

GLOBAL TENDER ENQUIRY DOCUMENT

**FOR PURCHASE OF
MEDICAL EQUIPMENT**

FOR

GOVT. MEDICAL COLLEGE, PATIALA

GOVT OF PUNJAB

DEPARTMENT OF MEDICAL EDUCATION AND

RESEARCH

HLL/PCD/PATIALA/02/14-15



BY

HLL Lifecare Limited

(A GOVERNMENT OF INDIA ENTERPRISE)

Procurement & Consultancy Services Division

B-14 A, Sector-62, Noida-201 307

PHONE: 0120-4071500

FAX: 0120-4071513

URL: www.lifecarehll.com

Email: pcd@lifecarehll.com

INDEX

Section	Topic	Page No.
Section I	– Notice inviting Tender (NIT) -----	03
Section II	– General Instructions to Tenderers (GIT) -----	05
Section III	– Special Instructions to Tenderers (SIT) -----	24
Section IV	– General Conditions of Contract (GCC) -----	26
Section V	– Special Conditions of Contract (SCC) -----	42
Section VI	– List of Requirements -----	43
Section VII	– Technical Specifications -----	45
Section VIII	– Quality Control Requirements -----	128
Section IX	– Qualification Criteria -----	129
Section X	– Tender Form -----	131
Section XI	– Price Schedules -----	132
Section XII	– Questionnaire -----	136
Section XIII	– Bank Guarantee Form for EMD -----	137
Section XIV	– Manufacturer’s Authorisation Form -----	138
Section XV	– Bank Guarantee Form for Performance Security /CMC Security -----	139
Section XVI	– Contract Form (A & B) -----	140
Section XVII	– Proforma of Consignee Receipt Certificate -----	144
Section XVIII	– Proforma of Final Acceptance Certificate by the Consignee -----	145
Section XIX	– Instructions from Ministry of Shipping/Surface Transport (Annexure 1) -----	147
Section XX	– Affidavit -----	151
Section XXI	– Consignee-----	154

SECTION I
NOTICE INVITING E-TENDERS (NIT)
(Global Tender)

Tender Enquiry No.: HLL/PCD/PATIALA/02/14-15

Dated 27/05/2014

NOTICE INVITING TENDERS (NIT)

1. Procurement & Consultancy Services Division of HLL Lifecare Limited, for and on behalf of Govt. Medical College, Patiala, Govt. of Punjab, Department of Medical Education and Research invites e-tenders, from eligible and qualified tenderers for supply of following medical equipment for Govt. Medical College, Patiala :

Sl. no.	Item description	Department	Qty.	EMD (Rs.)
1	Projection system in Dissection Hall	Anatomy	1	13,000
2	Digital Research Microscope with CCD camera	Anatomy	1	6,000
3	Computerized Cardiopulmonary Exercise Testing System with Treadmill for humans	Physiology	2	32,000
4	Portable Automatic Computerized Spirometer	Physiology	1	1,380
5	Evoked potential machine (digital)	Physiology	1	8,000
6	High resolution /Quality Microscope with digital camera, image analyzer & computer	Pathology	1	52,000
7	HPLC along with its accessories	Pharmacology	1	50,000
8	Whole body plethysmograph for conscious unrestrained freely moving animals	Pharmacology	1	10,000
9	Real Time PCR	Microbiology	1	20,000
10	Fully Automated Blood Culture System	Microbiology	1	8,000
11	Colour Doppler (2-D)	Surgery	1	58,000
12	Video Colonoscope	Medicine	1	50,000
13	MRI - 1.5 T	Radiology	1	15,00,000
14	Volumetric Infusion Pump	Anesthesia	20	30,000
15	Syringe Infusion Pumps	Anesthesia	30	42,000
16	Ventilator- High End (I.C.U)	Anesthesia	3	86,000
17	Anesthesia Work Station	Anesthesia	7	4,74,000
18	Neonatal Ventilators	Pediatrics	2	80,000
19	Open Intensive Care System for Neonates	Pediatrics	5	1,20,000
20	Blood Cell Separator	Transfusion Medicine	1	70,000
21	Laparoscopic Surgery Set with Hysteroscope & Resectoscope with High Definition Camera & Monitor	Obs. & Gyn.	1	38,000
22	Orthopaedic Operating Table with accessories	Orthopaedics	1	7,000
23	General Orthopedic Instruments	Orthopaedics	1	30,000
24	Drilling & Saw System	Orthopaedics	1	10,000

2. Tender No.: HLL/PCD/PATIALA/02/14-15

Sl. No.	Description	Schedule
i.	Dates for document download of tender enquiry documents	29.05.2014 to 09.07.2014
ii.	Tender Fee	Rs. 3,000/-
iii.	Pre Tender Meeting Date & Time	06.06.2014; 1100hrs IST
iv.	Pre Tender Meeting Venue	HLL Lifecare Ltd , B-14 A Sector-62, Noida 201307
v.	Closing date & time for receipt of Tender in e-Portal	09.07.2014; 1800hrs IST
vi.	Closing date & time for receipt of physical documents as stated in para 7 below	10.07.2014; 1400hrs IST
vii.	Time and date of opening of Techno – Commercial tenders in e-Portal	10.07.2014; 1430hrs IST.

3. Interested tenderers may obtain further information about this requirement from the above office. A tenderer has to pay a non-refundable tender fee of Rs. 3,000/- in the form of account payee Demand Draft/Pay Order/Cashier's Cheque/Banker's Cheque, drawn on a scheduled bank in India, in favour of "**HLL Lifecare Limited**" payable at New Delhi.
4. To participate in the submission against the tender, it is mandatory for the Applicants to get themselves registered with the Tender Wizard and to have user ID & password which has to be obtained by submitting an annual registration charges of **Rs. 2,247/-** (Inclusive of all taxes) to M/s ITI Ltd, New Delhi. After obtaining the user ID and password bidders can participate in this tender by paying item wise tender processing fee, which is payable to E-Tender service provider i.e. M/s ITI Ltd. on E-Tender portal <http://etender.punjabgovt.gov.in>. The Registration Charges and Tender Processing Fee as mentioned in the website against each line item i.e. inclusive of all taxes shall be paid to M/s. ITI Limited through E-Payment gateway of Punjab National Bank using Credit Card/ Debit Card- Master Card and Visa Card only. Validity of online registration is one year. For registration and other queries related to processing of e-tender email: punjabprocure@etenderwizard.com.
5. Tenderer may also download the tender enquiry documents from the web site www.punjabmedicaleducation.org, www.gmc.edu.in, <http://etender.punjabgovt.gov.in>, www.lifecarehll.com and <http://eprocure.gov.in>
6. All prospective tenderers may attend the Pre Tender meeting. The venue, date and time indicated in the Para 2 above.
7. Tenderers shall ensure that they shall submit the original documents specified in the tender like Demand Draft for tender fee in favour of HLL Lifecare Ltd, EMD (or exemption certificate, in case of EMD exemption), Technical Data Sheet and original technical literature/ Brochure (if any) and seal it in an envelope and mark the envelope with Tender number mentioning offered item serial number (s). The said envelope shall clearly bear the name of the Project and name and address of the bidder. In addition, the Tender due date should be indicated on the right hand corner of the envelope. The original documents should be submitted as stated in sl. no. vi of para 2 above in the tender box provided at **HLL Lifecare Ltd, B-14 A, Sector -62, NOIDA-201307**.
8. Since the tender opening is in e-mode, the same can be viewed by the tenderers online.

Head (P&CD)

SECTION - II
GENERAL INSTRUCTIONS TO TENDERERS (GIT)
CONTENTS

Sl. No.	Topic	Page No.
A	PREAMBLE	
1	Definitions and Abbreviations	7
2	Introduction	8
3	Availability of Funds	9
4	Language of Tender	9
5	Eligible Tenderers	9
6	Eligible Goods and Services	9
7	Tendering Expense	9
B	TENDER ENQUIRY DOCUMENTS	
8	Contents of Tender Enquiry Documents	9
9	Amendments to Tender Enquiry Documents	10
10	Clarification of Tender Enquiry Documents	10
C	PREPARATION OF TENDERS	
11	Documents Comprising the Tender	10
12	Tender Currencies	11
13	Tender Prices	11
14	Indian Agent	14
15	Firm Price / Variable Price	14
16	Alternative Tenders	14
17	Documents Establishing Tenderer's Eligibility and Qualifications	14
18	Documents Establishing Good's Conformity to Tender Enquiry Document	15
19	Earnest Money Deposit (EMD)	15
20	Tender Validity	16
21	Signing and Sealing of Tender	16
D	SUBMISSION OF TENDERS	
22	Submission of Tenders	17
23	Late Tender	17
24	Alteration and Withdrawal of Tender	17
E	TENDER OPENING	
25	Opening of Tenders	17

F	SCRUTINY AND EVALUATION OF TENDERS	
26	Basic Principle	18
27	Preliminary Scrutiny of Tenders	18
28	Minor Infirmary/Irregularity/Non-Conformity	19
29	Discrepancy in Prices	19
30	Discrepancy between original and copies of Tender	19
31	Qualification Criteria	19
32	Conversion of Tender Currencies to Indian Rupees	19
33	Schedule-wise Evaluation	20
34	Comparison of Tenders	20
35	Additional Factors and Parameters for Evaluation and Ranking of Responsive Tenders	20
36	Tenderer's capability to perform the contract	21
37	Contacting the Purchaser	21
G	AWARD OF CONTRACT	
38	Purchaser's Right to Accept any Tender and to Reject any or All Tenders	21
39	Award Criteria	21
40	Variation of Quantities at the Time of Award	21
41	Notification of Award	22
42	Issue of Contract	22
43	Non-receipt of Performance Security and Contract by the Purchaser/Consignee	22
44	Return of EMD	22
45	Publication of Tender Result	22
46	Corrupt or Fraudulent Practices	22

SECTION – II
GENERAL INSTRUCTIONS TO TENDERERS (GIT)

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

1.3 Abbreviations:

- (i) “TE Document” means Tender Enquiry Document
- (ii) “NIT” means Notice Inviting Tenders.
- (iii) “GIT” means General Instructions to Tenderers
- (iv) “SIT” means Special Instructions to Tenderers

- (v) "GCC" means General Conditions of Contract
- (vi) "SCC" means Special Conditions of Contract
- (vii) "DGS&D" means Directorate General of Supplies and Disposals
- (viii) "NSIC" means National Small Industries Corporation
- (ix) "PSU" means Public Sector Undertaking
- (x) "CPSU" means Central Public Sector Undertaking
- (xi) "LSI" means Large Scale Industry
- (xii) "SSI" means Small Scale Industry
- (xiii) "LC" means Letter of Credit
- (xiv) "DP" means Delivery Period
- (xv) "BG" means Bank Guarantee
- (xvi) "ED" means Excise Duty
- (xvii) "CD" means Custom Duty
- (xviii) "VAT" means Value Added Tax
- (xix) "CENVAT" means Central Value Added Tax
- (xx) "CST" means Central Sales Tax
- (xxi) "RR" means Railway Receipt
- (xxii) "BL" means Bill of Lading
- (xxiii) "FOB" means Free on Board
- (xxiv) "FCA" means Free Carrier
- (xxv) "FOR" means Free On Rail
- (xxvi) "CIF" means Cost, Insurance and Freight
- (xxvii) "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.
- (xxviii) "DDP" means Delivery Duty Paid named place of destination (consignee site)
- (xxix) "INCOTERMS" means International Commercial Terms as on the date of Tender Opening
- (xxx) "MOH&FW" means Ministry of Health & Family Welfare, Government of India
- (xxxi) "DHMR" means Department of Health and Medical Research
- (xxxii) "CMC" means Comprehensive maintenance Contract (labour, spare and preventive maintenance)
- (xxxiii) "RT" means Re-Tender.

2. Introduction

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

documents. Failure to provide and/or comply with the required information, instructions etc. incorporated in these TE documents may result in rejection of its tender.

3. Availability of Funds

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

4. Language of Tender

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

5. Eligible Tenderers

- 5.1 This invitation for tenders is open to all suppliers 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. Tendering Expense

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

B. TENDER ENQUIRY DOCUMENTS

8. Content of Tender Enquiry Documents

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

- Section II – General Instructions to Tenderers (GIT)
- Section III – Special Instructions to Tenderers (SIT)
- Section IV – General Conditions of Contract (GCC)
- Section V – Special Conditions of Contract (SCC)
- Section VI – List of Requirements
- Section VII – Technical Specifications
- Section VIII – Quality Control Requirements
- Section IX – Qualification Criteria
- Section X – Tender Form
- Section XI – Price Schedules
- Section XII – Questionnaire

- Section XIII – Bank Guarantee Form for EMD
- Section XIV – Manufacturer’s Authorisation Form
- Section XV – Bank Guarantee Form for Performance Security/CMC Security
- Section XVI – Contract Forms A & B
- Section XVII– Proforma of Consignee Receipt Certificate
- Section XVIII – Proforma of Final Acceptance Certificate by the consignee
- Section XIX –Instructions from Ministry of Shipping/ Surface Transport (Annexure 1 & 2)
- Section XX – Affidavit
- Section XXI – Consignee List

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

9. Amendments to TE documents

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

10. Clarification of TE documents

- 10.1 A tenderer requiring any clarification or elucidation on any issue of the TE documents may take up the same with the purchaser in writing. The purchaser will respond in writing to such request provided the same is received by the purchaser not later than fifteen days (unless otherwise specified in the SIT) prior to the prescribed date of submission of tender.

C. PREPARATION OF TENDERS

11. Documents comprising the tender. Tender has to be submitted online through e-mode. Hard copies submitted subsequently which have not been uploaded through e-mode will not be entertained.

- 11.1 The **Two Tender System**, i.e. “Techno – Commercial Tender” and “Price Tender” prepared by the tenderer shall comprise the following:

A) Techno – Commercial Tender (Un priced Tender)

- i) Earnest money furnished in accordance with GIT clause 19.1 alternatively, documentary evidence as per GIT clause 19.2 for claiming exemption from payment of earnest money.
- ii) Tender Form as per Section X (without indicating any prices).
- iii) Documentary evidence, as necessary in terms of clauses 5 and 17 establishing that the tenderer is eligible to submit the tender and, also, qualified to perform the contract if its tender is accepted.
- iv) Tenderer/Agent who quotes for goods manufactured by other manufacturer shall furnish Manufacturer’s Authorisation Form.

- v) Documents and relevant details to establish in accordance with GIT clause 18 that the goods and the allied services to be supplied by the tenderer conform to the requirement of the TE documents.
- vi) Performance Statement as per section IX along with relevant copies of orders and end users' satisfaction certificate.
- vii) Certificate of Incorporation.

B) Price Tender:

Price Schedule(s) as per Section XI filled up with all the details including Make, Model etc. of the goods offered in **online mode only (price bid must not be submitted in physical form)**.

N.B.

It is the responsibility of tenderer to go through the TE document to ensure furnishing all required documents in addition to above, if any.

- 11.2 The authorized signatory of the tenderer must sign the tender duly stamped at appropriate places and initial all the remaining pages of the tender before uploading.
- 11.3 A tender 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.
- 11.4 Tender sent by fax/telex/cable other than e-mode shall be ignored.

12. Tender currencies

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

13 Tender Prices

- 13.1 The Tenderer shall indicate on the Price Schedule provided under Section XI (**as per the format uploaded in the price tender**) all the specified components of prices shown therein including the unit prices and total tender prices of the goods and services it proposes to supply against the requirement. All the columns shown in the price schedule should be filled up as required. If any column does not apply to a tenderer, same should be clarified as "NA" (put a -) by the tenderer.
- 13.2 If there is more than one schedule in the List of Requirements, the tenderer has the option to submit its quotation for any one or more schedules and, also, to offer special discount for combined schedules. However, while quoting for a schedule, the tenderer shall quote for the complete requirement of goods and services as specified in that particular schedule.
- 13.3 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 XI.
- 13.4 While filling up the columns of the Price Schedule, the following aspects should be noted for compliance:

- 13.4.1 For domestic goods or goods of foreign origin located within India, the prices in the corresponding price schedule shall be entered separately in the following manner:
- a) the price of the goods, quoted ex-factory/ ex-showroom/ ex-warehouse/ off-the-shelf, as applicable, including all taxes and duties like sales tax, CST VAT, CENVAT, Custom Duty, Excise Duty etc. 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 sales or other taxes and any duties including excise duty, which will be payable on the goods in India if the contract is awarded;
 - c) charges towards Packing & Forwarding, Inland Transportation, Insurance (local transportation and storage) would be borne by the Supplier from ware house to the consignee site for a period including 3 months beyond date of delivery, Loading/Unloading and other local costs incidental to delivery of the goods to their final destination as specified in the List of Requirements and Price Schedule;
 - d) the price of Incidental Services, as mentioned in List of Requirements and Price Schedule;
 - e) the prices of Turnkey (if any), as mentioned in List of Requirements, Technical Specification and Price Schedule; and
 - f) the price of annual CMC, 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 FOB/FCA port of shipment, as indicated in the List of Requirements and Price Schedule;
 - b) Deleted**
 - c) the price of goods quoted CIP (name port of destination) in India as indicated in the List of Requirements, Price Schedule and Consignee List;
 - d) Deleted**
 - e) The charges for 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. Other local costs and Incidental costs, as specified in the List of Requirements and Price Schedule;
 - f) The charges for Incidental Services, as in the List of Requirements and Price Schedule;
 - g) The prices of Turnkey (if any), as mentioned in List of Requirements, Technical Specification and Price Schedule; and
 - h) The price of annual CMC, as mentioned in List of Requirements, Technical Specification and Price Schedule.
- 13.5 Additional information and instruction on Duties and Taxes:
- 13.5.1 If the Tenderer desires to ask for excise duty, sales tax/ VAT, Service Tax, Works Contract Tax etc. to be paid extra, the same must be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such duties and taxes and no claim for the same will be entertained later.
- 13.5.2 Excise Duty:
- a) If reimbursement of excise duty is intended as extra over the quoted prices, the supplier must specifically say so also indicating the rate, quantum and nature of the duty applicable. In the absence of any such stipulation it will be presumed that the prices quoted are firm and final and no claim on account of excise duty will be entertained after the opening of tenders.
 - b) If a Tenderer chooses to quote a price inclusive of excise duty and also desires to be reimbursed for variation, if any, in the excise duty during the time of supply, the tenderer

must clearly mention the same and also indicate the rate and quantum of excise duty included in its price. Failure to indicate all such details in clear terms may result in rejection of that tender.

- c) Subject to sub clauses 13.5.2 (a) & (b) above, any change in excise duty upward/downward as a result of any statutory variation in excise duty taking place within contract terms shall be allowed to the extent of actual quantum of excise duty paid by the supplier. In case of downward revision in excise duty, the actual quantum of reduction of excise duty shall be reimbursed to the purchaser by the supplier. All such adjustments shall include all reliefs, exemptions, rebates, concession etc. if any obtained by the supplier.

13.5.3 Sales Tax:

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

13.5.4 Octroi Duty and Local Duties & Taxes:

Normally, goods to be supplied to government departments against government contracts are exempted from levy of town duty, Octroi duty, terminal tax and other levies of local bodies. However, on some occasions, the local bodies (like town body, municipal body etc.) as per their regulations allow such exemptions only on production of certificate to this effect from the concerned government department. Keeping this in view, the supplier shall ensure that the stores to be supplied by the supplier against the contract placed by the purchaser are exempted from levy of any such duty or tax and, wherever necessary, obtain the exemption certificate from the purchaser. The purchaser should issue the certificate to the supplier within 21 days from the date of receipt of request from the supplier.

However, if a local body still insists upon payment of such local duties and taxes, the same should be paid by the supplier to the local body to avoid delay in supplies and possible demurrage charges and obtain a receipt for the same. The supplier should forward the receipt obtained for such payment to the purchaser to enable the purchaser reimburse the supplier and take other necessary action in the matter.

13.5.5 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 TE document, the terms FCA, FOB, FAS, CIF, CIP, DDP etc. for imported goods offered from abroad, shall be governed by the rules & regulations prescribed in the current edition of INCOTERMS, published by the International Chamber of Commerce, Paris
- 13.9 The need for indication of all such price components by the tenderers, as required in this clause (viz., GIT clause 13) is for the purpose of comparison of the tenders by the purchaser

and will no way restrict the purchaser's right to award the contract on the selected tenderer on any of the terms offered.

14. Indian Agent

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

- a) A copy of agreement between the Agent & their principal detailing the terms & conditions as well as services and after sales services as above to be rendered by the agent and the precise relationship between them and their mutual interest in the business as laid out in section VII (Technical specifications).
- b) Principal/ manufacturer's original proforma invoice with the price bid

15. Firm Price

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

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

16. Alternative Tenders

16.1 Alternative Tenders are not permitted.

16.2 However the Tenderers can quote alternate models meeting the tender specifications of same manufacturer with single EMD.

16.3 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 tender for the same item/product. In a tender, either the Indian Agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.

17 Documents Establishing Tenderer's Eligibility and Qualifications

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

17.2 The documentary evidence needed to establish the tenderer's qualifications shall fulfil the following requirements:

- a) In case the tenderer offers to supply goods, which are manufactured by some other firm, the tenderer has been duly authorised by the goods manufacturer to quote for and supply the goods to the purchaser. The tenderer shall submit the manufacturer's authorization letter to this effect as per the standard form provided under Section XIV in this document.
- b) The tenderer has the required financial, technical and production capability necessary to perform the contract and, further, it meets the qualification criteria incorporated in the Section IX in these documents.
- c) in case the tenderer 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 TE document.

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

19. Earnest Money Deposit (EMD)

- 19.1 Pursuant to GIT clauses 8.1 and 11.1 A (i) the tenderer shall furnish along with its tender, earnest money for amount as shown in the List of Requirements. The earnest money is required to protect the purchaser against the risk of the tenderer's unwarranted conduct as amplified under sub-clause 19.7 below.
- 19.2 The tenderers who are currently registered and, also, will continue to remain registered during the tender validity period with Directorate General of Supplies & Disposals or with National Small Industries Corporation, New Delhi for the specific goods as per tender enquiry specification shall be eligible for exemption from EMD. In case the tenderer falls in these categories, it should furnish copy of its valid registration details (with DGS&D or NSIC, as the case may be).
- 19.3 The earnest money shall be denominated in Indian Rupees or equivalent currencies as per GIT clause 12.2. The earnest money shall be furnished in one of the following forms:
- i) Account Payee Demand Draft
 - ii) Banker's cheque and
 - iii) Bank Guarantee
- 19.4 The demand draft or banker's cheque shall be drawn on any commercial bank in India or country of the tenderer, in favour of the "HLL Lifecare Limited" 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 tenderer as per the format specified under Section XIII in these documents.
- 19.5 The earnest money shall be valid for a period of forty-five (45) days beyond the validity period of the tender. As validity period of Tender as per Clause 20 of GIT is 120 days, the EMD shall be valid for 165 days from Techno – Commercial Tender opening date.
- 19.6 Unsuccessful tenderers' earnest money will be returned to them without any interest, after expiry of the tender validity period, but not later than thirty days after conclusion of the resultant contract. Successful tenderer's earnest money will be returned without any interest, after receipt of performance security from that tenderer.
- 19.7 Earnest Money is required to protect the purchaser against the risk of the Tenderer's conduct, which would warrant the forfeiture of the EMD. Earnest money of a tenderer will be forfeited, if the tenderer withdraws or amends its tender or impairs or derogates from the tender in any respect within the period of validity of its tender or if it comes to notice that the information/documents furnished in its tender is incorrect, false, misleading or forged

without prejudice to other rights of the purchaser. The successful tenderer's earnest money will be forfeited without prejudice to other rights of Purchaser if it fails to furnish the required performance security within the specified period.

- 19.8 In the case of Bank Guarantee furnished from banks outside India (i.e. foreign Banks), it should be authenticated and countersigned by any nationalised bank in India by way of back-to-back counter guarantee and the same should be submitted along with the bid.

20. Tender Validity

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

21. Signing and Sealing of Tender

- 21.1 The tenderers shall submit their tenders as per the instructions contained in GIT Clause 11.
- 21.2 Deleted.
- 21.3 Deleted.
- 21.4 All the copies of the tender shall be duly signed at the appropriate places as indicated in the TE documents and all other pages of the tender including printed literature, if any shall be initialled by the same person(s) signing the tender. The tender shall not contain any erasure or overwriting, except as necessary to correct any error made by the tenderer and, if there is any such correction; the same shall be initialled by the person(s) signing the tender.
- 21.5 The documents shall be prepared and scanned in different files (in PDF or JPEG format) and uploaded for on-line submission of Proposal. The following documents shall also be submitted in '**ORIGINAL**' to HLL Lifecare Ltd as detailed in the NIT para 2.
- a) Demand Draft towards Tender Fee in favour of HLL Lifecare Ltd
 - b) EMD in the prescribed format in favour of HLL Lifecare Ltd
 - c) **Technical Data Sheet and original technical literature/ Brochure**

Note: -Price bid to be submitted on-line only as per prescribed format. Changing the format may result in rejection of the bid. **Price bid must not be submitted in physical form**

- 21.6 TE document seeks quotation following **two Tender System**, in two parts. First part will be known as '**Techno - Commercial Tender**', and the second part '**Price Tender**' as specified in clause 11 of GIT.

D. SUBMISSION OF TENDERS

22. Submission of Tenders

- 22.1 Detailed tender document may be downloaded from Tender Wizard and the tender may be submitted online following the instructions appearing on the screen. A Vendor manual containing the detailed guidelines for e-tendering system is also available on Tender Wizard. The hard copies requested in the tender are to deposit in the tender box kept for this purpose at **HLL Lifecare Limited, Procurement and Consultancy Division, B-14 A, Sector-62, Noida-201 307, Uttar Pradesh before the due date and time of submission of tender.**
- 22.2 The tenderers must ensure that they deposit their tenders not later than the closing time and date specified for submission of tenders. It is the responsibility of the tenderer to ensure that their Tenders whether sent by post or by courier or by person, are dropped in the Tender Box by the specified clearing date and time.
- 22.3 No hard copies except otherwise as mentioned in the tender enquiry document need to be submitted.

23. Late Tender

- 23.1 The Original document which has been asked in the tender, which is received after the specified date and time for receipt of tenders will be treated as “late” tender and will be ignored.

24. Alteration and Withdrawal of Tender

- 24.1 The Bidder may modify, substitute or withdraw its e- tender after submission, prior to the tender Due Date. No tender shall be modified, substituted or withdrawn by the Bidder on or after the tender Due Date.
- (i) Any alteration/ modification in the tender or additional information supplied subsequent to the Bid Due Date, unless the same has been expressly sought for by the Authority, shall be disregarded.
- (ii) For modification of e-bid, bidder has to detach its old bid proposal from e-tendering portal and upload / resubmit digitally signed modified bid.
- (iii) For withdrawal of bid, applicant has to click on withdrawal icon at e-tendering portal and can withdraw its e-bid.

E. TENDER OPENING

25. Opening of Tenders

- 25.1 The purchaser will open the tenders at the specified date and time as indicated in the NIT. Opening of tender will be done through online process.
- 25.2 For participating in the tender, the authorized signatory holding Power of Attorney shall be the Digital Signatory. In case the authorized signatory holding Power of Attorney and Digital Signatory are not the same, the proposal shall be considered non-responsive.
- (i) The Authority shall open documents of the Application received in electronic form as mentioned in the NIT on the bid due date, in the presence of the Applicants who choose to attend. The Authority will subsequently examine and evaluate the bids in accordance with the provisions set out in the tender enquiry document.

