GLOBAL BIDDING DOCUMENT

(Two Bid System for Machinery & Equipment)

FOR

NATIONAL CANCER INSTITUTE
ALL INDIA INSTITUTE OF MEDICAL SCIENCES
(JHAJJAR CAMPUS)

NIB Ref: HITES/PCD/NCI-AIIMS/53/22-23

HITES
HLL INFRA TECH SERVICES LTD

B-14 A, Sector-62, Noida - 201 307
Phone: 0120-4071500; Fax: 0120-4071513
URL: www.hllhites.com
Email: hll.ncij@hllhites.com

INDEX

SECTION -I

NOTICE INVITING BIDS (NIB)

ALL INDIA INSTITUTE OF MEDICAL SCIENCES

Ansari Nagar, New Delhi-110 029

NIB Ref: HITES/PCD/NCI-AIIMS/53/22-23 **Dated: 28.03.2023**

Procurement & Consultancy Services Division of **HLL INFRA TECH SERVICES LIMITED** (a fully owned subsidiary of HLL Lifecare Ltd., a Govt. of India Enterprise) for and on behalf of **Director, AIIMS - New Delhi,** invites e-tenders in two bid system (technical and price bid) from the reputed, eligible & qualified firms/ manufacturers for purchase/supply of following goods at **National Cancer Institute-AIIMS, Jhajjar, Haryana.**

Sl. no.	Tender ID	Short Description of goods	Quantity (Nos.)	Bid Security (BS) (Rs.)	Tender Processing Fee incl. GST (Rs.)
1	2023_HLL_150351_1	Establishment of Molecular Pathology Lab	1 Set	47,95,000	2,950

Pre-bid conference meeting with prospective bidders		Scheduled Date & Time
Venue for pre-bid meeting:	Committee Room (No. 149), 1st Floor, Dr. BRA IRCH Building, AIIMS, New Delhi-29.	10.04.2023 at 02:30 PM
Last date and time of submission of tender:		28.04.2023 at 02:00 PM
Date and time of tender opening:		29.04.2023 at 02:30 PM

Contact Person: HEAD (PCD), HITES; Email: hll.ncij@hllhites.com

2. Interested bidders are advised to download the Bidding document from the websites www.hllhites.com or https://etenders.gov.in/eprocure/app for complete details.

3. Bidders shall ensure that their tender(s), complete in all respects, are submitted online through CPPP website: https://etenders.gov.in/eprocure/app only**.**

4. The Bidder shall download the Bidding Document directly from the designated websites and shall not tamper/modify it including downloaded Price Bid template in any manner. In case the same is found to be tempered/modified in any manner, Tender/Bid will be summarily rejected and EMD would be forfeited.

5. Bidders are advised to follow the instructions, for registering and online submission of their bid(s), as provided in the CPPP website and are requested to read them carefully before proceeding for bidding.

6. Bidders should be in possession of valid Digital Signature Certificate (DSC) of class III for online submission of bids. Prior to bidding, DSC need to be registered on the website mentioned above.

7. All prospective bidders (maximum two representative of a firm bearing ID proof issued by their firm) may attend the Pre-bid conference meeting. The venue, date and time indicated above.

8. 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.

9. **Tender Processing Fee and Bid Security (BS) in original** should be deposited, within the scheduled latest date & time of tender submission as mentioned above, in the Tender Box located at: **HLL Infra Tech Services Limited, Procurement and Consultancy Services Division, B-14 A, Sector-62, Noida-201307, Uttar Pradesh,** failing which the bid shall be summarily rejected.

10. Prospective bidders are advised to browse the above websites regularly before submission of their bids as any further amendments will be published in these websites only.

CEO (HITES)

SECTION - II

GENERAL INSTRUCTIONS TO BIDDERS (GIB)
CONTENTS

GENERAL INSTRUCTIONS TO BIDDERS (GIB)

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 HLL INFRA TECH SERVICES LIMITED (HITES) for and on behalf of The Director, AIIMS, New Delhi.
ii. "Bid" means Quotation / Tender received from a Firm / Tenderer / Bidder.
iii. "Bidder" means Tenderer/ the Individual or Firm submitting Bids / Quotation / Tender
iv. "Supplier" means the individual or the firm supplying the goods and services as incorporated in the contract/purchase order.
v. "Goods" means all articles, material, commodity, livestock, furniture, fixtures, raw material, spares, instruments, machinery, equipment, vehicles, medicines, assemblies, sub-assemblies, accessories, intangible products like software, technology transfer, licenses, patents or other intellectual properties purchased or otherwise acquired for the use of Government but excludes books, publications, periodicals, etc. for a library. The term 'goods' also includes works and services which are incidental or consequential to the supply of such goods, such as, transportation, insurance, installation, commissioning, training and maintenance.
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. "Bid Security" (BS) means Earnest Money Deposit / monetary or financial guarantee to be furnished by a bidder along with its tender.
viii. "Contract" means the written agreement entered into between the purchaser 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 bidder for due performance of the contract placed on it. Performance Security is also known as Security Deposit.
x. "Consignee" means the Center/Hospital/Department/Sections /person to whom the goods are required to be delivered as specified in the Contract.
xi. "Specification" also called Technical Specifications 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 mentioned in the contract to determine conformity.
xiii. "Day" means calendar day.

1.3 Abbreviations:

(i) "NIT" means Notice Inviting Tenders.
(ii) "GIB" means General Instructions to Bidders
(iii) "SIT" means Special Instructions to Bidders
(iv) "GCC" means General Conditions of Contract
(v) "SCC" means Special Conditions of Contract

(vi) "LC" means Letter of Credit
(vii) "DP" means Delivery Period
(viii) "BG" means Bank Guarantee
(ix) "GST" means Goods & Service Tax
(x) "CD" means Custom Duty
(xi) "BL" means Bill of Lading
(xii) "FOB" means Free on Board
(xiii) "CIF" means Cost, Insurance and Freight
(xiv) "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.
(xv) "INCOTERMS" means International Commercial Terms as on the date of Bid Opening
(xvi) "CAMC" means Comprehensive Annual Maintenance Contract (labour, spare and preventive maintenance)

2. Introduction

2.1 The Purchaser has issued these Bidding 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 Instructions to Bidders") 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 bidder for receipt and opening as well as scrutiny and evaluation of bids and subsequent placement of contract.

2.3 The bidder shall also read the Special Instructions to Bidders (SIB) related to this purchase, as contained in Section III of these documents and follow the same accordingly. Whenever there is a conflict between the GIB and the SIB, the provisions contained in the SIB shall prevail over those in the GIB.

2.4 Before formulating the bid and submitting the same to the purchaser, the bidder should read and examine all the terms, conditions, instructions, checklist etc. contained in the Bidding Document. Failure to provide and/or comply with the required information, instructions etc. incorporated in these Bidding Documents may result in rejection of its Bid.

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 Bid

4.1 The bid submitted by the bidder and all subsequent correspondence and documents relating to the bid exchanged between the bidder and the purchaser, shall be written in the English language. However, the language of any printed literature furnished by the bidder in connection with its bid may be written in any other language provided the same is accompanied by an English translation and, for purposes of interpretation of the bid, the English translation shall prevail**.**

5. Eligible Bidders

5.1 This Invitation for Tenders is open to all bidder who fulfil the eligibility criteria specified in these documents.

6. Eligible Goods and Services

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.

7. Bid Expense

7.1 The bidder shall bear all costs and expenditure incurred and/or to be incurred by it in connection with its bid including preparation, mailing and submission of its bid 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 bidding process.

B. TENDER ENQUIRY DOCUMENTS

8. Content of Tender Enquiry Documents

8.1 In addition to Section I – "Notice Inviting Bid" (NIB), the Bidding Documents include:

Section II – General Instructions to Bidders (GIB)
Section III – Special Instructions to Bidders (SIB)
Section IV – General Conditions of Contract (GCC)
Section V – Special Conditions of Contract (SCC)
Section VI – List of Requirements
Section VII – Technical Specifications& General Points
Section VIII – Qualification Criteria
Section IX – Bid Form
Section X – Price Schedules
Section XI - Check List
Section XII – Bank Guarantee Form for Bid Security
Section XIII – Manufacturer's Authorization Form
Section XIV – Bank Guarantee Form for Performance Security/CAMC Security
Section XV – Contract Forms A & B
Section XVI – Proforma of Consignee Receipt Certificate
Section XVII – Proforma of Consignee Acceptance Certificate by the consignee

8.2 The relevant details of the required goods and services, the terms, conditions and procedure for bidding, bid 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 bidders are expected to examine all such details etc to proceed further.

9. Amendments to a Bidding documents

9.1 At any time prior to the deadline for submission of bids, the purchaser may, for any reason deemed fit by it, modify the Bidding Documents by issuing suitable amendment(s) to it.

9.2 Such an amendment will be notified through CPPP (https://etenders.gov.in/eprocure/app) and/or www.hllhites.com and will be binding on them.

9.3 In order to provide reasonable time to the prospective bidders to take necessary action in preparing their bids as per the amendment, the purchaser may, at its discretion extend the deadline appropriately for the submission of bids and other allied time frames, which are linked with that deadline.

10. Clarification of Bid document

10.1 A bidder requiring any clarification or elucidation on any issue of the Bidding Documents may take up the same with the purchaser in writing. The purchaser will respond in writing to such request provided the same is received by the purchaser not later than ten days (unless otherwise specified in the SIB) prior to the prescribed date of submission of Bids.

C. PREPARATION OF BIDS

11. Documents comprising the e-Bid

11.1 The bid(s) shall only be submitted online as mentioned below:

A) Techno-commercial Bid (Un-priced Bid)

(Bidders shall furnish the following information along with technical tender in pdf format):

i) Bid Security furnished in accordance with GIB clause 19.1 alternatively, documentary evidence as per GIB clause 19.2 for claiming exemption from payment of Bid Security.
ii) Bid Form as per Section IX (without indicating any price).
iii) Documentary evidence, as necessary in terms of clauses 5 and 17 of GIB establishing that the bidder is eligible to submit the bid and, also, qualified to perform the contract if its bid is accepted.
iv) Bidder who quotes for goods manufactured by other manufacturer shall furnish Manufacturer's Authorisation Form. While giving authorization to agent, to quote on their behalf, manufacturer has to give the reasons for not quoting directly against this bid in the Manufacturer's Authorisation Form.
v) Power of Attorney in favour of the signatory who is digitally signing the bidding documents and signatory of Manufacturer's Authorization Form.
vi) Documents and relevant details to establish in accordance with GIB clause 18 that the goods and the allied services to be supplied by the bidder conform to the requirement of the bidding documents.
vii) Performance Statement as per section VIII along with relevant copies of orders and end users' satisfaction certificate.
viii) Price Schedule(s) as per Section X filled up with all the details including Make, Model etc. of the goods offered with prices blank (without indicating any prices).
ix) Documents confirming to Sole Proprietorship/Partnership/Private Limited Firm in the country of origin as the case may be.
x) Checklist as per Section XI.
xi) Copies of GST registration certificate and PAN Card.
xii) Copies of annual report, audited balance sheet and profit & loss account as per tender requirement.

xiii) Non conviction/no pending conviction certification issued by Notary on non-judicial stamp paper for preceding three years.
xiv) A declaration that bidder 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.
xv) Technical and Commercial Compliance statement in excel format provided in the e-tender portal.
xvi) Product catalogues/original Data Sheets for all quoted items.
xvii) Copies of quality certificates, if applicable, namely, BIS, ISO, FDA, CE, etc.

B) Price Tender:

Price Schedule(s) as per format provided in the portal, duly filled in with all the details including Make, Model, HSN Code etc. of the goods offered, is to be uploaded.

The price bid format is provided in excel format along with this Bidding Document at https://etenders.gov.in/eprocure/app under given Tender ID.

Bidders are advised to download this Price Bid Format as it is and quote their offer/rates in the permitted column and upload the same in the Price Bid. **Bidder shall not tamper/modify the downloaded price bid template in any manner**. The Instruction given in the Price Bid Format shall strictly be adhered to.

Note:

The tender Processing fee, BID SECURITY has to be submitted in physical form as per Section – I, Notice Inviting Tender of this tender enquiry.

11.2 The authorized signatory of the bidder must sign the bid duly stamped at appropriate places and initial all the remaining pages of the bid. Individuals signing the bid or other documents connected with a contract must specify whether he signs as:

i. A 'Sole Proprietor' of the firm or constituted attorney of such Sole Proprietor.
ii. In case of partnership firm he must have authority to quote & to refer to arbitration dispute concerning the business of the partnership either by virtue of the partnership agreement or a power of attorney;
iii. Constituted attorney of the firm if it is a company.

Note:

1. In case of (ii) above, a copy of the partnership agreement duly registered with "Registrar of Firm's" or general power of attorney, in either, case, attested by a Notary Public should be furnished, or affidavit on stamped paper of all the partners admitting execution of the partnership agreement or the general power of attorney should be furnished.
2. In case of the partnership firms, where no authority to refer disputes concerning the business of the partnership has been conferred on any partner, the bid and all other related documents must be signed by every partner of the firm.
3. A person signing the bid form or any documents forming part of the contract on behalf of another shall be deemed to warrantee 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, liable for rejection of bid or cancel of contract and hold the signatory liable for all cost and damages.

11.3 A bid, which does not fulfil any of the above requirements and/or gives evasive information/reply against any such requirement, shall be liable to be ignored and rejected.

12. Bid Currencies

12.1 The bidder supplying indigenous goods or already imported goods shall quote only in Indian Rupees.

12.2 For imported goods if supplied directly from abroad, prices shall be quoted in any freely convertible currency say US Dollar, Euro, GBP or Yen. As regards price(s) for allied services, if any required with the goods, the same shall be quoted in Indian Rupees only, if such services are to be performed/undertaken in India. Commission for Indian Agent, if any and if payable shall be indicated in the space provided for in the Price Schedule and will be payable in Indian Rupees only after satisfactory supply, installation and acceptance of the goods. The rate of conversion shall be taken as on the date of placement of purchase order.

12.3 Bids, where prices are quoted in any other way shall be treated as non-responsive and rejected.

13 Bid Prices

13.1 The Bidder shall indicate on the Price Schedule provided under Section X all the specified components of prices shown therein including the unit prices, applicable taxes and total bid 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 bidder has the option to submit its bid for any one or more schedules and, also, to offer special discount for combined schedules. However, while quoting for a schedule, the bidder shall quote for the complete requirement of goods and services as specified in that particular schedule.

13.3 The quoted prices for goods offered from within India and that for goods offered from abroad are to be indicated separately in the applicable Price Schedules attached Under Section X.

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 packing charges and GST and Custom Duty 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 duty, which will be payable on the goods in India if the contract is awarded;

c) Charges towards Inland Transportation, Insurance (local transportation and storage) 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 (including installation & commissioning, supervision, demonstration and training), at the consignee site as mentioned in List of Requirements, Technical Specification and Price Schedule;
e) The prices of Turnkey Work (if any), as mentioned in List of Requirements, Technical Specification and Price Schedule; and
f) The price of CAMC, as mentioned in List of Requirements, Technical Specification and Price Schedule.

13.4.2 For goods offered from abroad, the prices in the corresponding price schedule shall be entered separately in the following manner:

a) The price of goods quoted on FOB at port/ FCA at airport of shipment, as mentioned in List of Requirements, Technical Specification and Price Schedule
b) The amount of Freight and Insurance (port of loading to port of entry) and other incidental costs.
c) The price of Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training) at the Consignee's site as mentioned in List of Requirements, Technical Specification and Price Schedule.
d) The price of Extended Insurance (local transportation and storage) from port of entry to the consignee site for a period including 3 months beyond date of delivery.
e) The Unit Price on CIP Name port of Destination + Extended Insurance (local transportation and storage)
f) The price of total Price on CIP Named port of Destination +Insurance (local transportation on and storage)
g) The prices of Turnkey Work (if any), as mentioned in List of Requirements, Technical Specification and Price Schedule; and
h) The price of CAMC, as mentioned in List of Requirements, Technical Specification and Price Schedule.

13.5 Additional information and instruction on Taxes and Duties:

13.5.1 **GST (Goods & Services Tax)**

If the bidder desires to ask for GST (goods and services tax) to be paid extra, the same must be specifically stated. In the absence of any such stipulation, the price will be taken inclusive of GST and no claim for the same will be entertained later.

13.5.2 **Customs Duty**

The Purchaser will pay the Customs duty wherever applicable.

13.6 For transportation of imported goods offered from abroad, relevant instructions as incorporated under GCC Clause 10 shall be followed.

13.7 For insurance of goods to be supplied, relevant instructions as provided under GCC Clause 11 shall be followed.

13.8 Unless otherwise specifically indicated in this Bidding Document, the terms FCA, FOB, CIF, CIP etc. for imported goods offered from abroad, shall be governed by the

rules & regulations prescribed in the current edition of INCOTERMS - 2010, published by the International Chamber of Commerce, Paris

13.9 The need for indication of all such price components by the bidders, as required in this clause (viz., GIB clause 13) is for the purpose of comparison of the bids by the purchaser and will no way restrict the purchaser's right to award the contract on the selected bidder on any of the terms offered.

14. Indian Agent

14.1 If a foreign bidder has engaged an agent in India in connection with its bid, the foreign bidder, in addition to indicating Indian agent's commission, if any, in a manner described under GIB sub clause 12.2 above, shall also furnish the following information:

a) The complete name and address of the Indian Agent.
b) The details of the services to be rendered by the agent for the subject requirement.
c) Details of Service outlets in India, nearest to the consignee(s), to render services during Warranty and CAMC period.

15. Firm Price

15.1 Unless otherwise specified in the SIB, prices quoted by the bidder shall remain firm and fixed during the currency of the contract and not subject to variation on any account.

15.2 However, as regards taxes and duties, if any, chargeable on the goods and payable, the conditions stipulated in GIB clause 13 will apply.

16. Alternative Models

16.1 Alternative Models are permitted. The Bidder can quote alternate models meeting the specifications of the bidding document of same manufacturer with single Bid Security.

16.2 If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same ATE for the same item/product. In a bid, either the Indian Agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same models in the same ATE.

16.3 One Principal/OEM cannot authorize two agents simultaneously for the same item against same ATE.

17 Documents Establishing Bidder's Eligibility and Qualifications

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

17.2 The documentary evidence needed to establish the bidder's qualifications shall fulfill the following requirements:

a) In case the bidder offers to supply goods, which are manufactured by some other firm, the bidder has been duly authorised by the goods manufacturer to quote for and supply the goods to the purchaser. The bidder shall submit the manufacturer's authorization letter to this effect as per the standard form provided under Section XIII in this document.
b) In case the bidder is not doing business in India, it is duly represented by an agent stationed in India fully equipped and able to carry out the required contractual functions and duties of the supplier including after sale service, maintenance & repair etc. of the goods in question, stocking of spare parts and fast moving components and other obligations, if any, specified in the conditions of contract and/or technical specifications.

18. Documents establishing good's Conformity to Bidding Document.

18.1 The bidder shall provide in its bid the required as well as the relevant documents like technical data, literature, drawings etc. to establish that the goods and services offered in the bid fully conform to the goods and services specified by the purchaser in the Bidding Documents. For this purpose the bidder shall also provide a clause-by-clause commentary on the technical specifications and other technical details incorporated by the purchaser in the Bidding Documents to establish technical responsiveness of the goods and services offered in its bid.

18.2 In case there is any variation and/or deviation between the goods & services prescribed by the purchaser and that offered by the bidder, the bidder shall list out the same in a chart form without ambiguity and provide the same along with its bid.

18.3 If a bidder furnishes wrong and/or misguiding data, statement(s) etc. about technical acceptability of the goods and services offered by it, its bid will be liable to be ignored and rejected in addition to other remedies available to the purchaser in this regard.

19. Bid Security (BS)

19.1 Pursuant to GIB clauses 8.1 and 11.1 A (i) the bidder shall furnish along with its bid, Bid Security for amount as shown in the Notice Inviting Bids (NIB). The Bid Security is required to protect the purchaser against the risk of the bidder's unwarranted conduct as amplified under sub-clause 19.7 below.

19.2 The bidders who are currently registered with MSME for the specific goods as per bidding document specification shall be eligible for exemption from Bid Security as defined in MSE Procurement Policy issued by the department of MSME. In case the bidder falls in this category, the bidder shall enclose relevant certificate of registration issued by department of MSME.

Note: Traders/resellers/distributors/authorized agents will not be considered for availing benefits under PP Policy 2012 for MSEs as per MSE guidelines issued by MoMSME

19.3 The Bid Security shall be denominated in Indian Rupees or equivalent currencies as per GIB clause 12.2. The Bid Security shall be furnished in one of the following forms:

i) Account Payee Demand Draft/ Banker's cheque
ii) Fixed Deposit Receipt
iii) Bank Guarantee
iv) Insurance Security Bond

19.4 The **Demand Draft** or **Banker's Cheque** or **Fixed Deposit Receipt** shall be drawn on any commercial bank in India or country of the bidder, in favour of the "……."(as indicated in the NIB) payable at New Delhi. In case of **Bank Guarantee**, the same is to be provided from any commercial bank in India or country of the bidder as per the format specified under Section XII in this document.

19.5 The Bid Security shall be valid for a period of forty-five (45) days beyond the validity period of the bid. As validity period of Bid as per Clause 20 of GIB is 270 days, the Bid Security shall be valid for 315 days from Techno-Commercial Bid opening date.

19.6 The Bid Security of unsuccessful bidders will be returned without any interest, after expiry of the bid validity period, but not later than thirty days after conclusion of the resultant contract. The Bid Security of successful bidder will be returned without any interest, after receipt of performance security from that bidder.

19.7 Bid Security is required to protect the purchaser's right against the risk of the Bidder's conduct, which would warrant the forfeiture of the Bid Security. Bid Security of a bidder will be forfeited, if the bidder withdraws or amends its bids or impairs or derogates from the bid in any respect within the period of validity of its bid or if it comes to the notice that the information/documents furnished in its bid is incorrect, false, misleading or forged without prejudice to other rights of the purchaser. The Bid Security of the successful bidder 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 In the case of Bank Guarantee furnished from banks outside India (i.e. foreign Banks), it should be authenticated and countersigned by any nationalized bank in India by way of back-to-back counter guarantee and the same should be submitted along with the bid.

20. Bid Validity

20.1 If not mentioned otherwise in the SIB, the bid shall remain valid for acceptance for a period of 270 days (Two hundred and Seventy days) after the date of bid opening prescribed in the Bidding Document. Any bid valid for a shorter period shall be treated as unresponsive and rejected.

20.2 In exceptional cases, the bidder may be requested by the purchaser to extend the validity of their bids up to a specified period. Such request(s) and responses thereto shall be conveyed by mail/fax/email. The bidders, who agree to extend the bid validity, are to extend the same without any change or modification of their original bid and they are also to extend the validity period of the Bid Security accordingly. A bidder, who may not agree to extend its bid validity after the expiry of the original validity period, their bid will not be considered further and the Bid Security furnished by them shall be returned.

20.3 In case the day up to which the bids are to remain valid falls on/subsequently declared a holiday or closed day for the purchaser, the bid validity shall automatically be extended up to the next working day.

21. Signing and Sealing of Bid

21.1 The bidders shall submit their bids online as per the instructions contained in GIB Clause 11 and any other specific instruction mentioned in the CPPP portal using the digital signature.

21.2 Unless otherwise mentioned in the SIB, a bidder shall submit their bid online only.

21.3 The Bid shall either be typed or written in indelible ink and the same shall be signed by the bidder or by a person(s) who has been duly authorized. The letter of authorization shall be by a written power of attorney, which shall also be furnished along with the bid.

21.4 All the documents of the bid shall be duly signed at the appropriate places as indicated in the Bidding Documents and all other pages of the bid including printed literature (if any), shall be initialled and stamped by the same person(s) signing the bid. The bid shall not contain any eraser or overwriting, except as necessary to correct any error made by the bidder and, if there is any such correction; the same shall be initialled and stamped by the person(s) signing the bid.

21.5 The bidder is to seal the bid and writing the address of the purchaser and the bid reference number on the envelopes. The sentence "NOT TO BE OPENED" before _____ (The bidder is to put the date & time of bid opening) are to be written on this envelope. If the envelope is not sealed and marked properly as above, the purchaser will not assume any responsibility for its misplacement, premature opening, late opening etc.

