Type:-Optical Zoom / Focus(Automatice)
	Focal Length:- 16.9 - 20.28 mm
	Zoom- Up to 5x or more
	Lamp Life (Normal):- 5,000 hours

Screen should be white in colour and good quality, with automatic and remote controlled. Minimum size 5x6 Feet.	
Annexure-A	
MODELS & CHARTS- COMMUNITY MEDICINE	
1. Sanitary well with open mouth in longitudinal section showing Underground water level, no puddle clay, outside brick	
wall cemented jointed bricks, cemented platform with a circular drain, parapet, inclined coping hook in the wall shown	
2. Insanitary well with open mouth in longitudinal section showing	
3. Step Well	
4. Deep Well	
5. Deep Tube Well	
6. Section of slow sand Filter showing fine sand, coarse sand, gravel, bricks, channel, concrete	
7. Model of Patterson Rapid Sand Filter	
8. Berkefeld Filter	
9. House with Ventilation.	
10. Sanitary Slaughter House.	
11. Modern Drainage system	
12 Sewage Treatment Plant.	
13. Activated Sludge Process – Model	
14. Sanitary House.	
15. Rat Proof Godown.	
16. Sanitary Milk Dairy.	
17. Clean Sweet Meat shop.	
18. Bio gas Plant.	
19. Underground Sewer system	
20. Hard Tick	
21.Soft Tick	
22. L.C. of Sandfly Chart only	
23. L.C. of Itchmite Chart only	
24. Mosquito collecting device.	
25. L.C. of Rat Flea Chart only	
26. Life cycle of House Fly Model only	
27. Life cycle of louse Chart only	
28. L. C of Scrub typhus- Chart only	
29. L.C. of Common Bedbug- Chart only	
30. L.C. of Human Head Louse - Chart only	
31. Characteristics of Anopheles, Ades, Mansonia and Culex( Egg, larva, pupa, adult mosquito And mosquito head for all	
4 mosquito)-	
31. L.C. of Mosquito. Egg, Larva and Pupa Anopheles, Ades, Mansonia and Culex separate Models for all 4	
Mosquitoes	
32. L.C. Testse Fly.	
33. L.C Entamoeba histolytica	
34. L.C of Ancylostomaduodenale(hook worm)	
35. L.C of Ascarislumbricoides(round worm)	
36. SIMULUM Black Fly Chart only	
37. HORROCKS APPARATUS- Chart with Procedure to use the apparatus	
38. Specimen in Plastomounts of:	
Ascaris male and female	
Ancylostoma	
Hydatid cyst liver	
Pediculus (head louse)	
Mosquito culex	
SOIL SANITATION	
39. Pit Latrine (Dug Well Latrine)	
40. Bore Hole Latrine	
41. Trench Latrine	
42. Septic Tank Latrine	
43. RCA Laterine.	

44. Indian water Closet.		
45. Underground sewer.		
46. Sanitary Laterine.		
47. House Drainage System SOURCES OF VITAMIN- MODELS		
48.Vitamin A Source		
48. Vitamin A Source 49. Vitamin D Source		
50. Vitamin E Source		
51. Vitamin C Source		
52. Vitamin B Source		
Laminated Charts:		
BSE, breast self Examination method		
Cardiovascular/ Heart disease		
Hypertension		
Influenza		
Diabetes		
Menopause		
Osteoporosis Rabies		
Tetanus		
HIV AIDS		
Sexually transmitted Infections		
Dangers of alcohol		
Dangers of tobacco		
Understanding Parkinsons disease		
Understanding Alzheimers disease		
Keys to healthy eating		
Hepatitis B		
Leprosy		
Measles		
Malaria		
Chicken pox		
Rheumatic Fever		
Mumps		
Pertusis (Whooping Cough)		
Rubella		
Scabies		
Steven Johnson Syndrome		
Protein Energy Malnutrition		
Comparative study of Aedes, Anopheles &Culex		
Calorific Value of Cooked Preparations		
Portraits of Robert Koch, John Snow, Louis Pasteur, Ronald Ross, Edward Jenner with Short description		
FRUITS & VEGETABLES 50 set Food Models including:		
Green Leaves., Cereals, Millets, pulses		
Potato		
Mango Banana Apple Egg.		
Meat Fish Chicken Papaya		
Bitter Guard. Ladies finger Ground Nut Amla		
Guava Orange Lime tomato		
Cabbage Brinjal Cauliflower Onion Radish Carrot Pumpkin Drum Stick Spinch		
Fish Liver Oil Meat Liver Butter		
Milk Ghee		
KabliChanna		
Green Gram		
Bengal Gram Wheat		
Rice Atta Rajama.		

Green Mutter
Various type of Dals.
MODELS:
chicken pox
Filaria Leg
Measles
Mosquito - 3 types
Tetanus
Diptheria
Scurvy
Kwashiorkar
Pellagra

	Schedule No: 5	
	Microbiology Group Tender Items	
1	Anaecrobic apparatus	
	Anaerobic apparatus should be Transparent unbreakable jar with 3.5 Litres capacity	
	• Sturdy lid, clamp and sealing ring with built in safety features.	
	• System with compound gauge.	
	• Supplied with Stainless steel Petri-plate carrier, stainless steel test tube carrier and Min. 10 gas pack pkt.	
2	DISTILLED WATER PLANT	
_	Application: General laboratory purpose water distillation plant	
-	Specification:	
-	The complete outer and inner jacket, condenser tubes are made of Stainless steel.	
-	The apparatus capable of producing pyrogen free distilled water as per IP/BP standards.	
-	The instrument should have low water cut off device, water level indicator and control panel.	
-	Capacity : 5-6 ltrs/hr	
	Chamber -: Stainless Steel 304 quality	
	Air Heater: should have ISI Mark	
-	Heat up Time: 20- 30 min. from Ambient	
	Mounting: Clamp for wall mounting	
	It should have BIS or CE or ISO certified	
-		
3	Micrometer eye piece	
	It is used for mounting onto a microscope, it can be applied to a wide range of needs, including measuring,	
	inspection, measurement, alignment, positioning, etc.	
	Glass diameter: φ24 mm.	
	Material: Blue plate glass	
	• Plate thickness: 1mm	
	Vapor deposition: Top surface	
	• Diopter Adjustment Range: ±5 dpt	
	• Stationary Scale: 8mm/8div	
	• Movable Scale : 1mm/100div	
	Accuracy of Measurement: 1 micron	
4	Micrometer stage, Mounted on stainless steel slide mount	
	Micrometer stage, Mounted on stainless steel slide mount	
	• With cover-glass	
	Supplied with protective cover	
	• Graduated Scale of length 1-20 mm, subdivided giving smallest graduation of 10 micrometer	
	• Thickness (mm) – 1.1-1.5	
	• Thickness tolerance $(mm) - \pm 0.1$	
	<ul> <li>Thickness tolerance (mm) - ±0.1</li> <li>Line width (mm) - 0.001</li> </ul>	
	• Line width $(mm) - 0.001$	