- (ii) The Financial Proposal of the pre-qualified and short listed applicants will only be opened. The date of opening of Financial Proposal will be notified later on.

25.3 Two - Tender system as mentioned in Para 21.6 above will be as follows. The **Techno - Commercial Tenders** are to be opened in the first instance, at the prescribed time and date as indicated in NIT. These Tenders shall be scrutinized and evaluated by the competent committee/ authority with reference to parameters prescribed in the TE document. During the Techno - Commercial Tender opening, the tender opening official(s) will read the salient features of the tenders like brief description of the goods offered, delivery period, Earnest Money Deposit and any other special features of the tenders, as deemed fit by the tender opening official(s). Thereafter, in the second stage, the Price Tenders of only the Techno - Commercially acceptable offers (as decided in the first stage) shall be opened for further scrutiny and evaluation on a date notified after the evaluation of the Techno – Commercial tender. The prices, special discount if any of the goods offered etc., as deemed fit by tender opening official(s) will be read out.

F. SCRUTINY AND EVALUATION OF TENDERS

26. Basic Principle

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

27. Preliminary Scrutiny of Tenders

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

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

27.3 ~~Deleted~~

27.4 The tenders will be scrutinized to determine whether they are complete and meet the essential and important requirements, conditions etc. as prescribed in the TE document. The tenders, which do not meet the basic requirements, are liable to be treated as non – responsive and will be rejected.

27.5 The following are some of the important aspects, for which a tender shall be declared non – responsive during the evaluation and will be ignored;

- (i) ~~Deleted~~
- (ii) Tender is unsigned.
- (iii) Tender validity is shorter than the required period.
- (iv) Required EMD (Amount, validity etc.)/ exemption documents have not been provided.
- (v) Tenderer has quoted for goods manufactured by other manufacturer(s) without the required Manufacturer's Authorisation Form as per Section XIV.
- (vi) Tenderer has not agreed to give the required performance security of required amount in an acceptable form in terms of GCC clause 5, read with modification, if any, in Section - V – "Special Conditions of Contract", for due performance of the contract.
- (vii) ~~Deleted~~
- (viii) Tenderer has not agreed to other essential condition(s) specially incorporated in the tender enquiry like terms of payment, liquidated damages clause, warranty clause, dispute resolution mechanism applicable law.
- (ix) Poor/ unsatisfactory past performance.

- (x) Tenderers who stand deregistered/banned/blacklisted by any Govt. Authorities.
- (xi) Tenderer is not eligible as per GIT Clauses 5.1 & 17.1.
- (xii) Tenderer has not quoted for the entire quantity as specified in the List of Requirements in the quoted schedule.
- (xiii) Tenderer has not agreed for the delivery terms and delivery schedule.

28. Minor Infirmary/Irregularity/Non-Conformity

- 28.1 If during the evaluation, the purchaser finds any minor infirmity and/or irregularity and/or non-conformity in a tender, wherever necessary, the purchaser will convey its observation on such 'minor' issues to the tenderer by registered/speed post/courier/e-mail/fax etc. asking the tenderer to respond by a specified date. If the tenderer does not reply by the specified date or gives evasive reply without clarifying the point at issue in clear terms, that tender will be liable to be ignored.

29 Discrepancies in Prices

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

30. Discrepancy between original and uploaded scan copies of Tender

- 30.1 In the event of any discrepancy between the original and the copy (in electronic form), the original shall prevail.
It may be noted that scan copies can be prepared in different file format (PDF, JPEG).
It may also be noted that Applicants can upload a single file of size of 5 MB only but you can upload multiple files

31. Qualification Criteria

- 31.1 Tenders of the tenderers, who do not meet the required Qualification Criteria prescribed in Section IX, will be treated as non - responsive and will not be considered further.

32. Conversion of tender currencies to Indian Rupees

- 32.1 In case the TE document permits the tenderers to quote their prices in different currencies, all such quoted prices of the responsive tenderers 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 Tender' opening.

33. Schedule-wise Evaluation

- 33.1 In case the List of Requirements contains more than one schedule, the responsive tenders will be evaluated and compared separately for each schedule. The tender for a schedule will not be considered if the complete requirements prescribed in that schedule are not included in the tender. However, as already mentioned in GIT sub clause 13.2, the tenderers 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 tenderer for each schedule, subject to tenderer(s) being responsive.

34. Comparison of Tenders

Unless mentioned otherwise in Section – III – Special Instructions to Tenderers and Section – VI – List of Requirements, the comparison of the responsive tenders shall be carried out on Delivery Duty Paid (DDP) consignee site basis. The quoted turnkey prices and CMC prices will also be added for comparison/ranking purpose for evaluation. **“Net Present value (NPV) of the Comprehensive Annual Maintenance charges (CMC) quoted for 5 years after the warranty period shall be added to the bid price for evaluation and will not be considered for ranking purpose.**

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

- 35.1 Further to GIT Clause 34 above, the purchaser’s evaluation of a tender will include and take into account the following:
- i) In the case of goods manufactured in India or goods of foreign origin already located in India, sales tax & other similar taxes and excise duty & other similar duties, Service Tax, Works Contract Tax etc which will be contractually payable (to the tenderer), on the goods if a contract is awarded on the tenderer; and
 - ii) in the case of goods of foreign origin offered from abroad, customs duty and other similar import duties/taxes, which will be contractually payable (to the tenderer) on the goods if the contract is awarded on the tenderer.
- 35.2 The purchaser’s evaluation of tender will also take into account the additional factors, if any, incorporated in SIT in the manner and to the extent indicated therein.
- 35.3 The Purchaser reserves the right to give the price preference to small-scale sectors etc. and purchase preference to central public sector undertakings as per the instruction in vogue while evaluating, comparing and ranking the responsive tenders.
- i. In exercise of powers conferred in Section 11 of the Micro, Small and Medium Enterprises Development (MSMED) Act 2006, the Government has notified a new Public Procurement Policy for Micro & Small Enterprises effective from 1st April 2012. The policy mandates that 20% of procurement of annual requirement of goods and services by all Central Ministries / Public Sector Undertakings will be from the micro and small enterprises. The Government has also earmarked a sub-target of 4% procurement of goods & services from MSEs owned by SC/ST entrepreneurs out of above said 20% quantity.
 - ii. In accordance with the above said notification, the participating Micro and Small Enterprises (MSEs) in a tender, quoting price within the band of L 1+15% would also be allowed to supply a portion of the requirement by bringing down their price to the L 1 price, in a situation where L 1 price is from someone other than an MSE. Such MSEs would be allowed to supply up to 20% of the total tendered value. In case there are more than one such eligible MSE, the 20% supply will be shared equally. Out of 20% of the quantity earmarked for supply from MSEs, 4% quantity is earmarked for

procurement from MSEs owned by SC/ST entrepreneurs. However, in the event of failure of such MSEs to participate in the tender process or meet the tender requirements and the L 1 price, the 4% quantity earmarked for MSEs owned by SC/ST entrepreneurs will be met from other participating MSEs.

- iii. The MSEs fulfilling the prescribed eligibility criteria and participating in the tender shall enclose with their tender a copy of their valid registration certificate with District Industries Centres or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or any other body specified by Ministry of Micro and Small enterprises in support of their being an MSE, failing which their tender will be liable to be ignored.

36. Tenderer's capability to perform the contract

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

37. Contacting the Purchaser

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

G. AWARD OF CONTRACT

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

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

39. Award Criteria

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

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

- 40.1 At the time of awarding the contract, the purchaser reserves the right to increase or decrease by up to twenty five (25) per cent, the quantity of goods and services mentioned in the schedule (s) in the "List of Requirements" (rounded off to next whole number) without any change in the unit price and other terms & conditions quoted by the tenderer.

40.2 If the quantity has not been increased 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.

41. Notification of Award

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

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

42. Issue of Contract

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

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

42.3 The Purchaser/Consignee reserve the right to issue the Notification of Award consignee wise.

43. Non-receipt of Performance Security and Contract by the Purchaser/Consignee

43.1 Failure of the successful tenderer in providing performance security and / or returning contract copy duly signed in terms of GIT clauses 41 and 42 above shall make the tenderer liable for forfeiture of its EMD and, also, for further actions by the Purchaser/Consignee against it as per the clause 24 of GCC – Termination of default.

44. Return of E M D

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

45. Publication of Tender Result

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

46. Corrupt or Fraudulent Practices

46.1 It is required by all concerned namely the Consignee/Tenderers/Suppliers etc to observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Purchaser: -

(a) defines, for the purposes of this provision, the terms set forth below as follows:

- (i) “corrupt practice” means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution; and

- (ii) “fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Purchaser, and includes collusive practice among Tenderers (prior to or after Tender submission) designed to establish Tender prices at artificial non-competitive levels and to deprive the Purchaser of the benefits of free and open competition;
- (b) will reject a proposal for award if it determines that the Tenderer recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;
- (c) will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract by the purchaser if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing the contract.

SECTION - III
SPECIAL INSTRUCTIONS TO TENDERERS
(SIT)

Sl. No.	GIT Clause No.	Topic	SIT Provision	Page No.
A	1 to 7	Preamble	No Change	25
B	8 to 10	TE documents	No Change	25
C	11 to 21	Preparation of Tenders	No Change	25
D	22 to 24	Submission of Tenders	No Change	25
E	25	Tender Opening	No Change	25
F	26 to 37	Scrutiny and Evaluation of Tenders	No Change	25
G	38 to 45	Award of Contract	Change	25

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

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

A Preamble

No Change

B TE documents

No Change

C Preparation of Tenders

No Change

D Submission of Tenders

All documents must be submitted on-line. Only the following documents to be submitted physically also.

- a) Demand Draft towards Tender Fee in favour of HLL Lifecare Ltd
- b) EMD in the prescribed format in favour of HLL Lifecare Ltd
- c) **Technical Data Sheet and original technical literature/ Brochure**

Note: - Price bid to be submitted on-line only as per prescribed format. Changing the format may result in rejection of the bid. **Price bid must not be submitted in physical form**

E Tender Opening

No Change

F Scrutiny and Evaluation of Tenders

No Change

G Award of Contract

No Change

SECTION - IV
GENERAL CONDITIONS OF CONTRACT (GCC)
TABLE OF CLAUSES

Sl No.	Topic	Page
1	Application	27
2	Use of contract documents and information	27
3	Patent Rights	27
4	Country of Origin	27
5	Performance Security	27
6	Technical Specifications and Standards	28
7	Packing and Marking	28
8	Inspection, Testing and Quality Control	29
9	Terms of Delivery	30
10	Transportation of Goods	30
11	Insurance	30
12	Spare parts	31
13	Incidental services	31
14	Distribution of Dispatch Documents for Clearance/Receipt of Goods	31
15	Warranty	32
16	Assignment	33
17	Sub Contracts	33
18	Modification of contract	34
19	Prices	34
20	Taxes and Duties	34
21	Terms and mode of Payment	34
22	Delivery	37
23	Liquidated Damages	38
24	Termination for default	38
25	Termination for insolvency	38
26	Force Majeure	39
27	Termination for convenience	39
28	Governing language	39
29	Notices	40
30	Resolution of disputes	40
31	Applicable Law	40
32	Withholding and Lien in respect of sums claimed	40
33	General/Miscellaneous Clauses	40

GENERAL CONDITIONS OF CONTRACT (GCC)

1. Application

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

2. Use of contract documents and information

2.1 The supplier shall not, without the purchaser's prior written consent, disclose the contract or any provision thereof including any specification, drawing, sample or any information furnished by or on behalf of the purchaser in connection therewith, to any person other than the person(s) employed by the supplier in the performance of the contract emanating from this TE document. Further, any such disclosure to any such employed person shall be made in confidence and only so far as necessary for the purposes of such performance for this contract.

2.2 Further, the supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC sub-clause 2.1 above except for the sole purpose of performing this contract.

2.3 Except the contract issued to the supplier, each and every other document mentioned in GCC 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 fifteen (15) days from date of the issue of notification of award by the Purchaser/Consignee, the supplier, shall furnish performance security to the Purchaser/Consignee for an amount equal to ten percent (10%) of the total value of the contract, valid up to sixty (60) days after the date of completion of all contractual obligations by the supplier, including the warranty obligations, initially valid for a period of minimum 66 months from the date of Notification of Award.

5.2 The Performance security shall be denominated in Indian Rupees or in the currency of the contract as detailed below:

It shall be in any one of the forms namely Account Payee Demand Draft or Fixed Deposit Receipt drawn from any Scheduled bank in India or Bank Guarantee issued by a

Scheduled bank in India, in the prescribed form as provided in section XV of this document in favour of the Purchaser/Consignee. The validity of the Fixed Deposit receipt or Bank Guarantee will be for a period up to sixty (60) days beyond Warranty Period.

- 5.3 In the event of any failure /default of the supplier with or without any quantifiable loss to the government including furnishing of consignee wise Bank Guarantee for CMC security as per Proforma in Section XV, the amount of the performance security is liable to be forfeited. The Administration Department may do the needful to cover any failure/default of the supplier with or without any quantifiable loss to the Government.
- 5.4 In the event of any amendment issued to the contract, the supplier shall, within fifteen (15) days of issue of the amendment, furnish the corresponding amendment to the Performance Security (as necessary), rendering the same valid in all respects in terms of the contract, as amended.
- 5.5 The supplier shall enter into Annual Comprehensive Maintenance Contract as per the 'Contract Form – B' in Section XVI with respective consignees, 3 (three) months prior to the completion of Warranty Period. The CMC will commence from the date of expiry of the Warranty Period.
- 5.6 Subject to GCC sub – clause 5.3 above, the Purchaser/Consignee will release the Performance Security without any interest to the supplier on completion of the supplier's all contractual obligations including the warranty obligations & after receipt of Consignee wise bank guarantee for CMC security in favour of HLL Lifecare Ltd./Head of the Hospital/ Institute/ Medical College of the consignee as per the format in Section XV.

6. Technical Specifications and Standards

- 6.1 The Goods & Services to be provided by the supplier under this contract shall conform to the technical specifications and quality control parameters mentioned in 'Technical Specification' and 'Quality Control Requirements' under Sections VII and VIII 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 transshipment (if any), rough handling, open storage etc. without any damage, deterioration etc. As and if necessary, the size, weights and volumes of the packing cases shall also take into consideration, the remoteness of the final destination of the goods and availability or otherwise of transport and handling facilities at all points during transit up to final destination as per the contract.
- 7.2 The quality of packing, the manner of marking within & outside the packages and provision of accompanying documentation shall strictly comply with the requirements as provided in Technical Specifications and Quality Control Requirements under Sections VII and VIII and in SCC under Section V. In case the packing requirements are amended due to issue of any amendment to the contract, the same shall also be taken care of by the supplier accordingly.
- 7.3 Packing instructions:

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

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

8. Inspection, Testing and Quality Control

- 8.1 The purchaser and/or its nominated representative(s) will, without any extra cost to the purchaser, inspect and/or test the ordered goods and the related services to confirm their conformity to the contract specifications and other quality control details incorporated in the contract. The purchaser shall inform the supplier in advance, in writing, the purchaser's programme for such inspection and, also the identity of the officials to be deputed for this purpose. "The cost towards the transportation, boarding and lodging will be borne by the purchaser and/or its nominated representative(s) for the first visit. In case the goods are rejected in the first instance and the supplier requests for re-inspection, and if same is accepted by purchaser/consignee/PSA/PA, all subsequent inspections shall be at the cost of the supplier. The expense will be to and fro Economy Airfare, Local Conveyance, Boarding and Lodging of the inspection team for the inspection period."
- 8.2 The Technical Specification and Quality Control Requirements incorporated in the contract shall specify what inspections and tests are to be carried out and, also, where and how they are to be conducted. If such inspections and tests are conducted in the premises of the supplier or its subcontractor(s), all reasonable facilities and assistance, including access to relevant drawings, design details and production data, shall be furnished by the supplier to the purchaser's inspector at no charge to the purchaser.
- 8.3 If during such inspections and tests the contracted goods fail to conform to the required specifications and standards, the purchaser's inspector may reject them and the supplier shall either replace the rejected goods or make all alterations necessary to meet the specifications and standards, as required, free of cost to the purchaser and resubmit the same to the purchaser's inspector for conducting the inspections and tests again.
- 8.4 In case the contract stipulates pre-despatch inspection of the ordered goods at supplier's premises, the supplier shall put up the goods for such inspection to the purchaser's inspector well ahead of the contractual delivery period, so that the purchaser's inspector is able to complete the inspection within the contractual delivery period.
- 8.5 If the supplier tenders the goods to the purchaser's inspector for inspection at the last moment without providing reasonable time to the inspector for completing the inspection within the contractual delivery period, the inspector may carry out the inspection and complete the formality beyond the contractual delivery period at the risk and expense of the supplier. The fact that the goods have been inspected after the contractual delivery period will not have the effect of keeping the contract alive and this will be without any prejudice to the legal rights and remedies available to the purchaser under the terms & conditions of the contract.
- 8.6 The purchaser's/consignee's contractual right to inspect, test and, if necessary, reject the goods after the goods' arrival at the final destination shall have no bearing of the fact that the goods have previously been inspected and cleared by purchaser's inspector during pre-despatch inspection mentioned above.
- "On rejection, the supplier shall remove such stores within 14 days of the date of intimation of such rejection from the consignee's premises. If such goods are not removed by the supplier within the period mentioned above, the purchaser/consignee may remove the rejected stores and either return the same to the supplier at his risk and cost by such mode of transport as purchaser/consignee may decide or dispose of such goods at the suppliers risk to recover any expense incurred in connection with such disposals and also the cost of the rejected stores if already paid for."
- 8.7 Goods accepted by the purchaser/consignee and/or its inspector at initial inspection and in final inspection in terms of the contract shall in no way dilute purchaser's/consignee's right to reject the

same later, if found deficient in terms of the warranty clause of the contract, as incorporated under GCC Clause 15.

- 8.8 Principal/ Foreign supplier shall also have the equipment inspected by recognised/ reputed agency like SGS, Lloyd, Bureau Veritas, TUV or equivalent (acceptable to the purchaser) prior to despatch 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 and/or transshipment 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; the shipment shall be made by Indian flag vessel or by vessels belonging to the conference lines in which India is a member country through India's forwarding agents/coordinators. In case the forwarding agent/coordinators are unable to provide timely adequate space in Indian flag vessel or by vessels belonging to the conference lines, the supplier shall arrange shipment through any available vessel to adhere to the delivery schedule given in the contract.

In case of airlifting of imported goods offered from abroad, the same will be done only through the National Carrier i.e. Air India wherever applicable. In case the National Carrier is not available, any other airlines available for early delivery may be arranged.

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

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

11. Insurance:

- 11.1 Unless otherwise instructed in the SCC, the supplier shall make arrangements for insuring the goods against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the following manner:

- i) In case of supply of domestic goods on Consignee site basis, the supplier shall be responsible till the entire stores contracted for arrival in good condition at destination. The transit risk in this respect shall be covered by the Supplier by getting the stores duly insured for an amount equal to 110% of the value of the goods from ware house to ware house (consignee site) on all risk basis. The insurance cover shall be obtained by the Supplier and should be valid till 3 months after the receipt of goods by the Consignee.
- ii) 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 ware house 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, such extensions of the insurance will still be done by the supplier, but the insurance extension charges at actuals will be reimbursed.

12. Spare parts

12.1 If specified in the List of Requirements and in the resultant contract, the supplier shall supply/provide any or all of the following materials, information etc. pertaining to spare parts manufactured and/or supplied by the supplier:

- a) The spare parts as selected by the Purchaser/Consignee to be purchased from the supplier, subject to the condition that such purchase of the spare parts shall not relieve the supplier of any contractual obligation including warranty obligations; and
- b) In case the production of the spare parts is discontinued:
 - i) Sufficient advance notice to the Purchaser/Consignee before such discontinuation to provide adequate time to the purchaser to purchase the required spare parts etc., and
 - ii) Immediately following such discontinuation, providing the Purchaser/Consignee, free of cost, the designs, drawings, layouts and specifications of the spare parts, as and if requested by the Purchaser/Consignee.

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 CMC 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 and Demonstration of the goods
- ii) Providing required jigs and tools for assembly, minor civil works required for the completion of the installation.
- iii) Training of Consignee's 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 despatch documents well in time to the Purchaser/Consignee to enable the Purchaser/Consignee clear or receive (as the case may be) the goods in terms of the contract.

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

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

Within 24 hours of despatch, the supplier shall notify the purchaser, consignee, and others concerned if mentioned in the contract, the complete details of despatch and also supply the

following documents to them by registered post / speed post / courier (or as instructed in the contract):

- (i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
- (ii) Consignee Receipt Certificate as per Section XVII in original issued by the authorized representative of the consignee;
- (iii) Two copies of packing list identifying contents of each package;
- (iv) Inspection certificate issued by the nominated Inspection agency, if any.
- (v) Certificate of origin;
- (vi) Insurance Certificate as per GCC Clause 11.
- (vii) Manufacturers/Supplier's warranty certificate & In-house inspection certificate.

B) For goods imported from abroad

Within 24 hours of despatch, the supplier shall notify the purchaser, consignee, and others concerned if mentioned in the contract, the complete details of despatch and also supply the following documents to them by registered post / speed post (or as instructed in the contract). Any delay or demurrage occurred during the customs clearance on account of the non-availability of technical support/ clarifications /documents from the supplier shall be borne by the supplier:

- (i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
- (ii) Original and four copies of the negotiable clean, on-board Bill of Lading/Airway bill, marked freight prepaid and four copies of non-negotiable Bill of Lading/Airway bill;
- (iii) Four Copies of packing list identifying contents of each package;
- (iv) Insurance Certificate as per GCC Clause 11.
- (v) Manufacturer's/Supplier's warranty certificate;
- (vi) Inspection Certificate for the despatched equipment issued by recognized/ reputed agency like SGS, Lloyd, BEAUREU VERITAS, TUV prior to despatch
- (vii) Manufacturer's own factory inspection report;
- (viii) Certificate of origin
- (ix) Port of Loading;
- (x) Port of Discharge and
- (xi) Expected date of arrival.

15. Warranty

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, manufacturing 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 remain valid for the period as mentioned in the list of requirement/ General Technical specification, after the goods or any portion thereof as the case may be, have been delivered, installed and commissioned at the final destination.

- a. No conditional warranty will be acceptable.

- b. Warranty as well as Comprehensive Maintenance contract will be inclusive of all accessories and Turnkey work and it will also cover the following wherever applicable:-
- Any kind of motor.
 - Plastic & Glass Parts against any manufacturing defects.
 - All kind of sensors.
 - All kind of coils, probes and transducers.
 - Printers and imagers including laser and thermal printers with all parts.
 - UPS including the replacement of batteries.
 - Air-conditioners
- c. Replacement and repair will be under taken for the defective goods.
- d. Proper marking has to be made for all spares for identification like printing of installation and repair dates.
- 15.3 In case of any claim arising out of this warranty, the Purchaser/Consignee shall promptly notify the same in writing to the supplier. The period of the warranty will be as per G.C.C clause number 15.2 above irrespective of any other period mentioned elsewhere in the bidding documents.
- 15.4 Upon receipt of such notice, the supplier shall, within 8 hours on a 24(hrs) X 7 (days) X 365 (days) basis respond to take action to repair or replace the defective goods or parts thereof, free of cost, at the ultimate destination. The supplier shall take over the replaced parts/goods after providing their replacements and no claim, whatsoever shall lie on the purchaser for such replaced parts/goods thereafter. The penalty clause for non-rectification will be applicable as per tender conditions
- 15.5 In the event of any rectification of a defect or replacement of any defective goods during the warranty period, the warranty for the rectified/replaced goods shall be extended till the completion of the original warranty period of the main equipment.
- 15.6 If the supplier, having been notified, fails to respond to take action to repair or replace the defect(s) within 8 hours on a 24(hrs) X 7 (days) X 365 (days) basis, the purchaser may proceed to take such remedial action(s) as deemed fit by the purchaser, at the risk and expense of the supplier and without prejudice to other contractual rights and remedies, which the purchaser may have against the supplier.
- 15.7 During Warranty period, the supplier is required to visit at each consignee's site at least once in 6 months commencing from the date of the installation for preventive maintenance of the goods
- 15.8 The Purchaser/Consignee reserve the rights to enter into Annual Comprehensive Maintenance Contract between Consignee and the Supplier for the period as mentioned in Section VII, Technical Specifications after the completion of warranty period.
- 15.9 The supplier along with its Indian Agent and the CMC 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.
- 15.10 The Supplier along with its 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 tender. Such notification, in its original tender 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 despatch,
- e) Place of delivery, and
- f) Any other area(s) of the contract, as felt necessary by the purchaser depending on the merits of the case.

18.2 In the event of any such modification/alteration causing increase or decrease in the cost of goods and services to be supplied and provided, or in the time required by the supplier to perform any obligation under the contract, an equitable adjustment shall be made in the contract price and/or contract delivery schedule, as the case may be, and the contract amended accordingly. If the supplier doesn't agree to the adjustment made by the Purchaser/Consignee, the supplier shall convey its views to the Purchaser/Consignee within twenty-one days from the date of the supplier's receipt of the Purchaser's/Consignee's amendment / modification of the contract.

19. Prices

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

20. Taxes and Duties

20.1 Supplier shall be entirely responsible for all taxes, duties, fees, levies etc. incurred until delivery of the contracted goods to the purchaser.

20.2 Further instruction, if any, shall be as provided in the SCC.

21. Terms and Mode of Payment

21.1 Payment Terms

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

A) Payment for Domestic Goods 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) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;

- (ii) Consignee Receipt Certificate as per Section XVII in original issued by the authorized representative of the consignee;
- (iii) Two copies of packing list identifying contents of each package;
- (iv) Inspection certificate issued by the nominated Inspection agency, if any.
- (v) Insurance Certificate as per GCC Clause 11 and documents also to be submitted for payment of LC confirming that dispatch documents has already been sent to all concerned as per the contract within 24 hours;
- (vi) Certificate of origin.

b) On Acceptance:

Balance 25% payment would be made against 'Final Acceptance Certificate' as per Section XVIII of goods to be issued by the consignees subject to recoveries, if any, either on account of non-rectification of defects/deficiencies not attended by the Supplier or otherwise. FAC need to be issued by the designated consignee after installation, commissioning, testing and one to two weeks of successful trail run of the equipment.

B) Payment for Imported Goods:

Payment for foreign currency portion shall be made in the currency as specified in the contract in the following manner:

a) On Shipment:

Seventy Five (75)% of the net CIP price (CIP price less Indian Agency commission) of the goods shipped 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) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
- (ii) Original and four copies of the negotiable clean, on-board Bill of Lading/ Airway bill, marked freight pre paid and four copies of non-negotiable Bill of Lading/Airway bill;
- (iii) Four Copies of packing list identifying contents of each package;
- (iv) Insurance Certificate as per GCC Clause 11 and documents also to be submitted for payment of LC confirming that dispatch documents has already been sent to all concerned as per the contract within 24 hours;
- (v) Manufacturer's/Supplier's warranty certificate;
- (vi) Inspection certificate issued by the nominated inspection agency, if applicable as per contract;
- (vii) Manufacturer's own factory inspection report and
- (viii) Certificate of origin by the chamber of commerce of the concerned country;
- (ix) Inspection Certificate for the despatched equipment issued by recognized/ reputed agency like SGS, Lloyd, BEAURU VARITUS and TUV or equivalent (acceptable to the purchaser) prior to despatch.

b) On Acceptance:

Balance payment of 25% of net CIP price of goods would be made against 'Final Acceptance Certificate' as per Section XVIII to be issued by the consignees 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. FAC need to be issued by the designated consignee after installation, commissioning, testing and one to two weeks of successful trail run of the equipment.

c) Payment of Indigenous Goods :

Payment of indigenous goods will be paid as per the applicable payment terms i.e. 75% on delivery and 25% on acceptance. Delivery of the indigenous goods should be in line with the imported equipment.

d) Payment of Incidental Costs till consignee site & Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training) will be paid in Indian Rupees to the Indian Agent on proof of final installation, commission and acceptance of equipment by the consignee.

e) Payment of Indian Agency Commission:

Indian Agency commission will be paid to the manufacturer's agent in the local currency for an amount in Indian rupees indicated in the relevant Price Schedule (as per prevailing rate of exchange ruling on the date of Contract) and shall not be subject to further escalation / exchange variation.