21.6 Bidding Document seeks quotation following "Two Bid System", in two parts. First part will be known as 'Techno-Commercial Bid', and the second part 'Price Bid' as specified in clause 11 of GIB.

D. SUBMISSION OF BIDS

22. Submission of Bids:

22.1 Unless otherwise specified, the bidders are to drop the Bids in the tender box located at **HLL Infra Tech Services Limited, Procurement and Consultancy Division, B-14 A, Sector-62, Noida-201307, Uttar Pradesh** or the same shall be submitted by the bidder by hand to concerned Project Officer dealing hand or his nominee. The necessary entry will be made in the Bid Receipt Register.

22.2 The bidders must ensure that they submit the on-line bids within the scheduled closing date & time. They shall also ensure to submit the original Tender Processing Fee and Bid Security within its scheduled date & time. It is the responsibility of the bidder to ensure that their Bids whether sent by post or by courier or by person, are dropped in the Tender Box by the specified clearing date and time. In the event of the specified date for submission of bid falls on / is subsequently declared a holiday or closed day for the purchaser, the bids will be received up to the appointed time on the next working day.

22.3 Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.

22.4 The bidder has to digitally sign and upload the required bid documents one by one as indicated in the Bidding document.

22.5 Bidder has to select the payment option as "offline" to pay the Bid Security/ EMD as applicable and enter details of the instrument.

22.6 Bidder should prepare the Bid Security/EMD as per the instructions specified in the Tender Enquiry Document. The original should be dropped in the Tender Box latest by the last date of bid submission or as specified in the Bidding Document. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.

22.8 The server time (which is displayed on the dashboard of the e-tendering portal) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.

22.9 Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.

22.10 The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

23. Late Bid:

23.1 A bid, which is received after the specified date and time for receipt of bids will be treated as "late bid" and will be ignored.

24. Alteration and Withdrawal of Bid

24.1 The bidder, after submitting its bid, is permitted to alter/modify its bid, within the deadline for submission of bids. Alterations/modifications to bids received after the prescribed deadline will not be considered.

24.2 No bid should be withdrawn after the deadline for submission of bid and before expiry of the bid validity period. If a bidder withdraws the bid during this period, it will result in forfeiture of the Bid Security furnished by the bidder in its bid.

E. BID OPENING

25. Opening of Bids:

25.1 The purchaser will open the bids at the specified date and time and at the specified place as indicated in the NIB.

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

25.2 Authorized representatives of the bidder, who have submitted bids on time may attend the bid opening provided they bring with them letter of authority from their bidder. The bid opening official(s) will prepare a list of the representatives attending the bid opening. The list will contain the representatives' names & signatures and corresponding bidder's names and addresses.

25.3 Two Bid System as mentioned in Para 21.6 above will be as follows. The "Techno - Commercial Bids" are to be opened in the first instance, at the prescribed time and date as indicated in NIB. These Bids shall be scrutinized and evaluated by the competent committee/authority with reference to parameters prescribed in the Bidding Document. During the Techno-Commercial Bid opening, the bid opening official(s) will read the salient features of the bids like brief description of the goods offered, Bid Security and any other special features of the bids, as deemed fit by the bid opening official(s). Thereafter, in the second stage, the Price Bids 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 Bid. The prices, special discount if any of the goods offered etc., as deemed fit by bid opening official(s) will be read out.

F. SCRUTINY AND EVALUATION OF BIDS

26. Basic Principle

26.1 Bids will be evaluated on the basis of the terms & conditions already incorporated in the Bidding Document, based on which bids have been received and the terms, conditions etc. mentioned by the bidders in their bids. No new condition will be brought in while scrutinizing and evaluating the bids.

27. Scrutiny of Bids

27.1 The Purchaser will examine the Bids to determine whether they are complete, whether any computational errors have been made, whether required Bid Securities have been furnished, whether the documents have been properly signed stamped and whether the Bids are generally in order.

27.2 The Purchaser's determination of a Bid's responsiveness is to be based on the contents of the Bid itself without recourse to extrinsic evidence.

27.3 The Bids will be scrutinized to determine whether they are complete and meet the essential and important requirements, conditions etc. as prescribed in the Bidding Documents. The bids, which do not meet the basic requirements, are liable to be treated as non-responsive and will be rejected.

27.4 The following are some of the important aspects, for which a bid shall be declared non-responsive during the evaluation and may be ignored;

(i) Bid form as per Section IX not enclosed.
(ii) Bid is unsigned.
(iii) Bid validity is shorter than the required period.
(iv) Required Bid Security (Amount, validity etc.)/ Exemption documents have not been provided.
(v) Bidder has quoted for goods manufactured by other manufacturer(s) without the desired Manufacturer's Authorization Form as per Section XIII.
(vi) Bidder 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.

(vii) Bidder has not agreed to other essential condition(s) specially incorporated in the bidding document like terms of payment, liquidated damages clause, warranty clause, dispute resolution mechanism, and applicable law.

(viii) Poor/unsatisfactory past performance.

(ix) Bidders who stand de-registered/banned/blacklisted by any Central Govt. Ministries/Departments/Hospitals/Institutes.

(x) Bidder is not eligible as per Clauses 5, 6 & 17 of GIB.

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

(xii) Bidder has not agreed for the delivery terms and delivery schedule.

28. Minor Informality/Irregularity/Non-Conformity

28.1 If during the evaluation, the purchaser find any minor informality and/or irregularity and/or non-conformity in a bid, the purchaser will convey its observation on such 'minor' issues, which has not price implication, to the bidders by registered/speed post/ e-mail/fax etc. asking the bidder to respond by a specified date. If the bidder does not reply by the specified date or gives evasive reply without clarifying the point at issue in clear terms, that bid will be liable to be ignored.

29 Discrepancies in Prices

29.1 If, in the price structure quoted by a bidder, 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 bidder 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 judgment of the purchaser, there is any such arithmetical discrepancy in a bid, the same will be suitably conveyed to the bidder by registered/speed post/email. If the bidder does not agree to the observation of the purchaser, the bid is liable to be ignored.

30. Qualification Criteria

30.1 Bids of the bidder, who do not meet the required Qualification Criteria prescribed in Section VIII, will be treated as non-responsive and will not be considered further.

31. Conversion of Bid currencies to Indian Rupees

31.1 In case the Bidding Documents permits the bidder to quote their prices in different currencies, all such quoted prices of the responsive bidder will be converted to a single currency viz., Indian Rupees for the purpose of equitable comparison and

evaluation, as per the exchange rates established by the Reserve Bank of India for similar transactions, as on the date of 'Price Bid' opening.

32. Schedule-wise Evaluation

32.1 In case the List of Requirements contains more than one schedule, the responsive bids will be evaluated and compared separately for each schedule. The bid for a schedule will not be considered if the complete requirements prescribed in that schedule are not included in the bid. However, as already mentioned in GIB sub clause 13.2, the bidders have the option to quote for any one or more schedules and offer discounts for combined schedules. Such discounts wherever applicable will be taken into account to determine the lowest evaluated cost for the purchaser in deciding the successful bidder for each schedule, subject to bidder (s) being responsive.

33. Comparison of Bids

33.1. Unless mentioned otherwise in Section – III – Special Instructions to bidder and Section – VI – List of Requirements, the comparison of the responsive Bids shall be carried out on Free Delivery at consignee site basis. The quoted Turnkey Work prices and CAMC prices will also be added for comparison/ranking purpose for evaluation. "Net Present Value (NPV) of the Comprehensive Annual Maintenance Contract Charges (CAMC) quoted for 5 years after the warranty period shall be added to the bid price for evaluation and will be calculated after discounting the quoted price by a discounting factor of 10% per annum." However the payment of CAMC shall be made to the successful bidder at approved rates.

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

34.1 Further to GIB Clause 33 above, the purchaser's evaluation of a bid 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, GST which will be contractually payable (to the bidder), on the goods if a contract is awarded on the bidder; and

ii) in the case of goods of foreign origin offered from abroad, customs duty and GST which will be contractually payable (to the bidder) on the goods if the contract is awarded on the bidder.

34.2 The purchaser's evaluation of bid will also take into account the additional factors, if any, incorporated in SIB in the manner and to the extent indicated therein.

34.3 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 Bids.

35. Bidder's capability to perform the contract

35.1 The purchaser, through the above process of bid scrutiny and bid evaluation will determine to its satisfaction whether the bidder, whose bid has been determined as the lowest evaluated responsive bid 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.

35.2 The above-mentioned determination will, inter alia, take into account the bidder satisfying all the requirements of the purchaser as incorporated in the Bidding Document. Such determination will be based upon scrutiny and examination of all relevant data and details submitted by the bidder in its bid as well as such other allied information as deemed appropriate by the purchaser.

36. Contacting the Purchaser

36.1 From the time of submission of bid to the time of awarding the contract, if a bidder needs to contact the purchaser for any reason relating to NIB/Bidding Document and / or its bid, it should do so only in writing.

36.2 In case a bidder attempts to influence the purchaser in the purchaser's decision on scrutiny, comparison & evaluation of bids and awarding the contract, the bid of the bidder shall be liable for rejection in addition to appropriate administrative actions being taken against that bidder, as deemed fit by the purchaser.

G. AWARD OF CONTRACT

37. Purchaser's Right to accept any bid and to reject any or all bids.

37.1 The purchaser reserves the right to accept in part or in full any bid or reject any or more bid(s) without assigning any reason or to cancel the bidding process and reject all bids at any time prior to award of contract, without incurring any liability, whatsoever to the affected bidder(s).

38. Award Criteria

38.1 Subject to GIB clause 37 above, the contract will be awarded to the lowest evaluated responsive bidder decided by the purchaser in terms of GIB Clause 35.

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

39.1 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 bidder.

39.2 If the quantity has not been increased at the time of the awarding the contract, the purchaser reserves the right to increase by up to twenty five (25) per cent, the quantity of goods and services mentioned in the contract (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.

40. Notification of Award

40.1 Before expiry of the bid validity period, the purchaser will notify the successful bidder(s) in writing, by registered / speed post or by fax/email (to be confirmed by registered / speed post) that its bid for Goods & Services, which have been selected by the purchaser, has been accepted, also briefly indicating there in the essential details like description, specification and quantity of the goods & services and corresponding prices accepted. The successful bidder must furnish to the purchaser the required Performance Security within thirty days from the date of dispatch of this notification, failing which the Bid Security will be forfeited and the

award will be cancelled. Relevant details about the Performance Security have been provided in clause 5 of GCC under Section IV.

40.2 The Notification of Award shall constitute the conclusion of the Contract.

41. Issue of Contract

41.1 Promptly after notification of award, the Purchaser will mail the contract form (as per Section XV) duly completed and signed, in duplicate, to the successful bidder by registered / speed post.

41.2 Within twenty one days from the date of the contract, the successful bidder shall return the original copy of the contract, duly signed and dated, to the Purchaser/ by registered / speed post/courier.

41.3 The Purchaser reserves the right to issue the Notification of Award consignee wise.

42. Non-receipt of Performance Security and Contract by the Purchaser

42.1 Failure of the successful bidder in providing Performance Security and/or returning contract copy duly signed in terms of GIB clauses 40 and 41 above shall make the bidder liable for forfeiture of its Bid Security and, also, for further actions by the Purchaser it as per the clause 24-Termination of default of GCC under Section IV.

43. Return of Bid Security

43.1 The Bid Security of the successful bidder and the unsuccessful bidder will be returned to them without any interest, whatsoever, in terms of Clause 19 of GIB.

44. Publication of Bid Result

44.1 The name and address of the successful bidder (s) receiving the contract(s) will be mentioned in the Website of AIIMS, CPPP and HITES.

H. CORRUPT OR FRADULENT PRACTICES

45. Corrupt or Fraudulent Practices

45.1 It is required by all concerned namely the Bidder /Suppliers/Purchaser/Consignee/End User 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 anything 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 bidders (prior to or after Bid submission) designed to establish Bid 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 Bidder 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 BIDDERS (SIB)

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

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

Sl. No.	GIB Clause No.	Topic	SIB Provision	Ref. Page No.
A	1 to 7	Preamble	No Change	
B	8 to 10	Bidding Document	No Change	
C	11 to 21	Preparation of Bids	Change in GIB Clause no. 19, 21.1	
	19		Additional para 19.9 as under	15
D	22 to 24	Submission of Bids	No Change	
E	25	Bid Opening	No Change	
F	26 to 36	Scrutiny and Evaluation of Bids	Change in GIB Clause no. 33	
	33	Comparison of Bids	Additional para 33.2 as under	21
G	37 to 44	Award of Contract	No Change	
H	45	Corrupt or Fraudulent Practices	No Change	

19. Bid Security (BS)

19.9 HITES Bank details for necessary issuance of 'Structured Financial Messaging System (SFMS)' in case the Bid Security (i.e. EMD) is submitted in the form of Bank Guarantee:

Name of the Beneficiary	Bank Details	IFSC Code
HLL INFRA TECH SERVICES LTD.	HDFC BANK LTD, NOIDA, UTTAR PRADESH	HDFC0000088

33. Comparison of Bids

33.2 Unit Prices for all optional items/accessories/services (if any) asked in the tender specifications must be quoted separately by all the bidders in their price bid. Such unit prices after multiplying by the required quantity shall be added and taken into consideration for comparison and ranking of bids.

Added Para (Ref. GIB Clause 33 & 34):

The comparison of bids will be based on GIB Clause 33, 34 and if any, as specified in the Technical specification(s). However, at the time of award of contract, the value of award (bid value/contract value) shall be limited to the upfront charges payable by the exchequer for Supply, Installation, Testing & Commissioning value only on DDP basis which is inclusive of warranty (for number of years specified at section VI; List of Requirement, Part I) and any other item(s)/services detailed for upfront purchase in the technical specifications. The cost of any other parameters like CAMC price beyond the warranty period, cost of any Consumables, any other recurring expenditure, etc. which have been considered for ranking of bids or for freezing of rates shall not be part of tender/award/bid/contract value.

SECTION - IV

GENERAL CONDITIONS OF CONTRACT (GCC)
TABLE OF CLAUSES

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 Bidding 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 sub-clause 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 Thirty (30) days from date of the issue of notification of award by the Purchaser, the supplier, shall furnish Performance Security to the Purchaser for an amount equal to ten percent (10%) of the total value of the contract, valid up to

ninety (90) days after the date of completion of all contractual obligations by the supplier, including the warranty obligations.

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 XIV of this document in favour of the Purchaser. The validity of the Fixed Deposit Receipt or Bank Guarantee will be for a period up to ninety (90) 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 CAMC security as per Performa in Section XIV, the amount of the performance security is liable to be forfeited. The needful will be done 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.

5.5 The supplier shall enter into Comprehensive Annual Maintenance Contract as per the 'Contract Form - B' in Section XV with respective consignees, 3 (three) months prior to the completion of Warranty Period. The CAMC will commence from the date of expiry of the Warranty Period.

5.6 Subject to GCC sub – clause 5.3 above, the Purchaser will release the Performance Security without any interest to the supplier on completion of the supplier's all contractual obligations including the warranty obligations & after receipt of Consignee wise bank guarantee for CAMC security in favour of concerned Director AIIMS/Chief of Centres/MS of Hospital/Head of the Department/Dean as per the format in Section XIV.

6. Technical Specifications and Standards

6.1 The Goods & Services to be provided by the supplier under this contract shall conform 'Technical Specification' 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 under Section VII 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 under Section VII 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, 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 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 re-submit the same to the purchaser's inspector for conducting the inspections and tests again.

8.4 In case the contract stipulates pre-dispatch 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 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-dispatch 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 Principal/ Foreign supplier shall also have the equipment inspected by recognized/ reputed agency like SGS, Lloyd, Bureau Veritas, TUV etc. prior to dispatch at the supplier's cost and furnish necessary certificate from the said agency in support of their claim.

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 Instructions for transportation of imported goods offered from abroad:

The supplier shall not arrange part-shipments without the express/prior written consent of the purchaser. The supplier is required under the contract to deliver the goods under CIP (Named port of destination) terms.

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 Free Delivery at Consignee's 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 warehouse to warehouse (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) In case of supply of the imported goods on CIP (named port of Destination Basis), the additional extended Insurance (local transportation and storage) would be borne by the Supplier from the port of entry to the consignee site for a period including 3 months beyond date of delivery for an amount equal to 110% of the overall expenditure to be incurred by the purchaser from warehouse to ware house (consignee site) on all risk basis.

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/End User, such extensions of the insurance will still be done by the supplier, but the insurance extension charges at actual 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/End User 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/End User before such discontinuation to provide adequate time to the purchaser to purchase the required spare parts etc., and

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

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 and CAMC period.

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:

i) Installation & Commissioning, Supervision, Demonstration, Trial run etc. of the goods.
ii) Turnkey work (if any).
iii) Training of Consignee's/End Users Doctors, Staff, operators etc. for operating and maintaining the goods.
iv) 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 dispatch documents well in time to enable the purchaser 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:

Within 24 hours of dispatch, the supplier shall notify the concerned Store Officer in AIIMS Clearing Agent and others concerned the complete details of dispatch and also supply following documents by air mail/ courier etc. with intimation by e-mail:

a) Commercial Supplier's Invoice giving full details of the goods including quantity, value, etc.;
b) Packing list;
c) Certificate of country of origin;
d) Bill of Lading/Airway Bill;
e) Insurance Certificate; (if applicable)
f) Manufacturer's guarantee and Inspection certificate; (if applicable)
g) Inspection certificate issued by the Purchaser's Inspector; (if applicable)
h) Any other document(s) as and if required in terms of the contract.

15. Warranty and CAMC

15.1 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.

15.2 The warranty shall include all spares, labour and preventive maintenance from the date of completion of the satisfactory installation and acceptance till warranty period.

15.3 The Comprehensive Annual Maintenance Contract shall include all spares, labour and preventive maintenance from the date of completion of the satisfactory installation and acceptance till warranty period.

15.4 Warranty as well as Comprehensive Annual Maintenance Contract will be inclusive of all accessories and turnkey work and it will also cover the following, wherever applicable:-

- All kinds of Motors.
- Plastic & Glass Parts against any manufacturing defects.
- All kinds of sensors.
- All kinds of coils, probes and transducers.
- Printers and imagers including laser and thermal printers with all parts.
- UPS including the replacement of batteries.
- Air-conditioners

15.5 In case of any claim arising out of this warranty and CAMC period 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 unless revised in SCC in Section V of Bidding Document.

15.6 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 conditions laid down in the Bidding Document.

15.7 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 up to the completion of the original warranty period of the main equipment.

15.8 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.

15.9 During Warranty and CAMC 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.

15.10 The Purchaser/Consignee reserve the rights to enter into Comprehensive Annual Maintenance Contract between the Purchaser and the Supplier for the period as mentioned in Section VII, Technical Specifications after the completion of warranty period.

15.11 The supplier along with its Manufacturer, Indian Agent and the CAMC provider shall ensure continued supply of the spare parts for the machines and equipment supplied by them to the purchaser for 10 years from the date of installation and handing over.

15.12 The Supplier along with its Manufacturer Indian Agent and the CMC Provider shall always accord most favoured client status to the Purchaser vis-à-vis its other Clients/Purchasers of its equipment/machines/goods etc. and shall always give the most competitive price for its machines/equipment supplied to the Purchaser/Consignee.

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. Sub Contracts

17.1 The Supplier shall notify the Purchaser in writing of all sub contracts awarded under the contract, if not already specified in its bid. Such notification, in its original bid or later, shall not relieve the Supplier from any of its liability or obligation under the terms and conditions of the contract.

17.2 Sub contract shall be only for bought out items and sub-assemblies.

17.3 Sub contracts shall also comply with the provisions of GCC Clause 4 ("Country of Origin").

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 dispatch,
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 the supplier shall convey its views to the Purchaser within twenty-one days from the date of the supplier's receipt of the Purchaser'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 bid and incorporated in the contract except for any price adjustment authorized in the SCC.

20. Taxes and Duties

20.1 Supplier shall be entirely responsible for GST 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 through electronic transfer in NEFT/RTGS subject to recoveries, if any, by way of liquidated damages or any other charges as per terms & conditions of contract in the following manner:

A) Payment for Indigenous Goods (M&E) Or Foreign Origin Located Within India.
Payment shall be made in Indian Rupees as specified in the contract in the following manner:

a) **On delivery**: 75% payment of the contract price shall be paid on receipt of goods in good condition and upon the submission of the following documents:
   (i) Original copies of supplier's invoice showing contract number, goods description, quantity, packing list, unit price and total amount;

(ii) Consignee Receipt Certificate as per Section XVI of bidding document in original issued by the authorized representative of the consignee;

b) **On Acceptance**: Balance 25% payment would be made against "Installation and Acceptance Certificate" of goods to be issued by the End User subject to recoveries, if any, either on account of non-rectification of defects/deficiencies not attended by the Supplier or otherwise. "Installation and Acceptance Certificate" need to be issued by the concerned End User after installation, commissioning, testing and successful trial run (if applicable).

B) Payment for Imported Goods (M&E): Payment for foreign currency portion shall be made in the currency as specified in the contract in the following manner:

a) **On Shipment**: 75% of the net FCA/CIP price (i.e. FCA/CIP price less Indian Agency commission) of the goods despatch by Sea/Air shall be paid through irrevocable, non-transferable Letter of Credit (LC) opened in favour of the supplier in a bank in his country and upon submission of documents specified hereunder:

i) Commercial Supplier's Invoice giving full details of the goods including quantity, value, etc.;
ii) Packing list;
iii) Certificate of country of origin;
iv) Negotiable clean Bill of Lading/Airway Bill;
v) Insurance Certificate; (if applicable)
vi) Manufacturer's guarantee and Inspection certificate; (if applicable)
vii) Inspection certificate issued by the Purchaser's Inspector; (if applicable)
viii) Any other document(s) as and if required in terms of the contract.

b) **On Acceptance**: Balance payment of 25% of net FCA/CIP price of goods would be made against "Installation and Acceptance Certificate" to be issued by the End User through irrevocable, non-transferable Letter of Credit (LC) opened in favour of the Foreign Principal in a bank in his country, subject to recoveries, if any. "Installation and Acceptance Certificate" need to be issued by the concerned End User after installation, commissioning, testing and successful trail run (if applicable).

c) Payment of Consumable Imported Goods/Reagents/Kits would be made 100% against "Installation and Acceptance Certificate" to be issued by the End User through Wire Transfer.

d) **Payment of Incidental Costs:** Incidental costs till consignee site towards Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training),if applicable will be paid in Indian Rupees to the Indian Agent on submission of "Installation and Acceptance Certificate" by the End User.

e) **Payment of Indian Agency Commission**: Indian Agency Commission (IAC) will be paid to the Authorised manufacturer's agent in Indian rupees indicated in the contract (as per prevailing rate of exchange ruling on the date of Contract) and shall not be subject to further escalation/exchange variation. The agency commission payment shall be made on submission of "Installation and Acceptance Certificate" by the End User.

C) Payment of Civil/Electrical Works at site: The payment related to Civil/Electrical Works at site will be made as indicated in the contract (as per prevailing rate of exchange ruling on the date of Contract) and shall not be subject

to further escalation/exchange variation. The payment for Civil/Electrical works shall be made on submission of "Installation and Acceptance Certificate" by the End User.

D) Payment for Comprehensive Annual Maintenance Contract Charges: The consignee will enter into CAMC with the supplier at the rates as stipulated in the contract. The payment of CAMC will be made on six monthly basis after satisfactory completion of said period, duly certified by the End User on receipt of bank guarantee for an amount equivalent to 2.5% of the cost of the equipment as per contract in the prescribed format given in Section XV of the bidding document valid till 3 months after expiry of entire CAMC period. The Performance Bank Guarantee for CAMC will be applicable in case of contract value is more than Rs. 10 lakh.

21.2 Terms of payment for imported goods

21.2.1 The supplier shall not claim any interest on payments under the contract.

21.2.2 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.

21.2.3 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, the charges thereof shall be borne by the supplier.