	With Internationally traceable certificates of calibration
5	Multimedia Projector with screen
•	Size:- portable with remote control & USB, HDMI
	Type:-Optical Zoom / Focus(Automatice)
	Focal Length:- 16.9 - 20.28 mm
	Zoom- Up to 5x or more
	Lamp Life (Normal):- 5,000 hours
	Screen should be white in colour and good quality with automatic movement by remote, size 5x 6ft.
6	pH Meter
	PH determination apparatus Digital with LCD display
	• PH range from 1-14
	• combined electrode
	• Resolution 0.1
	• Accuracy $\pm 0.1$
7	VDRL Shaker
	VDRL Shaker, it has a ability to accommodate the blood bottle slides or the flasks by the spring holder. Used for
	VDRL Tests, Blood Grouping Tests, Agglutination Tests, Mixing of solutions in small bottles, beakers & flasks etc.
	Platform size: 300x300mm, Power consumption 230/220V AC with a speed of 70- 350 rpm, automatic timer, digital
	rpm meter, automatic restrart at preset speed in case of power failure.
8	WATER BATH
	Useful for routine purpose. Routine rectangular water bath with holes and concentric rings.
	Standard double wall construction.
	Inner chamber made out of highly polished stainless steel sheet and exterior made out of thick mild steel duly
	finished power coated paint and should be rust proof
	Immersion heaters are provided for heating to attain temperature range from 5° C above ambient to 95° C $\pm$ 1°C.
	Digital temp. Indicator-cum-Controller. The equipment to work on 220v AC 50 Hz single phase.
	Chamber size in mm & inches L x W x H 300 x 225 x 175 mm Approx Capacity appox 15 ltrs. Approx.
	Should be CE or FDA or BIS approved product
9	<u>Colony Counter (Digital)</u>
	1. Auto Mark Pen/Probe.
	2. Wolffhuegel Grid Glass Plate with adjustable focussing.
	3. 110 mm Magnifying Lens.
	4. Four Digit Resettable Electronic Counterwith audio beep at every count.
	5. Net Weight- 3.5Kgs.
	6. Supply- 230V AC 50Hz
10	Digital Thermometers of different temperatures
	Thermometers (Assorted) Digital, with temperature range, should have both Celsius and farenheight scale
	2-8 degree C -10 Nos., 25-40 degree C- 10 nos., 150 - 250 degree C - 2 nos.
11	<u>Vortex mixer</u>
	Designed with a heavy cast aluminum body to provide optimum bench-top stability.
	• The mixer has two modes of operation: Continuous operation when you need to mix a quantity of tubes in
	sequence; intermittent operation is activated by touching the cup attachment with a test tube.
	• Equipped with a single tube mixing cup for single tube mixing and a soft foam pad and mixing platform for mixing
	1 - 4 test tubes simultaneously.
	• To be supplied with a fractional workable motor on 220V AC completed with indicator, plug &cord, Speed- 100-
	3000rpm, dimensions (LxWxH)- 17.7x11.4x15.2 cms.
12	Candle Jar &Desicator
	Candle Jar :-240mm dia meter , Desicator :-Approximately - 18" x 8" - 2 nos.

#### 13. Variable and fixed volume auto pipettes

#### SINGLE CHANNEL PIPETTES

• Spring Loaded Tip Cone for connecting tips very tightly

• Adjustment opening for adjusting pipettes to a specific liquid and volume

• Control Button with very low operating force, color indication for pipette volume

• Tip ejector with very low operating force, positioned for perfect ergonomics

• Volume Display: 4 Digits with magnifier

• To provide thermal, mechanical and chemical stability piston should manufactured with the combination of Fortron and PEEK material

Error + 1%

**REPRODUCIBILITY -99-99.5%** 

Volume range

a) Micropippettes 0.1 to 2.5µl Variability 0.1µl increment - 1 nos.

b) Micropippettes 0.5 to 10µl Variability 0.1µl increment - 1 nos.

c) Micropippettes 2 to 20µl Variability 1µl increment - 2 nos.

d) Micropippettes 20 to 200µl Variability 1µl increment - 2 nos.

e) Micropippettes 100 to 1000µl Variability 1µl increment - 2 nos.

f) Micropippettes 0.1 to 10ml Variability 1ml increment - 1 nos.

g) Fixed volume single channel 20ul- 1 nos.

h) Fixed volume single channel 200ul- 1 nos.

#### **MULTI CHANNEL PIPETTES**

• Lightweight electronic Pipette for high Professional Standards that provide optimal support in work

• Only one multi-function rocker for liquid aspiration & dispensing.

• Pipette should work continous while charging

• Parameters should be in the same position regardless of the mode

• Provision to autoclave lower parts

• Should have provision for removing individual channels (in Multichannel Pipette) to adjust the distance between channels.

• Provision for electronic labeling to prevent an accidental exchange or loss

Should have adjustable volume range from 15 -300ul - 2 Nos.

Should have adjustable volume range from 5-50 ul- 2 Nos.

Should have Documentation Certificate of calibration and inspection from factory. Valid for 6 months and calibration every 06 months for 02 years

8 Channel pipettes

	Schedule No: 6		
	Pathology Group Tender Items		
1	Specimen Identification Solutions		
	As required for Department		
2	HOT PLATE – ELECTRICAL		
	Description of Function		
	Used to heat glassware or its contents.		
	Technical Specifications		
	Durable cast-iron heating element that heats up fast		
	Thermostatic control from simmer to boil		
	Durable and easy-to-clean spray plastic finish		
	Variable heat control		
	Stainless steel body with top having the diameter 30cm		
	Temperature and working indicator light		
	Maximum surface Temperature - 300 °C		
3	Paraffin embedding bath with Heated Paraffin Modules(Ordinary)		
	· Inner Wall with S.S. sheets		
	· Slide drying chamber at bottom		
	· Copper cups and tubes with lids and handle		