C) Payment of Turnkey, if any:

Turnkey payment will be made as indicated in the relevant Price Schedule (as per prevailing rate of exchange ruling on the date of Contract) and shall not be subject to further escalation / exchange variation.

D) Payment for Annual Comprehensive Maintenance Contract Charges:

The consignee will enter into CMC with the supplier at the rates as stipulated in the contract. The payment of CMC will be made on six monthly basis after satisfactory completion of said period, duly certified by the consignee 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 valid till 2 months after expiry of entire CMC period.

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

the paying authority without consignee's receipt certificate after three months from the date of the preceding part payment for the goods in question, subject to the following conditions:

- (a) The supplier will make good any defect or deficiency that the consignee (s) may report within six months from the date of despatch of goods.
- (b) Delay in supplies, if any, has been regularized.
- (c) The contract price where it is subject to variation has been finalized.
- (d) The supplier furnishes the following undertakings:

"I/We, _____ certify that I/We have not received back the Inspection Note duly received by the consignee or any communication from the purchaser or the consignee about non-receipt, shortage or defects in the goods supplied. I/We _____ agree to make good any defect or deficiency that the consignee may report within three months from the date of receipt of this balance payment.

22. Delivery

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

Works Contract Tax or any other duty or tax or levy or on account of any other grounds, which takes place after the expiry of the date of delivery stipulated in the contract.

22.5 The supplier shall not dispatch the goods after expiry of the delivery period. The supplier is required to apply to the Purchaser/Consignee for extension of delivery period and obtain the same before despatch. In case the supplier dispatches the goods without obtaining an extension, it would be doing so at its own risk and no claim for payment for such supply and / or any other expense related to such supply shall lie against the purchaser.

22.6 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 conditions of 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/Consignee shall, without prejudice to other rights and remedies available to the Purchaser/Consignee under the contract, deduct from the contract price, as liquidated damages, a sum equivalent to 0.5% per week of delay or part thereof on delayed supply of goods, installation, commissioning and/or services until actual delivery or performance subject to a maximum of 10% of the contract price. Once the maximum is reached Purchaser/Consignee may consider termination of the contract as per GCC 24.

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

24. Termination for default

24.1 The Purchaser/Consignee, without prejudice to any other contractual rights and remedies available to it (the Purchaser/Consignee), may, by written notice of default sent to the supplier, terminate the contract in whole or in part, if the supplier fails to deliver any or all of the goods or fails to perform any other contractual obligation(s) within the time period specified in the contract, or within any extension thereof granted by the Purchaser/Consignee pursuant to GCC sub-clauses 22.3 and 22.4.

24.2 In the event of the Purchaser/Consignee terminates the contract in whole or in part, pursuant to GCC sub-clause 24.1 above, the Purchaser/Consignee may procure goods and/or services similar to those cancelled, with such terms and conditions and in such manner as it deems fit and the supplier shall be liable to the Purchaser/Consignee for the extra expenditure, if any, incurred by the Purchaser/Consignee for arranging such procurement.

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

25. Termination for insolvency

25.1 If the supplier becomes bankrupt or otherwise insolvent, the purchaser reserves the right to terminate the contract at any time, by serving written notice to the supplier without any

compensation, whatsoever, to the supplier, subject to further condition that such termination will not prejudice or affect the rights and remedies which have accrued and / or will accrue thereafter to the Purchaser/Consignee.

26. Force Majeure

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

27. Termination for convenience

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

28. Governing language

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

29. Notices

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

30. Resolution of disputes

- 30.1 If dispute or difference of any kind shall arise between the Purchaser/Consignee and the supplier in connection with or relating to the contract, the parties shall make every effort to resolve the same amicably by mutual consultations.
- 30.2 If the parties fail to resolve their dispute or difference by such mutual consultation within 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. In the case of a dispute or difference arising between the Purchaser/Consignee and a domestic Supplier relating to any matter arising out of or connected with the contract, such dispute or difference shall be referred to the sole arbitration of an officer in the Ministry of Law and Justice, appointed to be the arbitrator by the Director General (Health Services). The award of the arbitrator shall be final and binding on the parties to the contract subject to the provision that the Arbitrator shall give reasoned award in case the value of claim in reference exceeds Rupees One lakhs (Rs. 1,00,000/-)
- 30.3 Venue of Arbitration: The venue of arbitration shall be the place from where the contract has been issued, i.e., New Delhi, India.
- 30.4 Jurisdiction of the court will be from the place where the tender enquiry document has been issued, i.e., New Delhi, India

31. Applicable Law

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

32 Withholding and Lien in respect of sums claimed

Whenever any claim for payment arises under the contract against the supplier the purchaser shall be entitled to withhold and also have a lien to retain such sum from the security deposit or sum of money arising out of under any other contract made by the supplier with the purchaser, pending finalization or adjudication of any such claim.

It is an agreed term of the contract that the sum of money so withheld or retained under the lien referred to above ,by the purchaser, will be kept withheld or retained till the claim arising about of or under the contract is determined by the Arbitrator or by the competent court as the case may be ,and the supplier will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention.

33. General/ Miscellaneous Clauses

- 33.1 Nothing contained in this Contract shall be constructed as establishing or creating between the parties, i.e. the Supplier/its Indian Agent/CMC Provider on the one side and the Purchaser on the other side, a relationship of master and servant or principal and agent.
- 33.2 Any failure on the part of any Party to exercise right or power under this Contract shall not operate as waiver thereof.

- 33.3 The Supplier shall notify the Purchaser/Consignee /the Government of India of any material change would impact on performance of its obligations under this Contract.
- 33.4 Each member/constituent of the Supplier/its Indian Agent/CMC Provider, in case of consortium shall be **jointly and severally liable** to and responsible for all obligations towards the Purchaser/Consignee/Government for performance of contract/services including that of its Associates/Sub Contractors under the Contract.
- 33.5 The Supplier/its Indian Agent/CMC Provider shall at all times, indemnify and keep indemnified the Purchaser/Government of India against all claims/damages etc. for any infringement of any Intellectual Property Rights (IPR) while providing its services under CMC or the Contract.
- 33.6 The Supplier/its Agent/CMC Provider shall, at all times, indemnify and keep indemnified the Purchaser/Consignee/Government of India against any claims in respect of any damages or compensation payable in consequences of any accident or injury sustained or suffered by its employees or agents or by any other third party resulting from or by any action, omission or operation conducted by or on behalf of the supplier/its associate/affiliate etc.
- 33.7 All claims regarding indemnity shall survive the termination or expiry of the contract.

SECTION – V

SPECIAL CONDITIONS OF CONTRACT (SCC)

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

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

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

SECTION - VI

LIST OF REQUIREMENTS

Part-I

Sl. no.	Item description	Department	Qty.	Warranty (Years)	CMC (Years)
1	Projection system in Dissection Hall	Anatomy	1	5	5
2	Digital Research Microscope with CCD camera	Anatomy	1	5	5
3	Computerized Cardiopulmonary Exercise Testing System with Treadmill for humans	Physiology	2	5	5
		Pharmacology			
4	Portable Automatic Computerized Spirometer	Physiology	1	5	5
5	Evoked potential machine (digital)	Physiology	1	5	5
6	High resolution /Quality Microscope with digital camera, image analyzer & computer	Pathology	1	5	5
7	HPLC along with its accessories	Pharmacology	1	5	5
8	Whole body plethysmograph for conscious unrestrained freely moving animals	Pharmacology	1	5	5
9	Real Time PCR	Microbiology	1	5	5
10	Fully Automated Blood Culture System	Microbiology	1	5	5
11	Colour Doppler (2-D)	Surgery	1	5	5
12	Video Colonoscope	Medicine	1	5	5
13	MRI-1	Radiology	1	5	5
14	Volumetric Infusion Pump	Anesthesia	20	5	5
15	Syringe Infusion Pumps	Anesthesia	30	5	5
16	Ventilator- High End (I.C.U)	Anesthesia	3	5	5
17	Anesthesia Work Station	Anesthesia	7	5	5
18	Neonatal Ventilators	Pediatrics	1	5	5
19	Open Intensive Care System for Neonates	Pediatrics	5	5	5
20	Blood Cell Separator	Transfusion Medicine	1	5	5
21	Laparoscopic Surgery Set with Hysteroscope & Resectoscope with High Definition Camera & Monitor	Obs. & Gyn.	1	5	5
22	Orthopaedic Operating Table with accessories	Orthopaedics	1	5	5
23	General Orthopedic Instruments	Orthopaedics	1	5	5
24	Drilling & Saw System	Orthopaedics	1	5	5

Part II: Required Delivery Schedule:

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

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

Installation and commissioning shall be done within 45 days of receipt of the stores/ goods at site or within 45 days of handing over the site for installation, whichever is later.

b) For Imported goods directly from foreign:

90 days from the date of opening of L/C. The date of delivery will be the date of Bill of Lading/Airway bill. (Tenderers may quote the earliest delivery period).

Note: Installation and commissioning shall be done within 45 days of receipt of the stores/ goods at site or within 45 days of handing over the site for installation, whichever is later. delayed 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 (if any) as per details in Technical Specification.

Part V:

Warranty period as per details in general technical specification and as specified in Part I above. Warranty period will be 60 months from the date of installation, commissioning and acceptance or 66 months from the date of last shipment/dispatch, whichever is earlier.

Comprehensive Maintenance Contract (CMC) as per details in Technical Specification as specified in part I above

Part VI:

Required Terms of Delivery and Destination.

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

At Consignee Site(s)

b) For Imported goods directly from abroad:

The foreign tenderers 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.

The shipping arrangements shall be made in accordance with the instruction of Ministry of Shipping & Transport, New Delhi, India as detailed in Annexure 1 at Section XIX.

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

Destination/Consignee details are given in Section XXI

Section – VII

Technical Specifications

Item no. 1

Projection system in Dissection Hall

A. Digital Camera for direct display (Quantity-2)

Full HD (1080) 30fps, 21.1 mega Pixel, movie recording 3.9 fps APEG Shooting 9 Auto focusing with Assist Auto focus Points integrated Cleaning System Magnesium allow body 16-35 LENS L2UMS.

B. LED TV (Quantity-6)

1. Video Screen Size 54.6”(1) Resolution Widescreen
2. Dynamic Contrast Ratio Mega Dynamic with Auto Motion
3. Plus 120/240 Hz and 120 Hz Wide Color Enhancer
4. Audio Speaker Type Bottom
5. Features
 - a. Having Any net+(HDMI-CEC) and Picture-in-Picture
6. Connectivity
 - a. Media Stream InfoLink, USB 2.0 Movie-Multi-Media Center Movie, JPEG
7. System
 - a. DTV Type LED, DTV Tuner Built-in
 - b. Panel:-Ultra Clear Panel
8. Input & Output
 - a. HDMI 4
 - b. Digital Audio (Optical), PC Input (D_sub) Yes
 - c. Components(Y/Pb/Pr) 1, Ethernet (LAN) 1, RF In 1, USB 2.0 - 2
9. Design
 - a. Swivel (Left/Right)
10. Optional Accessories
 - a. Ultra Slim Wall Mount

C. Installation with audio system

- 1 Suitable PC to be supplied along with the system.
- 2 Laser printer

Item no. 2

Digital Research Microscope with CCD Camera

1. Digital Research Microscope with CCD Camera.
2. Observation Tube - Siedentopf Trinocular, 30 deg. inclined 360 deg. rotatable. IPD range 52-75mm.
3. Eyepiece - Focusable WF 10x (18mm/ 20mm).
4. Revolving Quintuple nose piece (for objectives)
5. Objectives - RP Series Infinity Corrected Plan 4X, 10X, 40X (Spring Loaded), 100X (Spring Loaded, Oil Immersion)
6. Illumination - 6V 20 W Halogen Lamp with 5 spare lamps
7. Image Device - 2/3" CCD Camera - Resolution 1.4MP or better with suitable mount
8. Light Sensitivity - 1 Lux
9. Interface - USB
10. Software - Image Analysis Software
11. System Requirements – Suitable PC having 19" Colour LCD/TFT Monitor, CPU: RAM: 4 GB or more, Hard Disk Space: 500 GB or more, CD/DVD-ROM drive and USB port 3.0. Power adapters/ cables etc for projection and LAN transmission.
12. Should be supplied with compatible colour printer.
13. Manufactures/Supplier should have ISO certificate to Quality Standard.
14. Should be FDA/CE approved product.
15. Equipment should be installed and demonstrated.
16. Training should be given to at least two faculties.

Item no. 3

Computerized cardiopulmonary exercise testing system with treadmill for humans

A PHYSIOLOGY TEST SYSTEM

1. The unit should be a compact unit for spirometry and allied parameters, mounted on a suitable trolley.
2. The system should measure VO₂, VCO₂, RQ, VE, spirometry/ flow volume, AT etc.
3. The system should be interfaced to computer (latest configuration) with 17" Colour LCD/TFT monitor, printer
4. The system should have a fully automatic and computerized volume calibration system.
5. The system should measure Nutritional parameters.

6. The system should have a bidirectional volume sensor with the following specifications:-
 - (i) Volume: 0 to 10 lit.
 - (ii) Accuracy: 50 ml or 2%
 - (iii) Resolution: 3 ml
 - (iv) Flow: 0 to 15 l/s
7. **System should have oxygen & CO2 analyser with response time less than 150 m secs.**
8. The system should record data breath by breath and intra breath.
9. The system should have a unit to automatically detect ambient conditions such as pressure, temperature, and humidity.
10. It should have a 12 channel ECG unit integrated into the system.
11. It should be interfaced with a treadmill system (Specifications of treadmill enclosed).
12. A suitable interpretation program to evaluate the test results should be available.
13. The system should have the following:
PFT supplement: FRC- Helium/Nitrogen washout/Methane and diffusion single breath
14. Automatic BP measurement through Tango Type automatic BP recording device to record BP at all stages of exercise and automatically enter into the recorder

B SPECIFICATION OF TREADMILL

1. The new generation of treadmills especially designed in accordance with high safety and quality requirements in Pneumology, Cardiology, Stress Testing, Endurance Training, Rehabilitation, sports Medicine as well as in Medical Fitness Training.
2. The digital interface (RS 232) should allow the treadmill and all its functions being controlled via an Ergo spirometry measuring station or a PC (SW program for control via virtual User Terminal to be included). Current values such as speed, gradient, time, index no., distance as well as pulse rate can be transferred to the Ergo spirometry measuring station.
3. For safety purposes the unit should be equipped with an emergency switch which stops the treadmill at any stage of operation, and which switches the WHOLE system powerless.
 - (i) Speed: adjustable from 0 - 22 km/h optional: 0 - 30 km/h
 - (ii) Resolution: 0.1 km/h; 0.5 %, Gradient: 0 - 24 %: electrical engine brake prevents acceleration caused by body
 - (iii) Weight at gradient; optional: reverse operation 0 to -24% for downhill running (up to 5 km/h)
 - (iv) Resolution: 0.5 %

-
- (v) Acceleration: 7 intensities (3 ... 131 sec from 0 to max.) manual or also selectable via program step
 - (vi) Slow down: 7 intensities (3 ... 131 sec from max. to 0) manual or also selectable via program step
 - (vii) Motor power: 2.2 kW
 - (viii) Motor: maintenance-free and efficient rotary current asynchronous motor (CE mark) with V-belt, low noise and smooth running
 - (ix) Heart rate measurement: POLAR wireless, 1-channel receiver, beat-to-beat ECG precise measurement automatic load control according to pre-programmed heart rate (target pulse)
 - (x) Interface: RS232 (V 24) incl. PC-, CosRec-, CosCom- ECG, Oxycon and serial printer protocol.
 - (xi) Programs: fixed memory locations incl. test programs Conconi, Ellestad, Duke, Cornell, Naughton, etc. in combination with User Terminal Platform: wear-resistant and shock-absorbing Handrails: metallic railing in front and at both sides.
4. User terminal with HR Measurement
5. Integrated User Terminal with high contrast LC display. Complete with POLAR Heart Rate Measurement system and heart rate dependent load control. Current values such as speed, gradient, time, index no., distance as well as pulse rate should be legibly presented on the LCD. Programs should be available with fixed memory locations incl. test programs Conconi, Ellestad, Naughton, etc.
6. Following should be available
- (i) Para graphic Software:- The PC-software package Para Graphics should provide on-line recording of the load parameters and the heart rate in the form of graphs on the colour screen. The data should be exported to other programs (e.g. POLAR, Cyclo Vantage, HRCT, etc.) and should thus be evaluated.
 - (ii) Apart from on-line recording the software package Para Graphics HRC should provide a heart-rate controlled training. It should work automatically to control the speed of the treadmill according to the desired range of the heart rate that should be programmed.
7. The following data should be recorded on-line:
- (i) Time [s]
 - (ii) Speed [km/h]
 - (iii) Heart rate [bpm]
 - (iv) Elevation [%]
 - (v) Distance [km]

8. Rehabilitation attachment:- comfortable joint adjustment in width and height ; with scale; the Rehab attachment should be fixed to the lateral railings of the Treadmill. The Rehab attachment should be folded together, and should not need to dismantle it after use
9. Full Resting ECG Evaluation 12 Leads with Computerized Reporting Analysis of Waveform Morphology & Rhythm.
10. Computerized Treadmill Exercise Testing with 12 Leads, 3 leads Screen Showing Advanced waveforms Analysis. Accurate ST Segment Measurement, Heart Rate, BP Measurement should include noninvasive BP measurement from time to time during treadmill evaluations.
11. Facility for programmability for all variety of protocols.
12. Trend Charts for Heart Rate BP & ST shifts in at least 3 leads available at the end of the test.
13. Minute to minute Evaluation of all leads available at the end of the test.
14. 12 lead Printout to be available as & when necessary during the test.
15. Stable Reusable Electrode that gives clear good quality online ECG.
16. ST Analysis of all 12 leads at maximum ST Depression & at Maximum METs should be available at the end of the test.
17. Minute to minute evaluation of HR, BP, METs, Speed , Percentage of elevation of Treadmill Belt, ST Analysis in minimum 3 selected leads or maximum ST Depression out of all leads should be available at the end of the test.
18. Disc storage of at least 5 patients real time patients ECG / PFT analysis
19. Power input to be 220-240VAC, 50Hz
20. System Configuration Accessories, spares and consumables:
 - (i) 12 lead ECG CABLE-1no.
 - (ii) Gel-5 bottles

C Standards, Safety and Training

1. Should be US FDA/ European CE / BIS approved product
2. Calibration/Acceptance test certificate from the factory required.
3. Manufacturer/Supplier should have ISO certification for quality standards.

D Documentation

1. User/Service Manual in English
2. Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/data sheet. Any point, if not substantiated with authenticated catalogue/manual, will not be considered.

Item no. 4

Portable automatic Computerized Spirometer

- i. LCD graphical display, Transducer Bi-directional turbine
- ii. Turbine sensor: infrared interruption
- iii. Flow range:- 10 to +16 litres/sec
- iv. Volume range 8 litres
- v. Internal memory 2500 tests
- vi. Accuracy within 1%
- vii. Test performed FVC, SVC and MVV
- viii. Printout built in thermal printer/colour A4 size thru PC(Laptop to be supplied)
- ix. Power supply mains and battery operated

Item no. 5

Evoked Potential Machine (digital)

Technical Specifications for EMG/EP system 4 channels: for recording of the evoked response & EMG with accessories

A Essential Requirements:

- 1) Minimum four channel
- 2) With facility for up gradation
- 3) Standard programs for recording motor nerve conduction velocity, sensory nerve conduction velocity, repetitive nerve stimulation, F response, H reflex and blink reflex.
- 4) Standard program for routine electromyogram (EMG) recording motor unit potential (MUP) analysis, interference pattern analysis, single fiber EMG, jitter analysis, automatic computation with display
- 5) Standard program for recording sympathetic skin response
- 6) Standard program for recording brain stem auditory evoked response, middle latency response and slow vertex response
- 7) Standard program for recording pattern reversal visual evoked potential (VEP) and LED VEP
- 8) Standard program for recording P300 with audiovisual paradigms
- 9) Standard program for recording somato-sensory evoked potentials (upper limb & lower limb) and short latency evoked potentials
- 10) Facilities for checking electrode-skin impedance

- 11) PC requirements: Intel® Core™ i5-760 processor (2.80GHz, 1333MHz FSB, 8MB Cache) Genuine Windows® 7 Professional, 64bit (English) or higher ; 21.5” Full HD Widescreen Flat Panel Monitor ; 6 GB DDR3 SDRAM, 500GB SATA Hard Drive ; Single Drive: Blu-ray Disc Combo (DVD+/-RW + BD-ROM). Facility for internet connectivity, with facility of up gradation
- 12) Color laser printer & UPS with 20 minutes back up for whole system along with computer
- 13) Patient Data management software & archiving facility
- 14) MS Word based report generation facility
- 15) Amplifier:-
 - (i) Input impedance: 1000 mega ohms or more
 - (ii) Sensitivity: 2 microvolt – 10 millivolts per division
 - (iii) Time base: 0.1 millisecond – 0.5 seconds per division in variable steps
 - (iv) Filters: Standard low cut filter (0.2 to 2KHz), high cut filters for all recordings

B Standard accessories to be provided [items-quantity in numbers]

- 1) Surface stimulating (reusable) – 4 [Four]
- 2) Surface Recording electrodes (reusable) – 12 [Twelve]
- 3) Concentric needle electrodes (adult size, disposable, with adequate length of the connecting cable) – 50 [fifty]
- 4) Concentric needle electrodes (paediatric size, disposable, with adequate length of the connecting cable) – 50 [fifty]
- 5) Needle holder for disposable needles – 3 [three]
- 6) Single fiber EMG electrode with needle holder – 1 [one]
- 7) Ground electrode – 4 [four]
- 8) Headphones and child ear tips with cables – 2 [two]
- 9) VEP monitor and LED goggles – 1 [one]
- 10) Headphones for auditory evoked potentials – 1 [one]
- 11) Flash stimulator – 1 [one]
- 12) Electrode gel – 10 [ten]
- 13) EMG conductive paste (200 gms or more) – 10 [ten]
- 14) Recording paper – 3 [three]
- 15) Power cable – 2 [two]
- 16) Ground lead – 2 [two]
- 17) Power requirements: 220 V AC, 50 Hz

Item no. 6

High resolution /Quality Microscope with digital camera, image analyser & computer

1. Digital Research Microscope with CCD Camera.
2. Observation Tube – Siedentopf Trinocular, 30 deg inclined 360 deg rotatable. IPD range 52-75mm.
3. Eyepiece - Focusable WF 10x (18mm/ 20mm).
4. Revolving Quintuple nose piece (for objectives)
5. Objectives - RP Series Infinity Corrected Plan 4X, 10X, 40X (Spring Loaded), 100X (Spring Loaded, Oil Immersion)
6. Illumination - 6V 20 W Halogen Lamp with 5 spare lamps
7. Image Device - 2/3” CCD Camera - Resolution 1.4MP or better with suitable mount
8. Light Sensitivity - 1 Lux
9. Interface - USB
10. Software - Image Analysis Software
11. System Requirements – Suitable PC having 19” Colour LCD/TFT Monitor, CPU: RAM: 4 GB or more, Hard Disk Space: 500 GB or more, CD/DVD-ROM drive and USB port 3.0. Power adapters/ cables etc. for projection and LAN transmission.
12. Should be supplied with compatible colour printer.
13. Manufactures/Supplier should have ISO certificate to Quality Standard.
14. Should be FDA/CE approved product.
15. Equipment should be installed and demonstrated.
16. Training should be given to at least two faculties.

Item no. 7

HPLC along with its accessories

1. Description of function:

- 1.1 High performance pressure/liquid chromatography (HPLC) is a form of column chromatography used to separate components of a mixture by using a variety of chemical interactions between the substance being analysed (analyte) and the chromatography column.

2. Operational requirements:

2.1 System should be complete with columns, binary gradient pump, mixer, detector along with state of art PC with software for chromatography management.

3. Technical specifications:

3.1 Binary gradient pump: (2 nos.)

Integrated binary gradient system with dual piston pump (2 nos.) with automatic plunger cleaning system. Flow precision 0.1% RSD. Programmable flow rate range from 0.001 to 10ml/min with 0.01 ml/min increments. Composition accuracy +/- 0.5% precision: <0.5% RSD. Maximum pressure: 6000psi at all flow rates. Safety and maintenance aids: extensive diagnostic error detection and display. No of eluents: 2. Flow accuracy +/-1%. Software programmable high and low pressure limits. Software initiated purge functions. Delay volume: <200micro litre. Built-in master/slave function. Solvent selection valve facility.

3.2 Gradient mixer: (1no)

3.3 Manual injector: (1no)

M-7725i Rheodyne injector with 20 8l loop and mounting bracket. Additional loops of 5, 50, 100 & 200 8l to be included.

3.4 Photo diode array detector:

Two modes of operation using a variable slit width for high resolution mode and high sensitivity mode.

Should have temperature control cell (ambient +5° C to 50° C)

Wavelength range: 190nm-800nm

Wavelength accuracy: +/- 1nm

Light source D2, W, D2+W lamps (3 modes)

Drift less than 5×10^{-4} AU/Hour

Noise level +/- 0.3×10^{-5} AU

Linearity of 2.0AU

Automatic wavelength accuracy check at 4 wavelengths (UV & Vis) & wavelength correction

Florescence detector:

Wavelength rage: 200-650nm

Detector: Photomultiplier

Wavelength accuracy: +/-2nm

Wavelength reproducibility +/-0.2nm

Wavelength scanning possibility both for excitation and emission
Spectral Bandwidth 15nm both in the excitation and emission sides
Time programming feature
Light source compensation with dynode feedback system
Difference spectra and plotting of stored spectra
Diagnostic functions & configuration wizards.
Flow cell volume: facility to measure 15 micro litre or less

3.5 Chromatography manager: (1no)

Microprocessor of speed not less than 3 GHz, computer with 1 GB RAM, 80GB Hard disk drive, 1.44MB floppy drive, 52XCD-ROM R/W drive, Windows, 17" flat colour monitor, colour laser printer with the following features:

Control, acquire & process data.

Interactive control and display of solvent delivery.

All functions and features accessible from single window use the command bar to navigate.

Wizard to simplify and automate common system functions.

Methods- instrument, processing & reporting parameters in one place.

Database for better organization & easy retrieval of work and system user data

Extensive user help

Institutional copy of relevant software

3.6 Columns

a. C-18, Reverse Phase Column- 3 nos

3.7 Guard columns-10

3.8 One compatible degasser

3.9 Column oven: (1no)

Temperature range: 20 deg C to 60 deg C

Temperature accuracy: +/- 0.8 deg C

Temperature precision: +/- 0.25 deg C

Column capacity: Minimum 2 columns with guard columns

Requirement of HPLC is estimation of drugs level of narrow therapeutic sample/toxic drugs so columns should be offered accordingly to need with accessories.