21.2.4 The payment shall be made in the currency/currencies authorised in the contract.

21.2.5 The supplier shall send its claim for payment in writing, when contractually due, along with relevant documents etc., duly signed with date.

21.2.6 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.

21.2.7 While claiming reimbursement of duties, taxes etc. (like GST, sales tax, excise duty, custom duty) from the Purchaser, 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, the supplier shall refund to the Purchaser 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 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 no 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 in writing about the same and its likely duration and make a request to the Purchaser for extension of the delivery schedule accordingly. On receiving the supplier's communication, the Purchaser 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 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 GST 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 shall be entitled to the benefit of any decrease in price on account of reduction in or remission of customs duty and GST 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 for extension of delivery period and obtain the same before dispatch. 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 Passing of Property

22.6.1 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 contract.

22.6.2 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.

22.6.3 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, the Purchaser shall, without prejudice to other rights and remedies available to the Purchaser 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 may consider termination of the contract as per GCC 24.

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 without prejudice to any other contractual rights and remedies available to it the Purchaser, 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 pursuant to GCC sub-clauses 22.3 and 22.4.

24.2 The Performance Security in such cases will be forfeited.

24.3 Unless otherwise instructed by the Purchaser, 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.

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 in writing of such conditions and the cause thereof within twenty one days of

occurrence of such event. Unless otherwise directed by the Purchaser 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 is unable to fulfil its contractual commitment and responsibility, the Purchaser 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 reserves the right to terminate the contract, in whole or in part for its Purchaser'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. 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 following the contract terms, conditions and prices. For the remaining goods and services, the Purchaser 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 GIB 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 Facsimile/email 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 twenty-one 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.

30.3 In the case of a dispute or difference arising between the Purchaser 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 to be appointed by the Director, AIIMS. 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 lakh (Rs. 1,00,000/-).

30.4 **Venue of Arbitration:** The venue of arbitration shall be the place from where the contract has been issued, i.e., New Delhi, India.

30.5 **Jurisdiction of the court** will be from the place where the Bidding 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

32.1 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.

32.2 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. Fall Clause

Fall clause is a price safety mechanism. The fall clause provides that if the contract holder reduces its price or sells or even offers to sell the contracted goods of identical specification and terms & conditions to that of the contract, at a price lower than the contract price, to any person or organization during the currency of the Contract, the Contract price will be automatically reduced with effect from that date for all the subsequent supplies under the Contract and the contract amended accordingly.

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.

Any specific clause, mentioned in the technical specification shall prevail and will supersede the similar clause mentioned anywhere in the Bidding Document.

The applicable period of warranty & CAMC shall be as mentioned in the List of Requirement as per section VI of this Bidding Document.

SECTION- VI

LIST OF REQUIREMENTS

Part I:

Sl. no.	Tender ID	Short Description of goods	Quantity	Warranty Period	CAMC period after warranty
1	2023_HLL_150351_1	Establishment of Molecular Pathology Lab	1 Set	5 years	5 years

Part II: Required Delivery Schedule:

For Indigenous and/or Imported goods:

Supply, Installation, Commissioning and Acceptance to be completed within **90 days** from the date of NOA or date of opening of LC or date of approval of layout drawing (if applicable), whichever is later.

[In case of LC opening, necessary documents like valid Performance Security and Proforma Invoice are to be submitted within 30 days from the date of release of NOA. In case layout drawing (if approval is applicable), it should be submitted by the supplier within 21 days from the date of release of NOA]

For delayed submission of above documents, delivery and/or installation and commissioning liquidated damages will get applied as per GCC clause 23.

Part III: Scope of Incidental Services:

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

Part IV: Turnkey Work (if any) as per details in Technical Specification.

Part V: Warranty period as per details mentioned in technical specification and as specified in Part I above. Warranty period will start from the date of installation, commissioning and acceptance.

Comprehensive Annual Maintenance Contract (CAMC) as per details in Technical Specification as specified in part I above. Comprehensive Annual Maintenance Contract (CAMC) will start from the date of successful completion of warranty period.

Part VI: Required Terms of Delivery and Destination.

a) For Indigenous goods or for imported goods if supplied from India:
Free Delivery at Consignee's Site(s)

b) For Imported goods directly from abroad:

The foreign bidders are required to quote their rates on CIP (Named Port of Destination Basis) giving breakup of the price as per the Proforma prescribed in the Price Schedule. Purchaser will place the order on CIP (Named Port of Destination basis).

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.

c) The Consignee details are as under but the supplier is required to deliver the goods at the designated site in the floor and building of concerned Centers/Hospital/ Departments:

Consignee	Contact Address	Air Port	Sea Port
The Director, National Cancer Institute – AIIMS (Jhajjar Campus)	Badsha Village Jhajjar, Haryana	New Delhi	ICD Tuglakabad (for containerised shipments) Or ICD Patparganj

Note: The consignee will ensure timely issue of e-LORA, PNDT, CDEC etc., wherever applicable to the supplier.

SECTION - VII

TECHNICAL SPECIFICATION AND GENERAL POINTS

A. TECHNICAL SPECIFICATION:

(Tender ID: 2023_HLL_150351_1)

Establishment of Molecular Pathology Lab

Scope of Work

1. Proposal is for Plan, Design, Supply, Install, commission, maintenance of Molecular pathology laboratory (Molecular Pathology lab, staff common room, Culture and Hybridization laboratory, resident room, reporting room, cold room, common corridor plan, recreation area) 10 years.. However the Laboratory machinery and test services will be separately reviewed half yearly.
2. Bidders are strongly advised to visit the site and carry out the assessment of works. **All demolition, construction, & site modification shall be the sole responsibility of the bidder.**
3. Planning & Designing of the Pathology laboratory should be in such a way that the functional flow should be unidirectional. The pressure, temperature, humidity and other physical and functional barriers of various areas in Pathology lab have to be according to national and international standards, to be done by the vendor after inspection of the existing facilities
4. ANNEXURE -1 BOQ along with specifications under capex for various areas of core Pathology laboratory
5. Annexure -2 consists of test parameters/test menu for 10 years for molecular pathology.
6. Annexure -3 The items supplied per vial basis (Probe , kit etc.)
7. Annexure -4 List of items to be freezed for 10 years, order shall be placed through AIIMS, New Delhi as and when required.
8. Annexure-5: List of Concurrent Consumables
9. Annexure –6 Layout drawing and turnkey work
10. Bidder has to quote prices of consumables/ reagent. This consumables/ reagent rate shall be the basis for calculating OPEX (operational cost) of the Pathology Lab for bid ranking purpose. The consumables will be bought at unit rate quoted as and when required basis. Price should be quoted year wise. Both upfront and price escalation will be used for calculation of L1 (see price format)
11. The turnaround time (TAT) for all test has to maintained (Next generation sequencing has to be performed in batches twice a month, real time PCR 72hr, FISH,CISH, Sanger sequencing and fragment analysis 96hour). If TAT is not maintained due to lack of consumable penalty will imposed on the vendor. Forfeit/penalty will be imposed on the payment due, as done in

previous turnkey project at NCI in the term of recovery from dues and increase in warranty.

12. All the kits used for realtime PCR will be of CE IVD, if CE IVD kit is not available then RUO kit may be used after approval from laboratory in charge
13. All machinery/equipment and furniture etc paid for by NCI-AIIMS under CAPEX shall be the property of NCI-AIIMS from the date of issue of CRC.
14. The items like General Furnitures and other accessories where if technical specification is not provided, should be of reputed make and of good quality. All general furniture should be modular and should be of reputed make like Hermen Miller, Godrej, Featherlite, Wipro. All the general furniture items and other accessories should be supplied by the bidder only after approval of NCI-AIIMS authorities for approval of quality.
15. Proper signage have to be displayed in various sections of the Pathology lab and have to be aligned with the existing colour coding of signages for NCI-AIIMS.
16. CCTV should be provided with sufficient recording of at least 90 days.
17. LAN caballing including sockets, provision for telephone connectivity should be provided by the bidder.
18. In addition bidder should facility of RO water to all lab areas and maintaince of the RO system along with filters will be the responsibility of the bidder
19. External quality control of core laboratory will be the responsibility of the bidder as per NABL guideline
20. The vendor has to perform IQ/OQ of all equipment during installation and PQ as per NABL guideline
21. It will be the responsibility of the service provider to meet all the cost incurred for acquiring and maintaining NABL accreditation for the entire duration of contract
22. Vendor should ensure all the consumables as specified in annexure 2,3 and 4 used for the test are of analytic grade for core pathology. The consumable items should be approved and ratified by Lab incharge.

L1 Ranking & Payment:-

1. NCI-AIIMS shall pay upfront CAPEX cost for infrastructure work (as specified in annexure 5), installation and commissioning of supplied items by the bidder as per annexure 1 which includes warranty and maintenance for first 5 years for all the equipment, any furniture provided by bidder including RO system installed in the laboratory.
2. OPEX shall be inclusive of cost of (consumables As per Annex 2,3,4),
3. The CAMC price from 6th to 10th year must be quoted separately for CAPEX equipment
4. L1 calculation will be based on the total cost of CAPEX + price of all Annexures + NPV of CAMC from 6th to 10th year .

Turnkey & Civil work

1. Bidder has to do all required turnkey for successful installation of pathology lab, institute will provide shell structure of approx.6000 sq feet with one point electrical, water & drain supply, rest all bidder has to do from planning, designing, supply, installation and commissioning of all equipment on turnkey basis. Payment will be made on pro rata basis foe turnkey work
2. Bidders are strongly advised to visit the site and carry out the assessment of works. Only those vendors who offer the entire range of state of the art equipment comprehensively as a package deal will be considered. While designing the pathology lab, bidder has to keep provision for future expansion of the same.
3. Bidder has to submit the layout design proposed with material used for construction/civil works to NCI –AIIMS for approval, Bidder can start the execution of civil works after getting approval from NCI-AIIMS.
4. Civil works includes construction of brick wall, plastering, painting, ceiling, false ceiling etc required as per the approved lay out plan, laying of tiles on walls & floors, provision of doors & windows as per approved lay out plan. Levelling of floor (if required) before lying of suitable anti-slippery floor and strengthening of floor should be bidder's responsibility (if required). All floors and walls in processing areas must be smooth, impervious to fluids and easily cleaned.
5. Any other necessary work not mentioned in BOQ/technical specifications/turnkey but required for successful completion of Installation, Commissioning, and maintenance of Pathology lab should be carried out by the bidder.

Electrical works

1. All electrical work required for commissioning and installation of equipment like cable wire, electrical outlets, switches, cable trenches, trays, railings, etc. should be fire proof, of reputed make, certified for electrical safety. All remaining work has to be done by the bidder including Electrical Isolators, MCBs, Electrical boards, phase changer (if required) Switches, Sockets and any other thing which are required for smooth running of Pathology lab equipment.
2. Institute will provide one point electrical supply at Pathology Lab and further distribution within the pathology lab area will be responsibility of bidder as per approved layout.
3. Bidder has to provide suitable capacity online UPS to cater various equipment installed within the Pathology lab area.

Ventilation & Lighting

1. Provision of 2ftx2ft LED lights to provide illumination of 500 lux in all areas. LED lights to be flush mounted to the false ceiling.
2. There has to provision for ventilation in case of power failure/HVAC failure etc.
3. Bidder has to provide emergency lightning in lab area in case of power failure.

Plumbing Works

1. Institute will provide one point water& drain supply and further distribution will be responsibility of bidder as per approved layout.
2. All plumbing work associated with proper functioning of Equipment has to be carried out by the vendor. Drains are special open drains with removable covers having large discharge capacity for spontaneous discharge of water. Proper Lint Trap and Hair trap should be in the drain line.
3. Safe disposal of solid & liquid waste generated during the process of the work will be the responsibility of the bidder.
4. Any other plumbing works associated with proper functioning of Pathology Lab has to be carried out by the bidder.
5. Final layout for civil work must be approved by the institute before initiating the civil work

Fire Fighting

1. Fire safety: Fire safety equipment will be installed as per the norms and requirements of the fire department and keeping in mind the norms and specifications of the different zoning areas of the Pathology lab.
2. Fire detection and alarm system with conventional optical type smoke detectors, RIs/ MCP, fire control panel and its wiring with copper conductor FRLS wire shall be provided as per CPWD specifications.
3. Make of smoke detectors as approved will be Apollo/ Edward/ Seimens/ Honeywell.
4. Make of RI, Hooters, MCP, Fire control panel will be of Agni/ Safex/ Minimax.
5. Firefighting system will be installed comprising of Hose reels, fire hydrants, landing valve, hose pipes, branch pipe, nozzles, valves as per CPWD specifications. The hosing and internal pipeline needs to be laid down by the vendor. However the water connection will be provided by the institute.
6. Automatic sprinkler system with adequate size of pressurization pump with pressure gauge, flow switch, annunciation panel etc shall be installed by the vendor, as per CPWD specifications.
7. Vendor will provide adequate fire extinguishers of required type. (According to Fire safety rules).

Operation of Pathology Lab

1. The vendor will ensure physical presence of store manager for consumable supply and engineer for maintenance of machine and refilling of consumables in different machine as required at the Pathology Lab at NCI Jhajjar from 9.00AM to 5pm. If the lab test is running the staff has to remain in the laboratory till the test to be completed to ensure turnaround time for each test. Compensatory leave will not provided for the overtime. Attendance will be maintained by the department. All leave to be given only after providing replacement with forfeit/penanlty for default (see below)
2. AIIMS will have no responsibility for Store manager, Engineer and laboratory attendant (refilling of consumables). Vendor has to follow the rules mention below (I-IV)
   I. Medical examination of staff: The bidder shall employ only those persons in the lab who are found to be medically fit. Expenses, if any incurred by

the NCI-AIIMS on medical examination of such employees, shall be borne and paid by the bidder.

II. Wages and insurance: The vendor shall comply with the laws applicable to staff engaged for maintenance & operations Lab regarding working hours, minimum wages, safety, cleanliness, leave, over time allowances, provident fund, retrenchment benefit, and medical benefit like ESI etc.

III. NCI-AIIMS management has no liability for the manpower deployed by the vendor, their health and safety, etc.

IV. NCI AIIMS shall not provide any boarding/ lodging and transporting facilities to the staff deputed by the vendor for inventory management and engineer.

3. The vendor has to make sure that adequate inventory is being maintained by them. In addition to it the vendor has to calculate the quantity which has to be stored as an inventory (informed to the department and verified) for the uninterrupted and smooth functioning of the pathology laboratory. It is pertinent to mention that no supply order will be provided to the vendor. However for items detailed in Annexure-4 supply order will be provided to the vendor. If adequate inventory is not maintained, the department will impose forfeit/penalty.

Penalty Clause

1. If TAT is not maintained due to lack of consumable or breakdown of machinery or poor quality of slides/test requiring a repeat slide/test, penalty will imposed on the vendor. Penalty will be 2.5% of the test cost (whichever test does not run for consumable/machinery reasons) per test per day.
2. There will also be an increase in warranty period equal to the number of days that the machine is in not working state.
3. The penalty will be recovered from the next payment due to the vendor as part of test cost
4. The vendor will keep adequate facilities to maintain 100% uptime of the equipment in molecular pathology. The increase in warranty period will be equivalent to downtime of the machine, however if a single machine is down, warranty of the entire chain of machines for the molecular pathology sequence will be increased.

Payment Terms for OPEX

1. Payment to the vedor will be made on monthly basis based on the actual test performed in the particular month

2. Bills will be duly authorize by the competent authority (Lab incharge & User faculty) of NCI, AIIMS

Annexure-1

S. No	Description of Items	Qty.
1	Capillary Sequencer - 8 Capillary with their accessories	1
2	Gradient PCR multiwell with their accessories	2
3	Multi Block High through put Real Time PCR with their accessories	1
4	Gel Documentation System	1
5	Rotor Based real time PCR system	1
6	Fully Automated DNA/RNA Purification System with their accessories	1
7	Spectrophometer	1
8	Westernblot with Power Pack with vertical system	1
9	Gel Electrophoresis Apparatus (Horizontal) with power pack	1
10	Next Generation Sequencing with Automated Library Prepration and Reporting Server with their accessories	1
11	Fully Automated Next Generation Sequencing with accessories	1
12	Fragmant Analyser	1
13	Digital PCR with Accessories	1
14	Digital Slide Scanning System	1
15	Flowcytometer with their accessories	1
16	Imaging & Analysis For Cytogenetics – Fully Motorized System (Metaphase Finder System) with their accessories	1
17	Cell Counter	1

Note: **Manufacturer's Authorisation Form (MAF) Certificate as per Section-XIII of Bidding Document for all items are compulsory to be submitted in e-bid.**

Item no. 1

Capillary Sequencer – 8 capillary with accessories

1. Instrument should be fully automated 8 capillary, fluorescence-based genetic analysis system to process multiple samples in single run.
2. Instrument should be a bench top instrument to support various applications like: Genomic Sequencing, de novo/re-sequencing, Gene Expression, Targeted Sequencing (Variant Validation) and Microbial Identification
3. System should have 8 Capillaries operating in parallel and system should have feature to be upgraded with higher number of capillaries i.e., 24 when needed.
4. System should be capable of supporting 4 plates; 96- or 384-well plates; 8-strip tube(compatible)
5. System should have Cooled CCD detection technology and a spectrograph for color separation
6. Digital support which offers smart help and remote support feature for fast and secure resolution should be present
7. System should offer connectivity flexibilityvia local area network(LAN), wifi,USB and LIS
8. The system must be able to detect and analyse 8 fluorescent dyes simultaneously.

9. System should be enabled with one-button start up, auto calibration, and onboard learning centre.
10. System should facilitate continuous plate loading and sample reprioritization feature with walkaway operations for 4, 96 plates.
11. The system to utilize a single line 505nm Solid-State long-life laser utilizing a standard power supply.
12. System should be enabled with Radio-Frequency identification technology to tracks key consumables data.
13. Software for secondary data analysis should come from original equipment manufacturer.
14. Sequence analysis software should have enhanced base calling feature to obtain improved sequencing output with reduced manual review time
15. System should be provided with one polymer, one 8 capillary array(50cm) , cathode buffer, anode buffer and standardization kit for both fragment analysis (2 dye set) and sequencing.
16. System software allow real-time data quality evaluation providing immediate access to base-called or size called data to make decision about the quality of data as it is generated.
17. Sequencing Analysis Software of the system should enable us to base call, trim, display, edit and print electropherograms generated by Genetic Analyzer.
18. Sequencer Software should provide reference-based analysis of sequencing reactions for mutation detection and analysis, SNP discovery and validation, sequence confirmation.
19. Gene mapping software should be a flexible genotyping software that enables DNA sizing and quality allele calls. This software should specialize in fragment analysis and sequencing applications like multi-application functionality including Amplified Fragment Length Polymorphism (AFLP), Loss of Heterozygosity (LOH), microsatellite, SNP genotyping analysis.
20. Variant Reporter Software should be reference based and non-reference-based analysis of sequencing reactions for mutation detection and analysis, SNP discovery and validation, and sequence confirmation.
21. Must include Licence software Gene mapper, sequence analyser and variant calling
22. System should be equipped with latest model of fully compatible computer system with screen of 24inch or higher and storage space of 1TB, Original MS office
24. The vendor supplying the instrument should have own application support laboratory in India for local & efficient after sales service-support.
25. Should be supplied with Laboratory Centrifuge with 1.5 ml fixed angle rotor RPM 13,300 RCF 17,700xG. Should also supplied with Centrifuge RPM 4000 RCF: 30200xG with Plate rotor for 4 Standard or 2 Deep well Plate and Dry Bath with 2 block for 28x1.5ml tube & 24x13mm, Temperature Range: Ambient + 5°C – 130°C, Vortex with plate adapter with RPM 2800.
26. In addition two set packet each consumable (POP7 96 sample, Anode buffer, Cathode Buffer, Conditioning reagent, Hidi formamide, Exosap, BDX, Liz 600, 96well plate. 8 strip channel) and one Capillary (8 channel) 50cm-1, Septae-1, BDT-1,cathode buffer septe must be supplied without any additional cost.
27. All the machine Specific consumables (POP7,Anode buffer, Cathode Buffer, Conditioning reagent,Capillary (8 channel) 50cm, Septae, BDT, Hidi formamide, Exosap, Barcode plate ect price must be quoted along with the system and fixed for future purchase.

28. The machine should be upgraded freely during the warranty period, if any newer version of software lunch. If the newer version of software require hardware up gradation (computer/server/Microsoft newer version) the vendor will supply the compatible hardware also without any additional cost.
29. One 5kv UPS which can manage the Sstem with battery back up of 30minute must be provided. The vendor will be responsible for battery replacement for 5 year as when required

30. Any recurrent consumables required for running the machine should be separately listed and their price should be separately quoted as applicable, which would be fixed for the 10years
31. Warranty: 5 years comprehensive warranty including spares and CMC for next 5 years. The CMC price should be included into the final quoted price of the instrument.
32. The supplier should provide periodic maintenance services as per the requirement of NABL (At least twice a year for first 5 years).
33. The vendor will perform IQ/OQ during installation and PQ every year as per NABL recommendation
34. System should have open interface for LIS, implemented worldwide with various LIS systems. Ability to import/export patient demographic data from/to hospital LIS system. Automatic Import of patient information and test protocol from LIS

Item no. 2
Gradient PCR Multiwall with Accessories

1. Quoted instrument should have 3 x 32/ 2 x 48 well block with option of Interchangeable blocks for optimization and throughput i.e. 2 X 96 well, 96 well and 384-Well
2. The reaction Volume Range should be 10-80 µl
3. Should be Peltier Based system
4. System should have simulation mode that can mimic other thermal cycler's ramp rate.
5. Temperature Accuracy: ±0.25 °C (35 °C to 99.9 °C)
6. The System should have Auto re-start (after power outages) and Program overwrite protection
7. Temperature Range: 0 to 100.0 °C
8. Temperature Uniformity: <0.5 °C
9. Minimum Block Ramp Rate: 5.0 °C⁄sec ± 0.5
10. The system should have adjustable ramp rate
11. Display Interface: Touchscreen TFT LCD
12. The instrument should have a memory for approximately 800+ PCR methods and USB port for unlimited storage and protocol transfer.
13. The instrument software should have option to programme variable up-ramp and down-ramp temperature rates.
14. The machine should be duly licensed for PCR
15. Wi-fi and Cloud – enabled, and also allow access the system remotely via cloud through a mobile application or desktop- preferably
16. PCR methods should be stored in folders for easy organization and access that can be protected by a password.