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	• Temperature range: ambient +/- 5 to 65°C
	· Works on 220V AC.
	- It should have ISI/FDA mark
	Heated Paraffin Modules
4	Ultrapure water solutions - Distilled water plant
	Application: General laboratory purpose water distillation plant
	Specification:
	The complete outer and inner jacket, condenser tubes are made of Stainless steel.
	The apparatus capable of producing pyrogen free distilled water as per IP/BP standards.
	The instrument should have low water cut off device, water level indicator and control panel.
	Capacity: 5-6 ltrs/hr
	Chamber -: Stainless Steel 304 quality
	Air Heater: should have ISI Mark
	Heat up Time: 20- 30 min. from Ambient
	Mounting: Clamp for wall mounting
	Top Lid: Stainless Steel
	It should have BIS or CE or ISO certified
5	WATER BATH
	Useful for dual purpose. It is a combination of serological and routine rectangular water bath with holes and
	concentric rings.
	Standard double wall construction.
	Immersion heaters are provided for heating to attain temperature range from 5° C above ambient to 95° C $\pm$ 1 °C.
	Should having lids and 8-12 Holes.
	Digital temp. Indicator-cum-Controller. The equipment to work on 220v AC 50 Hz single phase.
	Should be CE or FDA or BIS approved product
6	CENTRIFUGE CLINICAL FOR 12 TUBES
	CENTRIFUGE CLINICAL FUR 12 TUDES
v	Description of Function
~	
•	Description of Function
	Description of Function Centrifuges are required in the Laboratory to separate various components of Blood and any other liquid sample for analysis
	Description of Function           Centrifuges are required in the Laboratory to separate various components of Blood and any other liquid sample for analysis           Operational Requirements
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	Description of Function         Centrifuges are required in the Laboratory to separate various components of Blood and any other liquid sample for analysis         Operational Requirements         Aerodynamic compact construction for vibration free performance         Table top version         Technical Specifications         Tube Capacity :No. 12 :Size 5 – 15 ml         Should have a digital timer
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	Description of Function           Centrifuges are required in the Laboratory to separate various components of Blood and any other liquid sample for analysis           Operational Requirements           Aerodynamic compact construction for vibration free performance           Table top version           Technical Specifications           Tube Capacity :No. 12 :Size 5 – 15 ml           Should have a digital timer           Body should be made of strong fabricated & corrosion resistant steel           Control panel – for start/stop switch, dynamic brakes, step less speed regulator with zero start switch & speed indicator with timer and protective fuses.           Door interlock           Maintenance-free brushless drive motor with exact speed preselection and display. Speed range 100 to 3000 rpm and above, accuracy 1 rpm.           RPM : Up to 3000           System Configuration Accessories, spares and consumables           Centrifuge complete with Swig and basic rotors and four buckets- 01 set.           Tube Holders as appropriate           Environmental factors           The unit shall be capable of operating continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%           The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%           Power Supply           Power Supply
	Description of Function         Centrifuges are required in the Laboratory to separate various components of Blood and any other liquid sample for analysis         Operational Requirements         Aerodynamic compact construction for vibration free performance         Table top version         Technical Specifications         Tube Capacity :No. 12 :Size 5 – 15 ml         Should have a digital timer         Body should be made of strong fabricated & corrosion resistant steel         Control panel – for start/stop switch, dynamic brakes, step less speed regulator with zero start switch & speed         indicator with timer and protective fuses.         Door interlock         Maintenance-free brushless drive motor with exact speed preselection and display. Speed range 100 to 3000 rpm and above, accuracy 1 rpm.         RPM : Up to 3000         System Configuration Accessories, spares and consumables         Centrifuge complete with Swig and basic rotors and four buckets- 01 set.         Tube Holders as appropriate         Environmental factors         The unit shall be capable of operating continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%         Power Supply

	Standards, Safety and Training
	The supplier should be ISO certified for quality standards.
	Should be FDA or CE or UL or BIS approved product
7	Cabinet for 1000 slides
-	· Stainless steel, 1000 capacity Wrap proof, break proof for storage of prepared microscopic slides.
	• Have slots to accommodate 1000 slides with lid. Wooden with hinged lid, slides are held in numbered slots and
	there is an index inside the lid.
8	Digital SLR Camera
	Digital SLR at least 20 megapixel with micro, macro, wide angle zoom lenses, Flash and other accessories
9	Digital Automatic camera > 5 megapixel(Sony/Nikon/Konica/Canon)
10	Standalone paraffin dispensing module cold plate holding more than 100 cassettes
11	Stand alone cold plate
12	Troughs for staining
13	Coplin Jars
	Coplin Jars (for fixing pap smears)
14	
14	Water bath ( Tissue flowing)
	For precise control of different samples at constant temperature. Temperature is
	controlled by capillary type thermostat, from ambient to 80°C with an accuracy of $\pm 1$ °C. Dia × Depth 250 × 125 mm
15	Balance Chemical with weights
15	Balance, Chemical with weights
15	Description of Function
15	Description of Function Electronic Balance is required for precision weighing of Lab samples.
15	Description of Function         Electronic Balance is required for precision weighing of Lab samples.         Operational Requirements
15	Description of Function         Electronic Balance is required for precision weighing of Lab samples.         Operational Requirements         Microprocessor based single pan Analytical Balance with High accuracy & precision is required.
15	Description of Function         Electronic Balance is required for precision weighing of Lab samples.         Operational Requirements         Microprocessor based single pan Analytical Balance with High accuracy & precision is required.         Reading of the weight by digital display.
15	Description of Function         Electronic Balance is required for precision weighing of Lab samples.         Operational Requirements         Microprocessor based single pan Analytical Balance with High accuracy & precision is required.         Reading of the weight by digital display.         Electronic top loading balances with transparent case
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15	Description of Function         Electronic Balance is required for precision weighing of Lab samples.         Operational Requirements         Microprocessor based single pan Analytical Balance with High accuracy & precision is required.         Reading of the weight by digital display.         Electronic top loading balances with transparent case         The balance should have functions of piece counting, percent weighing, formulation, dynamic weighing with automatic and manual start and provision for data interface
	Description of Function         Electronic Balance is required for precision weighing of Lab samples.         Operational Requirements         Microprocessor based single pan Analytical Balance with High accuracy & precision is required.         Reading of the weight by digital display.         Electronic top loading balances with transparent case         The balance should have functions of piece counting, percent weighing, formulation, dynamic weighing with automatic and manual start and provision for data interface         Technical Specifications         Weigh accurately up to 3rd decimal place of one gm.         Weighing capacity 210 gm
	Description of Function         Electronic Balance is required for precision weighing of Lab samples.         Operational Requirements         Microprocessor based single pan Analytical Balance with High accuracy & precision is required.         Reading of the weight by digital display.         Electronic top loading balances with transparent case         The balance should have functions of piece counting, percent weighing, formulation, dynamic weighing with automatic and manual start and provision for data interface         Technical Specifications         Weigh accurately up to 3rd decimal place of one gm.         Weighing capacity 210 gm         Settling time 2 second
	Description of Function         Electronic Balance is required for precision weighing of Lab samples.         Operational Requirements         Microprocessor based single pan Analytical Balance with High accuracy & precision is required.         Reading of the weight by digital display.         Electronic top loading balances with transparent case         The balance should have functions of piece counting, percent weighing, formulation, dynamic weighing with automatic and manual start and provision for data interface         Technical Specifications         Weigh accurately up to 3rd decimal place of one gm.         Weighing capacity 210 gm         Settling time 2 second         Suitable internal and external adjustment weights.
	Description of Function         Electronic Balance is required for precision weighing of Lab samples.         Operational Requirements         Microprocessor based single pan Analytical Balance with High accuracy & precision is required.         Reading of the weight by digital display.         Electronic top loading balances with transparent case         The balance should have functions of piece counting, percent weighing, formulation, dynamic weighing with automatic and manual start and provision for data interface         Technical Specifications         Weigh accurately up to 3rd decimal place of one gm.         Weighing capacity 210 gm         Settling time 2 second         Suitable internal and external adjustment weights.         LCD Display
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16	Description of Function         Electronic Balance is required for precision weighing of Lab samples.         Operational Requirements         Microprocessor based single pan Analytical Balance with High accuracy & precision is required.         Reading of the weight by digital display.         Electronic top loading balances with transparent case         The balance should have functions of piece counting, percent weighing, formulation, dynamic weighing with automatic and manual start and provision for data interface         Technical Specifications         Weigh accurately up to 3rd decimal place of one gm.         Weighing capacity 210 gm         Settling time 2 second         Suitable internal and external adjustment weights.         LCD Display         Power Supply         Power input to be 220-240VAC, 50Hz fitted with Indian plug         Resettable overcurrent breaker shall be fitted for protection         Standards, Safety and Training         Should be FDA or CE or BIS approved product         Magnifying lens (for grossing)