3.10 Filtration accessories:

a. Solvent filtration kit with vacuums pump.

b. Sample filtration kit (Aqueous & organic)

3.11 System should have installation kit for each module.

4. System configuration accessories, spares and consumables

- 4.1 As specified
- 4.2 High resolution colour laser printer

5. Environmental factors:

- 5.1 Shall meet IEC-60601-1-2:2001 (Or equivalent BIS) General requirements of safety for electromagnetic compatibility.
- 5.2 The unit shall be capable of being stored continuously in ambient temperature of 0-50° C and relative humidity of 15-90%
- 5.3 The unit shall be capable of operating in ambient temperature of 20-30° C and relative humidity of 80%

6. Power supply:

- 6.1 Power input to be 220-240VAC, 50Hz fitted with Indian plug
- 6.2 Suitable UPS with maintenance free batteries for minimum one hour back up should be supplied with the system.
- 6.3 Reset table over current breaker shall be fitted for protection.

7. Standards and safety

- 7.1 Electrical safety conforms to standards for electrical safety IEC-60601/IS-13450
- 7.2 Should be USFDA or European CE approved product.
- 7.3 Should be compliant to ISO 13485: Quality systems-medical devices- particular requirements for the application of ISO 9001 applicable to manufactures and service providers that perform their own design activities.

8. Documentation:

- 8.1 User technical maintenance manuals to be supplied.
- 8.2 Certificate of calibration and inspection from the factory.
- 8.3 List of equipment available for providing calibration and routine preventive maintenance support as per manufacturer documentation in service/ technical manual.
- 8.4 Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.
- 8.5 Compliance report to be submitted in a tabulated and point wise manner clearly mentioning the page/ para number of original catalogue.
- 8.6 List of important spare parts and accessories with their part number and costing should be available in stock with the supplier.

Item no. 8

Whole body plethysmograph for conscious unrestrained freely moving animals

Equipment specification for Rat unrestrained whole body Plethysmograph

1. Description of function:
 - 1.1 Whole body plethysmograph helps in measuring non-invasively the breathing characteristic of conscious, unrestrained small animals
2. Operational requirements:
 - 2.1 System complete with holding chamber, aerosol delivery mechanism and transducers.
3. Technical specifications:
 - 3.1 Chamber is constructed of a durable clear acrylic measuring 33” (83.8cm) OD and approximately 12” (30.5cm) in height with lid and ball valve in place, weight 7.8lbs (3.5kg)
 - 3.2 Animal holding chamber 23.5” (59.7cm) ID and 5.75”(14.6cm) in height, volume approximately 425 cubic inches (2740 cubic cm)
 - 3.3 16 ounce (475ml) water bottle with spin on lid with sipper tube.
 - 3.4 2 pressure transducer ports and 3 ancillary chamber ports.
 - 3.5 Temperature sensor with cable.
 - 3.6 Humidity sensor with cable pressure transducer
 - 3.7 Pressure transducer +/- 2.25 cm H₂O
 - 3.8 Barometric pressure sensor, 220V
4. System configuration accessories, spares and consumables, replacement accessories:
 - 4.1 Replacement screens
 - 4.2 Ball valve
 - 4.3 Water bottle with sipper tube
 - 4.4 Water bottle holder
 - 4.5 Temperature sensor
 - 4.6 Humidity sensor
 - 4.7 Temperature sensor cable for universalIXE
 - 4.8 Humidity sensor cable for UniversalIXE
 - 4.9 Rat whole body plethysmograph chamber lid
 - 4.10 Rat whole body plethysmograph chamber floor
 - 4.11 Gasket kit (6 gaskets)

4.12 Refurbishment kit includes 6 gaskets, pneumotachograph screen, ball valve, water bottle, luer fittings and caps, screws, stopper, tubing, chamber floor.

4.13 Plug and feet kit.

5. Environmental factors:

5.1 Shall meet IEC-60601-1-2:2001 (Or equivalent BIS). General requirements of safety for electromagnetic compatibility or should comply with 89/366/EEC; EMC directive.

5.2 The unit shall be capable of being stored continuously in ambient temperature of 0-50 deg C and relative humidity of 15-90%

5.3 The unit shall be capable of operating continuously in ambient temperature of 10-40 deg C and relative humidity of 15-90%

6. Power supply:

6.1 Power input to be 220-240V AC, 50Hz fitted with Indian plug

6.2 Suitable servo controlled stabilizer/CVT

7. Documentation:

7.1 User/ technical maintenance manuals to be supplied in English.

7.2 Certificate of calibration and inspection.

7.3 List of equipment available for providing calibration and routine preventive maintenance support as per manufacturer documentation in service/technical manual.

7.4 List of important spares and accessories with their part number and costing.

7.5 Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

Item no. 9

Real Time PCR

- 1 Thermal Cycling in Peltier-based system with gradient block
- 2 Block Format 96-well block compatible with 96-well (0.1 ml/0.2ml) plates, at least 8-tube (0.1 ml/0.2ml) strips with optical flat caps and Individual (0.1 ml/0.2ml) tubes with optical flat caps
- 3 Supported Volumes 10–50 μ L
- 4 Sample Ramp Rate at least 2°C/sec
- 5 Temperature Range 4°C-100°C, Temperature Accuracy at least +/-0.25°C and Temperature Uniformity at least +/-0.50°C.
- 6 **Software for melt curve analysis to be quoted along with equipment.**

- 7 Optical System: LED excitation source, four-emission filters, and photodiode for FAM, SYBR Green I, VIC, JOE, NED, TAMRA, ROX dyes, with option to select no passive reference.
- 8 Data Collection in all filters for all wells.
- 9 **LCD screen and attached computer capable of displaying and programming parameters.**
- 10 Should be US FDA or European CE approved product.
- 11 **Suitable online UPS with ½ hr backup and Printer & probe design software to be provided.**

Item no. 10

Fully Automated Blood culture System

1. Fully automated, technology with ability to take patient I.D. by barcode.
2. Should process blood samples, other sterile body fluids both aerobic and anaerobic systems.
3. Sample capacity more than 200 samples.
4. Besides pyogenic, system should have facility of detection for yeasts and fastidious organisms.
5. Capacity to include pediatric and adult samples.
6. Media in bottles should have agents for neutralization of antibiotics.
7. Continuous agitation system to allow better organism growth
8. Should analyze each sample separately as per ID, time of entry, incubation period, growth etc.
9. Should have built in calibration check and alarms / reminders for the same.
10. Decontamination facility should be available for the system as well as individual rack
11. System should have high sensitivity & specificity with continuous monitoring of all samples.
12. All media and consumables for setting up and standardization should be provided free of cost.
13. Should have minimum 3 day's standalone data storage capability in case of system malfunction.
14. Additional identification and sensitivity (with wide range of antibiotics) to be provided with the equipment.
15. Training of laboratory staff for the purchased equipment.
16. Three years warranty, 5 yrs comprehensive AMC should be available with service centers in close proximity
17. Availability of spares/ disposables for at least 10 years.
18. All consumables required for installation and standardization of system to be given free of cost.
19. List of users and Satisfactory report of quoted model from reputed institute preferably Government

institute/ hospital

20. Should have all the accessories required for the functioning of the equipment.
21. ISI mark or other equivalent quality certification.
22. All electrical peripherals required for smooth functioning e.g. voltage stabilizer and UPS should be provided with the equipment.
23. There should be provision for demonstration before final installation.

Item no. 11

2D Colour Doppler Ultrasound Equipment

The equipment must be capable of operating in B, M, Doppler, Colour flow and Power Doppler modes. It must support transducers with linear, sector and convex formats. Further, it must include a full array of measurement and calculation packages. The specific minimum requirements for this equipment are as follow.

1 User Interface & Ergonomics

- 1.1** The system shall support backlight keys or provide an integrated light for ease of use in darkened work areas. The backlighting shall be tri-state to further simplify ease of use and indicate function selected.
- 1.2** The system shall include at least a 17" LCD monitor to allow for both excellent images viewing as well as providing for workflow and productivity features.
- 1.3** The system shall have three active universal probe ports in a convenient, easy to access location to maximize the availability of needed probes.

2 Productivity

- 2.1** The system shall offer an extended field-of-view imaging that operates by sweeping a transducer over the anatomy of interest. This mode shall build the extended field-of-view in a real-time manner, showing the image as it builds.
- 2.2** System shall have image management features that store images by patient and include the ability to review images from different exam dates.
- 2.3** **System shall support the ability of post image acquisition optimization to optimize imaging** parameters such as B Gain, TGC, Color Gain, Dynamic Range, Speckle Reduction levels, Doppler Gain, Doppler Base Line on image recalled from the image archive.
- 2.4** System shall allow for live image and archive images side-by-side or quad display on a single monitor. This display shall allow any type of image – B-Mode, Color, or power Doppler on either side.

2.5 The system shall display thumbnails on a clipboard while scanning to facilitate exams.

3 Unit should have Auto IMT (Intima media thickness measurement) facility.

4 Unit should have Ultrasound Contrast imaging capability (Micro bubbles). Tissue Harmonic imaging with contrast should be available as standard feature.

5 Post-acquisition Data Processing.

5.1 The system shall allow for post-storage image manipulation to provide maximum image flexibility, review and productivity. It shall include, at a minimum the ability to change the:

Overall B-Mode gain, dynamic range and gray scale maps.

Overall Doppler gain, base line shift, sweep speed and inverted spectral waveform.

5.2 The system shall provide a display zoom function on frozen images.

6 Scanning Parameters

6.1 The system shall possess the ability to control speckle through the use of a speckle reduction (SRI) algorithm that enhances borders, reduces speckle artifact and improves detail and contract resolution in gray scale with compatibility in Color mode, 3D and side-by-side display. This feature shall have operator selectable settings and be capable of displaying in side-by-side mode with non-speckle reduced image.

6.2 The system shall provide the ability to scan in the compound imaging mode with multiple lines on all linear and convex probes. The system shall provide scan depths from a minimum of 2 cm to a maximum of at least 30 cm. System should have minimum of 50,000 Digital Channels for better resolution.

6.4 System should have Dynamic Range of **at least 170 Db.**

7 M-Mode Imaging

The system shall have a facility allowing the M-Mode cursor to be adjustable in any plane and allow for accurate measurements. The M-mode shall be available from a CINE loop or live image.

8 Spectral Doppler (PW)

8.1 Doppler mode shall be available on all probes.

8.2 The Doppler cursor shall be user-steerable with linear transducers.

8.3 The system shall provide the user with control to either have Doppler with real time B-Mode, Doppler with periodic B-Mode update or Doppler with frozen B-Mode scanning.

8.4 The system shall provide stereo audio of the Doppler spectral signal.

8.5 The system shall provide the user with control during timeline replay to review the spectrum only (i.e., frozen B-Mode) or with the spectrum and B-Mode together and synchronized.

8.6 The system shall provide the user with the ability to add a spectral peak and spectral mean trace onto the spectrum in both real time or after freezing the image.

9 Measurements and Calculations

9.1 The system shall provide digital calipers for at least the following measurements:

- a) Depth & Distance
- b) Circumference
- c) Area
- d) Volume
- e) Velocity

9.2 All measurements should be possible on frozen images as well as on images recalled from the image archive.

9.3 The system shall provide a comprehensive set of obstetrical and gynecologic calculations and vascular calculations with summary reports.

10 Unit should have integrated 3D Imaging facility using Normal probes for MULTIPLANAR views and surface rendering as well as vascular 3D capabilities for Gray scale, Color Mode and also power Doppler. System is capable of capturing 3 dimensional data from parallel and sweep movements.

11 Image Archive and Networking

11.1 The device should store images onto an integrated DVD-R Multiridrive and a USB port storage device.

11.2 The system shall include at least 100 GB bytes of dedicated hard drive for large local storage capacity.

12 DICOM Connectivity should be a standard feature with the hospital network and a standalone PC (Windows based) with suitable DICOM viewer to be supplied.

13 Transducers

- a) Transvaginal Probe **with Biopsy attachment**, Operating Frequency 4- 9 MHz
- b) Convex Probe with biopsy attachment. Operating Frequency: 2 - 5 MHz
- c) Linear Probe with biopsy attachment. Operating Frequency: 5 – 10 MHz
- d) **Sector probe / Microconvex probe** for pediatricneurosonography 2-5 MHz

14 The unit must be US FDA and CE approved.

- 15 Suitable UPS with 60 minute backup for whole system.**
- 16 Patient couch with compatible ergonomic operator chair of premium quality. (Price to be quoted separately).**
- 17 Gel warmer (standalone)- 01 No.**
- 18 The bidder has to arrange for demonstration of the quoted model.**
- 19 360 °mechanically rotated radial endoluminal probe Operating frequency: 7.5 - 10 MHz. (Optional - Price to be quoted separately).**

Item no. 12

Video Colonoscope

- Manufacturer (brand) should be of international repute
- Supplier should have supplied similar equipment to reputed institutes like PGIMER Chandigarh or AIIMS Delhi
- Must provide reliable and quick after sale service
- Must provide a replacement equipment in case of breakdown requiring off site repair, to ensure un interrupted patient care
- Compatible HD Video Processor with inbuilt light source with 180-300 Watts Xenon Light Source with 2 extra Xenon bulbs
- HD medical LCD Monitor
- Portable high quality Trolley for the whole system
- Biopsy channel rubber valves (50 pieces with one endoscope)
- All standard accessories, Air Leakage Tester, User/ Operator & Reference Manuals.
- A fully loaded Windows Xp / Vista based PC with genuine software including windows Xp / 7, office 2007 / 2010, software for recording, processing and printing.
- CPU minimum 500 GB hard disk, 5 GB RAM, DVD and CD reading & writing capabilities, digital keyboard, optical mouse, 17-19 /LCD monitor (other than above), UPS of standard make and model, color laser printer preferably with smart memory PC card slot or digital output to facilitate direct recording of data, image and video output the processors.

Colonoscope

- Optical System
 - Field of View: 140 degree or more
 - Depth of View: 4-100 mm or better
 - HD TV compatible CCD: High resolution Color chip of latest technology
- Distal End (OD): 14 mm or less
- Bending section (Range of distal end bending)
 - Up: 180 degree or more
 - Down: 180 degree or more
 - Right: 160 degree or more
 - Left: 160 degree or more
- Insertion tube (OD) : 13 mm or less
- Working Length: 1600 – 1800 mm
- Total Length: 1990-2100 mm
- Instrument Channel (ID): 3.8 mm or more

Accessories:

- Biopsy forceps, foreign body forceps, injection needle, dormia basket and polypectomysnear – one each for all scopes
- All Scope should be fully immersible for disinfection.

Video Duodenoscope (ERCP scope)

- Manufacturer (brand) should be of international repute
- Supplier should have supplied similar equipment to reputed institutes like PGIMER Chandigarh or AIIMS Delhi
- Must provide reliable and quick after sale service
- Must provide a replacement equipment in case of breakdown requiring off site repair, to ensure un interrupted patient care

HD medical LCD Monitor

- Portable high quality Trolley for the whole system
- Biopsy channel rubber valves (50 pieces with one endoscope)
- All Scope should be fully immersible for disinfection.

Other inclusions:

- All standard accessories, Air Leakage Tester, User/Operator & Reference Manuals.

Duodenoscope Optical System

Field of View: 100-140 degree or more

Depth of View: 4-60 mm or better

Angle of view: Backward oblique 5-7 degree or more

HD TV compatible CCD: High resolution Color chip of latest technology

- Distal End (OD): 12-13.5 mm or less
- Bending section (Range of distal end bending)
 - Up: 120-130 degree or more
 - Down: 90 degree or more
 - Right: 105degree or more
 - Left: 90 degree or more
- Insertion tube (OD) : 11-13 mm or less
- Working Length: 1200 – 1250 mm
- Total Length: 1500-1560 mm
- Instrument Channel (ID): 4.2 mm or more
- Custom-made 4x 3x 3 feet multi-rack good-quality trolley to keep ERCP Accessories & consumables

Accessories:

Biopsy forceps, foreign body forceps, injection needle, dormia basket and polypectomysnear- one each for all scopes

- All Scope should be fully immersible for disinfection.

Item no. 13

1.5 TESLA MAGNETIC RESONANCE IMAGING SYSTEMS

Competitive bids are invited for installation of **1.5 Tesla** MRI System with state-of-the-art latest features commercially available at the time of supply **EuropeanCE/ US FDA approved**). The system should be cost effective, with user friendly platform, reliable and capable of providing excellent performance for clinical imaging and research. The detailed specification that follows shall be understood to be minimum requirement.

1. MAGNET

- a. Whole Body **1.5Tesla** Magnetic Resonance Imaging System optimized for higher performance in Whole Body and Vascular examinations with superconducting magnet, high performance gradients and digital Radio Frequency System.
- b. **1.5T** active shielded super conductive magnet should be short and non-claustrophobic.
- c. It should have at least 70 cm patient bore with flared opening.
- d. Magnet length should be less than 200cm.
- e. Homogeneity of magnet should be less than 3.5 ppm over 45cm DSV
- f. The magnet should be well ventilated and illuminated with built in 2 way intercom for communication with patient.
- g. It should have a built in cryo-cooler such that helium consumption does not exceed 0.05 lit/hour.

2. SHIM SYSTEM

- a. High performance, highly stable shim system with global and localized automated shimming for high homogeneity magnetic field for imaging and spectroscopy.
- b. Auto shim should be available to shim the magnet with patient in position

3. GRADIENT SYSTEM

- a. Actively shielded Gradient system
- b. The gradient should be actively shielded with each axis having independently a slew rate of at least 200 T/m/s and a peak amplitude of 44mT/m.
- c. The system should have efficient and adequate Eddy current compensation
- d. Effective cooling system for gradient coil and power supply

4. RF SYSTEM

- a. A fully digital RF system capable of transmitting power of at least 15kw.
- b. It should also have at least 32 independent RF receiver channels with each having bandwidth of 1 MHz or more along with necessary hardware to support quadrature ICP array/Matrix coils. The highest receiver channels available with the vendor should be quoted.
- c. It should support Parallel acquisition techniques with a factor of up to 2 in 2D.
- d. Should allow remote selection of coils and / or coil elements.

5. PATIENT TABLE

- a. The table should be fully motorized, computer controlled table movements in vertical and horizontal directions.
- b. A CCTV system with colour LCD display to observe the patient should be provided:
Moving table angiography should be possible.
- c. There should be a hand held alarm for patients

6. COMPUTER SYSTEM /IMAGE PROCESSOR / OPERATOR CONSOLE

- a. The main Host computer should have a 19 inches or more high resolution LCD TFT color monitor with 1024 x 1024 matrix display
- b. The system should have image storage capacity of 100 GB for at least 2,00,000 images in 256x256 matrix.
- c. The reconstruction speed should be at least 1300 or more for full FOV 256 matrix.
- d. The main console should have facility for music system for patient in the magnet room. The system should have DVD / CD / flash drive archiving facility. Supply 5000 DVD along with the system. The system should be provided with auto DVD writer.
- e. Two way intercom system for patient communication.
- f. MRI System should be enabled and networked to RIS/HIS

7. MEASUREMENT SYSTEM

- a. Largest Field of View should be at least 45 cm in all three axis.
- b. The measurement matrix should be from 128x128 to 1024x1024.
- c. Minimum 2D slice thickness mm should be equal to or less than 0.5
- d. Minimum 3D slice thickness mm should be equal to or less than 0.1

8. COIL SYSTEM

- a. The main body coil integrated to the magnet must be Quadrature / CP. In addition to this following coils should be quoted
- b. Multichannel Head coils with at least 15 channels for high resolution brain imaging.
(16 channel coil should be supplier whenever available to the vendor with no additional cost.)
- c. Neuro-vascular Coil with 16 or more channels or Head / Neck Coil combined, capable of high resolution neuro-vascular imaging
- d. Spine Array/Matrix Coils with at least 32 channels for thoracic and lumbar spine imaging.

-
- e. Body Array/Matrix coil with 18-32 channels with at least 38 cm z axis coverage for imaging of abdomen, angiograms and heart. (The best available body coil with the vendor must be supplied)
 - f. Dedicated Cardiac Coil/ equivalent with at least 18-32 channels
 - g. Suitable coil with at least 32 channels for peripheral angiography application
 - h. Bilateral Breast Coil with at least 8 channels. (**The best available coil with vendor should be supplied**)
 - i. Dedicated Shoulder Coil
 - j. Dedicated Knee Coil with at least 15 channels
 - k. General purpose flexible coils and circular coils
 - l. Loop Flex Coil
 - m. Neck phased array coil – 8 channel or above
 - n. Suitable coils for multi-nuclear MR spectroscopy for brain, muscle, cardiac and liver spectroscopy. (Price should be offered separately for coils and software if available)
 - o. The system should continuously monitor the RF coils used during scanning to detect failure modes. RF coils should not require either set up time or coil tuning; Multi coil connection for up to 2 or more coils simultaneous scanning without patient repositioning i.e. like 4GTIM/ GEM/D stream coil combination should be quoted as standard.
 - p. Suitable Coil Storage Cart should be supplied for keeping the supplied coils.

9. APPLICATION SEQUENCES

- a. The system should have basic sequences package with Spin Echo, Inversion Recovery, Turbo Spin Echo with high turbo factor of 256 or more, Gradient Echo with ETL of 255 or more, FLAIR.
- b. Single slice, multiple single slice, multiple slice, multiple stacks, radial stacks and 3D acquisitions for all applications.
- c. Single and Multi shot EPI imaging techniques with ETL factor of 255 or more
- d. Fat suppression for high quality images both STIR and SPIR.
- e. The system should acquire motion artifact free images in T2 studies of brain in restless patients (Propeller, Multivane, Blade etc)
- f. Dynamic study for pre and post contrast scans and time intensity studies
- g. MR angio Imaging: Should have 20/30 TOF, 20/30 PC , MTS and TONE,ceMRA, Facilities for Accelerated time resolved vascular imaging with applications like Treats/Tracks/Tricks sequences.
- h. Fat and water excitation package. Diffusion Weighted Imaging, with at least b value of 5000 or more.

-
- i. Bolus chasing with automatic and manual triggering from fluoro mode to 3D acquisition mode with moving table facility.
 - j. Non contrast enhanced peripheral angiography for arterial flow with Native/Trance/Inhance sequences
 - k. Whole body screening imaging studies for metastasis
 - l. High resolution Abdominal and Liver imaging in breathhold and free breathing modes with respirator triggered volume acquisitions
 - m. The system should have basic and advanced MRCP packages including free breathing and 3D techniques.
 - n. The system should have facility for flow quantification of CSF, vessel flow and hepatobiliary system.
 - p. The system should have the Hydrogen, Single Voxel spectroscopy, Multivoxel Multislice & Multiangle 2D, 3D Spectroscopy and Chemical shift imaging in 2D/3D. The complete processing/post-processing software including color metabolite maps should be available on main console. Complete prostate spectroscopy hardware and applications should be provided.
 - q. Advanced Cardiac Applications: **(Optional - price to be quoted separately)**.
VCG gating, Morphology/wall motion; Cine perfusion imaging; Myocardial viability imaging; Arrhythmia rejection techniques, Advanced Cardiac Ventricular Measurement Analysis; Cine Cardiac Tagging Techniques; Coronary artery techniques; real time interactive imaging, 20/30 fast field echo/balanced/steady state techniques and **evaluation package on workstation**
 - r. Advanced Breast imaging Package.
 - s. Perfusion imaging of brain (including ASL)
 - t. Susceptibility weighted imaging (i.e.SWI)/ Venous BOLD imaging.
 - u. Multi Direction DWI and DTI with minimum of 32 directions(Complete package including quantification and tractography software). Prospective motion correction enabled software preferred.
 - v. High resolution imaging for inner ear
 - w. The bidder should mention the latest technology like “Silent MR” or equivalent available with offered system
 - x. The bidder should mention the advanced software available with offered model for advanced clinical and research point of view.

10. WORK STATION

- a. A workstation with preferably the same user interface as of main console is required with the availability of all necessary software including.
 - i. Basic post-processing software including MIP, MPR, surface reconstruction and volume rendering technique.
 - ii. **Advanced post-processing offered applications perfusion quantification, advanced diffusion and DTI, processing of 20/30 CSI data, with color metabolite mapping, quantification of CSF flow data, vascular analysis package,.**
- b. It should have at least 19 inch LCD TFT color monitor, with hard disk of at least 120 GB for at least 250,000 image storage in 256 matrix, and 4 GB RAM capacity or more, with self-playing OVO/CO archiving facility.
- c. The workstation should display cardiac cine images in movie mode with rapid avi creation
- d. The workstation should enable printing in laser film camera and color printers

11. SAFETY FEATURES

The System should have following safety features

- a. The magnet system should include an Emergency Ramp Down unit (ERDU) for fast reduction of the magnetic field with Ramp Down time below 3 minutes
- b. The magnet should have .quench bands that contain the fringe fields to a specified value in the event of a magnet quench
- c. Real time SAR calculation should be performed by software to ensure that RF power levels comply with regulatory guidelines and are displayed on each image
- d. The system shall have manual override of the motor drive for quick removal of the patients from the magnet bore
- e. Temperature sensor (built in) for magnet refrigeration efficiency must be provided.

12. DOCUMENTATION

- a. DICOM compatible Dry Chemistry laser camera with integrated processor for filming from main console & workstation.
- b. Printing on films of 14" x 17", 11" x 14" and 10" x 8" sizes in a resolution of 500 or more dpi. It should be possible to connect other imaging modalities to the printer. 5000 compatible films to be provided.

13. UPS

- a. The system should be provided with UPS system for the complete system with at least 30 minute back up.

14. SUITABLE RF ENCLOSURE

- a. RF Cabin: The system should be supplied with the imported RF cabin with RF room shielding, RF Door screen, and interiors for the same should be carried out suitably.

15. ACCESSORIES

- a. Dual Head MRI Compatible Pressure Injector with 100 sets of syringes.
- b. Water Chiller for Cold Head I Gradients..
- c. One Non-ferromagnetic patient transfer trolley of international make should be provided.
- e. Fire Fighting System, Detectors and 6 Fire Extinguishers.
- f. Hand held metal detectors and two mental detector doors to be installed at the entrance point as will be intimated.
- g. Closed circuit CCD camera
- h. Phantoms for image quality audits.
- i. MRI compatible Anaesthesia machine – detailed specification given below.
- j. Suction and O2 pipeline and manifold to be provided inside the RF enclosure.

16. GUARANTEE

- a. The vendor should guarantee the service and spare support for 10 Years of the system including Helium and cold head and all accessories after 5 years of warranty.
- b. Application training to be provided onsite for total of FOUR weeks.
- c. Two Radiologists to be provided training at premier govt. teaching institute within country for two weeks.

17. Warranty and CMC:

- a. The system should have warranty for five years including helium refill, all accessories and turnkey work.
- b. Comprehensive Maintenance Contract (CMC) for the whole equipment including helium refill and all accessories including turnkey for five years should be quoted after warranty.

All tender responses should include the following without which the tender will be considered invalid.

- (i) The model with 'the best and latest technical features' available with the vendor should be quoted in tender response with original printed vendor data sheets.
- (ii) All product catalogues in original and soft copy in word format in addition to a hard copy to be provided in a CD.
- (iii) When the vendor data sheet disagrees with the bid response, clarification should accompany in the form of letter/certificates from the principals in original.
- (iv) The System should be DICOM – 3MPPS & should be ready to integrate with any existing PACS/HIS System.
- (v) List of all installations of the system in the country.
- (vi) The compliance statement must be filled strictly under headings given in the tender. Each specification corroborated in the compliance statement must give the page number where it is listed in the original technical data sheet along with soft copy.