17. The instrument should have control to each levels for securely accessing each folder. The security scheme involves usernames and passwords. Password protection can also be turned off under the administrative setting.
18. The instrument allows to show run-time data and status messages stored in a Log File that is viewable on the display and printable at the end of each PCR method run. Run-time data displays the method name, the time the method started and the total run time of the method.
19. Power supply 220-240 volts.
20. Should be supplied with Laboratory Centrifuge with 1.5 ml fixed angle rotor RPM 13300 RCF 17700xG and Dry Bath with 2 block for 28x1.5ml tube & 24x13mm, Temperature Range: Ambient + 5°C – 130°C, Vortxer with tube adaptor with RPM 2800 and brief minifuge having adapter for both pcr tube and 1.5ml mct
21. PCR master mix for 300 sample, Hot stat enzyme 500IU, filter tips 50 boxes each (1-10µl, 20-200µl, 1000µl), 100gm molecular grade agarose, 100 BP ladder, tracking dye for 500 reaction, 20X 500ml TAE buffer must be supplied along with the equipment without additional cost.
22. The machine should be upgraded freely during the warranty period, if any newer version of software lunch. If the newer version of software require hardware up gradation (computer/server/Microsoft newer version) the vendor will supply the compatible hardware also without any additional cost.
23. Any recurrent consumables required for running the machine should be separately listed and their price should be separately quoted as applicable, which would be fixed for the 10years
24. Warranty: 5 years comprehensive warranty including spares and CMC for next 5 years. The CMC price should be included into the final quoted price of the instrument.
25. The supplier should provide periodic maintenance services as per the requirement of NABL (At least twice a year for first 5 years).
26. The vendor will perform IQ/OQ during installation and PQ every year as per NABL recommendation
27. The machine should be CE/FDA/ ISO/ India equivalent certified.
28. System should have open interface for LIS, implemented worldwide with various LIS systems. Ability to import/export patient demographic data from/to hospital LIS system. Automatic Import of patient information and test protocol from LIS

Item no. 3
Multiblock High throughput Real Time PCR with accessories

1. Thermal cycling system:

a. Peltier Based

2. All the necessary blocks change should be user changeable, and system must be quoted with 96 well and 384 well block.
3. Optical System:

a. Detection by CCD camera and excitation by white-light LED provides a broad spectrum of light-enabled capabilities with a maximum resolution of 12,000 data points.

b. Minimum six-excitation and six-emission filters set
4. Chemistry support: Support both TaqMan or SYBR green chemistry
5. Sensitivity: The system should be able to detect single copy of template for a single reaction
6. Dynamic range should be demonstrated to be at least 9 logs
7. Run Time: 45±10 minutes for 96 well block
8. Temperature range: 4ºC-99ºC
9. Block ramp temperature
10. The normalization of reaction due to non-PCR related fluctuations possible by using any calibrated dye.
11. Reaction volumes: The reaction volumes of the microfluidic chambers should be ≤ 1 microliter volumes; to facilitate reagents reducing and input DNA/cDNA to provide high quality data.
12. Resolution: should be able to detect as low as 1.5-fold change for singleplex reaction
13. Computer system: Instrument can run either standalone with touch screen interface or
14. External computer system. Capacity to store minimum 100 runs files.
15. Data analysis Software: It should include software to collect and analyze the data for the
16. Applications of absolute quantification, real time gene expression, presence/absence
17. Assays, allelic discrimination/SNP (Single Nucleotide Polymorphism) detection and HRM.
18. Laptop/desktop and One 5kv UPS which can manage the Sstem with battery back up of 30minute must be provided. The vendor will be responsible for battery replacement for 5 year as when required
19. The necessary consumables to perform real-time quantitative PCR and assays (TaqMan probes), including sample preparation reagent, Real Time PCR reagents and Plastic wares should be available with same vendor. Further the supplier should also be able to design and provide the TaqMan assays for the DNA/small RNA (Custom Assays) templates of our interest.
20. System preferably have TILDA block compatibility.
21. All the three blocks 96 (0.1ml fast& 0.2ml),384 should be provided without additional cost
22. Instrument should support four different interchangeable blocks with formats that enable numerous genotyping, gene expression, and standard PCR applications, including digital PCR.
23. System should have six independent excitation and emission filter channels and accommodates real-time sample 6 color multiplexing capability.
24. System should have touch screen feature however a branded laptop or should be provided along with the system with compatible configurations.
25. System should have capacity of 3 independent user interchangeable block of 96 well 0.2µl, 96 fast well 0.1µl, 384 well and . All the blocks should be included without additional cost.
26. Also supplied with Magnetic bead based Automated DNA Extractor with UV Light decontamination, to process 96 samples at a time, Processing Volume: 10–5,000 µL, Heating 4°C above ambient temperature up to 100°C; cooling down to 4°C, Elution Volume-30 to 100µl, Internal in-built memory of at least 30GB, With Standalone Laminar hood wit UV light and Refrigerated centrifuge RPM 17850 RCF: 30200xG with Plate rotor for 4

Standard or 2 Deep well Plate, fixed angel rotor 24x1.5ml, Swing out rotor for 50ml for sample preparation.

27. Master mix and cDNA synthesis kit (SYBER dye bases chemistry and Taqman base chemistry) for 200 sample, suitable PCR tubes with cap for 1000 sample, must be provided for of cost along with machine. 1000 0.1mlfast and 0.2 mlMCT. 1 pkt 96 well plate and optical clear sealant

28. The machine should be upgraded freely during the warranty period, if any newer version of software lunch. If the newer version of software require hardware up gradation (computer/server/Microsoft newer version) the vendor will supply the compatible hardware also without any additional cost.
29. Any recurrent consumables required for running the machine should be separately listed and their price should be separately quoted as applicable, which would be fixed for the 10years
30. Warranty: 5 years comprehensive warranty including spares and CMC for next 5 years. The CMC price should be included into the final quoted price of the instrument.
31. The supplier should provide periodic maintenance services as per the requirement of NABL (At least twice a year for first 5 years).
32. The vendor will perform IQ/OQ during installation and PQ every year as per NABL recommendation
33. System should have open interface for LIS, implemented worldwide with various LIS systems. Ability to import/export patient demographic data from/to hospital LIS system. Automatic Import of patient information and test protocol from LIS

Item no. 4

Gel Documentation System

1. Systems should image and analyse chemiluminescent western blots and stained Protein (Coomassie, silver, sypro, etc), DNA (EtBr, Sybr, etc) gels, colony plates, 2D strips, TLC plates and with Fluorescent imaging across 5 separate channels with RGB (Visible range), and near IR fluorophores (e.g., Alexa Fluor™ and Alexa Fluor Plus, DyLight™ dyes) with upto 4 channel multiplexing option.
2. **Camera:** True 16-bit cooled 6-9 megapixel or more high efficiency low noise CCD sensor with -30 °C below ambient temperature.
3. System interface: Touchscreen at least 12-inch display, Fully automated operation
4. Motorized and Fully Automatic fixed lens with f-stop of 0.95 or better
5. The system should have Auto-focus for each level of zoom & Auto-exposure capability. It should automatically take the best focus according to the sample.
6. **Illumination:** Systems should utilize a transilluminator based on green LED,/UV which effectively excites popular DNA dyes such as ethidium bromide and SYBR and one epi white LED
7. **Exposure time:** 1 millisecond to 30 minutes or more

8. System should possess built-in roll out LED transilluminator with sample view stage size of 22cm x 18 cm or more
9. System should eliminate uneven light illumination
10. **Filter Wheel and filters:** 12 position motorized filter wheel for capturing images
11. System should have images in TIFF, JPG, PNG & PDF formats
12. System should allow series capture for creating series of images over different time period
13. System should offer various binning option modes ranging from 1x1 to 8x8 for customized sensitivity/resolution.
14. System should have built-in algorithms that can identify multiple analysis frames and then assigns and quantifies lanes and bands for each analysis frame independently to allow multiple gels or membranes to be imaged and analyzed simultaneously with minimal user input and manipulation.
15. Automatic generation of customization report containing channel images, tables reporting band intensity, size, density, background etc with automatic and manual detection of lanes and quantification of bands or regions. System should have option to analyze upto 4 mini gels simultaneously.
16. The system should have molecular weight marker (MWM) overlay feature to allows users to perform molecular weight determination using a colorimetric molecular weight marker in the membrane channel and combining it with the corresponding chemiluminescent image.
17. Image analysis Software should not have any requirement for license registration allowing multiple users to use the software with full functionality online as well as offline.
18. Software should produce customizable reports with data organized as desired including Lane & Band identification with molecular weight estimation, relative quantitation, absolute quantitation, and normalization using loading controls.
19. All accessory consumables like UV protection spectacles for gel cutting, trey for protein must be included without additional cost, Gel loading dye (1ml), Ladder for 50 BP, 100BP
20. Desktop computer (i7, 8GB RAM, 500GB hard disc) with24" monitor and original window must be included for data storage and further analysis
21. The machine should be upgraded freely during the warranty period, if any newer version of software lunch. If the newer version of software require hardware up gradation (computer/server/Microsoft newer version) the vendor will supply the compatible hardware also without any additional cost.
22. One 1kv UPS which can manage the Sstem with battery back up of 30minute must be provided. The vendor will be responsible for battery replacement for 5 year as when required
23. Any recurrent consumables required for running the machine should be separately listed and their price should be separately quoted as applicable, which would be fixed for the 10years
24. Warranty: 5 years comprehensive warranty including spares and CMC for next 5 years. The CMC price should be included into the final quoted price of the instrument.
25. The supplier should provide periodic maintenance services as per the requirement of NABL (At least twice a year for first 5 years).
26. The vendor will perform IQ/OQ during installation and PQ every year as per NABL recommendation
27. System should have open interface for LIS, implemented worldwide with various LIS systems. Ability to import/export patient demographic data from/to hospital LIS system. Automatic Import of patient information and test protocol from LIS

Item no. 5
Rotor Base Real Time PCR System

1. Real time PCR system that works on Air based technology offering temperature range from Ambient (Room temperature) to 95°C.
2. It should be Rotor based real time PCR system
3. It should perform Standard curve quantification, Relative quantification by 2 standard curves, relative quantification Comparative quantification, Melt analysis, HRM analysis,

a. End-point analysis, Allelic discrimination, Scatter plot analysis, Concentration analysis

4. Excitation Source preferably LED light source
5. System should offer 5 Channels multiplexing with HRM Channel
6. System should not require any passive reference dyes or software colour compensation
7. The system should be compatible with 0.2ml and 0.1ml Strips and tubes.
8. System should offer sample ran from 36 & 72 Format, Reaction volume:- 10 to 50 microliter
9. Ramp rate should be >10°C/second heating; >10°C/second cooling
10. Temp range Ambient (Room temperature) to 95°C
11. Temperature uniformity (well to well variation) :- should be minimal ideally around ±0.01°C, Temperature equilibration time: - Minimal, ideally 'Zero' seconds
12. System should support third party reagents, plastic wares and dyes
13. System should perform at least 40 cycles in 45 min
14. Software should have unlimited user licenses and individual user management, System software should be as per MIQE Guidelines (Facility to generate report in MIQE Format)
15. Installations Vendor should have good number of Installation across the India in academic and research Institutes
16. One pack BRAF mutation kit and Compatible PCR tubes 1000 will be supplied along with the machine without additional cost
17. Licence Software (unlimited period) for PIC3CA and EGFR variant calling must be included without additional cost
18. The machine should be upgraded freely during the warranty period, if any newer version of software lunch. If the newer version of software require hardware up gradation (computer/server/Microsoft newer version) the vendor will supply the compatible hardware also without any additional cost.
19. Any recurrent consumables required for running the machine should be separately listed and their price should be separately quoted as applicable, which would be fixed for the 10years
20. Warranty: 5 years comprehensive warranty including spares and CMC for next 5 years. The CMC price should be included into the final quoted price of the instrument
21. The supplier should provide periodic maintenance services as per the requirement of NABL (At least twice a year for first 5 years).

22. The vendor will perform IQ/OQ during installation and PQ every year as per NABL recommendation
23. System should have open interface for LIS, implemented worldwide with various LIS systems. Ability to import/export patient demographic data from/to hospital LIS system. Automatic Import of patient information and test protocol from LIS

Item no. 6

Fully Automated DNA/RNA Purification System with accessories

1. Automates nucleic acid extraction, purification, and quantitation—all on a single platform
2. Off the shelve kits to complete DNA, RNA, and cell-free total nucleic acid (cfTNA) purification for multiple specimen types, including plasma; whole blood; PBLs; and lysate from FFPE tissue, fresh-frozen tissue, and bone marrow.
3. 200-300 µL FFPE lysate; 1–8 mL plasma; 50–400 µL whole blood (DNA kit); 50–150 µL whole blood
4. (RNA kit); 50–200 µL PBLs (DNA kit); 50–150 µL PBLs(RNA kit)
5. System should isolate and quantify DNA and RNA from FFPE samples in the same run.
6. Preferably Batching of 4, 8 and 12 samples for all the specimens.
7. Rapid turnaround which goes from specimen to purified and quantified nucleic acid that's ready for NGS analysis in as little as 2 hr.
8. Works simply with prefilled reagents that require only one touchpoint
9. Preferably Manufactured at an FDA-registered and ISO 13485–certified facility
10. Automated setup for error detection to confirm correct reagent placement and expiration dates of consumables; detects errors through automated barcode scanning
11. Any other equipments required for pre-processing of sample must be included without additional cost
12. Should be supplied along with Ice Flaking machine, capacity 85 Kg, SS construction, storage construction, storage
13. Appropriate Kit for DNA and RNA extraction 250 cases each(FFPE and BLOOD) must be included along with system without additional cost
14. 500appropriate plastic plates and kit for 500 sample (DNA & RNA) must be included without additional cost
15. The machine should be upgraded freely during the warranty period, if any newer version of software lunch. If the newer version of software require hardware up gradation (computer/server/Microsoft newer version) the vendor will supply the compatible hardware also without any additional cost.
16. Any recurrent consumables required for running the machine should be separately listed and their price should be separately quoted as applicable, which would be fixed for the 10years

17. Warranty: 5 years comprehensive warranty including spares and CMC for next 5 years. The CMC price should be included into the final quoted price of the instrument
18. The supplier should provide periodic maintenance services as per the requirement of NABL (At least twice a year for first 5 years).
19. The vendor will perform IQ/OQ during installation and PQ every year as per NABL recommendation
20. System should have open interface for LIS, implemented worldwide with various LIS systems. Ability to import/export patient demographic data from/to hospital LIS system. Automatic Import of patient information and test protocol from LIS

Item no. 7
Spectrophometer

1. The system should be a compact benchtop micro-volume spectrophotometer for accurate quantitation of nucleic acids, proteins
2. Wavelength range should be 190-850 nm
3. Minimum sample volume should be 1 µL with one sample analysis at a time onto a sample pedestal
4. Pathlength: 0.03-1 mm auto ranging
5. Should have xenon flash lamp as the illumination source and 2048 element CMOS linear image sensor as detector
6. Wavelength accuracy should be ± 1 nm
7. Absorbance range (1 cm equivalent): 0-550 A for pedestal mode
8. Measurement repeatability: 0.002 A (1.0 mm path) or 1% CV, whichever is greater
9. Limit of detection (pedestal): 2-27,500 ng/µL (dsDNA), 0.06-820 mg/mL (BSA)
10. Measurement time: 5-10 sec
11. The sample pesestal material should be SS 303 and quartz fiber
12. System should have experimental flexibility and increases the dynamic range. Use cuvettes to measure dilute samples and optical density of bacterial cultures or to perform kinetics experiments. Includes cuvette temperature control and stirring.
13. It should have standalone operation with a large touch screen display,
14. Instrument on-board software should enable quantitative applications like nucleic acid A260, A260/A280, A260/A230, fluorescent labelled nucleic acids, Protein A280 and Peptide A205, Protein Pierce 660, Protein Bradford, Protein BCA, Protein Lowry, fluorescent labelled Proteins, OD 600, UV-Vis, Custom Methods etc.
15. The software should have feature to identify the contaminants in the sample and report a corrected sample concentration. It should also detect the bubbles and other anomalies in the sample column. It should provide instant feedback about sample quality with on-demand technical support for guided troubleshooting
16. It should also be compatible with a PC based (OS Win 10, 64 bit) control software The Computer should have original window, MS office and antivirus with 3 year validity must be provided
17. The machine should be upgraded freely during the warranty period, if any newer version of software lunch. If the newer version of software require hardware up

gradation (computer/server/Microsoft newer version) the vendor will supply the compatible hardware also without any additional cost.

18. Any recurrent consumables required for running the machine should be separately listed and their price should be separately quoted as applicable, which would be fixed for the 10years
19. Warranty: 5 years comprehensive warranty including spares and CMC for next 5 years. The CMC price should be included into the final quoted price of the instrument
20. The supplier should provide periodic maintenance services as per the requirement of NABL (At least twice a year for first 5 years).
21. The vendor will perform IQ/OQ during installation and PQ every year as per NABL recommendation
22. System should have open interface for LIS, implemented worldwide with various LIS systems. Ability to import/export patient demographic data from/to hospital LIS system. Automatic Import of patient information and test protocol from LIS

Item no. 8

Western blot with Power Pack with vertical system

1. A programmable Semi Dry Protein Transfer System with pre-programmed methods and also the facility to create save and edit customized methods. Pre-programmed methods for Low molecular weight, mixed molecular weight and also for high molecular weight proteins should be available
2. The system should be capable of transferring proteins ranging from 10kDa to 300kDa from polyacrylamide gels Nitrocellulose or PVDF membranes in a short time (<60 minutes). System should be capable of transferring 4 mini gels or 2 midi gels simultaneously.
3. The system should be compatible with both precast and lab made polyacrylamide gels. The entire system should be made of inert, chemically resistant material. The system should support the use of traditional transfer buffer as well as proprietary transfer buffers
4. Each system should be provided with at least 5 litres of Transfer Buffer, 400 sheets of Filter paper and supported Nitrocellulose membrane sufficient for 400 mini gels
5. Each system should also be provided with a mini gel casting system, electrophoresis apparatus with a power pack from the same company
6. System should have a LCD/ LED display and indicate warnings in case of lack of passage of current or power failure
7. **Gel Casting and Running System should have the following specifications**
8. Each system should consist of leak proof casting stations (2 nos.), spacer plates (10 nos.) and short plates (10 nos.) and 1.0 mm gels or thicker
9. Two sets of 10 and 15-well combs or better should be provided per system
10. Four spare sets each of spacer plates (20 nos.: 10 each for 0.75 mm/ 1.0 mm gels or thicker), short plates (20 nos.) and combs (20 nos.) should be provided per system

11. Gel running apparatus should accommodate at least two mini gels individually or simultaneously per run

a. The power pack should have the following specifications:

12. Instrument should have an option for electrophoresis to be done at constant voltage, power and current
13. Programmable power supply should be capable of operating four electrophoresis units simultaneously with LCD display
14. The Output Voltage range should be 10-300V or better, Output Current range should be 4-500mA or better and Output Power Maximum should be at least 120 watts or better
15. Instrument should have an inbuilt timer from 1 min– 900min
16. There should be safety alarms to detect and indicate overload, sudden load change, no load, and over voltage protection
17. Suitable CVT must be supplied
18. The operating temperature for the instrument should be 4°C - 40°C
19. Spare leads (10 nos.) and electrodes for the running apparatus (4 nos.) should be provided
20. Should be supplied with orbital shaker.
21. Acrylamide BIs acrylamide solution 1L, TEMED 1ml ,2meter PVDF membrane and TBE buffer 50x 100ml must be included without additional cost
22. The machine should be upgraded freely during the warranty period, if any newer version of software lunch. If the newer version of software require hardware up gradation (computer/server/Microsoft newer version) the vendor will supply the compatible hardware also without any additional cost.
23. Any recurrent consumables required for running the machine should be separately listed and their price should be separately quoted as applicable, which would be fixed for the 10years
24. Warranty: 5 years comprehensive warranty including spares and CMC for next 5 years. The CMC price should be included into the final quoted price of the instrument
25. The supplier should provide periodic maintenance services as per the requirement of NABL (At least twice a year for first 5 years).
26. The vendor will perform IQ/OQ during installation and PQ every year as per NABL recommendation

Item no. 9

Gel Electrophoresis Apparatus (Horizontal) with power pack

A) Horizontal Gel Electrophoresis system

The system should have following features:

1. Should be portable unit
2. Principal Material: Acrylic
3. Inner Tank Dimension: 210x140x50mm approx (±10mm acceptable)

4. No. of gel casting trays: 130x130mm: 2, 130x65mm: 2, 65x60mm:4
5. Gel caster: essential
6. No. of combs: 18-20 well-2, 10-13 well-2, 8 well-4, 3 well-1
7. Connecting cord: 1 set
8. Lid: essential
9. Agarose 500gm and ETBR1ml must be included without additional cost

B) Power Supply Unit

The system should have following features:

1. Compact design
2. Max Volt: 500, Max mA: 400, Max watt: 200
3. Programmable
4. At least 3 pairs of output terminal
5. Output current 0-300mA approx.
6. Parallel out sockets(3 pairs of output terminal)
7. Relevant safety Standards
8. Large Dot matrix display
9. Graphic and text mode
10. Sound and graphic alarms when:
11. Ground Leakage, no Load-Overload
12. Constant voltage, current of wattage
13. Multistep programs (max 6 step each)
14. Timer setting: 1-999 min
15. Power: 220V, 50/60 Hz
16. 1KVA UPS with 10 minute back up
17. The equipment preferably USFDA or European CE with 4 digit notified or BIS certified
18. Any recurrent consumables required for running the machine should be separately listed and their price should be separately quoted as applicable, which would be fixed for the 10years
19. Warranty: 5 years comprehensive warranty including spares and CMC for next 5 years. The CMC price should be included into the final quoted price of the instrument
20. The supplier should provide periodic maintenance services as per the requirement of NABL (At least twice a year for first 5 years).
21. The vendor will perform IQ/OQ during installation and PQ every year as per NABL recommendation

Item no. 10

Next Generation Sequencing With Automated Library Preparation and Reporting Server with accessories

1. System should be a simple bench top instrument that enables rapid and scalable sequencing experiments and occupy minimal lab footprint.
2. System should be able to perform applications like Targeted oncology panels (Solid tumor including comprehensive panel (>500 genes), Cell free DNA panels, Hemat – oncology, Immuno-oncology, Targeted RNA sequencing, Small RNA Sequencing, RNA fusion, Amplicon Sequencing, Targeted sequencing, 16s Metagenomics, Microbial genome sequencing, etc.
3. System should be able to perform whole human exome, whole transcriptome sequencing and whole transcriptome gene expression profiling in a single run.
4. System should have capability to generate data output of 20 GB or more high-quality filter data from a single run.
5. The system should be able to generate at least 100 million reads or more from single/pair end from single sequencing run.
6. System should support read length of 200bp, 400bp & 600 bp from single/ pair end sequencing or better for various applications.
7. System should include a powerful on-board hardware with at least 20 TB of usable data storage capacity and must include all necessary software components to deliver signal processing, base calling, read alignment, variant calling, QC report for data, and downstream secondary analysis of data.
8. A powerful server, optimized software suite with graphical user interface for data analysis of NGS data in clinical research and faster reporting. System should be built upon hardware with at least dual 10 cores or more CPU, 128 GB of RAM and at least 15 tera byte of usable storage for efficient data storage, analysis and reporting. System should be provided with workflows to support various research applications in the area of oncology, inherited disease & infectious disease. The system should have access to decision-making software to generate report against proper guidelines, therapies, and clinical trials to assist and interpret the results of the clinical samples. System should be provided with analysis workflows to be able to support the analysis of single sample, paired sample, tumor/normal sample, CNV detection, family trio analysis and 16s Metagenomics. The database for variant calling should be update continuously throughout the warranty period.
9. Manufacturer should be able to supply following readymade Oncology panels covering SNVs, InDels, CNVs and Fusions from DNA and RNA in the single workflow when applicable: Off the shelf, assays such as solid tumor multi biomarker (>50 genes) assay, Solid cancer comprehensive panel (500 gene or more including TMB, MSI, LOH, detection of novel fusions), various tumor specific panels for molecular profiling and clinical research of specific tumors (such as bladder, prostate, melanoma, kidney, liver and others), Myeloid panel, cell free panels for comprehensive profiling (50 genes), lung, breast & colon for critical liquid biopsy samples and various immuno oncology panels for tumor mutation burden, immune response - B cell & T cell characterization, Pan clonality assessment including MRD, Somatic hypermutation detection and Myeloid MRD panel. Panels should have Coverage uniformity >95% and on-target reads >90%.
10. Comprehensive profiling of microbial diversity of the human gut microbiome. This assay offers increased resolution and specificity of species-level detection compared with traditional 16S rRNA sequencing for key organisms associated with immunological conditions like cancer, diabetes and autoimmune diseases, gastrointestinal (GI) disorders, and infectious disease research.
11. Vendor should have chemistry for sequencing applications where ultrahigh sensitivity is required, such as detection of low-frequency alleles in circulating tumor DNA and should have an option to design custom gene panels to find

variants with a very low limit of detection—down to 0.1% for cell-free DNA/TNA (cfDNA).