18	Laboratory Counter
	Laboratory Counter nine keys for DLC
19	laboratory stirrer
20	Automatic timer
	Automatic Timer (Standard type)
21	Balance for weighing organs
	$\cdot$ Sealed stainless steel surface, should be robust and easy to clean.
	· Platform size approximately 235x5x170 mm.
	· Display should be protected against soiling by fluids.
	· Sealed battery compartment.
	· One gram graduation.
	· Automatic switch off, HOLD function, pre-TARE function.
	· With a capacity of upto 10 kgs.
	· Batteries to be included.
22	Saws, wire for cutting bones
	Saws, wire for cutting bones
23	Slide boxes for 100 slides for students
	• Stainless steel, 100 capacity Wrap proof, break proof for storage of prepared microscopic slides.
	· Have slots to accommodate 100 slides with lid. Wooden with hinged lid, slides are held in numbered slots and there
	is an index inside the lid.
24	Drill for boring glass
	DIMENSIONS
	Bit Diameter mm: 6.4 mm
	Kerf: 1"
	Overall Length: 1.77
	Blade Thickness: 1"
	Shank Diameter: 0.125
	Material: Diamond
	RPM: 30000
	Contents: 1 Bit
	Color Code: DimGray
	Bit Diameter Inch: 1/4"
	Size: 1/4 In.
25	X7 · · · 1
25	X-ray viewing box (Reporting room + Demo room)
	$\cdot$ Regular size, 4 panel side by side X – Ray View box illuminator
	• Standard features: 2 lamps (F15IT8/D) per panel,
	• Roller gravity film holding systems,
	· Koner gravity min holding systems,
26	Sternal puncture needle Adult size
40	Sternal puncture needle Adult size (Klima and Salah type) Heavy duty stainless steel made, with total assembly
	comprising of aspiration needle with adjustable guard and trocar,
	Size:15G, 1 7/8inches Adult size
27	Stormal nunatura needla abild siza
41	Sternal puncture needle child size (Klima and Salah type) Heavy duty stainless steel made, with total assembly comprising of aspiration needle with
	(Klima and Salah type) Heavy duty stallless steel made, with total assembly comprising of aspiration needle with adjustable guard and trocar, Size: 18G, 1 ¹ / ₂ inches Child size
28	
<b>4</b> ð	Liver Biopsy needle SILVERMAN BIOPSY NEEDLE WITH OR WITHOUT FRANCKLINS'S MODIFICATION _ ADULT & CHILD
	FOR LIVER.
	> All metal Parts
	> All Inclair fails

HLL Infra Tech Services Limited

	>Aluminium anodized, to make it resistance to all chemicals, except Caustic soda. Water and whether proof.
	> Designed for manual capture of high quality tissue samples with minimal trauma to the patient. A scalpel sharp
	surgical steel cutting edge, retries clearly cut high quality specimens.
	> A light weight instrument with good handle grip.
	> The tru cut also offers a 15mm specimen notch.
	>Trucut biopsy needles provide the largest core of tissue than any other needle
	> Can be steam sterilized and reused.
	> Sizes available :
	Size
	Adult Use:- G 14 x 150 mm
	Pediatric Use:-G 18 x 150 mm
29	Stop watch
	Stop watch reding at 1/5 secound.
30	pH Meter electic
	· Digital with LCD display
	· PH range from 4-14
	· Removable electrode
	· Resolution 0.1
	$\cdot$ Accuracy $\pm 0.01$
31	Museum jeus
51	Museum jars
	Specimen jars Acrylic 220x150x100 mm. – 10 NOS
	Specimen jars Acrylic 220x150x100 mm. – 10 NOS
	Specimen jars Acrylic 220x195x80 mm. – 10 NOS
	Specimen jars Acrylic 250x165x140 mm. – 10 NOS
	Specimen jars Acrylic 360x150x100 mm. – 10 NOS
32	Haemocytometer (New Improved Neubauer's Chamber with RBC and WBC Pippets)
	Thick glass slide with central depressed plat form separated on either slide form remain platform by deep moats.
	Level of this platform exactly 0.1mm lower than the general surface of slide.
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	Level of this platform exactly o.1mm lower than the general surface of slide. Depressed platform is ruled in squares central depressed platform is divided in to two parts by a length wise moat and from surrounds slide by two breadth wise moats.
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34	Level of this platform exactly o.1mm lower than the general surface of slide. Depressed platform is ruled in squares central depressed platform is divided in to two parts by a length wise moat and from surrounds slide by two breadth wise moats. 16 square large block is demarcated from its neighbor by an extra interrupted line Central large square divided in to 25 square. <b>Syringes disposable one set from 2 cc to 10 cc (of each)</b> Urinometers Urinometers, Urinometer precision glass with mercury bulb and graduated stem with temperature mark Glass wares Glass wares of following capacity as required by standard lab. All items should be made of Heat resistant
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34 35 a)	Level of this platform exactly 0.1mm lower than the general surface of slide. Depressed platform is ruled in squares central depressed platform is divided in to two parts by a length wise moat and from surrounds slide by two breadth wise moats. 16 square large block is demarcated from its neighbor by an extra interrupted line Central large square divided in to 25 square.  Syringes disposable one set from 2 cc to 10 cc (of each)  Urinometers Urinometer precision glass with mercury bulb and graduated stem with temperature mark  Glass wares of following capacity as required by standard lab. All items should be made of Heat resistant Borosilicate Glass Pipettes-1ml - 50 Nos Pipettes-5ml - 50 Nos Pipettes-10ml - 50 Nos
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34 35 a) b)	Level of this platform exactly o.1mm lower than the general surface of slide. Depressed platform is ruled in squares central depressed platform is divided in to two parts by a length wise moat and from surrounds slide by two breadth wise moats. 16 square large block is demarcated from its neighbor by an extra interrupted line Central large square divided in to 25 square.  Syringes disposable one set from 2 cc to 10 cc (of each)  Urinometers Urinometers Urinometers precision glass with mercury bulb and graduated stem with temperature mark  Glass wares of following capacity as required by standard lab. All items should be made of Heat resistant Borosilicate Glass Pipettes-Inl - 50 Nos Pipettes-Inl - 50 Nos Pipettes-Inl - 50 Nos Beakers-100ml - 50 Nos Beakers-250ml - 50 Nos Beakers-250ml - 50 Nos Beakers-100ml - 10 Nos
34 35 a)	Level of this platform exactly o. Imm lower than the general surface of slide. Depressed platform is ruled in squares central depressed platform is divided in to two parts by a length wise moat and from surrounds slide by two breadth wise moats. 16 square large block is demarcated from its neighbor by an extra interrupted line Central large square divided in to 25 square. Syringes disposable one set from 2 cc to 10 cc (of each) Urinometers Urinometers Urinometers, Urinometer precision glass with mercury bulb and graduated stem with temperature mark Glass wares Glass wares of following capacity as required by standard lab. All items should be made of Heat resistant Borosilicate Glass Pipettes-1ml - 50 Nos Pipettes-2ml - 50 Nos Pipettes-5ml - 50 Nos Beakers-100ml - 50 Nos Beakers-250ml - 50 Nos Beakers-250ml - 50 Nos Beakers-20ml - 50 Nos
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	Conical Flask-1000ml - 10 Nos
	Conical Flask-2000ml - 10 No.
d)	Test Tube (glass) -10ml - 500 Nos
	Test Tube (glass) -15ml - 500 Nos
	Test Tube (glass) -20ml - 200 Nos
e)	Centrifuge tubes - 15ml - 500 Nos
	Centrifuge tubes (graduated) - 15ml - 500 Nos
f)	Reagents Bottles - 100ml - 50 Nos
	Reagents Bottles - 250ml - 50 Nos
	Reagents Bottles - 500ml - 50 Nos
	Reagents Bottles - 1000ml - 10 Nos
g)	Measuring Cylinder - 100ml - 20 Nos
	Measuring Cylinder - 500ml - 20 Nos
	Measuring Cylinder - 1000ml - 5 No.
Н	Dropping Bottles- 500 ml 20 Nos
	Dropping Bottles 4 ounce-20 Nos
36	Cold Plat for Modular Tissue embedding system
37	Multimedia Projector with screen
	Size:- portable LED ,portable with USB and HDMI input
	Type:-Optical Zoom / Focus(Automatice)
	Focal Length:- 16.9 - 20.28 mm
	Zoom- Up to 5x or more
	Lamp Life (Normal):- 5,000 hours
	Screen should be white in colour and good quality with automatic with remote controlled.