Technical Specifications for MRI Compatible Anesthesia Machine

1. All the components of anesthesia machine including anesthesia ventilator, anesthesia monitor and accessories should be MRI compatible
2. The Machine should have separate indexed (pin index/ DISS/NIST) provision for connecting central pipeline gas supply of oxygen, air and nitrous oxide. It should have mounting capability of two oxygen and two nitrous oxide pin-indexed gas cylinders.
3. High pressure tubing for Oxygen, air and Nitrous Oxide for central supply connection with pipeline connectors should be supplied with machine.
4. There should be pressure indicating gauges for each gas for both cylinder as well as pipeline supply in accordance to ISO requirements.
5. **Gas Flow Management:**
 - a. Mechanical colour and touch coded flow meters: precisely calibrated cascaded tube flow meters for oxygen down the stream.
 - b. Mechanical hypoxic guard to ensure minimum concentration of 25% oxygen, across all oxygen nitrous oxide mixtures and oxygen failure alarm along with nitrous oxide cut off conforming to ISO requirements.
 - c. Machine should be able to deliver maximal flows for oxygen and nitrous oxide at least up to 8 liters per minute through flow meters.
 - d. Emergency oxygen flush that can deliver flows between 35 to 50 liters per minute. It should be protected from accidental activation as per ISO requirements.
6. **Vaporisers:**
 - a. Vaporiser shall mount to a selectate manifold of at least two vaporizers, which allows easy exchange between agents.

- b. Vaporizer must be isolated from the gas flow in the off position and prevent the simultaneous activation of more than one vaporizer.
- c. With each working station temperature, pressure and flow compensated anaesthetic agent specific vaporizers for Isoflurane and sevoflurane should be provided. Vaporizers should be quick loading / unloading type.

7. Breathing system:

- a. Closed circle system with carbon dioxide absorbent canisters should be part of machine. There should be common gas outlet for using other type of breathing system with this machine. Breathing system shall be fully autoclavable to 134°C and natural latex free. Long coaxial breathing system tubings to meet the requirement of MRI suit.
 - b. Facility of connecting to scavenging system.
8. Anesthesia machine should be mounted on four large antistatic castor wheels with foot brake/locking facility for at least front two wheels.
 9. There should be work surface and drawers with at least one drawer with locking facility.

II Specifications for Anesthesia Ventilator:

1. The Anesthesia machine should have integrated Anesthesia Ventilator system that should have at least CMV or A/CMV mode with adjustable breath rate, tidal volume and I:E ratio.
2. Ventilator bellows should be integrally mounted to the breathing system and ascending type. Bellow assembly should be autoclavable.
3. Anesthesia ventilator should have following adjustable parameters: (The range mentioned below in adjustable parameters is minimal desirable and wider range than this will be preferred)
 - a. Tidal volume range 50ml to 1200ml
 - b. Respiratory rate range 4 to 30 breath per minute
 - c. I:E ratio range 1:1 to 1:3
 - d. Inspired airway pressure range 15 to 60cm of water.
4. Anesthesia ventilator should have audiovisual alarms with temporary muting facility for power failure, breathing system disconnection, high inspiratory airway pressure

III. Specifications for Anesthesia Monitor:

1. The anesthesia machine should have integrated / mounted monitoring system with memory to monitor patient parameters:
2. Five lead ECG with arrhythmia detection facility.
3. Respiratory rate measurement by impedance method.

4. SPO2 measurement with plethysmograph and saturation dependent audio tone.
5. NIBP measurement.
6. Temperature measurement.
7. It should have provision for automatic identification and measurement of anesthetic agents (Sevoflurane, isoflurane) and EtCO2

IV. Essential Accessories

Each anesthesia machine should be supplied with complete MRI compatible accessories and spares to make its all functions operational.

1. Long coaxial circle system tubings 1 set to suit MRI suit, 2L reservoir bag 1, brains breathing system
2. At least three ECG cables with MRI compatible body electrodes
3. SPO2 cable and sensor adult 1 paediatric 1
4. Temperature probe nasopharyngeal 1, skin 1
5. EtCO2 and anesthesia gas sampling lines 2
6. NIBP tubing and cuff adult range 1, medium 1, paediatric 1

V. Others

1. Anesthesia ventilator should be gas driven. In case electric driven, it should have at least 30 minutes battery backup in case of mains electricity failure. Monitor should also have at least 30 min battery backup.

VI. Laryngoscope – adult and pediatric compatible with MRI both 1.5 & 3 T (2Nos.)

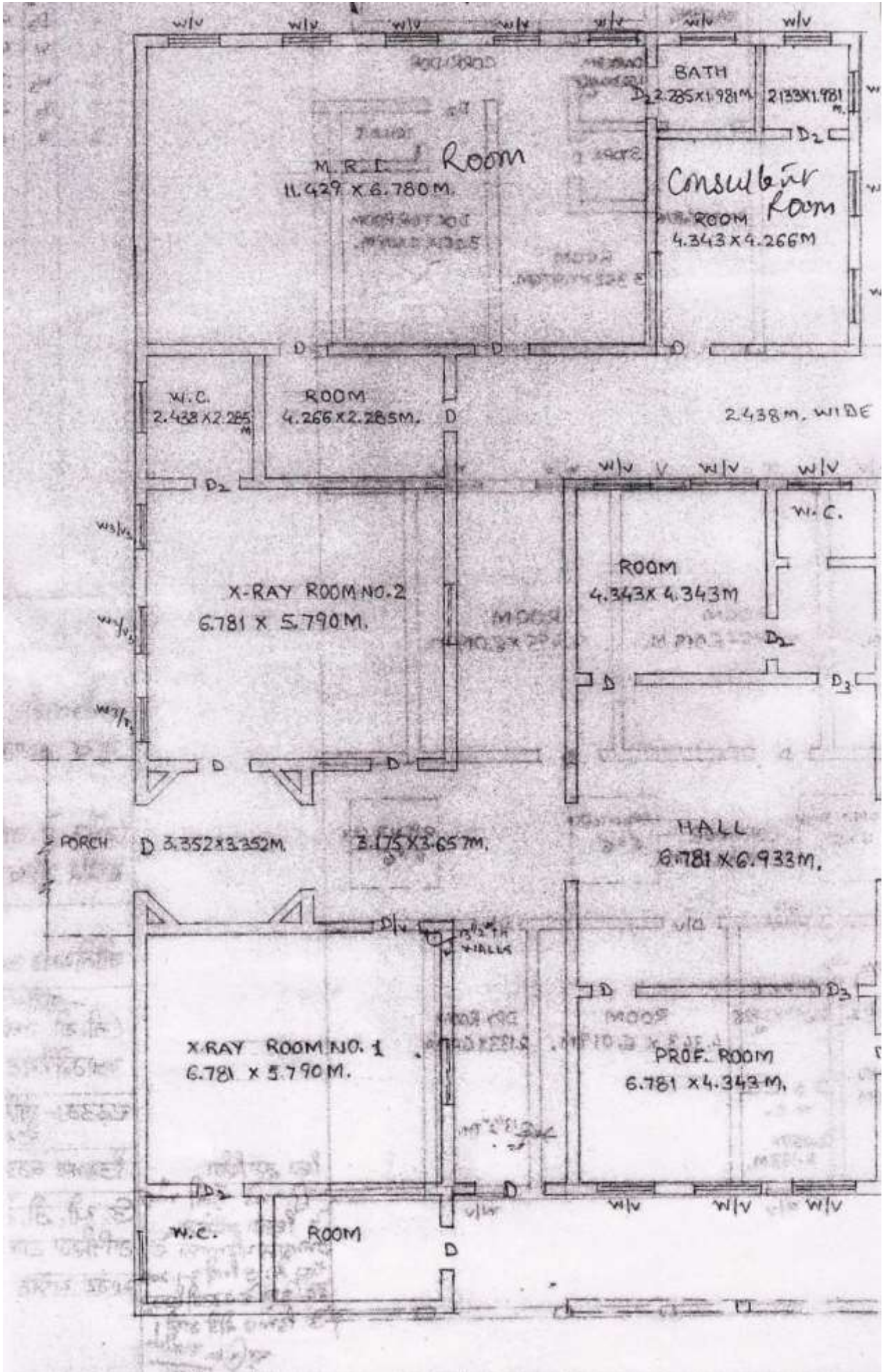
To be provided by the Bidder

The Turnkey Scope of Work – MRI 1.5 T	
1	The Supplier should inspect the proposed site offered by the Consignee Institute in which the MRI system has to be installed and they are required to submit the plan for the complete MRI Scan Centre on a turnkey basis. The scope of work includes complete Civil work, Electrical, Plumbing, Furnishing, Air-conditioning and Fire fighting for the construction of MRI Scan Centre.
2	While preparing the plan, the following aspects have to be addressed.
a)	Care should be taken to provide easy negotiation of the patient stretchers/ trolleys through corridors and doors.
b)	RF shielding for doors, walls, glass viewer etc.
c)	Furniture like desk, chairs, shelves etc.
d)	Patient stretcher and other furniture/ accessory to make the scan centre functional.
3	The cost of Turnkey for the area of approx 1500sq.ft and Air-conditioning of Tonnage 15 TR will be considered for Ranking / Evaluation purpose.

4	Moreover Bidders will have to quote the Unit Rates of the following components of turnkey work.
a)	Civil works
b)	Electrical work
c)	Public health (plumbing and sanitary fittings).
d)	Air Conditioning (HVAC)
e)	Interior Furnishing & Furniture
f)	Miscellaneous
	Scope of work for turnkey MRI unit works:-
	The supplier should inspect the proposed site and submit all the detailed structural and architectural drawings and BOQ for the proposed MRI Scan Centres along with technical bid of the tender.
	The MRI SCAN CENTRE shall consist of the following rooms:
a)	MRI Room
b)	Console room
c)	Equipment room
d)	Patient preparation room
e)	Reporting room
f)	Patient waiting area
g)	Radiologist room
	The actual area of turnkey works done will be considered for payment, based on the site measurements.
	Civil work
a)	Civil construction work including construction of brick wall, plastering, flooring as per the approved plan and equipment layout plan.
b)	Concrete bed at MRI equipment area.
c)	Platform for unloading and shifting the MRI should be provided if necessary.
d)	Platform for Chiller unit would be provided. Fencing and weather protection facility should be provided for the Chiller unit.
e)	Cable tray, trench & channel – necessary trenches, cable tray and channels at required location would be provided.
f)	All the construction work to be done as per the final plan approved by the purchaser.
g)	Active and passive room shielding for magnetic, fringe field should be provided as per the requirement of the equipment.
a)	Flooring
3	600 x 600 mm vitrified tiles with 100mm tile skirting to match in console room, lobby and patient preparation areas, Radiologist room etc.
4	50 mm thick cement concrete flooring with Vinyl flooring in MRI equipment / UPS room.
b)	Painting
2	Two coats Plastic Emulsion Paint over 2 coats of wall putty including primer in patient preparation area, Lobby area, console room, MRI equipment room etc.
3	Pre laminated particleboard wall panelling in MRI examination room
c)	False Ceiling
2	Acoustical tile for ceiling with light weight insulating material of high quality supported on grid or finished seamless with support above ceiling. Finished with white paint or powder coated with white paint, if metallic. Ceiling height to suit the equipment mount and clearances.
	Plumbing work
1	All water pipes and fittings shall be of high density polythene of approved and standard make. The gratings shall be brass chrome plated. All plumbing accessories should be of standard make.

2	Copper pipes to be used for plumbing the Chiller to the MRI.
	Electrical work
1	The supplier shall be required to specify the total load requirements for the MRI scan centre including the load of air conditioning , room lighting and for the accessories if any. The supply line will be provided by the Institute up to one point within the MRI Scan centre area. The distribution panel shall be provided by the vendor. Few lights in each room shall be connected to the UPS to provide emergency lighting.
3	The electrical work shall include the following:
a)	Wiring – All interior electrical wiring- with main distribution panel board, necessary MCBs, DB, joint box, switch box etc. the wires shall be of copper of different capacity as per the load and should be renowned make as listed below.
b)	Switches light and power points should be of modular type and of standard make as listed below.
c)	General lights – Mirror optical type 1X28 W or 2X28 W/CFL fittings 2X36, 3X36 W with electronic ballasts.
d)	MRI compatible lights for MRI examination room. The bulbs used within the RF cage should be easy replaceable and locally available.
	AIR CONDITIONING:
	Ductable package air conditioners and split AC units may be used according to room requirement and suitability. Humidity control should be effective to eliminate moisture condensation on equipment surface. . The Air conditioning should be designed with standby provision to function 24 hours a day. A)
	The outdoor units of AC should have grill coverings to prevent theft and damage.
	Ventilation is required in toilet.
	Environment specifications:
a)	Humidity range: Relative humidity 60% and 80% in all areas except equipment room which shall be as per requirement of the equipment.
b)	Temperature ranges: 22 ± 2° C in all areas except equipment room which shall be as per requirement of the equipment.
c)	Air conditioning load: The heat load calculations and maintaining the desired temperature and humidity shall be the responsibility of the bidder
	Furniture:
a)	Revolving chairs height adjustable, medium-back with hand-rest in the Control room, Radiologist room and viewing area. – 4 NO.S
b)	Chairs for patient waiting area – Three seater (chrome plated). – 10 NO.S
c)	Cupboard with laminate door shutters for storage of spare parts and accessories and records as per requirement. – 3 NO.S
d)	Drug trolleys for patient preparation area.- 1 NO.
e)	Patient trolley with rubber foam mattress to be kept in the patient preparation room.
f)	Name boards for all rooms
g)	Tables for Workstation and Radiologist in reporting room.- 2 NO.S
h)	Changing rooms should have change lockers and dressing table.
i)	Dustbins (plastic with lid) to be provided as required.
j)	Any other furniture item as per requirement.
	All furniture items should be of standard make as mentioned in the table below.
	Miscellaneous:
1	Reporting room should have LED X-ray Film viewer with adjustable brightness; capable of holding 3 films of 14”x17” size. – 2 no.s
2	Cabling of Network (LAN) connectivity for camera system, console system, workstation and computers etc
3	Broadband connection: for REMOTE SERVICE of MRI system.

4	MRI compatible Fire extinguisher Dry CO2 type for use in the magnet room should be supplied and Fire extinguisher Dry CO2 type as required for the building safety.
5	Suitable DG Set for complete MR area including the MRI machine
	LIST OF ITEMS AND SUGGESTED MANUFACTURERS.
SL NO	ITEMS PREFERRED MAKES
A	FLOORING VITRIFIED TILES -Somany, Kajaria , H&R Johnson, RAK india
B	PAINT - Dulux, Asian Paints , Nerolac
C	PLUMBING - Kohler, Jaguar , Grohe , Roca
D	SANITARY ITEMS - CERA, Hindware, Parryware
E	ELECTRICAL
1	CABLES - Finolex, Havells ,V-Guard
2	SWITCHES - Legrand, L&T, Crabtree , Roma
3	DISTRIBUTION BOX , MCB - Legrand, L&T, Siemens, Havels
4	LIGHT FITTINGS - Philips / Crompton / Kesselec-Schreder / Wipro.
F	AIR CONDINTIONING - Daikin, Hitachi, Blue Star, Voltas,
G	FURNITURE - Hermen Miller , Godrej , Featherlite



Item no. 14

Volumetric Infusion Pump

1 Description of Function

1.1 Volumetric Infusion Pump is a medical device that delivers intravenous fluids and medicine to patients in hospitals, outpatient surgical centres, hospices, nursing homes, and in ambulances

2 Operational Requirements

2.1 Programmable volumetric infusion pump is required

3 Technical Specifications

3.1 Battery back-up operating time 5 hours.

3.2 LCD programming display

3.3 Data entry calculator style alpha numeric programming keyboard

3.4 Pole clamp Multi-function mounting clamp

3.5 Nurse call output alarm, time and date settings

3.6 Quick titration of rate or dose with volume-time programming

3.7 Flow rate range (primary) 0.1 to 99.9 ml/hr. (0.1 ml increments) and 1 to 1200 ml/hr. (1ml increments.)

3.8 Volume to be infused 0.1 to 99.9 ml (0.1ml increments) and 1 to 9999 ml(1 ml increments).

3.9 Both flow rates and volume to be infused should be configured to limit the maximum allowable range

3.10 RS232C/USB/RS485 output for Printer, PC connectivity and Data acquisition with selectable baud rate options should be there

3.11 Accuracy $\pm 3\%$.

3.12 Pump Database: events of 24 hours with real time.

4 System Configuration Accessories, spares and consumables

4.1 Compatible with any standard infusion sets available in local Indian market

4.2 1000 numbers of required infusion sets should be supplied with the single unit

5 Environmental factors

- 5.1 The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%
- 5.2 The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%

6 Power Supply

- 6.1 Power input to be 220-240VAC, 50Hz fitted with Indian plug

7 Standards, Safety and Training

- 7.1 Should be US – FDA/European CE approved product
- 7.2 Manufacturer/Supplier should have ISO certification for quality standards.

8 Documentation

- 8.1 User/Technical/Maintenance manuals to be supplied in English.
- 8.2 Certificate of calibration and inspection from factory.
- 8.3 List of Equipment available for providing calibration and routine Preventive Maintenance Support as per manufacturer documentation in service/technical manual.

Item no. 15**SYRINGE INFUSION PUMPS**

- 1) The syringe pump should be programmable, user friendly, safe to use and should have battery backup and comprehensive alarm system.
- 2) **Must Work on commonly available standard 2ml/3ml/5ml/10ml/20ml/50ml/60ml Syringes with accuracy of minimum of +/-2% or better, with automatic syringe size recognition.**
- 3) **Manufacturer should be ISO certified for Quality Standards and the System should be European CE or USFDA certified.**
- 4) **Flow rate programmable from 0.01 to 1000 ml/hr or more in steps of 0.01 ml/hr with user selectable flow set rate option. SAVE last infusion rate even when the AC power is switched OFF.**
- 5) **Bolus rate should be programmable to 100 to 1200 ml/hr or more with infused volume display and one key press bolus. Reminder audio after every 1 ml delivered bolus.**
- 6) **Display of Drug directory of more than 50 or more drugs or more, customized and adjustable.**
- 7) **Coloured display of atleast 3.5 inches.**

- 8) **Should have upto 2000 history records.**
- 9) Key board locking system for patient safety.
- 10) Keep Vein Open (KVO) must be available at 0.1 ml or set rate
User should have choice to disable KVO whenever desired.
- 11) Selectable Occlusion pressure trigger levels selectable from 300/500/900 mmHg.
- 12) Automatic detection of syringe size & proper fixing. Must provide alarm for wrong loading of syringe such as flanges out of slot; disengaged plunger, unsecured barrel etc.
- 13) Manual pusher with plunger protection guard.
- 14) Anti bolus system to reduce pressure on sudden release of occlusion.
- 15) Should have comprehensive ALARM package including: Occlusion limit exceed alarm. Near end of infusion pre-alarm & alarm, Volume limit pre-alarm & alarm, KVO rate flow, Low battery pre-alarm and alarm, AC power failure, Drive disengaged.
- 16) **Rechargeable Battery having 5 hours or more backup for about 5ml/hr flow rate with 50ml syringes. Larger battery life and indication of residual life will be preferred.**
- 17) Mounting device/ Docking Station for two or four pumps as per requirement so as to enable to power up to 2-4 pumps with one power cord when mounted on IV pole (optional).
- 18) **The unit shall be capable of stored and operating continuously in ambient temperature of 10 - 50deg C and relative humidity of 30-90%**
- 19) Power input to be 220-240VAC, 50Hz.
- 20) Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.
- 21) User Manual and service manual in English.
- 22) Should have local service facility .The service provider should have the necessary equipment recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.
- 23) List of important spare parts and accessories with their part number and costing

Item no. 16

Ventilator-High End (I.C.U)

1 Description of Function

1.1 ICU ventilators provide artificial respiratory support to the critical patients in the Intensive Care Units.

2 Operational Requirements

- 2.1 Microprocessor Controlled ventilator with integrated facility for Ventilation monitoring suitable for **Preterm**, New born to adult ventilation.
- 2.2 Demonstration of the equipment is a must.

3 Technical Specifications

- 3.1 Standard hinged arm holder for holding the circuit
- 3.2 Colored **Touch LCD/TFT** screen, 15 Inch or more
- 3.3 Facility to measure and display
 - a. End tidal CO₂ with capnography **integrated in ventilator with display of values and EtCO₂ waveform on the screen.**
 - b. 3 waves- Pressure and Time, Volume and Time and Flow and Time.
 - c. 3 loops- P-V, F-V, P-F with facility of saving of 2 Loops for reference.
 - d. Graphic display to have automatic scaling facility for waves
 - e. Status indicator for Ventilator mode, Battery life, patient data, alarm settings, clock etc
- 3.4 Trending facility for **24 hours**.
- 3.5 Automatic compliance & Leakage compensation for circuit and ET tube
- 3.6 Following settings for all age groups.
 - a. Tidal Volume: Lowest **25 ml or less**
 - b. Pressure (insp)
 - c. Pressure Ramp
 - d. Respiratory Rate
 - e. SIMV Respiratory Rate
 - f. CPAP/PEEP
 - g. Pressure support
 - h. FiO₂
 - i. Pause Time
 - j. Pressure and/or Flow Trigger.
- 3.7 Monitoring of the following parameters
 - a. Airway Pressure (Peak & Mean)
 - b. Tidal volume (Inspired & Expired)
 - c. Minute volume (Inspired and Expired)
 - d. Spontaneous Minute Volume
 - e. Total Frequency
 - f. FIO₂ dynamic
 - g. Intrinsic PEEP and/or PEEP_i Volume
 - h. Plateau Pressure

- i. Resistance (Inspiratory and expiratory) & Compliance (Static and dynamic)
- j. Use selector Alarms for all measured & monitored parameters
- k. Shallow breathing index and stress index.

3.8 Modes of ventilation

- a. Volume controlled
- b. Pressure Controlled
- c. Pressure Support
- d. SIMV (Pressure Control and volume control) with pressure support
- e. CPAP/PEEP
- f. Inverse Ratio Ventilation
- g. Advanced mode like pressure controlled volume guaranteed/dual modes /PRVC/Auto flow/ ASV/Smartcare/NAVA/ PAV any one of this.
- h. Non Invasive ventilation
- i. APRV

3.9 Apnea / backup ventilation

3.10 Two autoclavable expiratory blocks including flow sensors should be provided with each ventilator and no routine calibration should be required.

3.11 Should have the ability to calculate / Procedure

- a. Intrinsic PEEP and/or PEEPi Volume
- b. Occlusion Pressure
- c. Spontaneous Breathing trial
- d. Facility to calculate lower and upper inflection point (OPTIONAL)

3.12 In built/ Online nebuliser or ultrasonic to be supplies

3.13 Automatic Patient Detection facilities preferable

3.14 Technical Specifications for reusable face mask & nasal mask. Reusable face & nasal mask with textured dual flap silicone cushion flap for easy fit. Removable forehead support and pad to match the angle of patient's forehead Stability Selector for easy fit and angle. Ball & Socket headgear attachments. Should be autoclavable.

3.15 Battery backup for minimum 1 hour for ventilator

3.16 RS 232 **or similar** interface for communications with networked devices. HL7 compatible.

3.17 Automatic patient detection facility preferable.

4 System Configuration Accessories, spares and consumables

4.1 ICU Ventilator – 01

4.2(a) Adult, **Neonatal** and Paediatric autoclavable silicone breathing circuits – 02 each

4.2(b) Reusable Masks (Small, Medium, Large) with each machine. -02 sets each

- 4.3 All Accessories for non-invasive ventilation – 2 sets
- 4.4 Heavy duty air compressor & ventilator should be mounted & it should be mobile - 01 no. & it should be European CE approved.

5 Environmental factors

- 5.1 The unit shall be capable of being stored continuously in ambient temperature of 0 -50 deg C and relative humidity of 15-90%
- 5.2 Shall meet IEC-60601-1-2: 2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.
- 5.3 The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%

6 Power Supply

- 6.1 Power input to be 220-240VAC, 50Hz

7 Standards, Safety and Training

- 7.1 Certified to be compliant with ANS/IEC60601.2.12-01 Medical Electrical Equipment—Part 2-12; Particular Requirements for the Safety of Lung Ventilators—Critical Care Ventilators
- 7.2 Should be US FDA **or** European CE approved product.
- 7.3 Certified to be compliant with ISO-7767 for Oxygen monitoring.
- 7.4 Should meet IEC 529 Level 3 (IP3X)(spraying water) for enclosure protection, water ingress.
- 7.5 Demonstration of quoted equipment model is a must.
- 7.6 Should have local service facility .The service provider should have the necessary equipments recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.
- 7.7 Back to back warranty to be taken by the supplier from the principal to supply spares for a minimum period 10 years.

8 Documentation

- 8.1 Certificate of calibration and inspection from factory.
- 8.2 List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.
- 8.3 User Manual in English
- 8.4 Service manual in English
- 8.5 Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.
- 8.6 List of important spare parts and accessories with their part number and costing.

- 8.7 Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/data sheet. Any point, if not substantiated with authenticated catalogue/manual, will not be considered.
- 8.8 Must submit user list and performance report within last 5 years from major hospitals.
- 8.9 Back to back comprehensive warranty to be taken by the supplier from the principal to supply spares for minimum 10 years.
- 9 1. Trolley,Hinged Arm and other parts should be supplied
2. Reusable flow sensor- 05 nos.

Item no. 17

Anesthesia Machine with Integrated Monitor & Ventilator

The Machine should have the following:

- 1 Should have pipelines attachment for oxygen , nitrous oxide and compressed air.
- 2 Should have yoke assembly for oxygen and nitrous oxide with pin index system.
- 3 Durable main switch to put the machine in the on or off position.
- 4 **Dual cascaded flow meter.**
- 5 Should have safety features like :
 - a. Should provide 25% or more of oxygen when an anaesthetic gaseous mixture is in used.
 - b. **Should be provided with “pneumatic/ electronic” hypoxic guard.**
 - c. Should have extra flow meters for oxygen only.
- 6 Should have oxygen flush with a flow rate of more than 35L/min.
- 7 Should be able to hold two seletatec vaporizers (Isoflurane, Sevoflurane) simultaneously. Vaporizers should be maintenance free. Cost of vaporizers to be quoted separately.
- 8 Co2 absorber system with the following features :-
 - a. Single/Double canister
 - b. Autoclavable
 - c. Canister capacity of 0.8 kg or more.
 - d. It should be possible to bypass the canister if removed during clinical cases to change sodalime.
- 9 APL valve assembly and Bag mount should be conveniently placed.
- 10 Independent port for open circuit.
- 11 Should be provided with one or more drawers.
- 12 Machine should have a good quality handle and castors to move the machine with locking system.
- 13 **The ventilator of the machine should have the following features:-**

- a. Should be electronically controlled.
 - b. Should be suitable for both pediatric, adult and new born.
 - c. It should have coloured screen of minimum 8 inch size.
 - d. Volume and pressure control mode of ventilations.
 - e. Electronic peep
 - f. Both SIMV and pressure support mode.
 - g. Tidal volume range from 20ml to 1500 ml or more
 - h. Respiratory rate from 4 to 80 or more
 - i. I:E ratio
 - j. Display : Respiratory rate, peak airway pressure and PEEP
 - k. There should be no collection of water in the breathing system.
14. Should have independent paramagnetic oxygen sensor for FiO₂ monitor and flow sensor for spirometry.
15. Should be able to display
- a. Pressure Vs time
 - b. Volume /Flow Vs time
16. Should have battery backup of atleast 60 minutes
17. Demonstration of the product is must for all the firm.