12. Manufacturer should have powerful content selection engine with genes classified according to various inherited diseases to assist in panel designing. System should have availability of custom panel designing option with high throughput multiplexing capability for around 5000 amplicons in a single reaction.
13. Separate NAS data storage unit of usable 48 TB(RAID6) or more should be provided along the machine
14. should provided 16 runs of each 15-20 millinon, 70-80 million and 100-130 million reads consumables including Library prep without additional cost. Also include two custom panel for 50 cases.
15. Must include fully automated walkaway solution for Library preparation.
16. Additional (Second) data analysis and interpretation software/ or server for variant annotation, clinical reporting etc. should be provided A validated data analysis software licence (SNV, RNA Seq data analysis) for 5 year should be provided along with the system
17. System should be able to work with samples with low-input DNA/RNA or degraded samples or FFPE tissue and should be able to prepare libraries from at least 10ng of low-quality DNA or RNA.
18. Manufacturers should have off the shelf 384 barcodes in kit format for various application to perform multiplexing in a single run.
19. System should offer the user-friendly sequencing experience, such as, intuitive touch screen user interface, RFID tracking and pre-mixed/pre-filled integrated reagent cartridge for minimal user intervention.
20. Vendor should have dedicated Laboratory to support the quoted technology for troubleshooting and training.
21. The manufacturer should have minimum 20 installations of quoted or similar configuration model at various Academic/ hospital/ diagnostic centers within India (User details to be shared). The quoted technology should have more than 4000 research publications in peer reviewed journals.
22. The vendor should also provide at least 5 to 7 satisfactory performance reports of quoted model from installed sites in India for the quoted technology.
23. All the software upgrade must be done free of cost within warranty period
24. Must supply compatible kits for library preparation , sequencing and barcoding to test the machine
25. All required consumables including library preparation and sequencing kit for 100 HRR panel samples must be included without additional cost
26. Must include Precast Agarose Electrophoresis system for Size selection, Fluorometer for accurate measurement of DNA/RNA/Protein in a sample, Magnetic stand for sample preparation, 96 well 0.2 ml Thermal Cycler - 3.9°C/Sec (Block)
27. Company should provide onsite training and support during warranty period
28. Online 5KV UPS with batteries with power back up of 3 hours.
29. Should be supplied with 2 desktop data acquisition unit with following configuration or better: Pentium core i7 Processor, (3.0 Ghz or higher) processor (with 32 GB RAM, DVD writer, 4TB HDD (SSD), dual high resolution flat panel monitor (24 inch or higher) with high end graphic card having discrete graphics memory of 2 GB or more, gigabit network card and 6 or more USB 3.0 port. Latest and original licensed Windows 11 operating system (64bit), original antivirus and Microsoft office with 5-years warranty. One external hard disc 3TB (SSD) must be supplied for data storage and laser Color Printer

30. Should be supplied with Fluorometer for accurate measurement of DNA/RNA/Protein in a sample minimum volume 1 µL, Laboratory refrigerated Centrifuge with Plate swing out rotor and 1.5ml fixed angel rotor, Standalone Laminar hood with UV light for sample preparation, Minifuge for 12x1.5ml tubesMax Speed: 12500rpm (100rpm increment), Max RCF: 9800xg, Refrigerated centrifuge with 24x1.5ml tube and 96 well block 0.2 ml Thermal Cycler - 3.9°C/Sec (Block Ramp Rate). One HS kit for DNA and RNA detection must be included without additional cost
31. Company should provide onsite training and support during warranty period
32. Two skilled manpower (one genomic and one bioinformatics)should be provided to run the machine for period of 2year without any additional cost. The manpower also perform other genomic related work.
33. One 5kv UPS which can manage the Sstem with battery back up of 60minute back up must be provided. The vendor will be responsible for battery replacement for 5 year as when required
34. The machine should be upgraded freely during the warranty period, if any newer version of software lunch. If the newer version of software require hardware up gradation (computer/server/Microsoft newer version) the vendor will supply the compatible hardware also without any additional cost.
35. Any recurrent consumables required for running the machine should be separately listed and their price should be separately quoted as applicable, which would be fixed for the 10years
36. Warranty: 5 years comprehensive warranty including spares and CMC for next 5 years. The CMC price should be included into the final quoted price of the instrument
37. The supplier should provide periodic maintenance services as per the requirement of NABL (At least twice a year for first 5 years).
38. The vendor will perform IQ/OQ during installation and PQ every year as per NABL recommendation
39. System should have open interface for LIS, implemented worldwide with various LIS systems. Ability to import/export patient demographic data from/to hospital LIS system. Automatic Import of patient information and test protocol from LIS

Item no. 11

Fully automated next generation sequencer with accessories

1. System should have rapid turnaround time from nucleic acid to report in a single day.
2. System should be automated next-generation sequencing platform enabling highly accurate variant detection, extremely uniform coverage, and sensitivity to detect low-frequency variants.
3. The instrument should be able to process both RNA and DNA samples in a single run.
4. Automated Library prep, Templating, sequencing, and reporting should be integrated on one instrument with a set-up-and-go workflow.
5. The system should have on board sequencing data analysis requiring no external server.

6. The system should come along with license to decision-making software to generate report against proper clinical guidelines, therapies, and clinical trials to assist and interpret the results of the clinical samples.
7. System should be robust and user friendly with prefilled reagents and preset instrument protocols, requiring one touchpoint and as little as 10 min of total hands-on time for setup and should not require any further user intervention from nucleic acid to variant report.
8. System should support single end 12-15M reads per lane and 48-60M reads on a full chip to support multiple applications.
9. The instrument should support 100bp to 400bp single end sequencing read length.
10. The instrument should have a capability to qualify a run as pass or fail based on predetermined QC metrics.
11. System should have on-instrument Graphic User Interface (GUI) that allows user to set up, manage and monitor run plans, view and analyze results, and generate report for the NGS runs.
12. The software should provide a summary of consumables that need to be installed in the integrated sequencer based on the run plan and should provide onboard vision system that verifies consumable placement using and user real-time alerts of any errors through automated barcode scanning.
13. The instrument should be able to track the usage of the lanes on the sequencing chip, barcodes on the barcode plate, and the sequencing reagent and nucleotide volumes to facilitate the reuse of these consumables.
14. The software should allow user to view sequencing run metrics, variant results, and quality control (QC) metrics for the run. The software should display pre-alignment QC analysis results and visualizations, thumbnail QC analysis results and visualizations.

15. When connected to the internet, instrument should allow user to view, download and install assay definition files, software updates and plugins for the system via secure authenticated API.
16. Manufacturer should have their own readymade panels for different cancers to detect Mutations, Indels, CNVs and gene fusion from DNA and RNA in a single workflow: such as solid tumor multi biomarker (>50 genes) assay, more comprehensive panel (with 160 genes), Myeloid panel, cell free panels for critical liquid biopsy samples and immune-oncology panels as T cell characterization. Limit of detection for the cell free panels should be 0.1 % or better. Vendor should provide comprehensive assay design and development guidelines for instrument.

17. The vendor should provide an installation and training kit to enable users to perform functional tests during installation and training.
18. The instrument preferably manufactured at an FDA-registered and ISO 13485–certified facility and should be CE – IVD mode.
19. At least 50 chip or equivalent for seqencing and consumables for the same must be included without any additional cost
20. The machine should be upgraded freely during the warranty period, if any newer version of software lunch. If the newer version of software require hardware up gradation (computer/server/Microsoft newer version) the vendor will supply the compatible hardware also without any additional cost.

21. Any recurrent consumables required for running the machine should be separately listed and their price should be separately quoted as applicable, which would be fixed for the 10years
22. Warranty: 5 years comprehensive warranty including spares and CMC for next 5 years. The CMC price should be included into the final quoted price of the instrument
23. The supplier should provide periodic maintenance services as per the requirement of NABL (At least twice a year for first 5 years).
24. The vendor will perform IQ/OQ during installation and PQ every year as per NABL recommendation
25. should be supplied along with A Bench Top integrated, vacuum concentrator to concentrate heat sensitive Biological samples such proteins, peptide extracts along with some other corrosive organic solvent like TFA wit completely isolated Concentrator chamber from the motor, rotation speed of not less than 1500 rpm, capable of processing samples in various formats such as tubes, vials, flasks etc. with sample ranging from 0.5-100ml, Cold Trap should have min 3.0L Capacity, Min. 30L/min capacity Vacuum pump.
26. System should have open interface for LIS, implemented worldwide with various LIS systems. Ability to import/export patient demographic data from/to hospital LIS system. Automatic Import of patient information and test protocol from LIS

Item no. 12

Fragment analyzer

1. Instrument for sample quality control for NGS
2. Should be unique low throughput system for the analysis of genomic DNA and other nucleic acid sample by proprietary small scale gel electrophoresis
3. Should process 1-16 samples per run
4. Should require only 1-2 µl of samples per run even for high sensitivity analysis
5. System should come with software including electronic user information (USB flash drive)
6. System should come with accessories like (Vortex mixer, tube Strip Holder, tip Waste Bucket, USB cable, etc)
7. System should come with consumables (Optical tube strips and caps, loading tips, tape station test Tape, D1000kit and reagent)
8. System should be capable of doing rapid analysis results should be available within 1-2 min per sample
9. System should offer unattended walk away operation with filly automated sample processing for up to 16 samples
10. Should have screen tape tool for hardware diagnosis of instrument
11. The tape station systems should have applications for all steps within any NGS workflow:
12. Integrity standards for RNA (RNA integrity Number) and Genomic DNA (DNA integrity Number, DIN)
13. QC of cell free DNA with qualification based of the calculation of % cfDNA

14. QC of fragmented genomic DNA
15. QC of adaptor ligated and amplified NGS libraries
16. Analysis of post capture amplified libraries after target enrichment
17. Computer system: Computer/Laptop with specifications similar or higher than I5-8350CPU@1.7Ghz/1.90GHz, 8GB RAM Win10Pro 64 bit needs to be provided without additional cost
18. One DNA high sensitivity (Pico lit) and RNA high sensitivity (Nano kit) must be included without additional cost
19. All the required additional equipment for CHIP loading or performance of test related to machine must be included without additional cost
20. The machine should be upgraded freely during the warranty period, if any newer version of software lunch. If the newer version of software require hardware up gradation (computer/server/Microsoft newer version) the vendor will supply the compatible hardware also without any additional cost.
21. Any recurrent consumables required for running the machine should be separately listed and their price should be separately quoted as applicable, which would be fixed for the 10years
22. Warranty: 5 years comprehensive warranty including spares and CMC for next 5 years. The CMC price should be included into the final quoted price of the instrument and should be quoted as optional.
23. The supplier should provide periodic maintenance services as per the requirement of NABL
24. The vendor will perform IQ/OQ during installation and PQ every year as per NABL recommendation
25. System should have open interface for LIS, implemented worldwide with various LIS systems. Ability to import/export patient demographic data from/to hospital LIS system. Automatic Import of patient information and test protocol from LIS

Item no. 13

Digital PCR with accessories

1. System should have integrated compartmentalization, thermal cycling and data acquisition of at least 4 targets in a single instrument workflow helping in reducing errors, multiple inventories and hassle-free workflow to minimize hands on time to 5-10 mins.
2. The system should be suitable for multiple applications like rare target quantification and SNP discrimination, digital count of target DNA sequences, absolute count of nucleic acids, gene expression analysis of low-concentration samples, library quantification for next-generation sequencing, copy number variation (CNV), viral load determination, pathogen detection and load determination, waste water surveillance and treatment etc. with high precision and sensitivity without the use of standards and standard curves.
3. System should be based on latest microfluidics array plate based or droplet-based partition technology.

4. System must have starting reaction volume up to 20 µl with 20,000 uniform partitions.
5. System must be able to utilize >90% of the loaded sample to be analyzed per reaction for high accurate digital pcr results.
6. System must consistently generate or provide 20,000 partitions per sample run.
7. System should include high-power LED (light-emitting diode) sources and CMOS imager for data acquisition and must be able to collect data for each filter combination in <2 seconds.
8. System should have the ability to detect down to 0.1% mutant allele frequency with a background of at least 10,000 copies of wild type target.
9. The system should be capable of analyzing up to 16 samples in one go within 1.5 hours.
10. System should be able to provide multiplexing with at least 4 optical channels along with 1 reference channel to enable more targets to be measured per sample saving time and reagents.
11. System should have the flexibility of running 4, 8, 12 or 16 samples at a time thus supporting minimum wastage of reagents.
12. The unused sample wells in the plate should be usable for the next run after proper storage of the plates to minimize cost per sample.
13. The system should offer a precision of ± 10%.
14. System should have a linear dynamic range of five orders of magnitude for detection of input samples.
15. System should be compatible with both dye based & Probe based chemistry. Also, applications like Liquid Biopsy Digital PCR assays for oncology, TaqMan assays for gene expression, genetic variation, gene regulation, and other quantification experiments should be compatible with the system.
16. System should be provided with easy-to-use instrument software to monitor runs, editing of thermal protocols including editing of individual PCR stages, PCR steps, temperature settings and step duration setting. Software should also have options with pre-optimized run protocols for applications like oncology research and viral titer, options to upload and download run protocols or run files, with flexible customization of run protocols. Software should also allow creation of secure templates with password protection to limit modification.
17. The instrument software must have feature to allow data from multiple arrays within a plate to be digitally pooled to calculate the concentration of target across more microchambers to achieve higher sensitivity.
18. One 5kv UPS which can manage the Sstem with battery back up of 30minute must be provided. The vendor will be responsible for battery replacement for 5 year as when required
19. Software should be able to detect fluorescence like FAM™, HEX™, VIC™, ABY™, ROX™, and JUN™ like dyes.
20. Software must also come with feature with image subtraction method to auto-reject false-positive and abnormal micro-chambers thus improving quality and accuracy of the data.
21. Software & Computer: Vendor should provide branded compatible desktop and Microsoft Windows 10 based software solution for data analysis.
22. System should have security, auditing, and e-signature features to support compliance with 21CFR part 11 for regulated environments.
23. All necessary reagents/consumables for completing digital PCR workflow should be quoted.

24. Onsite application training of staff and continuous technical support from qualified application scientist and service engineers should be provided by vendor.
25. Must be be supplied with An automatic system for extraction of contamination-free DNA, RNA from a range of sample types, Such as Whole Blood, Cells, Tissue, FFPE Tissue, Wastewater, Circulating Cell Free DNA and RNA from Plasma, miRNA from Tissue, Plasma and Serum & viral total nucleic acid (RNA and DNA) from serum, plasma using magnetic bead based chemistry. should use cartridges Pre-Filled with reagents and paramagnetic particles .should work in stand-alone mode and/or Tablet / PC controlled mode. Should have in-built UV sterilization. System should extract genomic DNA from multiple different human sample types in a single instrument run. Compatible sample types include human whole blood, buffy coat, bone marrow, buccal swabs, tissues, and cells isolated from tissue cultures or various biological fluids such as urine and amniotic fluid. Without any additional Cost
26. Vendor should provide minimum 180 reactions master mix and consumables along with the system
27. System should be equipped with remote support capabilities that allows quick and efficient access of issues to technical support for resolution, helping reduce instrument downtime
28. The machine should be upgraded freely during the warranty period, if any newer version of software lunch. If the newer version of software require hardware up gradation (computer/server/Microsoft newer version) the vendor will supply the compatible hardware also without any additional cost.
29. Any recurrent consumables required for running the machine should be separately listed and their price should be separately quoted as applicable, which would be fixed for the 10years
30. Warranty: 5 years comprehensive warranty including spares and AMC for next 5 years. The AMC price should be included into the final quoted price of the instrument
31. The supplier should provide periodic maintenance services as per the requirement of NABL (At least twice a year for first 5 years).
32. The vendor will perform IQ/OQ during installation and PQ every year as per NABL recommendation
33. System should have open interface for LIS, implemented worldwide with various LIS systems. Ability to import/export patient demographic data from/to hospital LIS system. Automatic Import of patient information and test protocol from LIS

Item no. 14

Digital Slide Scanning System

1. The scanner should be a non-microscope based complete WSI (Whole Slide Imaging) scanner with capability for brightfield image scanning technology.
2. The scanner should be able to intake minimum 300 slides or more in one go (at one time).
3. Should be able to handle all standard commercially available glass slides of 25mm x 75mm at least .

4. Should have facility for continuous loading and unloading of slides for scanning whilst a batch is running.
5. The scanner should be able to prioritise the slides as per user requirements.
6. It must be possible to load and scan an urgent slide, immediately during any stage of the scanning process.
7. The scanner must be capable of end to end scan (i.e. from slide insertion in scanner to image display on screen) at a standard rate of 60 seconds or less at 40x magnification for brightfield microscopy (15mm x 15mm tissue area).
8. The scanner should be able to scan and provide sustained throughput of 60 slides or more per hour when scanning at 40x magnification for brightfield microscopy (15mm x 15mm tissue area).
9. Should have a resolution of at least 0.26 pixel/um or better when scanning at 40x magnification for brightfield microscopy.
10. The scanner should have a LED source of illumination and 40x objective lens for slide scanning.
11. Scanner should automatically detect all tissues on a histopathology slide for brightfield including hematoxylin and eosin (H&E) stain, special stains and immunohistochemistry slides. It should be fully automatic.
12. The scanner should have continuous optical auto-focus or Z stacking so as to capture all undulated tissue. It should not have any digital stitching of the images.
13. Should have automated image focus correction, shading correction, auto white balance and automatic machine calibration.
14. The scanner should have an automatic recognition of failure to scan. In case of slide scan failure, it should still continue scanning the remaining slides without any need of manual intervention.
1. **Storage Server:** The system should be supplied with server with at least 500 TB inbuilt storage (usable space of 500 TB) with following specifications-
    A. Rack type
    B. Processor: Intel Xenon E3-1225v6 4C/4T 3.30 GHz or similar
    C. RAM: Min 64 GB
    D. 500 GB SSD RAID1 (OS)
    E. 500 TB HDD RAID6 for storage
    F. RAID controller: 4 port SATA with RAID 0/1/10
    G. LAN: 4x1 Gigabit Ethernet + Service LAN
    H. Latest Windows Server: Microsoft Windows Server 2019
    I. Server operating desktop
    J. The system should be flexible for expansion of storage for future.
    K. The storage should be at full scanned quality (40x magnification).
    L. The storage has to be physical & local RAID (Redundant Array of Inexpensive Discs or Drives) storage supported by necessary rack type servers

    The technical offer should clearly specify the size of the usable storage space (in TB/PB) & also should clearly specify the type of storage (tape drive/disk drive etc).
15. **Work station (Reporting station)**: For appropriate viewing and reporting by multiple people, the system has to be supplied with minimum 5 computers with latest intel xeon processor, 32GB RAM, 250GB SSD (for OS), 2TB HDD (for storage), branded high end graphic card (at least 8GB), DVD writer, latest windows (licensed version) and 64 bits. These computers should have 5 medical grade monitors with a screen size (diagonal) of at least 30" and resolution of minimum 6 Mega Pixel (3280x2048) along with printer with

scanner and wifi connectivity. The graphic card should be compatible with the monitor. The keyboard and mouse should be wireless and bluetooth compatible. The mouse should be ergonomic. All the above work stations should be provided at no additional cost. Rate of additional work stations (other than the above five) should be quoted separately. All pathologists should be able to work on the system without any downgrade in the quality of the image. The technical offer should clearly specify the number of concurrent pathologists/ users [users accessing the digital WSI (whole slide image) at the same time] who can access the network without compromising on user image experience. All necessary licences to enable this should be provided as part of technical configuration at no additional cost. System should be supplied with inbuilt teleconferencing tools. Rate of additional computers and monitors of above mentioned configuration to be quoted separately.

16. The scanner and all computers should be supplied with branded online UPS (5 KVA) (at no additional cost) with minimum one hour backup.

Image acquisition and management software

17. The scanner system should be supplied with anintegrated image management software (IMS) system with minimum 100 user licenses at no additional cost. It should also allow various image acquisition, viewing, annotation, measuring, sub-specialist consultation (on site and remote) and reporting capabilities. License should be valid for life-long without any additional cost. The update of software as and when available should be done at no additional cost.
18. The system should automatically combine the acquired images into one composite 'Digital slide' and present it in the desired magnification with seamless natural navigation and changes in magnification. Should have preset optical magnification (2x, 5x, 10x, 20x and 40x) like the conventional microscope to change to specific magnification quickly. Additionally, it should be able to digitally zoom to at least 100x magnification.
19. The image viewer software should allow the user to zoom in a particular area of interest at high magnification while simultaneously keeping the entire tissue section visible at lower magnification.
20. The Image Management Software should have the capability to read 1D/ 2D barcodes so as to enable grouping of multiple slides into its specific case. This feature (barcode integration) should be available at no additional cost for life long.
21. The Image Management Software should allow gross images of the case and the reporting form to be displayed along with the scanned slide images.
22. Using the system the pathologists must be able to view and report cases remotely both within and outside the organisation. This should not require any additional cost.
23. The image viewer software should allow for the simultaneous assessment and aligned stacking of multiple images of a case on one monitor screen at the same time.
24. Software should have easily visible summary information relating to each case without the need of opening the case itself.
25. The system must allow for simultaneous access to an image/images at multiple locations by at least 25 different assigned users facilitating multisite collaboration and real time consultation.
26. During collaborative viewing and real time consultation - participants should be able to identify and mark their particular areas of interest on the same

shared image, thus making it clear and easy to identify who performed the annotations.

27. The system must allow a user to search for a case by different criteria such as name, case id, date etc.
28. The system should provide the ability to flag special cases (user defined) for additional importance or priority.
29. The system must be able to track visited areas and support digital bookmarks which should be stored till cleared by the user.
30. The system should be up scalable in a Hub and Spoke environment (network pathology) if required in future as a part of up scalability.
31. The scanner image management system must be able to integrate fully and efficiently Bi-Directionally with the LIS/LIMS IT systems i.e. It should be able to pull from the LIS/LIMS: patient demographics and case reports retrieved from it and push back into LIMS any work done via the scanner image management system. For this the scanner company has to coordinate fully with the LIS vendor.
32. The Image Management System should allow remote access through mobile devices and web based viewer should be available.
33. The system should have facility for secure web based viewing of unlimited number of scanned slides at multiple local and remote sites for at least 1000 users. This should be provided at no additional cost.
34. The system should be DICOM compatible.
35. The system should support third party or other scanner scanned images at no additional cost.
36. The system should have the ability to view other image formats (other scanner formats) and standard formats on site and at remote location which may involve use of vendor neutral software or web based software at no additional cost. For the above, the manufacturer has to provide a software development kit (SDK) (at no additional cost) to access data stored in proprietary format for research and teaching purposes, in case it is not possible to do so without SDK. In addition, the images scanned by the system should be usable or viewable in other viewers.
37. The export of scanned images in TIFF and JPEG/JPEG2000 format should be possible.
38. The system should allow images to be securely stored in the local department/institute server in proprietary format and other standard formats.

Security

39. The data storage and transmission should use the HTTPS protocol for secure image transmission.
40. The designated system manager(s) **must** have the facility to create, maintain and retire users, or groups of users (i.e. roles), and associated privileges.
41. Individual users should be able to view on their screens only those menu options or icons that they are entitled to use as designated.
42. The system must provide the facility for the Authorised user to be authenticated and restriction placed on each authenticated account by: Allocation of a unique name (user-ID) and a personal password.
43. The system should provide and maintain a full audit trail or event log that is accessible and viewable to the reporting consultant. This should include on each occasion that a case image is viewed, amended, reported etc. that the user detail and date/time is recorded.

44. **Quality Indicator:** The scanner together with its associated software should have a European CE Mark for In Vitro Diagnostics, i.e. conform to CE/IVD standard or have US FDA approval for primary diagnosis or equivalent Indian Standards.

General specifications:

45. Company has to provide vibration free table to keep equipment. Required infrastructure will be developed and the provided by the bidder (fiber cable for data transfer cabin etc). Company has to visit the site before supplying the same to ensure proper infrastructure and other requirement.
46. Warranty should be 5 years from the date of installation and 5 year CMC should be quoted after warranty.
47. Onsite demonstration of the quoted model (at Department of Pathology, AIIMS, New Delhi) for at least 2 weeks is mandatory before the pre bid meeting as per the decision of the technical committee. If the firm fails to demonstrate the quoted model for the said duration, it will not be considered.
48. Penalty clause: In no case the instrument should remain in non-working condition for more than 7 days, beyond which a penalty of 0.25% of machine cost will be charged per day.
49. Since digital pathology is a highly complex IT driven and evolving field the vendor should have a good service and application support backup in India directly from manufacturer and not via a 3rd party/distributor along with instruments to provide an effective application related trouble shooting and response (Response time should be less than 24 hours). In addition, the scanner vendor needs to provide a trained official staff to the department for 12 months (1 year) who can train the multiple users in the department in official hours for the scanner usage and also help out in hardware, software and connectivity issues to set up the digital pathology system at the Department of Pathology at AIIMS, Delhi, at no additional cost.
50. All the components and requirements as specified at all the above points including the equipment, server, storage, work stations, hardware, software and licenses have to be provided at no additional cost.
51. All technical bids, comparative statement to the tender specifications must be enclosed along with the reference page no. paragraph no. from the original catalogue of equipment. The bid for the particular equipment may be summarily rejected in case bid fails to provide compliance statement with its reference from the catalogue.
52. Undertaking from the specifications committee stating that the specifications are broad based, general in respect to the requirement of instrument and not made to suit any particular firm or brand.