	Schedule No: 7	
	Group Tender Items for Depatment of Forensic Medicine	
1	Anthropometric Set including	
	A) Folding Metal Rod Upto 7 Ft	
	B) Osteometric Board	
	C) Craniometer	
	D) Mandibulometer	
	E) Goniometer	
	F) Vernier Calipers	
	G) Equipment for Reporting Height	
	H) Weighing Machine Dial Type Human	
2	Consumable for medico legal work	
	Disposable Cap-Mask-Gown, Gloves Etc.	
	Cotton Rolls, Suture Materials Etc.	
	Formalin, Rectified Spirit, Lugol's Iodine	
	Swabs, Preservative Bulbs etc.	
	Viscera bottles(wide mouthed, screw type cap, plastic, jointless with capacity of 500/200/100 ml), Tissue bottles with	
-	capacity of 2 lit	
	Syringe (5, 10, 20,50 ml)	
	Preservative Salts, (NaCl and NaF)	
	packing gauze than & sealing wax	
3	Multimedia Projector, CPU & Projection Screen	
	Size:- portable, With remote control, USB, HDMI (Full HD)	
	Type:-Optical Zoom / Focus(Automatice)	
	Focal Length:- 16.9 - 20.28 mm	
	Zoom- Up to 5x or more	
	Lamp Life (Normal):- 5,000 hours	
	Screen should be white in colour and good quality, With remote control minimum screen size 5x6 Feets.	

4	DSLR camera with accessories						
	1. Min 16MP with external flash with 16 GB Class 32 GB SD card and twin Lens kit (18-55mm and 55-250mm						
	with original manufacturer lens)						
	2. UV Lens filter and CP lens filter						
	3. Lens hood petal type, silicon rubber						
	4. Tripod: 2 way fluid head, quick release mechanism, spirit level, geared lockable centre column with braced 3						
	section leg, rubber legs.						
	6. Accessory to be supplied: Carrying case, AV cord, HDMI cord, Lens cleaning kit, battery charger.						
5	X-Ray View Box Two In One						
	View box two in one Metallic body fixed type, wall hung with white light (LED Light source, colour temperature						
	8000k, brightness 4000 Lux)						
6	Stop Watch						
	Stopwatch reading at 1/5 second with LED/LCD display reading at 1/5 display						
7	Digital pH meter						
-	· Digital with LCD display						
	· PH range from 4-14						
	· Combined electrode						
	Resolution 0.1						
0	$\cdot \text{Accuracy} \pm 0.01$						
8	Chemical Balance( upto 200g/1gm increment)						
	Description of Function						
	Electronic Balance is required for precision weighing of Lab samples.						
	Operational Requirements						
	Microprocessor based single pan Analytical Balance with High accuracy & precision is required.						
	Reading of the weight by digital display.						
	Electronic top loading balances with transparent case						
	The balance should have functions of piece counting, percent weighing, formulation, dynamic weighing with						
	automatic and manual start and provision for data interface						
	Technical Specifications						
	Weigh accurately up to 3rd decimal place of one gm.						
	Weighing capacity 200 gm						
	Settling time 2 second						
	Suitable internal and external adjustment weights.						
	LCD Display						
	Power Supply						
	Power input to be 220-240VAC, 50Hz fitted with Indian plug						
	Resettable overcurrent breaker shall be fitted for protection						
	Standards, Safety and Training						
	Should be FDA or CE or BIS approved product						
0							
9	DISTILLATION APPARATUS						
	Application: General laboratory purpose water distillation plant						
	The complete outer and inner jacket, condenser tubes are made of Stainless steel.						
	The apparatus capable of producing pyrogen free distilled water as per IP/BP standards.						
	The instrument should have low water cut off device, water level indicator and control panel.						
	Capacity : 5-6 ltrs/hr						
	Chamber -: Stainless Steel 304 quality						
	Air Heater: should have ISI Mark						
	Heat up Time: 20- 30 min. from Ambient						
	Mounting: Clamp for wall mounting						
	Top Lid: Stainless Steel						
	It should have BIS or CE or ISO certified						
10	Centrifuge						
	Should accommodate Max. Volume of 90 ml (6 x 15ml)						

Should accommodate Max. Volume of 90 ml (6 x 15ml)

	Should have an maximum speed of 4,000 rpm					
	Should have an Max. RCF 1,900 x g Should have an LCD display for displaying the parameters					
	Should have a Timer programmable from 0 to 30 minutes or continuous mode					
	Should have alarm facility Rotor radius 10cm Maximum Admiss.density 1.2 kg/dm3					
	Power supply – 220V 50Hz					
	Should be FDA or CE or BIS approved product					
11	Clida Warming Tabla					
11	Slide warming Table					
	Slide warming Table					
10						
12	Hot Plate					
	· Rectangular or round Hot plate					
	· Cast Iron top 200mm, with Energy regulator					
	· Sizes: 250X400X150mm, digitally controlled (optional)					
	· S.S. Top					
	· Works on 220V AC					
13	Glass Cutting Pencil					
	Glass Cutting Pencil					
14	Spectroscopic Lens With Adjustable Slit					
1-7	Spectroscope Lens with adjustable slit					
	To view and measure spectral lines from various light sources					
	To view and measure spectral lines from various light sources					
15						
15	Dissection Set Complete					
	Consisting of cartilage knife, bone cutting forceps, scissors- straight & curved, enterotome, scalpel knives with spare					
	blades, probe metal scale graduated in cm made up of good quality stainless steel, toothed forcep-1x2-2 pieces, 3x4-2					
	pieces, councilman chisel, bone mallet, double edged postmorten knives					
	Digital BP Instrument					
16	Digital BP Instrument should be one touch BP Measurement					
	Display of Value					
17	Stethoscope					
18	Abrasive Powder					
19	L Modes					
17	Made of stainless steel					
20	Block Holder					
20	Diock Holder					
<b>A</b> 1						
21	Stryker Type Autopsy Saw With Accessories					
	with attachment for bone dust collector with water proof card.					
22	Weighing Machine For Organs					
	Digital weighing machine for organ					
	Stainless steel platform,					
	size 1.5 feet, digital display					
	-measurement can be calibrated to adjust the weight of platform					
23	Waighing Mashing Far Fatur					
23	Weighing Machine For Fetus					
	Digital balance single pair for weighing foetus					
	Large weighing S.S. pan, weighing capacity up to $15 \text{ kg} \pm 10 \text{ g}$					
24	Dissection Set Complete					