The Monitor should have the following

1. A modular configurable patient monitor
2. Should have atleast 19" or more TFT colour display with up to 8 waveforms at a time
3. Should be touch screen
4. **Should be able to measure the following parameters:**
 - a. 3 and 5 lead ECG with electrocautery& defibrillator filter with ST Segment & arrhythmia detection with analysis,
 - b. Respiration , SpO₂ , temperature
 - c. NIBP, 2 IBP , ETCO₂
 - d. Multi –Gas analysis with auto detection of all anesthetic agents
 - e. Integrated BIS Monitoring.
 - f. Upgradable to cardiac output (thermodilution) monitoring.
5. Should be able to automatically detect and calculate MAC of all anaesthetic gases.
6. Should be able to calculate and display FiO₂.
7. Intelligent cooling system to keeps the unit running quiet during use.
8. Separate indicator lights for technical and physiological alarms.

- 9 Maximum BEEP tone should be loud enough to be audible from atleast a distance of 12 feet's.
- 10 **Should have graded audio and visual alarms for the following parameters:**
- a. Blood pressure - High and Low
 - b. SpO2 - High and Low
 - c. Heart rate - High and Low
 - d. Respiration - High and Low
 - e. FiO2 - High and Low
- 11 Trends – Upto 24 Hours or more
- 12 Battery Back- up – 45min to 1hour(2UPS for 30mins backup to be provided)
- 13 The quoted model should be European CE or US FDA approved
- 14 Bidder must ensure regular supply of medical grade Sodalime with rate quoted separately.
- The machine should be supplied with the following accessories:**
- a. ECG Cable – 2 nos
 - b. Reusable SpO2 Sensors: 2 each for Adult, Pediatric& Neonatal.
 - c. NIBP Cuff: 2 each for Adult, Pediatric& Neonatal.
 - d. IBP Transducers: 20nos
 - e. IBP Cable: 2 nos
 - f. BIS Electrode: 20 nos
 - g. ETCO2 Sample Line: 40 nos
 - h Reusable autoclavable Breathing circuit: 2 nos each for Adult &pediatric
- 16 Upgradable to modular EEG monitoring and SVO2 monitoring

Item no. 18

Neonatal Ventilator

- A) General requirements:**
- 1) Should be able to ventilate patients with body weight from 400 grams to 5 Kg
 - 2) Should have battery back-up for the ventilator with integrated re-chargeable battery for a minimum of 30 minutes operation.
 - 3) Should have an integrated high resolution screen with color display of at least 10 inches screen size
 - 4) Should have an integrated electronic blender Air and Oxygen
 - 5) Should have an imported integrated medical grade compressor
 - 6) The model that would be quoted should have US-FDA and /or European CE certification for neonatal use.
 - 7) The flow sensor should be reusable and should be located proximal between the Y piece and endotracheal tube
 - 8) Should have device checking mechanism where it can determine and display the compliance and resistance of the system, determine leakage in the patient hose system, and checking of valves, gas supply system, flow sensors, etc.

- 9) Should have and automatic leak compensation facility the provides sensitive triggering even with changing ET-tube leaks
- 10) Should be compatible with the Nitric oxide delivery system Sensor NOx (Viasys Healthcare, CA, USA) and the necessary connectors/adaptors/tubings and any other accessories required should be provided

B) Ventilation modes required:

- 1) Invasive ventilation:
 - Pressure limited mode: SIMV, Assist Control/ SIPPV, Pressure Support (PSV)
 - Should have volume targeting or volume assured or volume guarantee function in all pressure limited modes to ensure a preset tidal volume delivery by automatically varying the peak pressure or inspiratory time
 - Non-invasive ventilation: CAPA and NIMV with leak compensation function for a reliable delivery of peak pressures in NIMV mode
 - Should have apnea back-up facility with back up settings configured for neonates

C) Waveforms and loops:

- 1) Should be displayed on the integrated high resolution screen with color display of at least 10 inches screen size
- 2) Scalar graphics – for pressure, volume and flow; scales should be user selectable and adjustable for neonatal settings
- 3) Loop graphics – for pressure-volume, flow-volume, pressure-flow combinations; scales should be user selectable and adjustable for neonatal settings
- 4) Should have freezing and measuring facility for Loops and curves
- 5) Facility of movable cursor to read numeric values at any of point on the loop where the cursor is kept
- 6) Should have adjustable inspiratory flow patterns form square wave, sinusoidal, and decelerating wave

D) Ventilator parameters and settings:

- 1) Should have knobs for setting following parameters – Peak pressure, positive end expiratory and expiratory time, oxygen concentration (in 1% increments or decrements), and tidal volume
- 2) Should be able to monitor and display the following parameters: Peak pressure, PEEP, mean airway pressure (MAP), Respiratory rate, FiO₂, Minute Volume (Inspired and expired, Leak %), Resistance, Compliance
- 3) Should have the following settings and ranges:
 - a) Inspiration Time: 0.1 – 3 sec
 - b) Expiration Time: 0.1 – 30 sec
 - c) Respiratory rate up to 150 breaths per minute
 - d) Flow: Preset patterns – square, sinusoidal, decelerating
 - e) PEEP: 0-30 mbar/cmH₂O
 - f) Inspiratory Pressure: 5 – 60 mbar / cmH₂O
 - g) Tidal Volume: 2 - 30ml
 - h) Proximal flow trigger facility with a trigger sensitivity of at least 0.2 L/minute
 - i) Oxygen concentration (FiO₂)

E) Display

- 1) Inspiratory time
- 2) Expiratory time
- 3) I:E ratio
- 4) Ventilator
- 5) Mean airway pressure
- 6) Inspired oxygen concentration

- 7) Tidal volume and minute ventilation
 - 8) Trends of set and measured parameters with a trend memory of at least 24 hours
 - 9) Leak percentage
 - 10) Display of silenced alarms
- F) Alarm limits:** Should have visual as well as audible alarm with user adjustable alarm levels with text message for:
- 1) Power failure
 - 2) Circuit disconnection
 - 3) Tube obstructed
 - 4) Minute Volume
 - 5) Tidal Volume
 - 6) Peak pressure
 - 7) PEEP
 - 8) Patient disconnection
 - 9) Gas failure
 - 10) Low and high FiO₂
 - 11) Should have the facility to suspend the oxygen alarm indefinitely when oxygen cell is depleted or defective
- G) Power supply:** 220-240 V and 50-60MHz
- H) Miscellaneous:**
- 1) Complete unit should be mounted on a sturdy pedestal import trolley with good quality castors for easy movement of the complete ventilator. At least two of the four wheels should be lockable.
 - 2) Each unit should have a circuit hanger to support the patient circuit
 - 3) Each unit should be supplied with a heated servo controlled humidifier (either integrated or stand-alone) of the latest model with temperature display for set as well as measured temperature and complete with all accessories to make it operational. The humidifier should have the following requirements:
 - a) Heater with flow resistance up to 1 cmH₂O /L/sec
 - b) Temperature range: 28-39°C
 - c) Warm up time less than 15 minutes
 - d) Temperature control accuracy: ± 2 °C
 - e) Automatic audible and visual alarms for high and low temperatures
 - f) Visual indicator for water level and digital display for temperatures
 - g) Compatible with both reusable and disposable ventilator circuits
 - 4) Nebulizer: Should be in built and inspiration synchronized and preferably volume compensated with a time-programmable flow mechanism to activate nebulizer
 - 5) Manual oxygen key while suction; user adjustable oxygen concentration delivery while this manual mode is operated
 - 6) Should have an adjustable mechanical relief valve for excess pressure
 - 7) Should be able to be connected to central air line via and integrated compressor so that the compressor automatically switches on when air pressure in the central line drops below the recommended level
 - 8) Each unit should come with one set of standard Oxygen and Air hoses with hose connectors
 - 9) The firm should agree for periodic regular replacement of oxygen cells, compressor filters and ventilators filters during warranty and CMC
 - 10) Firm should agree for up gradation of software free of cost during the warranty and CMC period
- I) Consumable Accessories (per ventilator per year to be supplied on an annual basis during warranty as well as CMC) :**

- 1) Autoclavable reusable high quality neonatal specific low compliance heated ventilator circuits – 2 nos. (high frequency ventilator) and 4 nos (conventional ventilators).
 - 2) Heater wires for ventilator circuits (wherever applicable) – 2 nos.
 - 3) Guide wire for insertion of heater wires (wherever applicable) – 1 no.
 - 4) Proximal type flow sensors for neonatal use – 2 nos. (if differential pressure transducer type)
OR 8 nos. (if heated wire anemometer type)
 - 5) Flow sensor cables (if heated wire anemometer type) – 2 nos.
 - 6) In case of standalone humidifiers: one humidifier with each ventilator (total 6 humidifiers); 2 sets each of temperature probes, reusable humidifier chambers, heater wire adaptors for reusable circuits, and heater wire adaptors for disposable circuits with each humidifier;
 - 7) In case of integrated humidifiers: Two each of temperature sensors and reusable humidifier chambers with each ventilator
 - 8) Air filters (both inspiratory and expiratory – wherever applicable) – e each in case of reusable type (OR) 8 each in case of disposable type
- J)** Manuals: Operator & service manuals
- K)** Onsite physical demonstration of the ventilator with all standard actual accessories of the same make which the firm intends to supply will be mandatory if demanded by the technical committee. The ventilator with all the accessories has to be left in the unit for demonstration on real patients for at least 7 days.
- L)** Rates of consumable accessories should be quoted separately for the full duration of warranty and CMC

Item no. 19

Specifications for Open Intensive Care System for Neonates

Microprocessor base Electric servo control system made of sturdy, corrosion resistant material.

The accessories mentioned below are per machine.

Essential parts	:	Cart & bassinet warming system with controls & alarms Examination light
Cart	:	Should swivel on 4 wheels of at least 4" diameter with foot operated breaks on 2 front wheels
Dimensions		
Height	:	180-200 cms
Width	:	60-70 cms
Depth	:	100-120 cms
Working level	:	95-105 cm, adjustable
Bassinet	:	Moveable transparent side walls
Mattress		
Width	:	55-60 cms
Length	:	65-75 cms
Thickness	:	at least 4 cm
Material	:	Soft, easy to clean, radiolucent
Bassinet tilt	:	At least 8 degrees, Trendelenburg as well as reverse Trendelenburg
Warmer module swivel	:	45-70 degrees on either side
Modes	:	Manual & Skin
Manual mode	:	Adjustable in steps from 0 to 100%
Skin Mode	:	
Set point range	:	34-38 degrees C
Skin temp variability at	:	
Temperature equilibrium	:	± 0.2 degrees C
Skin temperature display		

Accuracy	:	± 0.2 degrees C
Resolution	:	0.1 degrees C
Audiovisual Alarms	:	Probe failure Heater failure High and low infant temperature Power failure System Failure Silence/reset switch
Examination light	:	Illuminance 100 foot candles at mattress centre
Storage space	:	2 drawers, preferably covered and sliding
Pulse oximeter	:	To measure oxygen saturation and heart rate Resistant to motion artifact Able to pick up signals in low perfusion states
CPAP system	:	Flow driven With air-oxygen blender and FiO ₂ control With heated humidifier Air way pressure display 0-15 cm H ₂ O With Bonnet, cap and nasal prongs (10 of each size) for babies 600 gm-4000 gms with 3 reusable circuits With 4 reusable flow generator
Power requirements	:	220/240 V AC, 50/60 Hz.
Essential Accessories		
I.V. Stand	:	Should be able to accommodate 2 fluid bottles
Monitor shelves	:	2 in number
X-ray Cassette holder	:	Sliding holder located just below under surface of bassinet, with markings to help placement of cassette.
Patient Probes	:	4 reusable temperature probes R reusable oxygen saturation probes 2 patient extension cables for the saturation probes

Operator Manuals

Prices of all consumables temperature probes, saturation probes, extension cable, heater element, halogen bulb, nasal prongs, bonnet, cap flow generator and CPAP circuit should also be quoted separately and should be valid for 7 years.

Item no. 20**Blood Cell Separator**

- Capable to collect Leukoreduced (<1 X 10⁶) Platelets, RBC & Plasma concurrently from single Donor.
- Multiple options for component collection.
- Product collected outside centrifuge.
- Single Needle Operation.
- Low extracorporeal Volume, <196ml.
- Continuous Flow Cell Separator.
- Short Set up time.

- Automatic Loading & priming of the disposables.
- Auto sensing of the disposable set type.
- Automatic self-test.
- Short Procedure Time.
- Configurable Donor safety Features like minimum post procedure Donor HCT, Platelet Count and Maximum Donor Volume Depletion.
- End of procedure summary screen showing Donor post Counts.
- Configurable Product Volume, HCT & Platelet Concentration
- Built-in Colour Graphic LCD Screen.
- Built-in Contamination Monitor
- Built-in ACD Detector.
- Built-in Ultrasonic Air Detector.
- Built-in pressure sensors for monitoring Access and Return pressures.
- Upgradable to Bar Code reader.

Item no. 21

Laparoscopic Surgery Set with Hysteroscope & Resectoscope with High Definition Camera & Monitor

	Technical Specification of Laparoscope	
	1 Description of Function	
	Laparoscope is used for minimally invasive surgery and comprises of telescope and associated instruments and units	
	2 Operational Requirements	
	All offered items should be from same manufacturer with USFDA or European CE approved products.	
	3 Technical Specifications	
	3.1 TELESCOPES	
	a) 5 mm forward oblique, 30 degree – 1 no	
	b) 10 mm forward oblique, 30 degree – 1 no	
	c) 10 mm straight forward 0 degree – 1 no	
	3.1.1 All telescope should have following:	
	Low risk of object bum	
	Colour coded for identification	
	Autoclavable	

	Fibreoptic light transmission incorporated	
	3.2 HAND INSTRUMENTS & OTHER ACCESSORIES	
1	Reusable VeressPneumoperitoneum Needle- Spring loaded blunt stylet/uer lock length 10/15cm/12cm - 4 each	
2	Reusable Trocar:- 5mm – Multifunctional , insufflation stopcock and threaded sleeves, pyramidal tip, length (10.5cm) ,Flapper valve - 4 nos	
3	Reusable Trocar:- 10/11mm & 12 mm-Multifunctional valve, insufflation stopcock and threaded sleeves, pyramidal tip, length (10.5cm) Flapper valve - 4 each	
4	Suction and Irrigation cannula-Size 5mm, length 36cm, used with suction and irrigation handle, size 10 mm also, Reusable suction irrigation tubing set, Multifunction suction irrigation handle with provision for using 5/10mm diameter auxiliary instruments - 2 each	
5	Grasping forceps curved - toothed 2x4 teeth- Double action jaws, rotating with connector pin for unipolar coagulation, size 5mm, length 33-36cm, dismantling facility, size 10mm - 2 each(5 & 10mm)	
6	Grasping forceps straight- toothed 2x3 teeth- Double action jaws, rotating with connector pin for unipolar coagulation, size 5mm, length 33-36cm, dismantling facility, size 10mm - 2 each(5 & 10 mm)	
7	Maryland forceps-Double action jaws, rotating with connector pin for unipolar coagulation, size 5mm, length 33-36cm, dismantling facility - 2 nos	
8	Grasping forceps-Atraumatic-Double action jaws, rotating with connector pin for unipolar coagulation, size 5mm, length 33-36cm, dismantling facility - 2nos	
9	Grasping forceps-Allis-Double action jaws, rotating with connector pin for unipolar coagulation, size 5mm, length 33-36cm, dismantling facility - 2nos	
10	Grasping forceps Mixer-Double action jaws, rotating with connector pin for unipolar coagulation, size 5mm, length 33-36cm, dismantling facility - 2nos	

11	Grasping forceps-plain dissection & Grasping-Double action jaws, rotating with connector pin for unipolar coagulation, size 5mm, length 33-36cm, dismantling facility - 2nos	
12	Grasping forceps-Babcock-Double action jaws, rotating with connector pin for unipolar coagulation, size 5mm, length 33-36cm, dismantling facility, size 10 mm - 2 each (5& 10mm)	
13	Fan shaped retractor-Rotating, size 5mm, length 33-36cm, dismantling facility - 2nos	
14	Hook Scissors-Double action jaws, rotating with connector pin for unipolar coagulation, size 5mm, length 33-36cm, dismantling facility- 2nos	
15	Rotating Metzenbaum Scissors-Double action jaws, rotating with connector pin for unipolar coagulation, size 5mm, length 33-36cm, dismantling facility - 2nos	
16	Bipolar coagulating forceps-Size 5mm, length 33-36cm fenestrated- 2 nos	
17	Bipolar coagulating forceps-Size 5mm, length 36cm, 3mm width of jaws - 2 nos	
18	High Frequency Cord-For 5mm & 10mm hand instruments with Monopolar Electrodes, spatula tip, needle electrode- 2 each	
19	High Frequency Cord-For 5mm & 10mm hand instruments with Monopolar Electrodes, hook tip, knife electrode - 2 each	
20	Knot pushers-Eye type, length 33-36cm - 2 nos. each for intra and extra corpal knotting	
21	Needle holder coaxial type-5mm, tungsten tip, straight handle with ratchet, single moving jaw, length 33-36cm - 2nos. with carbide insert tips for straight and curved needles	
22	Clip Applicator-Medium -Size -Rotatable, Provision for locking the shaft conveniently, 10mm, compatible with clip LT 300, - 2nos. quoted with adequate no. of spare clip	
23	Clip Applicator- Large-Rotatable, Provision for locking the shaft conveniently, 10mm, compatible with clip LT 400, - 2nos. quoted with adequate no. of spare clip	
24	Hassan cone-Adaptable to 10mm trocar - 2nos	
25	Blunt Obturator-For 11mm port-From 10/11 mm to 5mm & 5 to 3 mm - 2nos	

26	Reducer-Size 5mm, length 33-36cm with pin for cautery - 2nos	
27	L-Hook-Size 5mm, length 33-36cm with pin for cautery- 2nos	
28	Spatula-Size 5mm, length 33-36cm with pin for cautery - 2nos	
29	Fascia closure instrument-Size 2.8mm, length 17cm - 2nos	
30	Washers-For 5 & 10 mm cannula and reducers - 100 each	
31	Container System: Metal & Plastic-For Sterilization and storage of telescopes, hand instruments and other accessories. Different sizes - 3nos	
32	Metzenbaum scissors-High performance with bipolar cautery - 2nos	
33	Large operating scissors-With double action jaws (slightly curved) Rotatable 10mm diameter instruments with a working length of 33-36cm, dismantling facility - 2 nos	
34	Assistant needle holder-5mm diameter instrumentations with a working length of atleast 33-36 cms with carbide insert tips for straight and curved needles. 2 for straight & curved needles with carbide insert tip	
35	Disposable extraction bags – 2 nos.	
36	Injection and puncture canula-5 mm diameter, 33-36cms length with luer lock - 2 nos	
37	Myoma screw-5 mm, 33-36 cms length, 10mm - 2 nos	
38	Uterine Manipulator-LAVH, mobilization of uterus, identification of vaginal fornices and sealing of vagina during hysterectomy. – 2 nos.	
39	CCL Vaginal extractor for LAVH Surgery – 2nos.	
40	HF Needle electrode for splitting & coagulation insulated with connection pin for unipolar coagulation, working length – 31-33cm – 2 nos.	
41	Electronic morcellator-With cutting sleeve and protective sleeve along with spare knife (Fully autoclavable) can be from other make. It should be European CE or USFDA approved. – 1 no.	
	Morcellator with accessories-•	
	a. Electronic Drive unit with motor for use with morcellator	
	b. Morcellator tube serrated edge	
	c. Atraumatic trocar sleeve with pyramidal trocar 12mm	
	d. Claw forceps insert 2 x 3 teeth	
	e. Insulated sheath	
	f. Laproscopic Bag	
	g. Insulated handle with HF connection rotating with ratchet	

42	High frequency monopolar cables-For above auxiliary instruments.	
43	Hight frequency bipolar cables-For above auxillary instruments	
44	Cleaning accessories-	
	a. Cotton carrier with thread	
	b. Cotton carrier with "U" shaped handle	
	c. Cleaning brush	
	d. Brush for cleaning jaws	
	e. Oil dropper	
	f. Wadding silver polish	
	g. Special lubricating oil	
	Note : Insulated outer sheath for all forceps and scissors	
3.3 INSUFFLATOR – 1 no.		
	a) Fully automatic, electronically controlled gas fill	
	b) Flow rate of 20-30 litres per minute	
	c) Optical and acoustic warning signals in case of malfunction or excessive pressure	
	d) Connectible to medical gas pipeline	
	e) Control by keys on front panel	
	f) Clear and adjacent display of actual and preset flow rate, actual and preset pressure, gas consumed	
	g) Facility for filtering preheating of gas to body temperature	
	h) Facility for easy evacuation of smoke and mist	
	i) Memory for retention of previous pressure settings	
	j) Should include high pressure hose pin-index connection to smallbig cylinder with regulator, mains cord, silicone tubing set with luer lock, universal wrench and gas filter	
3.4 CARBON DIOXIDE CYLINDER (type-B)		
	Large size cylinders with required regulators and connecting pipe to the insufflator (Type-B) – 2 nos	
	Gas tubing – 4	
3.5 SUCTION-IRRIGATION UNIT		
	a) Pump for irrigation and suction	
	b) Maximum irrigation pressure 400 mm Hg	
	c) Suction pressure 0.75 bar	
	d) Control from control panel and/or foot pedal	

	e) Overflow protection on suction bottles	
	f) Accessories should include silicone tubings (2 nos), bacterial filter and bottles with cap	
	g) Irrigation suction flow rate should not be less than 2-5 L/min.	
3.6 Sterilization/Disinfection Tray:		
	Disinfection/Sterilization tray with sieve, tray to lift Size: 27”X7”X5” (LXBXD) – 04 nos	
3.7 Formaline Chamber (Imported / Indian make) – 4 nos.		
	Formaline Chamber made of Virgin Acrylic 4.5mm thickness; size : 26”X8”X8” (LXBXH) with three tray, for sterilizing the laparoscope&Hysteroscope– 04 nos.	
3.8 Suitable autoclavable plastic tray double tray for sterilization and storage for hand instruments of minimum 20 hand instruments preferably from OEM – 04 nos		
3.9 CAMERA CONTROL UNIT & CAMERA HEAD		
	High definition Three chip Endoscopic camera system should have following features:	
	a) Digital HD technology	
	b) Progressive Scan	
	c) Camera control unit with three chip HD camera head having HD CCD chip of same aspect ratio of 16:9 and camera control unit should be able to produce following video output: DVI-D-2 nos, RGB-1 no. SDI – 1 no, S-VHS-2 nos, Composite Video – 1 no.	
	d) Three chip camera head should produce at head itself Pure Digital Signal with High Definition video (1920 * 1080P) with aspect ratio of CCD chip and video format of 16:9 or 16:10.	
	e) System should have integrated Parafocal Optical Zoom (F should not be less than 12 mm and upper range should not be less than 30 mm, 2 X) to enhance image size and focus lens/rings to make it fully soakable and waterproof.	
	f) System should be able to optimize all the settings and should be ready as soon as connected to camera control unit.	
	g) Three Chip Camera control unit should be compatible with all the tree chip camera head and the company should provide standby facility within 48 hours of breakdown.	

	h) Should be compatible for remote controlled operation of various features	
	i) Camera should be suitable for both Laparoscope, Hysteroscope & Resectoscope	
	j) Should have Integrated gain, shutter, Enhancement, white balance with brightness control.	
	k) All camera functions to be controlled from camera head buttons and through key board at camera control unit to make it controllable from both sterile and non-sterile zone	
	l) Technical Specification :-	
	Image Sensor CCD Chip	
	Pixels 1920 x 1080	
	AGC Microprocessor controlled	
	Lens F14-30mm	
	Video Outputs Composite to BNC, Y/C to S-VHS, RGB to D Socket, HDTV-DVI-D, DV for recording	
	Input Key Board for Character Generator, 5 pole Din	
3.10 High Definition Medical Grade Monitor – 2 nos.		
	Two Wide Screen Monitors having the following features:	
	a) HDTV Display in 16:10 HDTV format.	
	b) LCD/LED Crystal display	
	c) 26" High Resolution HD video Medical grade monitor – 2 nos	
	d) Resolution : 1920 x 1200 pixels	
	e) SDI/HD-SDI, Composite, S-Video RGB, DVI-D, VGA input, S-VHS – 2 nos, should also have same video output.	
	f) All required cables and connectors, which should be specified	
	g) TFT screen stand/Fixtures for connecting to pendant system/Ceiling Light Arm	
	h) Dustproof and Drip Water Protected	
	i) Fast response time: (5-12ms)	
	j) Number of colours: 16.8 million	
	k) Luminance: 500cd/m ² , contrast ratio: 800:1	
	l) Vertical/Horizontal Viewing angle: 178 degree	
3.11 LIGHT SOURCE		
	a) Xenon 300 watts	

	b) Manual and automatic adjustment of light intensity	
	c) Lamp life 500 hrs or more with at least one spare bulb	
	d) Display of lamp life/Bulb usage meter warning light	
	e) Standby mode with emergency lamp with visual indicator	
	f) Long (250 cm or more) fluid and fibre-optic light cable of diameter 4.8-5 mm	
	g) Light weight	
	h) Certified for National International safety standard normal	
	i) Should be able to produce colour temperature of 6000K.	
3.12 VIDEO- CART (Should be from the same manufacturer)		
	a) Made of stainless steel / Epoxy coated metal	
	b) Portable on 4 antistatic dual castors, 2 with locking brakes	
	c) Required number of shelves for housing all the units of the set	
	d) Adjustable arm for fixation to either side for fixing the TFT monitor	
	e) One drawer unit with lock and key	
	f) Cable Manager	
	g) Power box with concealed wiring for providing electrical connections of proper rating to all the units	
3.13 IMAGE MANAGEMENT SYSTEM		
	a) Documentation system for digital storage of still images, video sequences and audio files.	
	b) Latest processor & HDD, which should be specified	
	c) Largest possible RAM, which Should be specified	
	d) Integrated DVD/CD writer with maximum speed which should be specified	
	e) Compact key board with drape	
	f) Cordless mouse	
	g) All types of connecting cables (BNC, DVI) and connectors, which should be specified	
	h) zwith all connectors and connection cables (BNC, S-VIDEO(Y/C), VGA), which should be specified	
	i) Separate mobile cart with lock and key for housing all the components of the image management system	
	j) It should be medical grade with touch screen monitor.	