Accessories:

53. Rate of additional computers with i7 processor, 16 GB RAM, 1TB hard disk and medical grade 24" (screen size) monitor having resolution of 2 mega pixel (1920x1200) to be quoted separately in case there is requirement for more in the department.
54. Rate of additional storage in the server to be quoted separately.
55. Rate of Image analysis software algorithms to be quoted separately.
56. No consumables are required on recurrent basis.
57. One 5kv UPS which can manage the Sstem with battery back up of 30minute must be provided. The vendor will be responsible for battery replacement for 5 year as when required
58. The machine should be upgraded freely during the warranty period, if any newer version of software lunch. If the newer version of software require

hardware up gradation (computer/server/Microsoft newer version) the vendor will supply the compatible hardware also without any additional cost.

59. Any recurrent consumables required for running the machine should be separately listed and their price should be separately quoted as applicable, which would be fixed for the 10years
60. Warranty: 5 years comprehensive warranty including spares and CMC for next 5 years. The CMC price should be included into the final quoted price of the instrument
61. The supplier should provide periodic maintenance services as per the requirement of NABL (At least twice a year for first 5 years).
62. The vendor will perform IQ/OQ during installation and PQ every year as per NABL recommendation
63. System should have open interface for LIS, implemented worldwide with various LIS systems. Ability to import/export patient demographic data from/to hospital LIS system. Automatic Import of patient information and test protocol from LIS

Item no. 15

Flowcytometer with accessories

1. System should be a bench-top flow-cytometer with minimum 4 laser (blue, red, Violet and UV/yellow green) and 14 color configurations.
2. All four lasers should be solid state and all lasers usable simultaneously.
3. All lasers and their excitation-optics should be fixed aligned and each laser to have its unique pinhole
4. Preferably System have provision for up gradation
5. The detection system should be PMT based.
6. System should be able to acquire at least 35,000 events or more per second.
7. System should accept 5.0ml tube and 96 well plate for sample acquisition
8. The equipment should have digital signal processing with dynamic range of at least 18 bit data acquisition or more in order to get the clear resolution of populations without data smoothing & also the detection of the dimmest population even in lower decades
9. Must have compensation capability between all fluorescence channels through auto compensation
10. The system should provide sensitivity: ≤80 MESF-FITC &≤30 MESF-PE
11. Instruments equipped with multiple side scatter detectors to analyze particles of different granularity.
12. Sheath fluid consumption of less than 1L /hr
13. Sample carryover should be <1%
14. System should be able to resolve 0.5 micron particles using light scatter
15. Flow Cytometer should be operable at 230V; 50Hz
16. System should be provided with software capable of baseline settings of system performance, thereby ensuring automated instrument set-up for consistent results.
17. System should have the capability for compensation in real-time and also post-acquisition.
18. System should be supplied with high end compatible data acquisition unit with with 64 GB RAM , DVD writer , 4TB HDD , dual high resolution flat

panel monitor (24 inch or higher) with high end graphic card having discrete graphics memory of 2 GB or more, gigabit network card and 6 or more USB 3.0 port. Latest and original licensed Windows operating system (64bit) , original MS office

19. Should be supplied with additional data analysis unit with software license with following configuration or better: Pentium core i7 Processor, (3.0 Ghz or higher) processor (with 32 GB RAM , DVD writer , 4TB HDD , dual high resolution flat panel monitor (24 inch or higher) with high end graphic card having discrete graphics memory of 2 GB or more, gigabit network card and 6 or more USB 3.0 port. Latest and original licensed Windows operating system (64bit) , original MS office, original antivirus with 3year validity
20. System should be supplied with the complete startup kit reagents like (Sheath Fluid 100 L, Tubes 1000 Qty. , QC Beads/Compensation/Setup bead 100 Test pack, Cleaning solution for 200ml, Lysing solution 150 ML for 300 test, stratup and shut down 1L each, Debubble solution 200ml, Bleach1L, Cleaning solution 200ml)) for extensive on-site training for system and software and also training at company training center for two personnel.
21. Must include one service kit for Flowcytometer and 500 strainer (40µ) without additional cost
22. System should be supplied with Centrifuge with swing bucket rotor for 24x5/7ml tube (RPM: 4500, RCF: 3200xG)
23. One 5kv UPS which can manage the Sstem with battery back up of 30minute must be provided. The vendor will be responsible for battery replacement for 5 year as when required
24. Quoted model must have at least 3 orders in India and proof is to be provided with bid.
25. Company should have direct presence in India and dedicated service and application support for flowcytometer and must ensure that all faults are rectified within 72hr
26. The machine should be upgraded freely during the warranty period, if any newer version of software lunch. If the newer version of software require hardware up gradation (computer/server/Microsoft newer version) the vendor will supply the compatible hardware also without any additional cost.
27. Any recurrent consumables required for running the machine should be separately listed and their price should be separately quoted as applicable, which would be fixed for the 10years
28. Warranty: 5 years comprehensive warranty including spares and CMC for next 5 years. The CMC price should be included into the final quoted price of the instrument
29. The supplier should provide periodic maintenance services as per the requirement of NABL (At least twice a year for first 5 years).
30. The vendor will perform IQ/OQ during installation and PQ every year as per NABL recommendation
31. System should have open interface for LIS, implemented worldwide with various LIS systems. Ability to import/export patient demographic data from/to hospital LIS system. Automatic Import of patient information and test protocol from LIS

Item no. 16

Imaging & Analysis For Cytogenetics – Fully Motorized System Digital Slide Scanner (Metaphase Finder System)

1. Upright fully motorized microscope with software for Fluorescent in-situ hybridization and metaphase finder for Karyotyping
2. High quality optics with latest Infinity Color Corrected System (UIS2 series) for high Brightness, High contrast, flatness correction and color correction. All optics coated with anti-reflection / anti-fungal treatment.
3. **Microscope Stand** should be Rigid and sturdy Microscope stand with in-built motorized Z-drive USING any focus for better stability with TFT/LCD Touch Screen Control monitor.
4. This controller should control motorized parts like Fluorescence turret, Objective Nose Piece, Motorized Condenser. Built-in motorized Z-focus with step size of at least 10 nm or better.
5. All the Motorized Parts of the Microscope should be controlled by the Touch Panel Controller and also through the software.
6. **Nosepiece:**Seven or more position Motorized objective nosepiece with slot for DIC analyser
7. **Observation Tube:** Wide Field tilting Trinocular observation tube with continuously variable tilting angle range of 5- 35 degrees, three way light path selection for simultaneous observation and imaging having. F.NO. 22mm or better.
8. 10X eyepieces with F.N. 22 or higher.
9. **Motorized Stage:** XY Motorized scanning stage with adapter for at least 8 slides at a time Ceramic coated with double slide holding capacity
10. **Condenser** Motorized condenser for all microscopy techniques with 8-position turret for optical elements, with motorized polarizer in/out. Motorized in/out top lens**.**
11. **Illumination:** High color reproductivity with LED light with an average life of at least 20,000 hours or better.
12. **. Objectives**
    I. Plan Apochromat 4X/0.16
    II. Plan Apochromat 10X/0.4
    III. Plan Apochromat 40X/0.95
    IV. Plan Apochromat 60XOI/1.42 – Oil Immersion Objective.
    V. Plan Apochromat 100XO/1.45 – Oil Immersion Objective.
    VI. Objectives will higher numerical apertures will be preferred
13. **Fluorescence Attachment** Motorized Eight or more position fluorescence/ FISH Filter turret with LED Fluorescence light source with at least 20000 hrs life Built in Intensity attenuator and high performance Light guide to avoid direct heat transmission to sample.
14. **Oil Dispenser** Automatic oil dispenser. Any good quality immersion oil should be applicable. Automated oil dispensing following x10 scan prior to high resolution capture of selected metaphases .Automated oil drop sensing by optical sensor to achieve accurate oil amount and optimum oil spread

15. FISH Filters

I. Single bandpass DAPI filter (Ex: 350/30, Em: 460/50).
II. Single bandpass Green filter (Ex: 495/25, Em: 537/29).
III. Single bandpass Orange filter (Ex: 546/22, Em: 590/33).
IV. Single bandpass Aqua filter (Ex: 436/20, Em: 480/30).
V. Dual bandpass filter (Green/ Orange).
VI. Triple bandpass filter (DAPI/Green/ Orange).

Note - Single filter should be replaceable if required. (There should be one empty position for brightfield and karyotyping imaging)

16. **Camera :**Monochrome , Resolution: 4 MP or higher , Resolution (HxV) – 2448px X 2048px. Sensor Type: CMOS/CCD, Frame Rate: 30fps. Pixel bit depth: 12-bit .
Pixel Size (HxV): 3.45µm X 3.45µm Global shutter USB3.0 interface

17. DATABASE

Data Management

a. Single database for all applications with Modern paperless laboratory design management software . View full-case summary status from the database management station.
b. Workflow oriented database user interface, includes all the information about the patient demographics, images, results, etc.
c. Microsoft SQL server based database for maximum security and scalability
d. All images stored should be of conventional format: jpg or tiff.
e. The database should manage all patient / sample demographics as well as images for all sample types analyzed.
f. Better control on flow and data protection by temporal lock of data as needed.
g. Ability to assign levels of security for user access.
h. Ability to assign advanced roles & permissions management.
i. Case attachments – ability to scan patient info, document, images and incorporate into case view.
j. Combined gallery view of all image types capture for a case, giving the user the ability to choose multiple images side by side viewing.
k. Search mechanism by any case or slide field or combination of any fields even when archived.
l. Automated data maintenance.
m. Automatic archiving of completed cases and based on user defined rules.
n. Single click retrieval of archived cases.
o. Single database can support multi-site installations without the need to transfer data between workstations.

18. LIS Connectivity:

System should have open interface for LIS, implemented worldwide with various LIS systems. Ability to import/export patient demographic data from/to hospital LIS system. Automatic Import of patient information and test protocol from LIS Automatic export of results, images and reports to LIS.

19. Report Generation

a. Digital Chromosome overlap report.

b. Case Report summarizing karyotype of all cells aberrations for immediate view of clones and common aberration.
c. Ability to perform special reports to include chromosomes from multiple cases, normal and aberrant ideograms and annotations.
d. Ability to create a report hiding the sex chromosomes (for pre-natal tests).
e. Obtain statistics across any subset of cases according to desired parameters.
f. Ability to create, view and save customizable summary reports for case statistics per sample type, period of interest (day/week/month/quarter) and more, for CAP Guidance compliant reporting.
g. Ability to create, view and save customizable turnaround time reports per sample type, period of interest (day/week/month/quarter) and compare performance year on year to make data driven decisions.
h. Summarize case results - normal, abnormal, failed - and review per specimen type .
i. Ability to create, view and save customizable slides statistics reports.
j. Ability to create, view and save customizable staff productivity reports per sample type, period of interest (day/week/month/quarter) and more.
k. Automated IHC counting for Ki67, Her2Neu must be provided with the system

20. KARYOTYPING

a. Automated Scanning for Metaphase Detection

b. Fully automated, walk-away operation for 8 or more slides and high efficiency.
c. The system must operate unattended through the entire process for both low and high magnification scanning and capture
d. One click definition of common slide-tests.
e. One click definition of panel-test spreading over multiple slides.
f. Rapid automated scan for the detection of cover-slip and identification of amniotic fluid colonies. (prenatal samples).
g. Rapid automated scan for detection of metaphases.

h. Scanning and metaphase detection of the following staining types: G-band, Q-band, R-band and DAPI stained metaphases
i. Automated exposure adjustment for optimal image quality and metaphase detection.
j. Full slide coverage, scanning of slide edge to edge.
k. Machine learning algorithms for optimal metaphase detection.
l. Automated metaphase grading during scan.
m. Highly graded metaphases to be selected automatically for automated high magnification image acquisition.
n. During slide scanning, allow user to interactively select desired metaphases for high magnification image acquisition.
o. Real-time scanning progress indicator - displays gallery of captured metaphases.
p. Real-time scanning progress indicator - displays position of scanning on mini slide viewer.
q. Automated relocation to selected metaphases, using x100 oil immersion objective, following detection using x10 magnification with no user intervention.
r. Automated metaphase centering algorithm of high magnification capture.
s. Ability to fuse floater chromosomes to the metaphase within the scanning application.

t. Side by side display of low and high magnification metaphase images to ensure all chromosomes are included within the high magnification image.
u. Karyotyping can be performed on cells of a slide while same slide is being scanned.
v. Automated exposure and focusing of metaphase with best focus layer selection to ensure crisp and sharp metaphases images.
w. Option for user to select the metaphases to be later automatically captured in 100x (e.g.: Bone Marrow samples).
x. Automated metaphase finder and high magnification capture of FISH metaphases, including all FISH colors with optional Z-stack.

21. Chromosome Analysis & Karyotyping

a) Ability for multiple users to perform analysis on individual images within the same case simultaneously, for faster analysis of an urgent case.
b) Import and analyze metaphase images captured by third party system in standard image formats.
c) Machine learning algorithm for classification of each chromosome and arrangement in the karyogram per laboratory samples.
d) Automatic threshold to separate between background and chromosomes.
e) Single click access to customizable set of reference websites from the karyotyping application.
f) Ability to handle G-,R-,Q- banding, polyploid cells and markers
g) Drag and Drop Chromosomes in karyotype: The entire chromosome should be seen (with all its gray values) while dragged into Karyotype (not just the contour), in order to enable comparing bands even before released in a new location.
h) Expand or shrink specific chromosome boundaries by keyboard short key.
i) Ability to perform chromosome segmentation operations within a single tool without additional key board strokes or mouse clicks to switch to a different tool function, with more than 10 different operations.
j) Join objects into one chromosome.
k) Separation of complex chromosome clusters using brush tool.
l) All contour editing and segmentation operations, including addition of missing telomere regions, can be done within the karyotype window.
m) Automatic separation of touching chromosomes without user interaction.
n) Enhancement tools (sharpening, contrast, staining etc.) are available using sliders in all analysis steps
o) Automatic counting of chromosomes with minimal adjustment to complete full chromosome count.
p) Incorporate the sex chromosomes within the count tool for a display of both the model number and sex.
q) User can perform indexing on the metaphase image with the ability to associate a or text with a chromosome for visual awareness within the image with automatic display in ISCN format within the results.
r) Keyboard short keys for indexing
s) Mark and count the overlapped chromosomes automatically
t) User can track and mark the chromosomes overlapping p/q arms.
u) Free text annotation, and markups, with different colors and shapes can be added to metaphase, karyogram images and ideograms.

v) Ability to localize Marker Chromosomes in Karyotype view.
w) System can automatically present a single karyotype of multiple patients (like family members) with all chromosomes included side by side for each class.
x) Karyotype arrangement is adjusted automatically based on content of chromosomes, even if chromosome size is larger than standard size of the group or 10 or more chromosome are in the same class.
y) Drag to re-classify chromosomes from one class to the other.
z) Ability to perform a Chromosome Compare by allowing user to simultaneous review (side by side) chromosomes from either all Karyotyped cells of the case and from selected Karyotyped cells of the case. Minimal need to show chromosomes from 20 cells simultaneously.
aa) Ability to perform a Multi-Case Chromosome Compare by allowing user to simultaneous review (side by side) chromosomes from multiple related cases within a single view. Minimal need to show 2 to 6 cases side by side simultaneously.
bb) Ability to define a karyotype with all chromosomes of multiple family members.
cc) Ability to prepare the customized ideograms
dd) Support ISCN formats for 300, 400, 550, 700 and 850 -band levels of resolution.
ee) Automatic ISCN - embedded abnormality text.
ff) Automatic measurement of band resolution.

22. FLUORESCENCE IN-SITU HYBRIDIZATION

Automated FISH Scanning & Image Acquisition

a) Fully automated, walk-away operation for slides or higher
b) Automatic control over the microscope components, filters turret, objective turret, Z axis and shutter
c) Fully automated scanning protocol for cell suspension and tissue samples.
d) Ablility to scan slide by descending order of cell density, defined co-ordinates or user-defined area. It should come with basic scanning patterns like Spiral & line by line.
e) Simultaneous Metaphase & Interphase detection in a single scan, with ability to classify metaphases and interphases in separate cell galleries.
f) Fully automated, user independent scanning protocol for tissue samples that includes:
g) 4x scan of entire slide in DAPI with background uniformity correction,
h) Auto detect of tissue followed by,
i) Auto scan of tissue in high magnification with all colors and 3D focal planes.
j) Interactive scan mode which enables the user to define the desired fields of view followed by automated scanning and image acquisition.
k) System notifies the user of expected number of cells during the Interactive definition of FOV (fields of view).
l) Built-in safe guards for coordinates that are overlapping or outside of the defined tumor regions during the Interactive definition of FOV.
m) User can define scanning stop condition based on number of cells found, FOV captured, time limit.

n) System can scan multiple regions on slide with different probe for each of the regions.
o) System can perform Z-stacking based on user defined number of layers and distance between layers.
p) Automated exposure adjustment for optimal image quality and cells/tissue detection.
q) Ability to reset Scan for specific regions of unsuccessful scans.
r) Ability to scan newly added tumor regions without the need to rescan the original tumor regions.

23. Automated FISH Analysis & Review

a. Compatible for Suspension and FFPE samples on same system.
b. Software should support automated imaging and analysis of all probe companies
c. Single click image acquisition with automatic switch of filters.
d. Ability to see all color layers of a cell side by side.
e. Automatic cells detection based on cell morphology, size, shape, intensity.
f. Automatic cells classification based on pre-defined signal pattern.
g. User can select, add, delete cells from the captured field of view.
h. Algorithm for the detection and classification of multi-fusion FISH probes, including triple- and quad-color fusions.
i. Ability to define new FISH probes/kits without the need for vendor support. \
j. On-screen review of automatically detected and classified cells, both through cells gallery and on the images/captured field of view.
k. Single multi-tool with multiple cell editing functions, free hand cell contour drawing, editing cell boundaries, deletion and more.
l. Sensitivity control panel allowing the user to adjust the level of sensitivity of each signal layer and improve the cells classification.
m. Ability for user to change Image Enhancement settings of one image and if required apply to all cells/frames in the gallery.
n. User can review cells by seeing each of their Z-layers separately, simultaneously for any subset of the colors in 3D Mode.
o. Ability to scroll between all signal layers of a cell.
p. Multiple view modules within the software GUI: large FOV image, multi-color panel, zoom view.
q. Color coded on-screen cells review: each cell contour is colored according the signal pattern defined class color.
r. Automatic detection of unexpected aberrations: Identifying aberrant cells having signal patterns that were not defined by user. Automatic allocation of a new class if such cells amount reaches pre-defined percentage.
s. Ability to reclassify any cell to one of 15 cell-classes in a single key press.
t. Ability for user to adjust cell and signal detection parameters for reanalysis of cells from all originally analyzed frames.
u. Review bin allowing the user to mark questionable cells for later supervisor review.
v. Blinded review: multiple users can review the cells of the same slide separately without revealing the analysis results of each user. Statistics is gathered digitally but cannot be seen by the next reviewer, for true double blinded process.

w. Ability to provide quantitative graphical data from FISH scanning, including cell area, signals intensity and SNR. This should be used in evaluating probes and wet lab quality control
x. Ability to change classification of entire group of cells simultaneously
y. Original Image display – Ability to display the original images in addition to the enhanced color image.
z. External keypad for manual FISH review allows short keys for switching filters in either filter wheel or filter cube and can be enabled also when acquisition applications are closed.
aa. Should facilitate quick scoring and support double blinded reading.
bb. Can toggle back and forth quickly through the individual signal colors and also using the 3D mode.

24. COMPUTER

OS Windows 10 Professional 64 Bit ENG. Processor Intel Xeon E3-1270 (3.6GHz, 8MB, 4C). RAM 8GB 2400MHz DDR4 Non-ECC. Hard drive 500 GB 7200 RPM. Storage 2TB 7200 RPM. With Widescreen 2560 x 1440 resolution. Aspect ratio 16: &28" Monitor or higher.