	1 Technical Specifications					
	1.1 Student Dissecting Kit					
	1.2 Should contain most widely used instruments of high quality stainless steel.					
	2 Dissection Kit contents:					
	2.1 · Cartilage knife 2" blade					
	2.2 · Scalpel with screw lock blade					
	2.3 · Narrow blade scalpel 1.5" blade					
	2.4 · Forceps 4.5" with guide pin, medium points					
	2.5 · Forceps 4.5" with guide pin curved, fine points					
	2.6 · Dissecting scissors, Iris 4.5"					
	2.7 · Probe and hook chrome					
	2.8 · Dissecting scissors with one point sharp & one point blunt 5.5"					
	2.9 · Teasing needle straight					
	2.10 · Teasing needle bent					
	2.11 · Ruler 6" plastic					
	2.12 · Dissecting chain and hook chrome					
	2.13 · Dissecting blow pipe 6"					
	2.14 · Double fold vinyl case					
25	Brain Knife					
	Dual sided edged knife for precision brain sectioning.					
26	Hack Saw					
	Hacksaw 12" stainless steel hacksaw frame tubular with plastic handle with fine cutting blades					
27	Rib Shear Left & Right					
	Rib. Shears, right and left Complete set made up of good quality stainless steel					
28	Measuring Tape( Steel Tape Roll)					
	Minimum 5 M					
29	Magnifying Lens					
-						
30	X- Ray View Box (4 In 1)					
	X'ray view box one in four (Reporting room + Demo room)					
	· Regular size, 4 panel side by side X – Ray View box illuminator					
	· Standard features: 2 lamps (F15IT8/D) per panel,					
	· Roller gravity film holding systems,					
	Koner gruvny min holding systems,					
31	Tooth Extractor Left & Right					
51	Tooth Extractor should be made of SS					
	Fine finish & Good quality					
32	Hand Set Heat Sealer					
34	nanu set neat seater					
	Hand sat hast Saslar (Standard Type)					
	Hand set heat Sealer (Standard Type)					
22	Trature out Trallor					
33	Instrument Trolley					
	Stainlage steel Instrument trolley, with three shalves with speed rolls or three side					
	Stainless steel Instrument trolley with three shelves with guard rails on three side					
	With swivel castors					
	Small:- 66x44x87cm (LxWxH)					
	Large:- 91x45x82cm (LxWxH)					

34	Stretchers for shifting dead bodies						
	Dead Body Transfer Stretcher Trolleys						
	Frame work constructed with stainless steel material.						
	Top is made with stainless steel sheet, with high boarder.						
	A shelve is provided under the top.						
	With swivel castors with breakes in all						
35	Rectal Thermometer						
	Rectal Thermometer with Digital Display						
36	Water bath (Tissue Flowing)						
	$\cdot$ Double walled, inner stainless steel and outer mild steel sheet and glass window fixed on the front for visibility of sample.						
	· Heating mechanism should comprise of set of heat us corresponding to faster and lower heating						
	· Should have stirrer and speed regulator, should operate on 220/230 volts AC/DC.						
	• Digital temperature controller cum indicator from 5 oC to 80 oC with an accuracy of +/- 1 oC.						
37	Victim examination table (Gynecological Examination table with leg stirrups)						
	Made of SS with with good finish.						
38	Screen of size 6x 2 feet each with 3 Fold						
39	Hymenoscope						
40	Colposcope						
41	Sims Speculum						
10							
42	Cuscos Speculum						
12							
43	Sponge holding forceps						
44	Toothed forceps						
44	Toomed for ceps						
45	Ovum forceps						
75	ovum forceps						
46	Proctoscope						
47	Torch						
48	Paraffin embedding bath						
	· Inner Wall with S.S. sheets						
	· Slide drying chamber at bottom						
	· Copper cups and tubes with lids and handle						
	• Temperature range: ambient +/- 5 to 65°C						
	· Works on 220V AC.						
	- It should have BSI/FDA/CE mark						

	Schedule No: 8						
	Pharmacology Group Tender Items						
S.No	S.No Name Of The Items Specifications						
	Metered Dose	Components include: the drug. a propellant mixture, a canister, a metering valve. and a					
	Inhaler	mouthpiece activators, for demonstration prupose.					
1	Spacer	Add-on device referred to as holding chambers or spacers. which are tubes attached to the inhaler that act as a reservoir or holding chamber and reduce the speed at which the aerosol enters the mouth. They serve to hold the medication that is sprayed by the inhaler.					

	Rotahaler	Rotahaler is a plastic dry powder inhalation device to be used with Rota caps which is pre- metered single dose medication for inhalation.
	Nasal spray	for drug administration thru Intranasal route, for demonstration purpose.
	Transdermal patch	It should be non messy and non greasy, water proof.
		WHO Classification indicator
		Averages the Last 3 readings
	Digital	Memory: 120 Records
2	Shygmomanometer	Irregular Heartbeat Detection
	Shiyginometer	User Interface for 4 Users
		Included: 1 Monitor, 1 Normal Cuff, 4 AA
		1. Fusion frequency- 5 to 70Hz.
		2. Frequency in Ascending and Descending mode.
	Critical Flicker	3. Two color light facility- Red & Green.
3	Fusion Apparatus	4. Auto mode.
		5. LCD Display for frequency counts.
		6. Mains operated.
		Digital Lcd display optical pupilometer pd meter led target lamp inside. RANGE of
		measurement:
		1-10 mm (total) in 0. 5mm steps.
4	Pupillometer	(each) in 0. 5mm steps display: liquid crystal digital display . fixation target: green dot on
		illuminated background, focus range: 30cm to infinity, illumination: led automatical shut-
		off:
		one minute of inactivity ,power supply: 4. 5v dc, 2 x aaa batteries.
5		To illustrate the Pharmacodynamic and pharmacokinetic properties of drugs, Adverse drug
5	Charts and Videos	reactions, drug administration techniques(System wise) (5 in each, 5*4=20)
6	Stop Watch	Stop watches reading at 1/5 second with LED/LCD display reading at 1/5 display
7	Weighing Machine	Digital Weighing Machine with accuracy of $\pm 0.5$ to 1 kg
7	0-100kg.	
8	Stethoscope	Standard Biaural Stethoscope

### GENERAL TECHNICAL SPECIFICATIONS

#### **GENERAL POINTS:**

- 1. Warranty:
  - a) The warranty shall remain valid for a minimum period of one year/standard warranty of manufacturer, after the goods or any portion thereof as the case may be, have been delivered, installed and commissioned at the final destination.
  - b) 95% up time Warranty of complete equipment with extension of Warranty period by double the downtime period on 24 (hrs) X 7 (days) X 365 (days) basis.
- 2. After Sales Service:

After sales service centre should be available at the city of Hospital/Institution/Medical College on 24 (hrs) X 7 (days) X 365 (days) basis. Complaints should be attended properly, maximum within 8 hrs. The service should be provided directly by Tenderer/Indian Agent. Undertaking by the Principals that the spares for the equipment shall be available for at least 10 years from the date of supply.