	k. Full HD recording, Medical grade computer and Monitor, Touchscreen, Minimum 1 TB storage memory. It should have window based operating system, minimum Windows –XP.	
3.14 VIDEO COLOR PRINTER/ LASER COLOUR PRINTER		
	i. For endovision camera and multi-colour systems existing in country.	
	ii. Large colour prints of video images with outstanding quality at least 4 different Images can be stored and printed on one sheet.	
	iii. Memories at least 4 rame, should be compatible with any monitor and should be Supplied with all connecting cables, satisfying international quality controls, safety Norms and power supply	
	iv. It should be CE approved.	
4. Technical Specification for Hysteroscope & Resectoscope		
	4.1 Description of Function	
	4.1.1 The resectoscope is a hysteroscope with a built in wire loop (or other shape device) that uses high-frequency electrical current to cut or coagulate tissue. It allows surgery inside the uterus an organ without having to make an incision.	
	4.1.2 Hysteroscopy uses a hysteroscope, which is a thin telescope that is inserted through the cervix into the uterus for examination	
	4.2 Operational Requirements	
	4.2.1 Complete unit with Resectoscope and Hysteroscope is required	
	4.3 Technical Specifications	
	A) HYSTEROSCOPE TELESCOPES STANDARD –	
	a. Operating and Contact-Hysteroscope Forward-Oblique Full HD Telescope 30°, enlarged view, magnification 1x, 60x, diameter 4.0 mm, length 30 cm, autoclavable, fiber optic light transmission incorporated,- 1 no	
	b. Forward-Oblique Telescope 30°, enlarged view, diameter 4.0 mm, length 30 cm, autoclavable, fiber optic light transmission incorporated - 1 no	
	B) Diagnostic Sheath with obturator 5mm diameter for the above 4 mm Hysteroscope telescopes(item A), with luer lock adapter	
	C) Continuous irrigation Operative Hysteroscope Sheath with obturator, outer and inner sheath for the above 4 mm hysteroscope telescope (item A) with channel for semi-rigid 5/8 fr size instruments. Should have facility for	

	self-closing sealing system for precise irrigation.	
	D)Accessories	
	Hysteroscopy flexible / semi rigid instruments which should be adaptable to above sheath (item C), 5/8 fr. Diameter-	
	a. Foreign body grasping forceps. – 4 nos.	
	b. Scissors-Scissors semi rigid, blunt tips, 5 Fr., length 33-36cm, single action jaws-2 nos	
	c. Scissors semi rigid, pointed jaws, 5 Fr., length 33-36cm, single action jaws, semi-rigid – 2 nos	
	d. Biopsy and Grasping forceps - Biopsy- and Grasping Forceps semi rigid, 5 Fr. , length 33-36cm, double action jaws -2 nos	
	e. Punch Forceps - Punch through Cutting semi rigid 5Fr, length 33-36cm- 2 nos	
	f. Tenaculam grasping forcep, semi rigid, size 5Fr, length 33-36cm 2 nos	2
	g. Needle electrode and ball electrode-Unipolar – high frequency cords of any make should be compatible with the above equipment	
	h. Bipolar vaporizing electrode – high frequency cords of any make should be compatible with the above equipment	
	i. Myoma fixation screw	
	j. Palpation probe	
	k. Polypectomy loop	
	E) Resectoscope including connecting tube for inflow and outflow for the above 4 mm hysteroscope telescope (item A)complete with continuous irrigation double sheath system, i.e outer flow and rotating inner tube with ceramic insulation distal tip,withobturator to be quoted along with working element and complete set of electrodes and 2 set of HF cables	
	All electrodes and Collin"s knife to be bipolar/unipolar (as per requirement) to be quoted with appropriate cautery	
	ACCESSORIES FOR RESECTOSCOPE FOR TCRE UNIPOLAR AND BI-POLAR SET	
1	UNIPOLAR WORKING:- Unipolar Working Element to be used with 26FR Resectoscope sheath: Motion by means of a spring. The thumb support is movable. Return of the loop is controlled by the thumb and in rest position the electrode should rest inside the operating sheath, to be used with 4mm hysteroscopy	

	telescope - 1 no	
2	CUTTING LOOP ELECTRODE FOR UNIPOLAR:-Cutting loop 24 Fr - 12 nos	
3	STRAIGHT CUTTING ELECTRODE FOR UNIPOLAR:- Forward angle/straight cutting loop 24Fr - 06 nos	
4	ROLLER COAGULATING ELECTRODE FOR UNIPOLAR:- Roller electrode Cylindrical diameter 3mm, 24Fr - 06 nos	
5	POINTED ELECTRODE FOR UNIPOLAR:- Pointed electrode/Collines HF knife electrode, 24Fr - 06 nos	
6	VAPOR CUTTING ELECTRODE UNIPOLAR:- VAPOR CUTTING Electrode, 24Fr - 06 nos	
7	SPIKE ELECTRODE UNIPOLAR:- SPIKE Electrode 24Fr, size 3mm diameter, 24Fr - 06 nos	
8	BIPOLAR WORKING ELEMENT SET:- BIPOLAR Working Element to be used with 26Fr Resectoscope sheath: Motion by means of a spring. The thumb support is movable. Return of the loop is controlled by the thumb and in rest position the electrode should rest inside the operating sheath, to be used with 4mm hysteroscopy telescope. Should work in saline. - 01 no	
9	BIPOLAR CUTTING LOOP:- BIPOLAR Cutting loop 24 Fr should work in saline - 6 no	
10	BIPOLAR CUTTING LOOP SMALL:- Cutting Loop 24Fr, bipolar, small should work in saline - 6 no	
11	BIPOLAR ELECTRODE POINTED:- Coagulating Electrode 24Fr, bipolar, pointed should work in saline - 6 no	
12	BIPOLAR ELECTRODE BALL END:- Coagulating Electrode 24Fr, bipolar, ball end should work in saline - 6 no	
13	BIPOLAR LOOP STRAIGHT:- Cutting Loop 24Fr, bipolar, straight should work in saline - 6 no	
14	RESECTOSCOPE SHEATH FOR UNIPOLAR:- Continuous Flow Resectoscope Sheath 26 Fr., including connection tubes for in- and outflow, 2 LUER-lock adaptors, diameter 8 mm, oblique beak, fixed inner tube, with ceramic insulation, for use with working element - 2 nos	

15	RESECTOSCOPE SHEATH FOR BIPOLAR:- Continuous Flow Resectoscope Sheath 26 Fr., for Bi-Polar, including connection tubes for in- and outflow, 2 LUER-lock adaptors, diameter 8 mm, oblique beak, rotating inner tube, with ceramic insulation, for use with working element should work in saline. - 1 no	
16	OBTURATOR:- Obturator, for use with the Resectoscope sheath. - 2 nos	
17	FIBER OPTIC CABLE:- Fiber Optic Light Cable, diameter 3.5 mm, length minimum 300 cm - 2 nos	
	F) Hysteropump	
	o Suction and irrigation system for use in hysteroscopy	
	o Irrigation function is performed by electric pump	
	o Maximum parameters for hysteroscopy are automatically set	
	o Precise presetting of volume and pressure of suction and irrigation parameters via touch keys.	
	o Adjacent display scales for set values and actual value to ensure safe monitoring.	
	o To be used with pressure regulated from 0 to 200mm of Hg, and flow rate regulated from 0- 500ml/min. Suction regulated to 0 to -50kPa. Power supply 100-240 VAC, 50/60 Hz, Mains cord.	
	o Connecting cable 100 cm, one pedal foot switch.	
	o hysteroscopic tubing set	
	o Suction and irrigation tube, antireflex surface with two way stop cock for single hand control.	
	o Suction bottle 1.5 l and 5 l, sterilizable with bottle stand and bottle stand holder.	
	o Silicon Tubing Set for suction ,sterilizable.	
	o Hysteromet should be from same manufacturer as of Hysterescope	
5. Electrocautery compatible with Laparoscope, Hysterescope&Resectoscope		
	1• Should have unipolar cutting and coagulation as well as bipolar cutting and coagulation modes and have the facility of blending cutting and coagulation in different ratios and degree –soft, standard and/ or forced coagulation and spray coagulation	
	2• Arc controlled cutting with a pre selectable power of maximum of 200 watts in both unipolar and bipolar modes	

	3• Arc controlled coagulation with a pre selectable power of maximum of 120 watts in both unipolar and bipolar modes	
	4• Auto stop function with automatic power – off on completion of coagulation process.	
	5• Automatic start function for bi- polar coagulation. Should be operable both in hand and foot mode and should have hand control switch on the handle of the electrode. Bipolar application with irrigation with sodium chloride	
	6• Endoscopy mode with reduced voltage output for use with fine endoscopic electrodes.(microfunction)	
	7• It should have automatic read out panel to display current being used and actual output at distal tip of electrode, simple operation due to clearly arranged control with easy to read symbols	
	8• Should be compatible with under water operative procedures	
	9• It should have neutral electrode monitoring through a patient contact system.	
	10• It should have automatic high frequency power cut off by autocoagulation stop and autostart facility	
	11• The unit should have the facility of self-testing for trouble shooting	
	12• Visual and acoustic signs of HF activation by different colored indicators and different acoustic tones for cutting and coagulating	
	13• Unit should have safety monitoring circuit in event of malfunction for output monitoring. Neutral electrode connection .Automatic self-test and automatic power cutoff in event of malfunction. Ground leakage current(LF/HF) HF application time	
	14. Power supply 230VAC, 50/60 Hz.	
	15• The unit should be supplied with all standard accessories such as Electrode, Foot switch, Twin earth pad , bipolar forceps with Cord, Electrode Handle with switches , neutral plate, ball electrodes, Loop electrodes, variable output power for all types of currents	
6 System Configuration Accessories, spares and consumables		
	6.1 System as specified	
	6.2 ACCESSORIES:- All Possible accessories of the equipments should be quoted. The specific accessory and its quantity will be decided on the basis of actual requirement	

	6.3 The system should be capable of accepting standard accessories of major international brands, which should be specified and for which suitable adaptor, if required, is to be provided	
	6.4 The codes and rates of all relevant individual accessories should be quoted separately with clear mention of period of validity of rates	
	6.5 Cautery system should be upgradable for vessel sealing device	
7 Environmental factors		
	7.1 The unit shall be capable of being stored continuously in ambient temperature of 0-50 deg C and relative humidity of 15-90%	
	7.2 The unit shall be capable of operating continuously in ambient temperature of 10-40deg C and relative humidity fo 15-90%	
8 Power Supply		
	8.1 Power input to be 220-240VAC, 50Hz fitted with Indian power-plug	
	8.2 UPS for all systems of adequate rating for power supply to the system for 60 minutes.	
9 Standards & Safety		
	9.1 Should be USFDA or European CE approved product	
	9.2 Manufacturer and Supplier should have ISO certification for quality standards	
	9.3 Electrical safety conforms to standards for electrical safety IEC 60601-1 General Requirements (or equivalent BIS Standard)	
	9.4 Shall meet internationally recognized standard for Electro Magnetic Compatibility (EMC) for electro-medicaequipment : IEC-60601-1-2 :latest edition Or Equivalent BIS) or should comply with 89/366/EEC; EMC-directive as amended	
	9.5 Certified to be complaint with IEC 60601-2-2 Medical Electrical Equipment part 2-2: Particular requirements for the safety of equipment mentioned above – wherever applicable	
10 Training		
	10.1 Comprehensive training for staff of user department and support services till familiarity with the system.	
	10.2 Training of two faculties from each consignee to be provided	
11 Documentation		
	11.1 Product Literature in original along with that of accessories and indigenous components if any Photocopies/computer generated copies are	

	not acceptable	
	11.2 Statement of compliance with tender specification with clear and unambiguous links to relevant portions of product literature/authentic document, which should be highlighted. Alternatives provide for noncompliant specification with justification must be described in details with supporting literature	
	11.3 Certificate of Compliance with standards and approvals stated above	
	11.4 Certificate of manufacturer/principal regarding authorization of service facility provided by the supplier	
	11.5 List of important spare parts and accessories, which are required for maintenance and repair, with their part number and costing.	
	11.6 Commitment for supply of log book with check list for daily, weekly, monthly and quarterly preventive maintenance with contact details of service personnel along with the equipment. The job description of the hospital technician and company service engineer should be clearly spelt out in the log book	

Item no. 22

ORTHOPAEDIC OPERATING TABLE with ACCESSORIES

	SPECIFICATIONS
A	Each orthopedic table along with its accessories must be able to perform orthopedic trauma surgeries, arthroscopy, pediatric orthopedics, spine and standard replacement surgeries
	Table must have the following standard features:
1	Radiolucent table top made up of Carbon Fiber or equivalent for orthopedic use
2	Radiolucent top for orthopedic use:
a)	Three or more sectional back plate
b)	Seat plate with detachable buttock support
c)	Radiolucent Perineal Post- child and adult size
d)	Detachable divided leg plates
e)	Should be able to slide longitudinally more than 250mm both side.

3	Should have provision for Eccentric Position.
4	Two foldable and detachable radiolucent traction bars fixed beneath the seat plate with two adjustable pivot joints.
5	Accessory side rails for attaching accessories entire length of the table top. Rail should accept standard accessories.
6	Hygenic steel base.
7	Additional radiolucent attachment/ plate for orthopaedic intervention in paediatric patients
8	Detachable pads made of foam core, approximately 50mm thick, should be molded and radiolucent
9	Table measurements and control panel:
a)	Table Top height range- 70cm – 120cm
b)	Trendelenburg/ Reverse Trendelenburg –upto 30 degree
c)	Lateral Tilt- 15-30 degree
d)	Motorised back plate up 80-90 degree and down upto -40 degree
e)	Hand control and Battery control for various table functions.
f)	Battery capacity for approximately 2 weeks with average use
g)	Can be operated directly from the mains for all electro hydraulic and Manual override movements
h)	Patient weight capacity >180kg for all positions.
i)	Handset can be connected on either side of the table (head or foot end).
j)	Length: 210 – 220cm
k)	Width: more than or equal to 50 cm without side rails.
l)	Table should be able to bring to zero position with single button
B	Each table must be provided with the following accessories:
1	Hand operating table
2	Lateral brace kit for total hip replacement
3	Accessory for bilateral hip surgery
4	Body strap
7	Traction bars radiolucent-02
8	Total Knee Flexion and Support System for knee arthroscopy
9	Well Leg Support system
10	Traction boot small pair with multiplanner rotation
11	Traction boot large pair with multiplanner rotation
12	Radiolucent Arm Boards with Pad(2)

13	Beach chair position system with helmet type head rest for position of the patient along with radiolucent. shoulder plates
14	Skull traction and head rest for cervical spine surgery
15	Accessories for genucubital position
16	Accessories for genupectoral position
17	Mayfield attachment for cervical spine
18	Accessories for interlocking nailing of humerus and tibia,
19	Accessories for interlocking nailing for femur in supine position
21	Anaesthesia screen with clamp
22	Silicone Gel pads (One set each) for various patient
a)	Gel pads as Head ring: open and closed type for both adult and pediatric use separately
b)	Gel pads for head rest in supine, prone and lateral positions separately for adults and children
c)	Gel pads as operating table pad, perineal table pad, sacral protector, arm protectors
d)	Gel pads for flexed knee in positions for spine surgery
e)	Gel pads thigh, leg, heel
f)	Gel pads for different positions
23	Cushions (One set each): as foam pads for different positions:Head ring, lateral positioning, leg rest cushion, cushions especially for spine surgery
24	Should include below Pediatric accessories-
a)	Pediatric traction boot.
b)	Side post.
c)	Perineal post
25	Two or more detachable shoulder segment
26	RS 232 port/USB should be available for diagnostic and servicing purposes.
27	It should be USFDA/European CE approved and all accessories from the same manufacturer

Item no. 23
General Orthopaedic Instruments

General Orthopaedic Instruments – Set No. 1		
	DESCRIPTION	QTY
1	Langenback Retractors – 10 each of following	20 Nos.
	i. Mini Langenback Retractor 10mm X 6mm	
	ii. Mini Langenback Retractor 22mm X 8mm	
	iii. Kocher Langenback Retractor 40 X 11mm X 21cm	
	iv. Langenback Retractor 30 X 11	
2	Hohmann's Retractors	30 Nos.
	i. 8mm Blade	
	ii. 10mm Blade	
	iii. 17mm Blade	
	iv. 43mm Blade	
	v. 13/25mm Blade	6 Nos. Each
3	Hip Retractor set with quadrilateral frame and six spare blades	2 Nos.
4	Jacob's drill (open type/closed type)	30 Nos.
5	BP knife handles	
	No 3 size	20 Nos.
	No 4 size	20 Nos.
	No 5 size	20 Nos.
6	Bone levers	
	Small size	20 Nos.
	Medium size	20 Nos.
	Large size	20 Nos.
7	Hammer	
	i. Collin Mallet	12 Nos.
	ii. Gerzog Mallet	10 Nos.
	iii. Nylon Faced Hammer	20 Nos.
8	Bone Holding Reduction Forceps with locking device	

	Small for forearm bones	6 pairs
	Medium	6 pairs
	Large for leg bones	6 pairs
9	Bone Holding Forceps	
	Lane's- Small, Medium, Large size 6 each	18 Nos.
	Ferguson's- Small, Medium, Large size 6 each	18 Nos.
	Hey Grove's- Small, Medium, Large size 6 each	18 Nos.
	Burn's – Small, Medium, Large size 6 each	18 Nos.
10	Bone forceps with Wire Passer (two blunt blades with hole	
	for Passing K wire to fix phalanx fractures)	10 Nos.
11	Bone Reduction forceps with radiolucent attachment to pass	
	Wire to fix the fractures	20 Nos.
12	Forearm clamps with provision for passing plates without	
	Removing the clamp	20 Nos.
13	Wire holding forceps	20 Nos.
14	Wire holding pliers	
	Small	10 Nos.
	Large	10 Nos.
15	Wire bending pliers – 5 each of blunt tip and sharp tip	10 Nos.
16	Wire tensioner	20 Nos.
17	Wire passer	20 Nos.
18	Bending Irons for 3.5 mm plates	20 Nos.
19	Bending Irons for 4.5 mm plates	20 Nos.
20	Bending Irons for reconstruction plates	20 Nos.
21	K- Wire Traction Set Complete	10 Sets
	a) Each set should contain	
	i. Kirschner Stirrup for wire extension	5 Nos.
	ii. K – Wire double ended 200mm	50 Nos.
	b) Each Set Should Contain	
	i. Gissane Stirrup for wire extension	5 Nos.
	ii. K- Wire double ended 200mm	50 Nos.
22	Bohler's Stirrups of Assorted Sizes	200 Nos.
23	Bernhard Towel Forceps 6 ½	100 Nos.
	Backhaus Towel Forceps 5"	100 Nos.

24	Sims Maier Sponge Holding 11”	50 Nos.
25	Probe Nelaton 16cm	10 Nos.
26	Skin Hooks	20 Nos.
	Gillies of size 1 & 3	10 Nos.
27	Amputation Saw (Charriere Type)	10 Nos.
28	Bone Curette	
	i. Volkman All Size	5 Each
	ii. Maartini Currettes All Size	5 Each
29	Patella Holding Forceps, 4 prong/3 prong	4 each
30	Pointed reduction Clamp(AO type, small, medium,large)	6 pairs each
31	AO type self-centric Forceps, (AO type, small, medium,large)	6 pairs each
32	Low Man clamp, small, medium, large	4 nos each
	N.B. Only Complete set should be quoted and sample to be produced for evaluation	
	Instruments should be European CE/ US FDA approved	
	General Orthopaedic Instruments – Set No.2	
	Following Instruments made good quality stainless steel with long lasting cutting edge	
	Specifications	
	DESCRIPTION	
1	Depth Gauge for miniscrews	
	1.5mm to 2 mm screw	5 Nos.
	2.0mm to 2.5mm screw	5 Nos.
	2.7mm to 4.0mm screw	5 Nos.
	4.5mm screw	5 Nos.
2	Tap Sleeve for	
	4.5mm tap	10 Nos.
	3.5mm tap	10 Nos.
3	Drill Sleeve for	
	3.2mm drill bit	10 Nos.
	2.5mm drill bit	10 Nos.
4	Autoclavable storage box for AO tyoe screws -	5 Nos.

5	Autoclavable storage box with trays for AO type plating instrument set -	5 Nos.
6	A.O. type damaged screw removal set	2 Nos.
7	Small Fragment Plating Instrument with Implant Set Complete	4 Sets
	Should consist of the following:	
	i. Small Fragment instrument set (3.5mm) in autoclavable box	1 No.
	ii. Small screw box	1 No.
	Contain the box:	1 No.
	Cortical screw 3.5 mm	1 No.
	10mm	10 unit
	12mm	12 unit
	14mm to 40mm	18 units each
	Cancellous Screws 4 mm	
	10mm to 50mm	5 units each
	Screw holding forceps	1 No
	Storage and sterilization case with tray	1 No.
	iii. Box Containing Small Plates.	
	D.C. Plates Small 4 hole	4 No.
	D.C. Plates Small 5 hole	8 No.
	D.C. Plates Small 6 hole	12 No.
	D.C. Plates Small 7 hole	8 No.
	D.C. Plates Small 8 hole	5 No.
	Storage and Sterilization Box	1 No.
	2. Instruments and Implants for Narrow and Broad	
	Dynamic Compression Plating. Sets	
	Should Consist of the following	
	i. Basic Instrument set for 4.5mm Plating	1 No.
	Storage and autoclave box for above	1 No.
	ii. Screws Box Containing the following	
	Cortical Screws 4.5mm 14mm to 28mm	8 No. Each

	Cortical Screws 4.5mm 30mm	16 No. Each
	Cortical Screws 4.5mm 32mm	14 No. Each
	Cortical Screws 4.5mm 34 to 40mm	12 No. Each
	Cortical Screws 4.5mm 42mm & 44mm	6 No. Each
	Cortical Screws 4.5mm 46mm & 48mm	9 Nos. Each
	Cortical Screws 4.5mm 50mm to 60mm	2 No. Each
	Concellous Screws 6.5mm 32mm Thread	
	40mm to 50mm	4 No. Each
	55 to 65mm	3 No. Each
	70 to 95mm	2 Nos. Each
	Cancellous Screws 6.5mm 16mm Thread	
	30&35mm	4 No. Each
	40mm to 50mm	6 No. Each
	55mm to 65mm	2 No. Each
	70mm & 75mm	3 Nos. Each
	80mm to 95mm	2 Nos. Each
	Malleolar Screws 4.5mm	
	25mm to 75mm	2 Nos. Each
	Storage & Sterilization Box	1 No.
	iii. Dynamic Compression Plates	

	Narrow 4 hole to 8 hole	2 Nos. Each
	9 hole to 12 hole	1 No Each
	Broad 5 hole to 8 hole	2 Nos. Each
	9 hole to 14 holes	4 Nos. Each
	9. Wiring Instrument Set	
	Should consist of the following:	
	Wire Tightner With Pegs	
	Wire Passer With Synthetic Handle	
	Double Action Wire Cutter Large	
	Wire Bending Pliers Multipurpose	
	Flat Nosed Parallel Pliers Large With Side Cutter	
	Wire Holder	
	Forceps For Holding Cercilage Wire	
	Box For Wire Instrument Set	
10	Femoral Nail Extractor Set	2 Nos.
11	Long handled Bone curette	
	- Non serrated edge	10 Nos.
	- Serrated edge	10 Nos.
12	Gigli Saw Instrument set	5 Nos.
	Each set should contain	
	I. Gigli Saw Handle	1 pair
	II. Gigli Saw Wires	100 Nos.
	13. Patella reduction clamp	10 Nos.
	14. Patella wire passer	4 Nos.
	15. Ring Cutter	10 Nos.
	N.B. Only Complete set should be quoted and Sample to be produced for evaluation	
	Instruments should be European CE/ US FDA approved	
	General Orthopaedic Instruments – Set No.3	
	Specification: Following items manufactured to international standards by reputed multinational firms	
	DESCRIPTION	

1	Bone Rongeur – Double Action	
	Small Size 18 cm	10 Nos.
	Medium Size 23 cm	10 Nos.
	Large Size 27cm	10 Nos.
	Sergent Bone Rongeur	4 Nos.
	Duckbill Bone Rongeur	4 Nos.
	Lacksell Bone Rongeur	4 Nos.
2	Bone cutter – Double Action straight & curved	
	Small Size 18cm	10 Nos.
	Medium Size 23 cm	10 Nos.
	Large Size 27cm,	10 Nos.
	Tudur Edward	4 Nos.
3	K- Wire Cutter (Capacity 4 mm) with replaceable tungsten carbide	
	Blades with rubber Jaws Set	10 Sets.
	Should consist of:	
	I. K- wire cutter 28cm	
	II. Spare Blades 4 pairs with Screws	
	III. Spare Rubber Jaws 4 Pairs with Screws	
	IV. Allen keys 4 sets	
4	Stienmann Pin Cutter cutting capacity up to 6mm	10 Nos.
5	Bone Curette Double Ended Round/Oval	
	Small 13 cm	20 Nos.
	Medium 16 cm	20 Nos.
	Large 20cm	20 Nos.
6	Loute wire tightener cum wire cutter	10 Nos.
7	Wire Bending cum cutter plier length 15 cm	10 Nos.
8	Osteotomes, straight with tufnol handle, 10 each of sizes	40 Nos.
	7,10,15,20 mm width	
9	. Osteotomes, curved with tufnol handle, 10 each of sizes	40 Nos.
	7,10,15,20 mm width	
10	Osteotomes, straight with tufnol handle, 10 each of sizes	50 Nos.
	4,6,8,10,12 mm	
11	Chisel Straight with tufnol handle 10 of each sizes	40 Nos.