25. **Essential Accessories:** Sturdy granite top table, one swingout condenser, 10 ergonomic chairs dust cover, immersion oil, online UPS 5kVA with backup of 30minute one set and all necessary cables for successful installation should be provided without any additional cost. Should be supplied with air jacketed Co2 incubator with co2 cylinder & Regulator, capacity 185 lit.
26. The system must include software for automated Ki67 and Her2neu Immunohistochemistry interpretation
27. Along with the system 1L high quality oil immersion fluid, 2L SSC 20x, FISH antigen retrival buffer 1L 20x, Rubber cement 5 tube, DAPI with antifade solution 5ml, Pepsin 50gm, round cover slip 500 and original MS office and Antivirus with 3 year license must be provided
28. One 5kv UPS which can manage the Sstem with battery back up of 30minute must be provided. The vendor will be responsible for battery replacement for 5 year as when required
29. The machine should be upgraded freely during the warranty period, if any newer version of software lunch. If the newer version of software require hardware up gradation (computer/server/Microsoft newer version) the vendor will supply the compatible hardware also without any additional cost.
30. Any recurrent consumables required for running the machine should be separately listed and their price should be separately quoted as applicable, which would be fixed for the 10years
31. Warranty: 5 years comprehensive warranty including spares and CMC for next 5 years. The CMC price should be included into the final quoted price of the instrument
32. The supplier should provide periodic maintenance services as per the requirement of NABL (At least twice a year for first 5 years).
33. The vendor will perform IQ/OQ during installation and PQ every year as per NABL recommendation

Item no. 17

Cell Counter

1. System should be able to count the cells automatically in bright-field
2. Sample processing time should not be more than 10 seconds (10 secs or less)
3. Sample concentration range for counting should be in the range of $1x10^4$ - $1x10^7$ cells/ml or more
4. Particle/cell diameter range for the counting of cells should be in the range of 4-60 µm or more
5. Sample volume requirement should not be more than 10-15µL or more
6. System should have integrated automated Cell Counting Platform Software
7. System should be upgradable to Fluorescence with the use of fluorescent filters
8. System should have at least 3 channels (1 bright-field + 2 fluorescent filters) for future upgradation
9. For bright fluorescence intensity, fluorescent filters should have shelf life of 50,000 hrs or more
10. System should have camera with minimum resolution of 4-5 Megapixels & minimum 2X optical magnification
11. System should generate data output in following formats –JPEG, TIFF, PDF, CSV, BMP and should also support PDF,CSV and FCS
12. System should have following operating power –100-200, 50/60 Hz, 0.58 A max.
13. Application should not only be limited to cell counting but should also help with following

a) Cell Viability, Apoptosis, Transfection Efficiency

14. Following accessories should be provided with the system (automated cell counter)

a) Reusable analysis slides, at least 1 nos.
b) Disposable analysis slides, minimum 50 slides
c) Trypan Blue stain solution vial (0.4%)

15. Stains for visualizing cell and one extra chamber for counting must be included without additional cost
16. 1KVA UPS with 10minute backup
17. The machine should be upgraded freely during the warranty period, if any newer version of software lunch. If the newer version of software require hardware up gradation (computer/server/Microsoft newer version) the vendor will supply the compatible hardware also without any additional cost.
18. Any recurrent consumables required for running the machine should be separately listed and their price should be separately quoted as applicable, which would be fixed for the 10years
19. Warranty: 5 years comprehensive warranty including spares and CMC for next 5 years. The CMC price should be included into the final quoted price of the instrument

20. The supplier should provide periodic maintenance services as per the requirement of NABL (At least twice a year for first 5 years).
21. The vendor will perform IQ/OQ during installation and PQ every year as per NABL recommendation

System should have open interface for LIS, implemented worldwide with various LIS systems. Ability to import/export patient demographic data from/to hospital LIS system. Automatic Import of patient information and test protocol from LIS

Annexure 2 - MOLECULAR PATHOLOGY TEST MENU

Sr. no	List of Applications	Name of Test Parameters	Price to be quoted for Test Parameters at Col. (b) should included the following consumables *(Frequency of change of consumable is as per tender requirement)*	Criteria	Number of Test (approximate quantity for 10 years being factored for bid ranking only)	Number of Test (approximate annual quantity being factored for bid ranking only)	Make/ Model	HSN Code	Catalogue No.	Complied and Price for 10 years Quoted in Price Bid?
1	NGS	At least 50 Gene Panel for Solid tumors for CNV, indels, SNVs and fusions	DAN/ RNA QC by fragment Analysis, Flurometer consumables, Library pepraretion, Library QC by fragment Analysis, Seqencing	Must include all reagent for sucessfull Sequencing. Must provide onsite bioinformatic support for vaiant calling till 2 year for patient reporting Sequencing will be done twice a month so sequencing cost must be calculated accordingly while quoting in Price Bid Validation data must be available for gene panel. Lower detection limit must be mentioned	600	60				

Sr. no	List of Applications	Name of Test Parameters	Price to be quoted for Test Parameters at Col. (b) should included the following consumables *(Frequency of change of consumable is as per tender requirement)*	Criteria	Number of Test (approximate quantity for 10 years being factored for bid ranking only)	Number of Test (approximate annual quantity being factored for bid ranking only)	Make/ Model	HSN Code	Catalogue No.	Complied and Price for 10 years Quoted in Price Bid?
2	NGS	BRCA Somatic (BRCA 1 and 2) +	DAN/ RNA QC by fragment Analysis, Flurometer consumables, Library pepraretion, Library QC by fragment Analysis, Seqencing	Must include all reagent for sucessfull Sequencing. Must provide onsite bioinformatic support for vaiant calling till 2 year for patient reporting Sequencing will be done twice a month so sequencing cost must be calculated accordingly while quoting in Price Bid Validation data must be available for gene panel. Lower detection limit must be mentioned	1200	120				
3	NGS	Tumor specific panels (HRR pathway, BRCA expanded, Kidney panel, Lymphoma panel, Prostrate, Pancreas &CRC, Gynecological etc. Melanoma, Liver, kidney)	DAN/ RNA QC by fragment Analysis, Flurometer consumables, Library pepraretion, Library QC by fragment Analysis, Seqencing	Must include all reagent for sucessfull Sequencing. Must provide onsite bioinformatic support for vaiant calling till 2 year for patient reporting Sequencing will be done twice a month so sequencing cost must be calculated accordingly while quoting in Price Bid	1200	120				

Sr. no	List of Applications	Name of Test Parameters	Price to be quoted for Test Parameters at Col. (b) should included the following consumables *(Frequency of change of consumable is as per tender requirement)*	Criteria	Number of Test (approximate quantity for 10 years being factored for bid ranking only)	Number of Test (approximate annual quantity being factored for bid ranking only)	Make/ Model	HSN Code	Catalogue No.	Complied and Price for 10 years Quoted in Price Bid?
				Validation data must be available for gene panel. Lower detection limit must be mentioned						
4	NGS	Childhood cancer panel - SNVs, indels, CNVs and fusions - 209 genes	DAN/ RNA QC by fragment Analysis, Flurometer consumables, Library pepraretion, Library QC by fragment Analysis, Seqencing	Must include all reagent for sucessfull Sequencing. Must provide onsite bioinformatic support for vaiant calling till 2 year for patient reporting Sequencing will be done twice a month so sequencing cost must be calculated accordingly while quoting in Price Bid Validation data must be available for gene panel. Lower detection limit must be mentioned	240	24				

Sr. no	List of Applications	Name of Test Parameters	Price to be quoted for Test Parameters at Col. (b) should included the following consumables *(Frequency of change of consumable is as per tender requirement)*	Criteria	Number of Test (approximate quantity for 10 years being factored for bid ranking only)	Number of Test (approximate annual quantity being factored for bid ranking only)	Make/ Model	HSN Code	Catalogue No.	Complied and Price for 10 years Quoted in Price Bid?
5	NGS	TCR Pan-Clonality Assay - Clonality assessment (Beta and gamma)	DAN/ RNA QC by fragment Analysis, Flurometer consumables, Library pepraretion, Library QC by fragment Analysis, Seqencing	Must include all reagent for sucessfull Sequencing. Must provide onsite bioinformatic support for vaiant calling till 2 year for patient reporting Sequencing will be done twice a month so sequencing cost must be calculated accordingly while quoting in Price Bid Validation data must be available for gene panel. Lower detection limit must be mentioned	240	24				
6	NGS	BCR Pan-Clonality Assay - Clonality assessment (Igh, IgK, IGL, KDE)	DAN/ RNA QC by fragment Analysis, Flurometer consumables, Library pepraretion, Library QC by fragment Analysis, Seqencing	Must include all reagent for sucessfull Sequencing. Must provide onsite bioinformatic support for vaiant calling till 2 year for patient reporting Sequencing will be done twice a month so sequencing cost must be calculated accordingly while quoting in Price Bid	240	24				

Sr. no	List of Applications	Name of Test Parameters	Price to be quoted for Test Parameters at Col. (b) should included the following consumables *(Frequency of change of consumable is as per tender requirement)*	Criteria	Number of Test (approximate quantity for 10 years being factored for bid ranking only)	Number of Test (approximate annual quantity being factored for bid ranking only)	Make/ Model	HSN Code	Catalogue No.	Complied and Price for 10 years Quoted in Price Bid?
				Validation data must be available for gene panel. Lower detection limit must be mentioned						
7	NGS	MPN Panel (DNA + RNA) - covering all actionable markers for, CMl, CMML, MDS, MPN and JMML	DAN/ RNA QC by fragment Analysis, Flurometer consumables, Library pepraretion, Library QC by fragment Analysis, Seqencing	Must include all reagent for sucessfull Sequencing. Must provide onsite bioinformatic support for vaiant calling till 2 year for patient reporting Sequencing will be done twice a month so sequencing cost must be calculated accordingly while quoting in Price Bid Validation data must be available for gene panel. Lower detection limit must be mentioned	120	12				

Sr. no	List of Applications	Name of Test Parameters	Price to be quoted for Test Parameters at Col. (b) should included the following consumables *(Frequency of change of consumable is as per tender requirement)*	Criteria	Number of Test (approximate quantity for 10 years being factored for bid ranking only)	Number of Test (approximate annual quantity being factored for bid ranking only)	Make/ Model	HSN Code	Catalogue No.	Complied and Price for 10 years Quoted in Price Bid?
8	NGS	500 comprehensive gene pnel	DAN/ RNA QC by fragment Analysis, Flurometer consumables, Library pepraretion, Library QC by fragment Analysis, Seqencing	Must include all reagent for sucessfull Sequencing. Must provide onsite bioinformatic support for vaiant calling till 2 year for patient reporting Sequencing will be done twice a month so sequencing cost must be calculated accordingly while quoting in Price Bid Validation data must be available for gene panel. Lower detection limit must be mentioned	480	48				
9	NGS	Cell free lung	DAN/ RNA QC by fragment Analysis, Flurometer consumables, Library pepraretion, Library QC by fragment Analysis, Seqencing	Must include all reagent for sucessfull Sequencing. Must provide onsite bioinformatic support for vaiant calling till 2 year for patient reporting Sequencing will be done twice a month so sequencing cost must be calculated accordingly while quoting in Price Bid	480	48				

Sr. no	List of Applications	Name of Test Parameters	Price to be quoted for Test Parameters at Col. (b) should included the following consumables *(Frequency of change of consumable is as per tender requirement)*	Criteria	Number of Test (approximate quantity for 10 years being factored for bid ranking only)	Number of Test (approximate annual quantity being factored for bid ranking only)	Make/ Model	HSN Code	Catalogue No.	Complied and Price for 10 years Quoted in Price Bid?
				Validation data must be available for gene panel. Lower detection limit must be mentioned						
10	NGS	Heridetary screening	DAN/ RNA QC by fragment Analysis, Flurometer consumables, Library preparation, Library QC by fragment Analysis, Seqencing	Must include all reagent for successful Sequencing. Must provide onsite bioinformatic support for vaiant calling till 2 year for patient reporting Sequencing will be done twice a month so sequencing cost must be calculated accordingly while quoting in Price Bid Validation data must be available for gene panel. Lower detection limit must be mentioned	480	48				

Sr. no	List of Applications	Name of Test Parameters	Price to be quoted for Test Parameters at Col. (b) should included the following consumables *(Frequency of change of consumable is as per tender requirement)*	Criteria	Number of Test (approximate quantity for 10 years being factored for bid ranking only)	Number of Test (approximate annual quantity being factored for bid ranking only)	Make/ Model	HSN Code	Catalogue No.	Complied and Price for 10 years Quoted in Price Bid?
11	Fragment Analysis	MSI	Includes all cost Cost of kit ocnsumable for amplification including Plastiware, enzyme All consumable to run the smaple (POP,ANODE & Cathode Buffer, HIDI formamide, size standard, Plate, Sepate)	NA	1200	120				
12	Fragment Analysis	Gene Rearrangements, Large deletions/duplications, CNV-SALSA MLPA kits	Includes all cost Cost of kit ocnsumable for amplification including Plastiware, enzyme All consumable to run the smaple (POP,ANODE & Cathode Buffer, HIDI formamide, size standard, Plate, Sepate)	NA	1200	120				

Sr. no	List of Applications	Name of Test Parameters	Price to be quoted for Test Parameters at Col. (b) should included the following consumables *(Frequency of change of consumable is as per tender requirement)*	Criteria	Number of Test (approximate quantity for 10 years being factored for bid ranking only)	Number of Test (approximate annual quantity being factored for bid ranking only)	Make/ Model	HSN Code	Catalogue No.	Complied and Price for 10 years Quoted in Price Bid?
13	Fragment Analysis	B/T Cell clonality (B-IGK+IGK), (T- TCR Gamma, TCR Beta)	Includes all cost Cost of kit ocnsumable for amplification including Plastiware, enzyme All consumable to run the smaple (POP,ANODE & Cathode Buffer, HIDI formamide, size standard, Plate, Sepate)	NA	480	48				
14	Fragment Analysis	Any other fragment analysis	Includes only consumables for running cost (POP,ANODE & Cathode Buffer, HIDI formamide, size standard, Plate, Sepate)	NA	600	60				
15	Sanger Sequencing	Require for any validation of NGS data	Includes Sequencing consumables cost (BDT,Exosap, BDX, POP,ANODE & Cathode Buffer, HIDI formamide, size standard, Plate, Sepate Include all price except primary amplification	NA	240	24				

Sr. no	List of Applications	Name of Test Parameters	Price to be quoted for Test Parameters at Col. (b) should included the following consumables *(Frequency of change of consumable is as per tender requirement)*	Criteria	Number of Test (approximate quantity for 10 years being factored for bid ranking only)	Number of Test (approximate annual quantity being factored for bid ranking only)	Make/ Model	HSN Code	Catalogue No.	Complied and Price for 10 years Quoted in Price Bid?
16	Sanger Sequencing	Any other sequencing	Includes Sequencing consumables cost (BDT,Exosap, BDX, POP,ANODE & Cathode Buffer, HIDI formamide, size standard, Plate, Sepate Include all price except primary amplification	NA	360	36				
17	RT-PCR	Human Papillomavirus (HPV)	Includes all cost kit , enzyme and plasticware	The realtime kit should be approved for iVD	600	60				
18	RT-PCR	Cytomegalovirus (CMV) (Quantitative)	Includes all cost kit , enzyme and plasticware	The realtime kit should be approved for iVD	600	60				
19	RT-PCR	Epstein-Barr Virus (EBV) (Quantitative)	Includes all cost kit , enzyme and plasticware	The realtime kit should be approved for iVD	600	60				
20	RT-PCR	EGFR	Includes all cost kit , enzyme and plasticware	The realtime kit should be approved for iVD	1200	120				
21	RT-PCR	IDH1/2	Includes all cost kit , enzyme and plasticware	The realtime kit should be approved for iVD	480	48				
22	RT-PCR	MGMT Methylation	Includes all cost kit , enzyme and plasticware	The realtime kit should be approved for iVD	480	48				
23	RT-PCR	PIK3CA	Includes all cost kit , enzyme and plasticware	The realtime kit should be approved for iVD	240	24				
24	RT-PCR	BRAF	Includes all cost kit , enzyme and plasticware	The realtime kit should be approved for iVD	1200	120				

Sr. no	List of Applications	Name of Test Parameters	Price to be quoted for Test Parameters at Col. (b) should included the following consumables *(Frequency of change of consumable is as per tender requirement)*	Criteria	Number of Test (approximate quantity for 10 years being factored for bid ranking only)	Number of Test (approximate annual quantity being factored for bid ranking only)	Make/ Model	HSN Code	Catalogue No.	Complied and Price for 10 years Quoted in Price Bid?
25	RT-PCR	KRAS	Includes all cost kit , enzyme and plasticware	The realtime kit should be approved for iVD	1200	120				
26	RT-PCR	NRAS	Includes all cost kit , enzyme and plasticware	The realtime kit should be approved for iVD	1200	120				
27	Digital PCR	BRAF: COSM ID: 475 ; Amino Acid Muttaion: p.V600E ; CDS Mutation: c.1799_1800TG>AA	Includes all cost primer, enzyme and plasticware Positive sample, chip, mastermix	NA	240	24				
28	Digital PCR	BRAF: COSM ID: 476 ; Amino Acid Mutation: p.V600E ; CDS Mutation: c.1799T>A	Includes all cost primer, enzyme and plasticware Positive sample, chip, mastermix	NA	240	24				
29	Digital PCR	MYD 88 L265P	Includes all cost primer, enzyme and plasticware Positive sample, chip, mastermix	NA	240	24				
30	Digital PCR	CXCR4	Includes all cost primer, enzyme and plasticware Positive sample, chip, mastermix	NA	240	24				
31	Digital PCR	Digital PCR Assay any TWO SNV in a batch	Include cost of primer, CHIP, Enzyme, mastermix	NA	240	24				

Note:

1. It is mandatory for the bidders to quote unit rates for each year over a period of 10 years

2. Any reagent, essential consumables required for performing tests, calibration, quality control, cleaning the lab system, as per quantities detailed above if not quoted in Price Bid shall be provided free of cost by the bidder during the validity of the contract.

3. Do not tamper with the formulas provided in the above cells.

4. Must include all reagent for successful sequencing. Must provide onsite bioinformatic support for vaiant calling till 2 year for patient reporting

5. Sequencing will be done twice a month so sequencing cost must be calculated accordingly.

6. Validation data must be available for gene panel. Lower detection limit must be mentioned.

Annexure 3 – List of Fish Probes

Sr. no	List of Parameters (Probes)	Required Pack Size	Total Quantity of Pack Size (approximate quanity for 10 years being factored for bid ranking only)	Annual Quantity of Pack Size (approximate annual quantity being factored for bid ranking only)	Make/ Model	HSN Code	Catalogue No.	Complied and Price for 10 years Quoted in Price Bid?
1	MAMI2 BREAK APART FISH PROBE KIT	200µl	20	2				
2	MYB BREAK APART FISH PROBE KIT	200µl	20	2				
3	ETV6 BREAK APART FISH PROBE KIT	200µl	20	2				
4	PLAG1 BREAK APART FISH PROBE KIT	200µl	10	1				
5	NR4A3 BREAK APART FISH PROBE KIT	200µl	10	1				
6	ERBB2 / CCP17 FISH PROBE KIT (Her 2neu)	200µl	100	10				
7	PAX3 BREAK APART FISH PROE KIT	200µl	10	1				
8	MYCN / CCP2 FISH PROBE KIT	200µl	20	2				

Sr. no	List of Parameters (Probes)	Required Pack Size	Total Quantity of Pack Size (approximate quanity for 10 years being factored for bid ranking only)	Annual Quantity of Pack Size (approximate annual quantity being factored for bid ranking only)	Make/ Model	HSN Code	Catalogue No.	Complied and Price for 10 years Quoted in Price Bid?
9	MYC / CCP8 FISH PROBE KIT	200µl	20	2				
10	PAX3-FOXO1 DUAL COLOR FUSION FISH PROBE	200µl	10	1				
11	PAX7-FOXO1 DUAL COLOR FUSION FISH PROBE	200µl	10	1				
12	EWSR1 BREAK APART FISH PROBE KIT	200µl	40	4				
13	ETV6-NTRK3 DUAL COLOR FUSION FISH PROBE	200µl	10	1				
14	BCOR-CCNB3 DUAL COLOR FUSION FISH PROBE	200µl	10	1				
15	TFE3 BREAKAPART FISH PROBE KIT	200µl	10	1				
16	FOXO1 BREAK APART FISH PROBE KIT	200µl	10	1				
17	WT1 BREAK APART FISH PROBE KIT	200µl	10	1				
18	NTRK3 BREAK APAART FISH PROBE KIT (PAC244)	200µl	10	1				
19	CIC BREAK APART FISH PROBE KIT (PAC236)	200µl	10	1				
20	FUS BREAK APART FISH PROBE KIT	200µl	10	1				
21	SS18 BREAK APART	200µl	10	1				

Sr. no	List of Parameters (Probes)	Required Pack Size	Total Quantity of Pack Size (approximate quanity for 10 years being factored for bid ranking only)	Annual Quantity of Pack Size (approximate annual quantity being factored for bid ranking only)	Make/ Model	HSN Code	Catalogue No.	Complied and Price for 10 years Quoted in Price Bid?
	FISH PROBE KIT							
22	MDM2 / CCP12 FISH PROBE KIT	200µl	10	1				
23	HEY-NCOA2 FUSION PROBE	200µl	10	1				
24	PHF1 BREAK APART FISH PROBE KIT (PAC341)	200µl	10	1				
25	BCOR-CCNB3 DUAL COLOR FUSION FISH PROBE	200µl	10	1				
26	BCOR BREAK APART FISH PROBE KIT	200µl	10	1				
27	YWHAE-NUTM2 DUAL COLOR FUSION FISH PROBE	200µl	10	1				
28	HMGA2 REARRANGEMENT / BREAK APART FISHPROBES	200µl	10	1				
29	NCOA2 REARRANGEMENT / BREAK APART FISH PROBES	200µl	10	1				
30	CDKN2C / CKS1B FISH PROBE (1p1q)	200µl	10	1				
31	CIC-DUX4 DUAL FUSION FISH PROBE (PAC237)	200µl	10	1				
32	CISD2 / CCP4 FISH PROBE KIT	200µl	10	1				

Sr. no	List of Parameters (Probes)	Required Pack Size	Total Quantity of Pack Size (approximate quanity for 10 years being factored for bid ranking only)	Annual Quantity of Pack Size (approximate annual quantity being factored for bid ranking only)	Make/ Model	HSN Code	Catalogue No.	Complied and Price for 10 years Quoted in Price Bid?
33	ROS1 BREAK APART FISH PROBE KIT	200µl	30	3				
34	ALK BREAK APART FISH PROBE KIT	200µl	30	3				
35	CDKN2A / CCP9	200µl	20	2				
36	CCND1 / CCP11	200µl	10	1				
37	RET BREAK APART FISH PROBE KIT	200µl	10	1				
38	JAZF1- SUZ12 FUSION FISH PROBE KIT	200µl	10	1				
39	CMYC BREAK APART FISH PROBE KIT	200µl	40	4				
40	BCL2 BREAK APART FISH PROBE KIT	200µl	20	2				
41	IRF4 / SUSP22 (MUM1) BREAK APART FISH (PAC181)	200µl	20	2				
42	DEK BREAK APART (PAC347)	200µl	10	1				
43	MYBL1 BREAK APART	200µl	10	1				
44	TFCP2 BREAK APART	200µl	10	1				
45	GLI1 LSP PROBE CT-LSP219	200µl	10	1				
46	IGH-MYC DUAL FUSION FISH PROBE KIT (PAC223)	200µl	20	2				
47	IGH-CCND1DUAL FUSION FISH PROBE KIT (PAC222)	200µl	10	1				

Sr. no	List of Parameters (Probes)	Required Pack Size	Total Quantity of Pack Size (approximate quanity for 10 years being factored for bid ranking only)	Annual Quantity of Pack Size (approximate annual quantity being factored for bid ranking only)	Make/ Model	HSN Code	Catalogue No.	Complied and Price for 10 years Quoted in Price Bid?
48	IGH-BCL2 DUAL FUSION FISH PROBE KIT (PAC221)	200µl	10	1				
49	IGH-MALT1 DUAL FUSION FISH PROBE KIT (PAC383)	200µl	10	1				
50	BIRC3-MALT1 DUAL FUISION FISH PROBE KIT (PAC062)	200µl	10	1				
51	TNFRSF14 (1P36) DELETIION	200µl	10	1				
52	YWHAE BA (PAC063)	200µl	10	1				
53	RET BA (PAC051)	200µl	10	1				
54	SS18 BA	200µl	10	1				
53	1P19Q	200µl	10	1				
54	EGFR Amplification	200µl	10	1				

Note:

1. It is mandatory for the bidders to quote unit rates for each year over a period of 10 years

Annexure 4 - Items for Rate Contract

Sr. no	List of Item	Required Pack Size	Quantity of Pack Size (approximate quanity for 10 years being factored for bid ranking only)	Annual Quantity of Pack Size (approximate annual quantity being factored for bid ranking only)	Make/ Model	HSN Code	Catalogue No.	Complied and Price for 10 years Quoted in Price Bid?
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	
1	FFPE DNA extraction kit (compatible with quoted machine)	50	300	30				
2	FFPE DNA extraction kit compatible manual method	50	20	2				
3	DNA extraction kit from blood	50	100	10				
4	FFPE RNA extraction kit (compatible with quoted machine)	50	60	6				
5	RNA extraction kit from blood	50	50	5				
6	Pre-treatment Buffer for Fluorescent in-situ hybridization	100ml	50	5				
7	Rubber cement	100gm	200	20				
8	Saline Sodium Citrate 20X	1L	30	3				
9	Pepsin (>3000 units /gm)	100gm	10	1				
10	Antifade mounting Media with DAPI	10ml	50	5				
11	Rond coverslip 5mm	100	50	5				
12	IGEPAL	100ml	10	1				
13	RPMI	1L	20	2				
14	Amplitaq Gold	250 unit	40	4				
15	PCR master mix	50 reaction	30	3				
16	Agarose molecular grade	100gm	10	1				
17	Em pure bead	60ml	10	1				
18	Ladder 100 Bp, 50BP	100 reaction	10	1				
19	Positive Charge Slide	70	300	30				
20	EBER ISH KiT	40 case	60	6				
21	Kappa Lambda ISH	40 case	20	2				
22	Ethanol Molecular Grade	500ml	500	50				