3. Training:

On Site training to Doctors/ Technicians/ staff is to be provided by Principal/ Indian Agents (if they have the requisite know-how) for operation and maintenance of the equipment to the satisfaction of the consignee. The same will be in line with the training modalities as specified in general technical specification.

**Note 1:** Tenderer's attention is drawn to GIT clause 18 and GIT sub-clause 11.1 A (iii). The tenderer is to provide the required details, information, confirmations, etc. accordingly failing which it's tender is liable to be ignored.

#### Section – VIII

# **Quality Control Requirements**

This Section is deleted

#### Section – IX

#### **Qualification Criteria**

1. The Tenderer must be a medical equipment supplier with an average annual turnover of Rs. 2 Cr. in last three years from the date of tender opening.

#### NOTE:

1. The tenderer shall give an affidavit as under:

"We hereby certify that if at any time, information furnished by us is proved to be false or incorrect, we are liable for any action as deemed fit by the purchaser in addition to forfeiture of the earnest money."

2. In support of 1, the Tenderer shall furnish Performance statement in the enclosed Proforma 'A'.

The manufacturer (Tenderer) / Indian Agent shall furnish Satisfactory Performance Certificate in respect of above, duly translated in English and duly notarized in the country of origin, alongwith the tender.

- 3. The Tenderer shall furnish a brief write-up, packed with adequate data explaining and establishing his available capacity/capability (both technical and financial) to perform the Contract (if awarded) within the stipulated time period, after meeting all its current/present commitments. The Tenderer shall also furnish details of Equipment and Quality Control in the enclosed Section VIII.
- 4. Notwithstanding anything stated above, the Purchaser reserves the right to assess the Tenderer's capability and capacity to perform the contract satisfactorily before deciding on award of Contract, should circumstances warrant such an assessment in the overall interest of the Purchaser.
- 5. The Purchaser reserves the right to ask for a free demonstration of the quoted equipment at a pre determined place acceptable to the purchaser for technical acceptability as per the tender specifications, before the opening of the Price Tender.

#### PROFORMA 'A' PROFORMA FOR PERFORMANCE STATEMENT

(For the period of last five years)

Tender Reference No.	:		
Date of opening	:		
Time	:		
Name and address of the Tenderer	:		

:

Name and address of the manufacturer

Order	Order	Description	Value	Date of		Remarks	Have the
placed by	number	and quantity	of	completion of		indicating	goods been
(full	and date	of ordered	order	Contract		reasons for	functioning
address of		goods and	(Rs.)	As per Actual		delay if	Satisfactorily
Purchaser/		services		contract		any	(attach
Consignee)							documentary
							proof)**
1	2	3	4	5	6	7	8

We hereby certify that if at any time, information furnished by us is proved to be false or incorrect, we are liable for any action as deemed fit by the purchser in addition to forfeiture of the earnest money.

#### Signature and seal of the Tenderer

** The documentary proof will be a certificate from the consignee/end user with crossreference of order no. and date in the certificate along with a notarized certification authenticating the correctness of the information furnished.

#### Section – X TENDER FORM

Date____

To CEO HLL Infra Tech Services Limited Procurement and Consultancy Division B-14 A, Sector -62, Noida -201307, Uttar Pradesh.

Ref. Your TE document No. _____dated _____

We, the undersigned have examined the above mentioned TE document, including amendment/corrigendum No. ______, dated ______ (*if any*), the receipt of which is hereby confirmed. We now offer to supply and deliver______ (*Description of goods and services*) in conformity with your above referred document for the sum as shown in the price schedules attached herewith and made part of this tender. If our tender is accepted, we undertake to supply the goods and perform the services as mentioned above, in accordance with the delivery schedule specified in the List of Requirements.

We further confirm that, if our tender is accepted, we shall provide you with a performance security of required amount in an acceptable form in terms of GCC clause 5, read with modification, if any, in Section - V – "Special Conditions of Contract", for due performance of the contract.

We agree to keep our tender valid for acceptance as required in the GIT clause 20, read with modification, if any in Section - III – "Special Instructions to Tenderers" or for subsequently extended period, if any, agreed to by us. We also accordingly confirm to abide by this tender up to the aforesaid period and this tender may be accepted any time before the expiry of the aforesaid period. We further confirm that, until a formal contract is executed, this tender read with your written acceptance thereof within the aforesaid period shall constitute a binding contract between us.

We further understand that you are not bound to accept the lowest or any tender you may receive against your above-referred tender enquiry.

We confirm that we do not stand deregistered/banned/blacklisted by any Govt. Authorities.

We confirm that we fully agree to the terms and conditions specified in above mentioned TE document, including amendment/ corrigendum if any

(Signature with date) (Name and designation) Duly authorised to sign tender for and on behalf of

## SECTION – XI PRICE SCHEDULE

Price to be filled in the relevant field of Price Format in Excel provided in the e-tendering portal.

#### SECTION – XII QUESTIONNAIRE

# Fill up the Techno-Commercial Compliance Sheet Bid provided in spreadsheet (Excel file) and upload in the C-Folder

- 1. The tenderer should furnish specific answers to all the questions/issues mentioned in the Techno-Commercial Compliance Sheet. In case a question/issue does not apply to a tenderer, the same should be answered with the remark "not applicable".
- 2. Wherever necessary and applicable, the tenderer shall enclose certified scanned copy as documentary proof/ evidence to substantiate the corresponding statement.
- 3. In case a tenderer furnishes a wrong or evasive answer against any of the question/issues, their tender is liable to be ignored.

Note: The documents like Priced Proforma Invoice (Single Proforma Invoice from Manufacturer's indicating uniform unit rates) and List of Consumables with prices can be uploaded in the Notes & Attachment under Rfx information (<u>Please note, in the separate Notes & Attachment</u> provided under Rfx information and not in the C-Folder Notes & Attachments).

#### **SECTION – XIII**

#### **BANK GUARANTEE FORM FOR EMD**

Where	as			(hereinafter calle	d the "T	endere	er") has submit	ted it	s quota	ation (	lated
		fo	or the	supply of			(hereinafte	r call	led the	: "ten	der")
against	t the purcha	ser's ten	der en	quiry No		ŀ	Know all persor	is by t	hese pr	resents	s that
we				of		(	Hereinafter cal	led th	e "Ban	k") ha	iving
our 1	registered	office	at					ar	e boi	und	unto
				(hereinafter	called	the	"Purchaser)	in	the	sum	of
			f	or which payment	will and	truly	to be made to	the sa	aid Pur	chaser	the
Bank b	oinds itself,	its succe	essors	and assigns by the	se presen	ts. Sea	led with the Co	ommo	n Seal	of the	said
Bank t	his	day of		20 The co	nditions of	of this	obligation are:				

- 1) If the Tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
- 2) If the Tenderer having been notified of the acceptance of his tender by the Purchaser during the period of its validity:-

fails or refuses to furnish the performance security for the due performance of the contract or

fails or refuses to accept/execute the contract or

if it comes to notice that the information/documents furnished in its tender is incorrect, false, misleading or forged

We undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both the two conditions, specifying the occurred condition(s).

This guarantee will remain in force for a period of forty-five days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.

(Signature with date of the authorised officer of the Bank) Name and designation of the officer Seal, name & address of the Bank and address of the Branch

#### SECTION-XIV

## MANUFACTURER'S AUTHORISATION FORM

This Section is deleted

#### SECTION-XV

#### BANK GUARANTEE FORM FOR PERFORMANCE SECURITY

CEO

HLL Infra Tech Services Limited

Procurement and Consultancy Division

B-14 A, Sector -62, Noida -201307, Uttar Pradesh.

WHEREAS ______ (Name and address of the supplier) (Hereinafter called "the supplier") has undertaken, in pursuance of contract no

dated ______ to supply (description of goods and services) (herein after called "the contract").

AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognised by you for the sum specified therein as security for compliance with its obligations in accordance with the contract;

AND WHEREAS we have agreed to give the supplier such a bank guarantee;

NOW 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.

We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid till such time to cover two months beyond the warranty period from the date of Notification of Award i.e. up to ______ (indicate date).

(Signature with date of the authorised officer of the Bank) Name and designation of the officer

Seal, name & address of the Bank and address of the Branch

#### **SECTION – XVI**

#### **CONTRACT FORM - A**

#### <u>CONTRACT FORM FOR SUPPLY, INSTALLATION, COMMISSIONING, HANDING</u> <u>OVER, TRIAL RUN, TRAINING OF OPERATORS & WARRANTY OF GOODS</u>

(Address of the Purchaser/Consignee Office issuing the contract)

Contract No_____ dated_____

This is in continuation to this office's Notification of Award No_____ dated _____

1. Name & address of the Supplier: _____

- 2. Purchaser's TE document No_____ dated_____ and subsequent Amendment No_____, dated_____ (if any), issued by the purchaser
- 3. Supplier's Tender No_____ dated _____ and subsequent communication(s) No_____ dated _____ (if any), exchanged between the supplier and the purchaser in connection with this tender.
- 4. In addition to this Contract Form, the following documents etc, which are included in the documents mentioned under paragraphs 2 and 3 above, shall also be deemed to form and be read and construed as integral part of this contract:

(i) General Conditions of Contract;
(ii) Special Conditions of Contract;
(iii) List of Requirements;
(iv) Technical Specifications;
(v) Quality Control Requirements;
(vi) Tender Form furnished by the supplier;
(vii) Price Schedule(s) furnished by the supplier in its tender;
(viii) Manufacturers' Authorisation Form (if applicable for this tender);
(ix) Purchaser's Notification of Award

- <u>Note:</u> The words and expressions used in this contract shall have the same meanings as are respectively assigned to them in the conditions of contract referred to above. Further, the definitions and abbreviations incorporated under clause 1 of Section II 'General Instructions to Tenderers' of the Purchaser's TE document shall also apply to this contract.
- 5. Some terms, conditions, stipulations etc. out of the above-referred documents are reproduced below for ready reference:
  - (i) Brief particulars of the goods and services which shall be supplied/ provided by the supplier are as under:

Schedule No.	Brief description of goods/services	Accounting unit	Quantity to be supplied	Unit Price	Terms of delivery

Any other additional services (if applicable) and cost thereof:

- Total value (in figure) _____ (In words) _____
- (ii) Delivery schedule
- (iii) Details of Performance Security
- (iv) Quality Control
  - (a) Mode(s), stage(s) and place(s) of conducting inspections and tests.
  - (b) Designation and address of purchaser's inspecting officer
- (v) Destination and despatch instructions
- (vi) Consignee, including port consignee, if any
- 6. Warranty clause
- 7. Payment terms
- 8. Paying authority

(Signature, name and address of the Purchaser's/Consignee's authorised official) For and on behalf of_____

Received and accepted this contract

Date: _____

Place: _____

## **SECTION – XVII**

This section is deleted

#### SECTION – XVIII <u>Proforma of Final Acceptance Certificate by the Consignee</u>

No	Date
То	
M/s	

#### Subject: Certificate of commissioning of equipment /plant.

This is to certify that the equipment (s)/plant(s) as detailed below has/have been received in good conditions along with all the standard and special accessories and a set of spares (subject to remarks in Para no.02) in accordance with the contract/technical specifications. The same has been installed and commissioned.

(a)	Contract No	dated
(b)	Description of the equipment (s)	) and quantity: (list may be enclosed for many items):

(c)	Supplier's Challan /Invoice no. with date.:	
(d)	Bill of Loading/Air Way Bill/Railway	
	Receipt/ Goods Consignment Note no	dated

- (e) Name of the vessel/Transporters:
- (f) Name of the Consignee:_____
- (g) Date of Receipt by theConsignee:_____
- (h) Date of commissioning and proving test:_____

#### Details of accessories/spares not yet supplied and recoveries to be made on that account.

Sl. No.	Description of Item	Quantity	Amount to be recovered

The proving test has been done to our entire satisfaction and operators have been trained to operate the equipment (s)/plant(s).

The supplier has fulfilled its contractual obligations satisfactorily ## or

The supplier has failed to fulfil its contractual obligations with regard to the following:

- a) He has not adhered to the time schedule specified in the contract in dispatching the documents/ drawings pursuant to 'Technical Specifications'.
- b) He has not supervised the commissioning of the equipment (s)/plant(s)in time, i.e. within the period specified in the contract from date of intimation by the Purchaser/Consignee in respect of the installation of the equipment (s)/plant(s).
- c) The supplier as specified in the contract has not done training of personnel.

The extent of delay for each of the activities to be performed by the supplier in terms of the contract

is

The amount of recovery on account of non-supply of accessories and spares is given under Para no.02.

The amount of recovery on account of failure of the supplier to meet his contractual obligations is______ (here indicate the amount).

(Signature) (Name) (Designation with stamp)

#### **##** Explanatory notes for filling up the certificate:

- i) He has adhered to the time schedule specified in the contract in dispatching the documents/drawings pursuant to 'Technical Specification'.
- ii) He has supervised the commissioning of the equipment (s)/plant(s) in time, i.e. within the time specified in the contract from date of intimation by the Purchaser/Consignee in respect of the installation of the equipment (s)/plant(s).
- iii) Training of personnel has been done by the supplier as specified in the contract.
- iv) In the event of documents/drawings having not been supplied or installation and commissioning of the equipment (s)/plant(s) having been delayed on account of the supplier, the extent of delay should always be mentioned in clear terms.

## Section – XIX

# **Consignee List**

SI. No.	Name of Hospital and Address	State
1	Government Medical CollegeChhindwara, Near T. B. Sanatorium, Chhindwara, M.P.	Madhya Pradesh
2	Government Medical College, Datia Thandi Sadak, Near 29 th Batallian, NH – 75, Datia, 475661, M.P	Madhya Pradesh
3	Government Medical College, Khandwa Love Kush Nagar, Khandwa, 450001 Madhya Pradesh	Madhya Pradesh
4	Government Medical College, Ratlam Village- BanjaliSailana Road, Ratlam, M.P.	Madhya Pradesh
5	Government Medical College, Shahdol Village Champa, Kudri Road, Near New Bus stand, Shahdol, MP.	Madhya Pradesh
6	Government Medical College, Shivpuri Gwalior Highway, Near Katha mil, Shivpuri (M.P).	Madhya Pradesh
7	Government Medical College, Vidisha Sanchi Road, Vidisha (M.P).	Madhya Pradesh