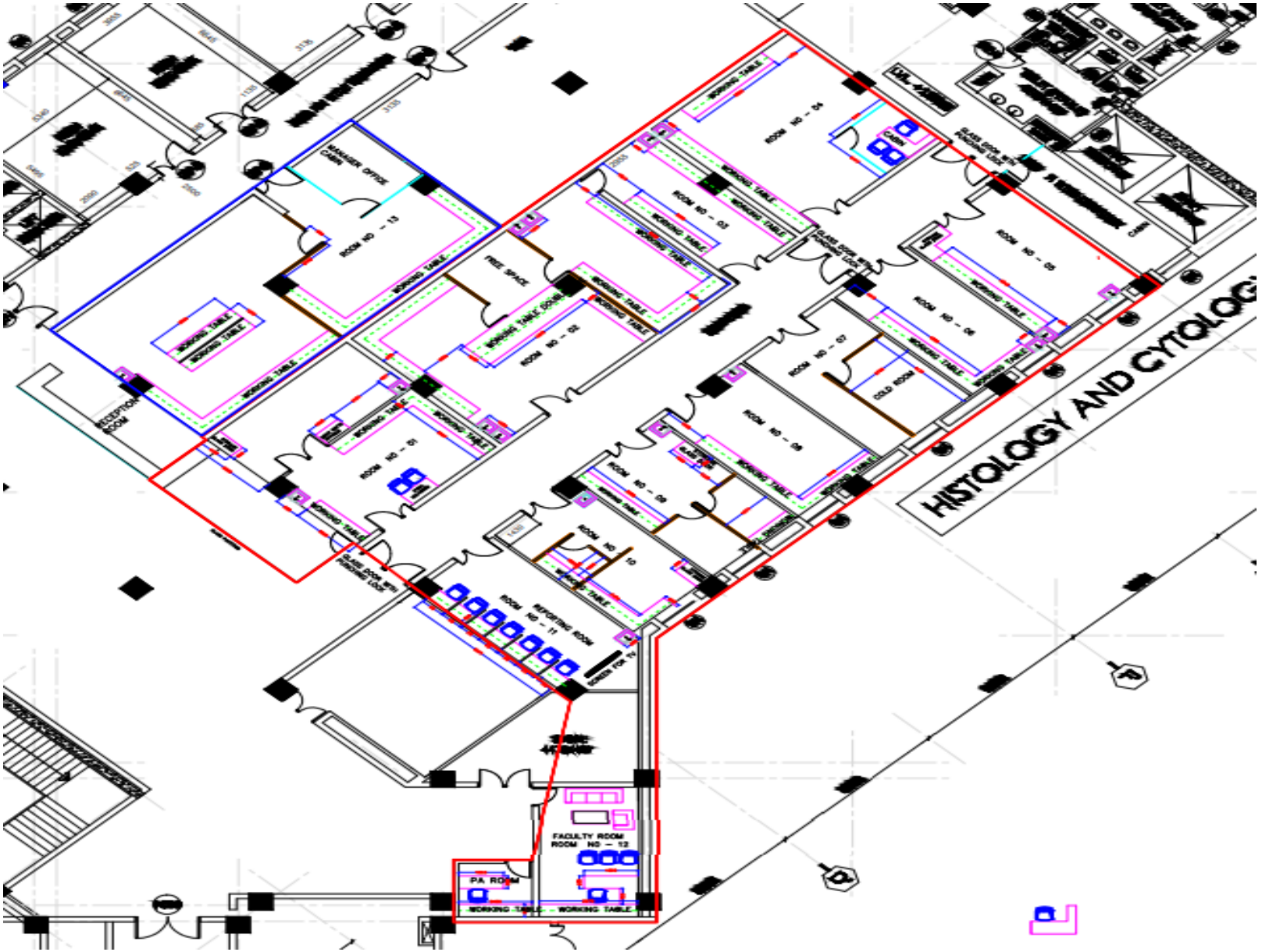
Note:

1. It is mandatory for the bidders to quote unit rates for each year of each item over a period of 10 years

Annexure 5 (Description of Consumables related to Main Equipment as per BOQ only)

Sr. no	Name of the Consumable	Name of the Main Equipment (as per BOQ)for which Consumable is required	Make/ brand & Catalogue No.	HSN Code	Total Consumable quantity required in 01 (one year) (i.e. frequency of Change) (in whole number only)	Complied and Price for 10 years Quoted in Price Bid?
	(a)	(b)	(c)	(d)	(e)	(f)

Annexure-6: Indicative Layout Drawing



B. GENERAL POINTS:

1. Warranty:

a) The bidders must quote for Comprehensive Warranty as per Conditions of Contract of the bidding document for complete equipment (Including all spares, labour and third party items) and Turnkey Work (if required) from the date of satisfactory installation, commissioning, trial run, handing over and acceptance of the goods by the User Department.

b) The warranty charges shall not be quoted separately.

c) All software and hardware updates should be provided free of cost during Comprehensive Warranty period.

d) During the Warranty period, desired Uptime of 95% of 365/366 (Leap Year) days (24 hrs), if downtime more than 5%, the warranty period/CAMC period will be extended by double the downtime period. Complaints should be attended properly, maximum within 8 hrs.

2. After Sales Service:

After sales service centre should be available at the city of Institution 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 Bidder/Indian Agent. Undertaking by the Principals in the "Manufacturer Authorisation Form" that the spares for the equipment shall be available for at least 10 years from the date of supply of equipment.

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 User Department.

4. Comprehensive Annual Maintenance Contract (CAMC) of subject equipment:

a) The cost of Comprehensive Annual Maintenance Contract (CAMC) which shall include preventive maintenance including testing & calibration as per technical/service/ operational manual of the manufacturer, labour and all spares, after satisfactory completion of Warranty period may be quoted for next five years on yearly basis for complete equipment including third party items as per Price Schedule.

b) The cost of CAMC may be quoted along with GST applicable on the date of Bid Opening.

c) Cost of CAMC will be added for Ranking/Evaluation purpose on NPB basis.

d) Before commencement of CAMC period, the suppliers shall furnish a Performance Bank Guarantee for 2.5% of the cost of the equipment (as per Performa given in bidding document) valid till 3 months extra after expiry of entire CAMC period. The Performance Bank Guarantee for CAMC will be applicable in case of equipment cost is more than Rs.10 lakh.

e) All **software/hardware** updates should be provided free of cost during CAMC. In case of failure by the supplier, the Bank Guarantee of CAMC will be forfeited.

f) The payment of CAMC will be made on half yearly basis after satisfactory completion of said period duly certified by end User.

g) During the CAMC period, desired Uptime of 95% of 365/366 (Leap Year) days (24 hrs), if downtime more than 5%, the warranty period/CAMC period will be extended by double the downtime period. Complaints should be attended properly, maximum within 8 hrs.

5. Uptime & Downtime Penalty Clause:

a) The firm should provide uptime guarantee of 95% during warranty period and CAMC period.

b) During the Warranty period and CAMC period, desired Uptime of 95% of 365/366 (Leap Year) days (24 hrs), if downtime more than 5%, the warranty period/CAMC period will be extended by double the downtime period Complaints should be attended properly, maximum within 8 hrs.

6. Turnkey Work:

Turnkey Work is to be indicated in the Technical Specification wherever required. The Bidder shall examine the existing site where the equipment is to be installed, in consultation with User Department. The Bidders are required to quote separately for the equipment and Turnkey Work as per Price Schedule. The Turnkey Work costs may be quoted in Indian Rupee and the same will be added for Ranking Purpose.

The Turnkey Work should completely comply with AERB requirement, wherever required.

SECTION - VIII

QUALIFICATION CRITERIA

1. **Status:** The bidders must be a manufacturer. In case the manufacturer does not quote directly, they may authorise their authorized agent as per proforma of "Manufacturer Authorization Form" as given in the bidding document to quote and enter into a contractual obligation.

2. **Minimum Work of Similar Nature:** The Manufacturer and/or Bidder should have supplied and installed the tendered quantity of the below mentioned items in last five years from the date of Bid Opening, successfully supplied and executed order(s)** to hospital(s) like any Govt. hospitals/institutes of national importance or at any other reputed hospitals/institutes globally as detailed below.

   **The order(s) individually or in combination should include the following (any 06 {six}):

Sl. no	Item Description	Qty
1	Capillary Sequencer - 8 Capillary with their accessories	1
2	Gradient PCR multiwell with their accessories	2
3	Gel Documentation System	1
4	Fully Automated DNA/RNA Purification System with their accessories	1
5	Gel Electrophoresis Apparatus (Horizontal) with power pack	1
6	Next Generation Sequencing with Automated Library Preparation and Reporting Server with their accessories	1
7	Bioanalyzer	1
8	Digital PCR	1
9	Digital Slide Scanning System	1

   In support of the above, the Bidder shall furnish Satisfactory Performance Certificate from the end user duly translated in English and duly signed alongwith the bid.

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

4. The Purchaser reserves the right to ask for a free demonstration of the quoted equipment after giving reasonable time to the bidder at a pre-determined place acceptable to the purchaser or at site (in case of non-portable and heavy equipment) for technical acceptability as per the bidding document specifications, before the opening of the Price Bid.

5. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with Competent Authority, as specified in Annexure-C of order F.No.6/18/2019-PPD dated 23-July-2020 and bidder must comply with all provisions mentioned in the order. A self-declaration with respect to above order must be submitted.

6. Preference to Make In India products (For bids less than 200 Crore): Preference shall be given to Class 1 local supplier as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products. The minimum local content to qualify as a Class 1 local supplier is denoted in the bid document 50%. If the bidder wants to avail the Purchase preference, the bidder must upload a certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made along with their bid, failing which no purchase preference shall be granted. In case the bid value is more than Rs 10 Crore, the declaration relating to percentage of local content shall be certified by the statutory auditor or cost auditor, if the OEM is a company and by a practicing cost accountant or a chartered accountant for OEMs other than companies as per the Public Procurement (preference to Make-in -India) order 2017 dated 04.06.2020 and its susequent amendment thereof. In case Buyer has selected Purchase preference to Micro and Small Enterprises clause in the bid, the same will get precedence over this clause.

7. Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders/Resellers are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE firm has/have quoted price within L-1+ 15% of margin of purchase preference /price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for percentage of 25% of total value.

PROFORMA 'A'

PROFORMA FOR PERFORMANCE STATEMENT

(For the period of last five years, as applicable)

TE No. : _____

Date of Bid Opening : _____

Name and address of the Bidder : _____

Name and address of the Manufacturer : _____

Order placed by (full address)	Order no. and date ##	Description (Model no.) and quantity	Value of order (Rs.)	Consignee	Date of Delivery Period			Have the goods been functioning satisfactorily (attach documentary proof)**
					Contract	Actual	Reasons for Delay if Any	
1	2	3	4	5	6	7	8	9

We hereby certify that the details of all orders received in last 5 years, as applicable, of quoted equipment (including AIIMS, PGIMER, JIPMER, RML Hospital, Safdarjung Hospital, Institute of National importance) has been furnished. We hereby further 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 Bid Security.

Name_____

Business Address_____

Signature of Bidder_____

Place: _____ Seal of the Bidder_____

** The documentary proof will be a latest certificate from the consignee/end user with cross-reference of order no. and date

The bidders are requested to submit the purchase order copies for the specific model quoted along with the Techno-commercial Bid.

SECTION – IX

BID FORM

To
CEO
HLL Infra Tech Services Limited
B-14A, Sector-62
Noida – 201 307

Ref. Your TE No. _____due for opening on _____

We, the undersigned have examined the above mentioned bidding document, including amendment/corrigendum (*if any*), the receipt of which is hereby confirmed. We now offer to supply and deliver _____ in conformity with your above referred document for the sum as shown in the Price Schedules attached herewith and made part of this bid. If our bid is accepted, we undertake to supply the goods and perform the services as mentioned in the bidding documents, in accordance with the delivery schedule specified in the List of Requirements.

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

We agree to keep our bid valid for acceptance as required in the "General Instruction to Bidders", read with modification, if any in "Special Instructions to Bidders", Section – III or for subsequently extended period, if any, agreed to by us. We also accordingly confirm to abide by this bid up to the aforesaid period and this bid may be accepted any time before the expiry of the aforesaid period. We further confirm that, until a formal contract is executed, this bid 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 bid you may receive against your above-referred advertised tender enquiry.

We confirm that we do not stand deregistered/banned/blacklisted by any Central Govt. Ministries/Departments/Hospitals/Institutes.

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

"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 bid security."

Name_____

Business Address_____

Place: _____ Signature of Bidder_____

Date: _____ Seal of the Bidder_____

SECTION - X

PRICE SCHEDULE

Price to be filled in the relevant field strictly as per the Price Bid Format provided in the e-tender portal 'https://etenders.gov.in/eprocure/app' under the Tender ID as per terms of the tender enquiry.

The instructions mentioned in the Price Bid Format are to be read and followed by the participating bidders while filling the Price Bid.

SECTION – XI

CHECK LIST

The bidders should furnish specific answers to all the questions/issues mentioned in the Checklist detailed below:

Name of Bidder: _____

Name of Manufacturer: _____

Sl. No.	Activity	Yes/ No/ NA	Page No. of the Bids submitted	Remarks
1. a.	Have you enclosed Bid Security of required amount for the quoted schedules?			
b.	In case Bid Security is furnished in the form of Bank Guarantee, has it been furnished as per standard format of the bidding document?			
c.	In case Bank Guarantee is furnished, have you kept its validity 45 days beyond the validity of Techno Commercial Bid?			
2.a.	Are you exempted for furnishing bid security being MSE as defined in MSE procurement policy issued by department of MSME.			
b.	If yes, have you enclosed certificate of registration issued by department of MSME.			
c.	Does such certificate clearly mention the quoted item?			
3. a.	Have you enclosed duly filled bid form as per bidding document?			
b.	Have you enclosed Power of Attorney in favour of the signatory?			
4. a.	Have you enclosed clause-by-clause technical compliance statement for the quoted goods vis-à-vis the Technical specifications?			
b.	In case of Technical deviations in the compliance statement, have you identified and marked the deviations?			
5. a.	Have you submitted satisfactory performance certificate as per the Proforma for performance statement given in the bidding document?			
b.	Have you submitted the documentary proof that goods have been functioning Satisfactorily?			
c.	Have you submitted latest purchase order copies?			

Sl. No.	Activity	Yes/ No/ NA	Page No. of the Bids submitted	Remarks
6.	Have you submitted Manufacturer's Authorization Certificate as per bidding document?			
7.a.	Have you quoted prices of goods, turnkey (if any), CAMC etc. in the Price Schedule as per bidding document?			
b.	If the ATE calls for buy back, have you quoted buy back prices along with applicable GST?			
8.	Have you kept validity of 270 days from the Techno Commercial Bid Opening date as per the bidding document?			
9. a.	In case of Indian Bidder, have you furnished GST No.?			
b.	In case of Foreign Bidder, have you furnished GST No. of your Indian Agent?			
10.	Have you intimated the name and full address of your Banker (s) along with your Account Number, IFSC Code etc.?			
11.	Have you furnished documents establishing your eligibility & qualification criteria as per bidding documents?			
12	Have you accepted all the terms and conditions of this bidding document?			

N.B.

1. All pages of the Bid should be page numbered and indexed.
2. The Bidder may go through the checklist and ensure that all the documents/ confirmations listed above are enclosed in the bid and no column is left blank. If any column is not applicable, it may be filled up as NA.
2. It is the responsibility of bidder to go through the bidding document to ensure furnishing all required documents in addition to above, if any.
3. Wherever necessary and applicable, the bidders shall enclose certified copy as documentary proof/ evidence to substantiate the corresponding statement.
4. In case a bidders furnishes a wrong or evasive answer against any of the question/issues mentioned in the Checklist, its bids will be liable to be ignored.

Name_____

Business Address_____

Place: _____ Signature of Bidder_____

Date: _____ Seal of the Bidder_____

SECTION – XII

BANK GUARANTEE FORM FOR BID SECURITY

Whereas _____ (Name and address of the Bidder)
(*Hereinafter called the "Bidders"*)
Has submitted its Bid dated _____ for the supply of _____
(Hereinafter called the "Bid")
Against the purchaser's ATE No. _____

Know all persons by these presents that we _____ having our registered office at _____
(Hereinafter called the "Bank")
Are bound unto HLL Infra Tech Services Ltd., Noida (for and on behalf of AIIMS)
(Hereinafter called the "Purchaser)
In the sum of _____ for which payment will and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this _____day of _____ 20____.

The conditions of this obligation are:

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

    a. if the bidder fails or refuses to furnish the performance security for the due performance of the contract or
    b. if the bidder fails or refuses to accept/execute the contract or
    c. if it comes to notice at any time, that the information/documents furnished in its Bid are false or incorrect or 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 more the three conditions, specifying the occurred condition(s).

This guarantee will remain in force upto _____ *(insert date of additional forty-five days after Bid validity)* and any demand in respect thereof should reach the Bank not later than the above date.

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

SECTION XIII

MANUFACTURER'S AUTHORISATION FORM

The CEO
HLL Infra Tech Services Limited
B-14A Sector-62
Noida, Uttar Pradesh-201307

Dear Sir,

Ref: Your TE document No _____ dated _____

We, _____ who are proven and reputable manufacturers of_____(*name and description of the goods offered in the bid*) having factories at_____, hereby authorise Messrs_____(*name and address of the agent*) to submit a bid, process the same further and enter into a contract with you against your requirement as contained in the above referred TE documents for the above goods manufactured by us.

We also state that we are not participating directly in this bid for the following reason(s):
_____*(please provide reason here).*

We further confirm that Messrs. _____ (*name and address of the above agent*) is authorised to submit a bid, process the same further and enter into a contract with you against your requirement as contained in the above referred TE documents for the above goods manufactured by us.

We also hereby extend our full warranty, CAMC as applicable as per clause 15 of the General Conditions of Contract, read with modification, if any, in the Special Conditions of Contract for the goods and services offered for supply by the above firm against this TE document.

We also hereby confirm that we would be responsible for the satisfactory execution of contract placed on the authorized agent and the spares for the equipment shall be available for at least 10 years from the date of supply of equipment.

We also confirm that the price quoted by our agent shall not exceed the price which we would have quoted directly"

Yours faithfully,

[*Signature with date, name and designation*]
for and on behalf of Messrs_____
[*Name & address of the manufacturers*]

Note:

1. *This letter of authorisation should be on the letter head of the manufacturing firm and should be signed by a person competent and having the power of attorney to legally bind the manufacturer.*
2. *Original letter may be sent.*

SECTION – XIV

BANK GUARANTEE FORM FOR PERFORMANCE SECURITY/CAMC SECURITY

WHEREAS _____ (Name and address of the supplier) (Hereinafter called "the supplier")

has undertaken, in pursuance of Purchase Order/ Contract no_____ dated _____ to supply _____ (*insert description of goods and services*) (Hereinafter 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 recognized 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 _____ (insert *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 will remain in force upto _____*(insert date of additional Ninety days after completion of satisfactorily warranty period in case of Performance Security and additional Ninety days after completion of satisfactorily CAMC period in case of CAMC security)* 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 – XV

CONTRACT FORM - A

CONTRACT FORM FOR SUPPLY, INSTALLATION, COMMISSIONING, HANDING OVER, TRIAL RUN, TRAINING OF OPERATORS & WARRANTY OF GOODS

ALL INDIA INSTITUTE OF MEDICAL SCIENCES
(Insert Name of concerned Centre/ Hospital/ Department/ Section)
ANSARI NAGAR, NEW DELHI-110 029

Contract No_____ dated_____

To _____
(*insert name of Supplier with address*)

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

1. Name & address of the Supplier: _____
2. ATE No of Bidding Documents: _____and subsequent Amendment No_____, dated_____ (if any), issued by the Purchaser
3. Supplier's Bid No_____ dated_____ and subsequent communication(s) No_____ dated _____ (if any), exchanged between the supplier and the purchaser in connection with this Bidding Document.
4. In addition to this Contract Form, the following documents etc, which are included in the Bidding 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) Bid Form furnished by the supplier;
   (vii) Price Schedule(s) furnished by the supplier in its Bid;
   (viii) Manufacturers' Authorisation Form (if applicable);
   (ix) Purchaser's Notification of Award

   Note: 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 Bidders" of the Bidding 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 of goods/services	Accounting unit	Quantity to be supplied	Unit Price	Total 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 required:_____

(v) Destination and despatch instructions:_____

(vi) Consignee: _____

6. Warranty clause:

7. Payment terms:

_____
(Signature, name and designation of the Purchaser authorised official**)**
For and on behalf of Director, AIIMS

Received and accepted this contract

(Signature, name and address of the supplier's executive duly authorised to sign on behalf of the supplier)

For and on behalf of _____
(*Insert Name and address of the supplier*)

(Seal of the Supplier)
Date: _____
Place: _____

CONTRACT FORM – B

CONTRACT FORM FOR COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT (CAMC)

Comprehensive Annual Maintenance Contract No._____
Dated_____

Between

Director, AIIMS

And

(*insert Name & Address of the Supplier*)

Reference: Contract/ Purchase Order No_____ dated_____ for supply, installation& commissioning, Training and CAMC of goods& services.

In continuation to the above referred Contract/Purchase Order, the Contract of Comprehensive Annual Maintenance Contract is hereby concluded as under: -

1	2	3	4					5	6
Items Sr. No./ RFx no.	Brief description of goods	Quantity (Nos.)	CAMC Cost for Each Unit year wise in Rs					GST Value in Rs (___ %)	Total CAMC Cost for 5 Years with GST (3) X[(4a+4b+4c+4d+4e) + (5)]
			1st	2nd	3rd	4th	5th		
			a	b	c	d	e		

Total value (in figure) _____ (In words) _____

b) The CAMC commence from the date of expiry of all obligations under Warranty i.e. from_____ (date of expiry of Warranty) and will expire on _____ (date of expiry of CAMC)

c) The cost of Comprehensive Annual Maintenance Contract (CAMC) which includes preventive maintenance, labour and spares, after satisfactory completion of Warranty period as contained in the above referred contract on yearly basis for complete equipment as per contract including Turnkey Work(if any).

d) There will be 95% uptime warranty during CAMC period on 24 (hrs) X 7 (days) X 365 (days) basis, with penalty, to extend CAMC period by double the downtime period and other penalty as per contract.

e) During CAMC period, the supplier shall visit at each consignee's site for preventive maintenance including testing and calibration as per the manufacturer's service/ technical/operational manual. The supplier shall visit each consignee site as recommended in the manufacturer's manual, but at least once in 3 months commencing from the date of the successful completion of warranty period for preventive maintenance of the goods.

f) All software and hardware updates should be provided without any extra cost during CAMC period.

g) The Bank Guarantee valid till _____ [(fill the date) 3 months after expiry of entire CAMC period] for an amount of Rs. _____ [(fill amount) equivalent to 2.5% of the cost of the equipment as per contract] shall be furnished in the prescribed format given in Section XIV of the Bidding Document, along with the signed copy of CAMC within a period of 21 (twenty one) days of start of CAMC failing which the Performance Security (10% of the contract value) submitted shall be en-cashed payable to the Purchaser/Consignee.

h) If there is any lapse in the performance of the CAMC as per contract, the proceeds Annual CAMC Bank Guarantee shall be forfeited and their bad performance will be considered while awarding future contracts.

i) Payment terms: The payment of CAMC will be made against the bills raised by the supplier on six monthly basis after satisfactory completion of said period, duly certified by the concerned User Department. The payment will be made in Indian Rupees.

_____
(Signature, name and designation of the Store Officer/ASO of the Purchaser**)**

_____
(Signature, name and designation of the F&CAO of the Purchaser)
For and on behalf of Director, AIIMS

(Seal of the Purchaser)
Date: _____
Place: _____

Received and accepted this contract

(Signature, name and address of the supplier's executive duly authorised to sign on behalf of the supplier)

For and on behalf of _____
(*Insert Name and address of the supplier*)

(Seal of the Supplier)
Date: _____
Place: _____

Note:- The contract will be prepared on Non-judicial Stamp paper(currently of value of Rs. 100).

SECTION – XVI

CONSIGNEE RECEIPT CERTIFICATE

(To be given by consignee's authorized representative)

The following store(s) has/have been received in good condition:

1) Contract/Purchase Order No. & date: _____

2) Supplier's Name: _____

3) Consignee's Name & Address: _____

4) Name of the item supplied: _____

5) Quantity Supplied: _____

6) Date of Receipt by the Consignee: _____

7) Signature of Authorized Representative of Consignee with date:_____

8) Name and designation of Authorized Representative of Consignee:_____

9) Seal of the Consignee:_____

SECTION – XVII

CONSIGNEE ACCEPTANCE CERTIFICATE

(To be given by consignee's authorized representative)

This is to certify that the goods as detailed below have been received in good conditions along with all the standard and special accessories in accordance with the contract. The same has been installed and accepted.

1) Contract/Purchase Order No. & date:_____

2) Supplier's Name:_____

3) Consignee's Name & Address: _____

4) Name of the item Supplied :_____

5) Quantity Supplied :_____

6) Date of Receipt by the Consignee :_____

7) Date of Installation/Commissioning and Acceptance of Equipment: _____

8) The supplier has fulfilled its contractual obligations satisfactorily

OR

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

i)
ii)
iii)
iv)

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

10) Signature of Authorized Representative of Consignee with date:_____

11) Name and designation of Authorized Representative of Consignee:_____

12) Seal of the Consignee:_____