	7,10,15,20 mm	
13	Retractors	
	Wullstein-Weitlaner Self-Retaining Retractor 3 X 3 Teeth Blunt Length 13 Cm	20 Nos.
	Weitlaner Self-Retaining Retractor 3 X 4 Teeth Blunt Length 163 Cm	20 Nos.
	Weitlaner Self-Retaining Retractor 3 X 4 Teeth Blunt Length 26 Cm	20 Nos.
	Adson Self-Retaining Retractor 3 X 4 Teeth Blunt Length 26 Cm	20 Nos.
	Gelpi Self-Retaining Retractor With Balls, Blunt Length 18 Cm	20 Nos.
14	Elevators	
	Farabeuf Periosteal Elevator, Straight 13 Mm Length 15 Cm	20 Nos.
	Farabeuf Periosteal Elevator, Curved 13 Mm Length 15 Cm	20 Nos.
	Lambotte Periosteal Raspatory And Elevator, Curved 10mm Length 21 Cm	20 Nos.
	Mc Donald Elevator Double Ended Curved 6/6 Length 19 Cm	15 Nos.
	Cobbs Elevator Medium 13mm With Long Handle	10 Nos.
	Cobbs Elevator Large 19mm With Long Handle	10 Nos.
	Bristows	10 Nos.
15	Bolt Cutter	
	Bolt Cutter Maximum Capacity Dia 6mm Length 56 cm	10 Nos.
16	Lead Hands	
	Lead Hands for Adults	10 Nos.
17	Jacobs Chuck With Handle	
	Jacobs Drill Three Jaw Chuck With Key, Max Dia 6.35mm Length 14 Cm	30 Nos.
18	Awls	
	With T-Handle Length 14 Cm	20 Nos.
	With Round Handle Length 14 Cm	20 Nos.
19	Skin Grafting Handle With Blades	20 Nos.
	N.B. Only Complete set should be quoted and Sample to be produced for evaluation	

	Instruments should be European CE/ US FDA approved	
	General Orthopaedic instruments - Set No.4	
	Specifications: Following items manufactured to international standards	
	(equivalent to AO Specification) by reputed multinational firms)	
	DESCRIPTION	
	1. DHS/DCS Triple Reamer	2 Nos.
	2. Quick coupling for DHS, DCS triple reamer	2 Nos.
	3.Key for Jacob's reamer chuk - 5 Nos. for each sizes	10 Nos.
	4. Seating chisel for condylar blade plate	2 Nos.
	5. Router for quick coupling for condylar blade plate	2 Nos.
	6. Screw driver for 3.5 mm screws	10 Nos.
	7. Screw driver for 4.5 mm screws	10 Nos.
	8. Templates for 3.5 mm DCP plates	10 Nos.
	9. Templates for 4.5 nun DCP plates	10 Nos.
	10. Bending Plier for 3.5mrn plates	4 Nos.
	11. Bending Press for 4.5mm Plates	4 Nos.
	12. Tap for DHS Lag Screw	1 Nos.
	N.B. Only Complete set should be quoted and Sample to be produced for evaluation	
	Instruments should be European CE/ US FDA approved	
	General Orthopaedic Instruments - Set No. 5	
	The following instruments are made of good quality of stainless steel	
	DESCRIPTION	
1	HemireplacementInstsrument Set Complete	5 sets
	With trial A.M. Prosthesis one each of sizes	
	From 39mm to 54mm	
2	Ilizarov Instrument Set Complete	10 sets
	Each set should contain:	
	i. Half Rings 140,160,180,00 & 220	10 Nos. Each
	ii. 5/8 Rings as above	1 Each
	iii. Wire Fixation Bolt Cannulated	200 Nos.

	iv. Wire Fixation Bolt Slotted	200 Nos.
	v. Connection Bolts	100 Nos.
	vi. Nuts	500 Nos.
	vii. Threaded Rod 100mm 125,150,200,50,300	10Nos. Each
	viii. Male Post & Female Posts 2,3 & 4 hole:	10 Nos. Each
	ix. Washers	200 Nos.
	x. Twisted Plates 2,3,4 hole:	10 Nos. Each
	xi. K-Wires 1.8mm with trocar.	100 Nos.
	xii. K-wires 1.8mm with Bayonet	100 Nos.
3	External Fixator Instrument Set Complete	
	Each Set Should Contain	10 sets
	i. Universal Clamps for	
	Tibia and Femur	100 Nos.
	ii. Tubular Rod assorted size 20,30 cm	10 Nos. Each
	iii. Schanz Pin 4.5 & 5mm	100 Nos.
	iv. Tranverse Clamps	10 Nos
	v. Tube to Tube Clamp	10 Nos
	vi. Delta Clamps	10 Nos
	vii. Mini Clamp 2.5mm	50 Nos.
	viii. Mini Clamp 3.5mm	50 Nos.
	ix. Schanz Pin 2.5mm	50 Nos.
	x. Schanz Pin 3.5mm	50 Nos.
	xi. Connecting Rods 15cm	5 Nos.
	xii. Connection Rods 20cm	5 Nos.
	xiii. Spanner Stainless Steel 11mm	5 Nos.
	xiv. Spanner Stainless Steel 8mm	5 Nos.
1	Skull Traction Instrument Set Complete	
	Each Set Should Contain	10sets
	i. Crutchfield Tongs	25 Nos
	ii. Bur	1 Nos.
2	Staple Inserter, Extractor Set Complete	

	With 50 Assorted Sizes Stapleg	4 Nos.
3	Manual Plaster Removal Set Complete	10 sets
	Each Set Should Contain	
	i. Cast Spreader Beeson 30cm	1 Nos.
	ii. Model U.S.A.	1 Nos.
	iii. Engle Plaster Swa	5Nos
	iv. Stille Plaster Shear 37 cm	1 Nos.
4	Manual Tourniquet Set	5 sets
	Should Consist of Following	
	i. Pump	1 Nos.
	ii. Pressure regulator	1 Nos.
	iii. Small, Medium & large Sizes of Cuffs	(2 Each)
	N.B. Only Complete set should be quoted and Sample to be produced for evaluation	
	Instruments should be European CE/ US FDA approved	
	General Orthopaedic Instruments - Set No.6	
	Specifications: Following items manufactured to international standards by reputed multinational firms	
	GENERAL INSTRUMENTS FOR ORTHOPAEDIC SURGERY (LONG LASTING IMPORTED)	
	Specifications	
	1 SCISSORS	
	STANDARD SURGICAL SCISSOR BLUNT/BLUNT, STRAIGHT LENGTH 13 CM	10 Nos.
	STANDARD SURGICAL SCISSOR BLUNT/BLUNT, STRAIGHT LENGTH 18.5 CM	10 Nos.
	STANDARD SURGICAL SCISSOR BLUNT/BLUNT, CURVED LENGTH 13 CM	10 Nos.
	STANDARD SURGICAL SCISSOR BLUNT/BLUNT, CURVED LENGTH 18.5 CM	10 Nos.
	STANDARD SURGICAL SCISSOR SHARP/BLUNT STRAIGHT LENGTH 13 CM	10 Nos.
	STANDARD SURGICAL SCISSOR SHARP/BLUNT STRAIGHT LENGTH 18.5 CM	10 Nos.

	STANDARD SURGICAL SCISSOR SHARP/BLUNT, CURVED LENGTH 13 CM	10 Nos.
	STANDARD SURGICAL SCISSOR SHARP/BLUNT, CURVED LENGTH 18.5 CM	10 Nos.
	MAYO DISSECTING SCISSOR STRAIGHT LENGTH 14.5 CM	10 Nos.
	MAYO DISSECTING SCISSOR STRAIGHT LENGTH 20 CM	10 Nos.
	MAYO DISSECTING SCISSOR CURVED LENGTH 14.5 CM	10 Nos.
	MAYO DISSECTING SCISSOR CURVED LENGTH 20 CM	10 Nos.
	METZENBAUM DISSECTING SCISSOR BLUNT/BLUNT, STRAIGHT LENGTH 18 CM	10 Nos.
	METZENBAUM DISSECTING SCISSOR BLUNT/BLUNT, STRAIGHT LENGTH 25 CM	10 Nos.
	METZENBAUM DISSECTING SCISSOR BLUNT/BLUNT, CURVED LENGTH 18 CM	10 Nos.
	METZENBAUM DISSECTING SCISSOR BLUNT/BLUNT, CURVED LENGTH 25 CM	10 Nos.
	BEEBEE WIRE CUTTING SCISSOR BLUNT/BLUNT, STRAIGHT LENGTH 12 CM	10 Nos.
	BEEBEE WIRE CUTTING SCISSOR BLUNT/BLUNT, CURVED LENGTH 12 CM	10 Nos.
	LISTER BANDAGE AND PLASTER SHEAR SCISSOR LENGTH 20 CM	10 Nos.
	BERGMANN BANDAGE AND PLASTER SHEAR. SCISSOR LENGTH 23 CM	10 Nos.
	IRIS SCISSORS 11.5 CM STRAIGHT	10 Nos.
	IRIS SCISSORS 11.5 CM CURVED	10 Nos.
2	FORCEPS	
	USA STANDARD DRESSING FORCEPS LENGTH 14.5 CM	10 Nos.
	USA STANDARD DRESSING FORCEPS LENGTH 20 CM	10 Nos.
	ADSON DRESSING FORCEPS LENGTH 12 CM	10 Nos.

	ADSON DRESSING FORCEPS LENGTH 15 CM	10 Nos.
	TAYLOR DRESSING FORCEPS WITH DISSECTOR END LENGTH 17.5 CM	10 Nos.
	TAYLOR DRESSING FORCEPS WITH DISSECTOR END LENGTH 18.5 CM	10 Nos.
	BROPHY DRESSING FORCEPS STRAIGHT LENGTH 20 CM	10 Nos.
	STANDARD TISSUE FORCEPS 1 X 2 TEETH LENGTH 14.5 CM	10 Nos.
	STANDARD TISSUE FORCEPS 1 X 2 TEETH LENGTH 20 CM	10 Nos.
	STANDARD TISSUE FORCEPS 1 X 2 TEETH MEDIUM WIDE LENGTH 14.5 CM	10 Nos.
	STANDARD TISSUE FORCEPS 1 X 2 TEETH MEDIUM WIDE LENGTH 20 CM	10 Nos.
	STANDARD TISSUE FORCEPS FINE 1 X 2 TEETH LENGTH 14.5 CM	10 Nos.
	STANDARD TISSUE FORCEPS FINE 1 X 2 TEETH LENGTH 20 CM	10 Nos.
	USA STANDARD TISSUE FORCEPS 1 X 2 TEETH LENGTH 14.5 CM	10 Nos.
	USA STANDARD TISSUE FORCEPS 1 X 2 TEETH LENGTH 20 CM	10 Nos.
	DEBAKEY ATRAUMATIC DISSECTING FORCEPS 1.5 MM STRAIGHT LENGTH 16 CM	10 Nos.
	DEBAKEY ATRAUMATIC DISSECTING FORCEPS 1.5 MM STRAIGHT LENGTH 20 CM	10 Nos.
	DEBAKEY ATRAUMATIC DISSECTING FORCEPS 2.7 MM STRAIGHT LENGTH 16 CM	10 Nos.
	DEBAKEY ATRAUMATIC DISSECTING FORCEPS 2.7 MM STRAIGHT LENGTH 20 CM	10 Nos.
	HALSTEAD - MOSQUITO FORCEPS STRAIGHT LENGTH 14 CM	100 Nos.
	HALSTEAD - MOSQUITO FORCEPS CURVED LENGTH 14 CM	100 Nos.

	HALSTEAD FORCEPS STRAIGHT LENGTH 21 CM	100 Nos.
	HALSTEAD FORCEPS CURVED LENGTH 21 CM	100 Nos.
	RANKIN - KELLY FORCEPS STRAIGHT LENGTH 16 CM	100 Nos.
	RANKIN - KELLY FORCEPS CURVED LENGTH 16 CM	100 Nos.
	NEGUS FORCEPS CURVED LENGTH 19 CM	100 Nos.
	KOCHER (ROCHESTER- OCHSNER) FORCEPS 1 X 2 TEETH STRAIGHT LENGTH 18 CM	50 Nos.
	KOCHER (ROCHESTER- OCHSNER) FORCEPS 1 X 2 TEETH STRAIGHT LENGTH 20 CM	50 Nos.
	KOCHER (ROCHESTER- OCHSNER) FORCEPS 1 X 2 TEETH CURVED LENGTH 18 CM	50 Nos.
	KOCHER (ROCHESTER- OCHSNER) FORCEPS 1 X 2 TEETH CURVED LENGTH 20 CM	50 Nos.
1	NEEDLE HOLDERS	
	CRILE-WOOD NEEDLE HOLDER SERRATED P04, LENGTH 15 CM	20 Nos.
	CRILE-WOOD NEEDLE HOLDER SERRATED P04, LENGTH 20 CM	20 Nos.
	STRATTE NEEDLE HOLDER SERRATED P05, LENGTH 23 CM	20 Nos.
	N.B. Only Complete set should be quoted and Sample to be produced for evaluation	
	Instruments should be European CE/ US FDA approved	

Item no. 24

DRILL & SAW SYSTEM

	QTY
Drill and Reamer Hand Piece	1
Should have forward/ reverse and oscillation mode	
Minimum speed of 1000-1200 rpm and should have variable speed control on the hand piece	
Adaptors for Drill/ Reamer Hand Piece	
Attachments	1

	Reamer attachment for humrus, femur & tibia	1
	Drill chuck with Quick Coupling	1
	Angular/ Straight Drive Unit for Medullary Reaming	1
	Oscillating Drill Attachment	1
	Jacob's Chuck with Key	1
	Drill chuck Keyless	1
	AO/ASIF Quick Coupling	1
	Quick Coupling for DHS/DCS Triple Reamers	1
	Attachment for Acetabular& Medullary Reaming - Reverse possible	1
	Quick Coupling for Kirschner Wires, 0.6mm - 3.2mm dia.	1
	Oscillating Saw Attachment with variable Angle with Key	1
	Oscillating Saw Attachment II with Quick Coupling	Choose Together
	Reciprocating Saw Attachment	
	Top for Sternum for Reciprocating Saw Attachment	1
	Saw Blade for Reciprocating Saw for Top for Sternum	
	Radiolucent Drive -	1
	Drill Bits for Radiolucent Drive	1
	Drill Bit, 2.0mm dia., L 148/122mm, 3-flute	1
	Drill Bit, 2.5mm dia., L 148/122mm, 3-flute	1
	Drill Bit, 2.7mm dia., L 148/122mm, with centering tip, 3-flute	1
	Drill Bit, 3.2mm dia., L 148/122mm, with centering tip, 3-flute	1
	Drill Bit, 3.5mm dia., L 148/122mm, with centering tip, 3-flute	1
	Drill Bit ϕ 3.6 w/center-tip L148/122 3fl	1
	Drill Bit ϕ 4 w/center-tip L148/122 3flut	1
	Drill Bit ϕ 4.5 w/center-tip L148/122 3fl	1
	Drill Bit, 3.2mm dia., L 106/80mm, with centering tip, 3-flute	
	Drill Bit ϕ 4 w/center-tip L106/80 3flute	1
	Standard Saw Blades for general traumatology	1
	Saw Blade 70/49 x 27 x 0.6/0.4 mm, for Oscillating Saw with AO/ASIF Coupling	1

Saw Blade 46/25 x 10 x 0.6/0.4 mm, for Oscillating Saw with AO/ASIF Coupling	1
Saw Blade 70/49 x 10 x 0.6/0.4 mm, for Oscillating Saw with AO/ASIF Coupling	1
Saw Blade 70/49 x 20 x 0.6/0.4 mm, for Oscillating Saw with AO/ASIF Coupling	1
Saw Blade 90/69 x 18 x 1.0/0.8 mm, for Oscillating Saw with AO/ASIF Coupling	1
Saw Blade 90/69 x 18 x 1.2/1.0 mm, for Oscillating Saw with AO/ASIF Coupling	1
Saw Blade 70/49 x 14 x 0.6/0.4 mm, for Oscillating Saw with AO/ASIF Coupling	1
Saw Blade 90/69 x 27 x 0.8/0.6 mm, for Oscillating Saw with AO/ASIF Coupling	1
Saw Blade 90/69 x 50 x 0.8/0.6 mm, for Oscillating Saw with AO/ASIF Coupling	1
Saw Blade 90/69 x 27 x 1.0/0.8 mm, for Oscillating Saw with AO/ASIF Coupling	1
Saw Blade 90/69 x 27 x 1.2/1.0 mm, for Oscillating Saw with AO/ASIF Coupling	
Saw Blade 46/25 x 6.0 x 0.6/0.4 mm, for Oscillating Saw with AO/ASIF	1
Coupling	
Saw Blade 46/25 x 14 x 0.6/0.4 mm, for Oscillating Saw with AO/ASIF Coupling	1
Aggressive Special Saw Blades for total joint replacement surgery	1
Saw Blade 111/90 x 12.5 x 0.89 mm, for Oscillating Saw	1
Saw Blade 111/90 x 12.5 x 1.19 mm, for Oscillating Saw	1
Saw Blade 111/90 x 12.5 x 1.27 mm, for Oscillating Saw	1
Saw Blade 111/90 x 12.5 x 1.37 mm, for Oscillating Saw	1
Saw Blade 111/90 x 12.5 x 1.47 mm, for Oscillating Saw	1
Saw Blade 112/91*12.5*0.9/0.8 AO/ASIF-Co	1

	Saw Blade 111/90 x 19 - 12.5 x 0.89 mm, for Oscillating Saw	1
	Saw Blade 111/90 x 19 - 12.5 x 1.19 mm, for Oscillating Saw	1
	Saw Blade 111/90 x 19 - 12.5 x 1.27 mm, for Oscillating Saw	1
	Saw Blade 111/90 x 19 - 12.5 x 1.37 mm, for Oscillating Saw	1
	Saw Blade 111/90 x 19 - 12.5 x 1.47 mm, for Oscillating Saw	1
	Saw Blade 116/95 x 19 x 0.89 mm, for Oscillating Saw	1
	Saw Blade 116/95 x 19 x 0.90 mm, for Oscillating Saw	1
	Saw Blade 116/95 x 19 x 1.19 mm, for Oscillating Saw	1
	Saw Blade 116/95 x 19 x 1.25 mm, for Oscillating Saw	1
	Saw Blade 116/95 x 19 x 1.27 mm, for Oscillating Saw	1
	Saw Blade 116/95 x 19 x 1.37 mm, for Oscillating Saw	1
	Saw Blade 116/95 x 19 x 1.40 mm, for Oscillating Saw	1
	Saw Blade 116/95 x 19 x 1.47 mm, for Oscillating Saw	1
	Saw Blade 116/95 x 25 x 0.89 mm, for Oscillating Saw	1
	Saw Blade 116/95 x 25 x 0.90 mm, for Oscillating Saw	1
	Saw Blade 116/95 x 25 x 1.19 mm, for Oscillating Saw	1
	Saw Blade 116/95 x 25 x 1.25 mm, for Oscillating Saw	1
	Saw Blade 116/95 x 25 x 1.27 mm, for Oscillating Saw	1
	Saw Blade 116/95 x 25 x 1.37 mm, for Oscillating Saw	1
	Saw Blade 116/95 x 25 x 1.40 mm, for Oscillating Saw	1
	Saw Blade 116/95 x 25 x 1.47 mm, for Oscillating Saw	1
	Saw Blade 106/85 x 25 x 1.47 mm, for Oscillating Saw	1
	Saw Blade 81/60 x 25 x 0.89 mm, for Oscillating Saw	
	Saw Blade 81/60 x 25 x 0.9 mm, for Oscillating Saw	1
	Reciprocating Saw Blades	1

	Saw Blade for Reciprocating Saw, 80 x 1.05 mm	1
	Saw Blade for Reciprocating Saw, 55 x 1.05 mm	1
	Saw Blade for Reciprocating Saw, 55 x 0.85 mm	
	Saw Blade for Reciprocating Saw, 68 x 1.1 mm, toothed on both sides	1
	Vario Case	1
	VC f/CompAir Drive w/o Lid w/o Cont	
	Lid Stainless Steel size1/1 f/VC	
	The System should be CE/FDA approved	
	Optional -Burs for cement removal and sculpting	

GENERAL TECHNICAL SPECIFICATIONS**GENERAL POINTS:**

1. Warranty:

- a) Five years Comprehensive Warranty as per Conditions of Contract of the TE document for complete equipment (including X ray tubes, Helium for MRI, Batteries for UPS, other vacuumatic parts wherever applicable) and Turnkey Work from the date of satisfactory installation, commissioning, trial run & handing over of equipment to Hospital/Institution/Medical College.
- b) 98% up time Warranty of complete equipment with extension of Warranty period by double the downtime period on 24 (hrs) X 7 (days) X 365 (days) basis.
- c) All software updates should be provided free of cost during Warranty period.

2. After Sales Service:

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

3. Training:

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

4. Annual Comprehensive Maintenance Contract (CMC) of subject equipment with Turnkey:

- a) The cost of Comprehensive Maintenance Contract (CMC) which includes preventive maintenance including testing & calibration as per technical/ service /operational manual of the manufacturer, labour and spares, after satisfactory completion of Warranty period may be quoted for next 5 (five) years on yearly basis for complete equipment (including X ray tubes, Helium for MRI, Batteries for UPS, other vacuumatic parts wherever applicable) and Turnkey (if any). The supplier shall visit each consignee site as recommended in the manufacturer's technical/ service /operational manual, but at least once in six months during the CMC period
- b) The cost of CMC may be quoted along with taxes applicable on the date of Tender Opening. The taxes to be paid extra, to be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such taxes and no claim for the same will be entertained later.
- c) Cost of CMC will be added for Ranking/Evaluation purpose. The same will be taken at Net Present Value with a 10% discounting factor each year.
- d) The payment of CMC will be made on six monthly basis after satisfactory completion of said period, duly certified by end user on receipt of bank guarantee for 2.5 % of the cost of the equipment as per Section XV valid till 2 months after expiry of entire CMC period.
- e) There will be 98% uptime warranty during CMC period on 24 (hrs) X 7 (days) X 365 (days) basis, with penalty, to extend CMC period by double the downtime period.
- f) During CMC period, the supplier is required to visit at each consignee's site at least once in 6 months commencing from the date of the successful completion of warranty period for preventive maintenance of the goods.
- g) All software updates should be provided free of cost during CMC.
- h) Failure of the above [4. e) to 4. g)] by the supplier, may lead to the forfeiture of the Bank Guarantee for Annual CMC.
- i) The payment of CMC will be made as stipulated in GCC Clause 21.

Turnkey:

Turnkey is indicated in the technical specification of the respective items, wherever required. The Tenderer shall examine the existing site where the equipment is to be installed, in consultation with HOD of Hospital/Institution/Medical College concerned. Turnkey details of each Hospital/Institution/Medical College are given at the end of Technical Specification. The Tenderer to quote prices indicating break-up of prices of the Machine and Turnkey Job of each Hospital/Institution/Medical College. The Turnkey costs may be quoted in Indian Rupee will be added for Ranking Purpose.

The taxes to be paid extra, to be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such duties and taxes and no claim for the same will be entertained later.

The Turnkey Work should completely comply with AERB requirement, if any

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

Note 2: General: Bidders are requested to make sure that they should attach the list of equipment for carrying out routine and preventive maintenance wherever asked for and should make sure that Electrical Safety Analyzer / Tester for Medical equipment to periodically check the electrical safety aspects as per BIS Safety Standards IS-13540 which is also equivalent to IEC electrical safety standard IEC-60601 is a part of the equipment. If the Electrical Safety Analyzer/Tester is not available they should provide a commitment to get the equipment checked for electrical safety compliance with Electronic Regional Test Labs / Electronics Test and Development Centres across the country on every preventive maintenance call.

Note 3: OPTIONAL ITEMS: Bidders are requested to quote for all the available options as asked in the bidding document with reasonable pricing. However the pricing for optional items will not be considered for price comparison for ranking purpose. If the firm has not quoted for any optional item (except the items of turnkey) their offer will be treated as **TECHNICALLY RESPONSIVE** if otherwise meeting the specification.

Section – VIII

Quality Control Requirements

(Proforma for equipment and quality control employed by the manufacturer(s))

Tender Reference No.

Date of opening

Time

Name and address of the Tenderer:

Note: All the following details shall relate to the manufacturer(s) for the goods quoted for.

- 01 Name of the manufacturer
 - a. full postal address
 - b. full address of the premises
 - c. telegraphic address
 - d. telex number
 - e. telephone number
 - f. fax number

- 02 Plant and machinery details
- 03 Manufacturing process details
- 04 Monthly (single shift) production capacity of goods quoted for
 - a. normal
 - b. maximum

- 05 Total annual turn-over (value in Rupees)
- 06 Quality control arrangement details
 - a. for incoming materials and bought-out components
 - b. for process control
 - c. for final product evaluation
- 07 Test certificate held
 - a. . type test
 - b. . BIS/ISO certification
 - c. . any other
- 08 Details of staff
 - a. technical
 - b. skilled
 - c. unskilled

Signature and seal of the Tenderer

Section – IX

Qualification Criteria

1. The tenderer 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 tender enquiry document to quote and enter into a contractual obligation.
2. (a) The Manufacturer should have supplied and installed in last **Five** years from the date of Tender Opening, at least 100% of the quoted quantity of the similar equipment meeting major parameters of technical specification which is functioning satisfactorily.
2. (b) The Tenderers quoting as authorized representative of the manufacturer meeting the above criteria 2 (a) should have executed at least one contract in the last five years from the date of tender opening of similar equipment (of the same manufacturer) meeting major parameters of technical specification which is functioning satisfactorily, anywhere in India.

Note:

1. The tenderer shall give an affidavit as per Section XX:
2. In support of 2 (a) & 2 (b), the Tenderer shall furnish Performance statement in the enclosed Proforma 'A'.

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

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

PROFORMA 'A'
PROFORMA FOR PERFORMANCE STATEMENT

(For the period of last five years)

Tender Reference No. : _____

Date of opening : _____

Time : _____

Name and address of the Tenderer : _____

Name and address of the manufacturer : _____

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

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

Signature and seal of the Tenderer

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

**** The bidders are requested to submit the latest purchase order copies supplied to AIIMS, PGIMER, JIPMER, Institute of National importance for the specific model quoted along with the price bid.**

Section – X
TENDER FORM

Date _____

To _____

Head (P&CD), HLL Lifecare Limited, Procurement and Consultancy Division, B-14 A, Sector - 62, Noida -201307, Uttar Pradesh

Ref. Your TE document No. _____ dated _____

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

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

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

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

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

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

(Signature with date)

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

SECTION – XI PRICE SCHEDULE

A) PRICE SCHEDULE FOR DOMESTIC GOODS OR GOODS OF FOREIGN ORIGIN LOCATED WITHIN INDIA

1	2	3	4	5							6
Schedule No.	Brief Description of Goods	Country of Origin	Quantity (Nos.)	Price per unit (Rs.)							Total Price (at Consignee Site) basis (Rs.) 4 x 5(g)
				Ex - factory/ Ex - warehouse /Ex - showroom /Off - the shelf (a)	Packing and Forwarding charges (b)	Excise Duty (if any) [%age & value] (c)	Sales Tax/VAT(if any) [%age & value] (d)	Inland Transportation, Insurance for a period including 3 months beyond date of delivery, loading/ unloading and Incidental costs till consignee's site (e)	Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training) at the Consignee's site (f)	Unit Price (at Consignee Site) basis (g) =a+b+c+d+e+f	

Total Tender price in Rupees: _____

In words: _____

Note: -

1. If there is a discrepancy between the unit price and total price THE UNIT PRICE shall prevail.
2. The charges for Annual CMC after warranty shall be quoted separately as per Section – XI – Price Schedule C

Name _____

Business Address _____

Place: _____

Date: _____

Signature of Tenderer _____

Seal of the Tenderer _____

B) PRICE SCHEDULE FOR GOODS TO BE IMPORTED FROM ABROAD

1	2	3	4	5				6
Schedule No.	Brief Description of Goods	Country of Origin	Quantity (Nos.)	Price per unit (Currency)				Total price on CIP Named Port of Destination + Insurance (local transportation and storage) 4X 5 (e)
				FOB price at port/ airport of Lading (a)	Freight & Insurance (port of loading to port of entry) and other Incidental costs (b)	Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training) at Consignee's site (c)	Extended Insurance (local transportation and storage) from port of entry to the consignee site for a period including 3 months beyond date of delivery** (d)	

** To be paid in Indian Currency (Rs.)

Total Tender price in foreign currency: _____

In words: _____

Note: -

1. If there is a discrepancy between the unit price and total price THE UNIT PRICE shall prevail.
2. The charges for Annual CMC after warranty shall be quoted separately as per Section – XI – Price Schedule C
3. The Tenderer will be fully responsible for the safe arrival of the goods at the named port of entry in good condition as per terms of CIP as per INCOTERMS, if applicable
4. Custom duty @ 11.76% (considering CDEC provided) and 2% C& F charges will be added to the CIP price to arrive at the DDP price for evaluation purpose.

Indian Agent:

Indian Agency Commission (included in FOB price): ____% of FOB

Signature of Tenderer _____

Name _____

Business Address _____

Place: _____

Date: _____

Signature of Tenderer _____

Seal of the Tenderer _____

C) PRICE SCHEDULE FOR ANNUAL COMPREHENSIVE MAINTENANCE CONTRACT AFTER WARRANTY PERIOD

1 Schedule No.	2 BRIEF DESCRIPTION OF GOODS	3 Qty. (Nos.)	4 Annual Comprehensive Maintenance Contract Cost for Each Unit year wise*.					5 Total Annual Comprehensive Maintenance Contract Cost for 5 Years [3 x (4a+4b+4c+4d+4e)]
			1 st	2 nd	3 rd	4 th	5 th	
			a	b	c	d	e	

* After completion of Warranty period

NOTE:-

1. In case of discrepancy between unit price and total prices, THE UNIT PRICE shall prevail.
2. The cost of Comprehensive Maintenance Contract (CMC) which includes preventive maintenance including testing & calibration as per technical/ service /operational manual, labour and spares, after satisfactory completion of Warranty period may be quoted for next 5 years on yearly basis for complete equipment and Turnkey (if any).
3. The cost of CMC may be quoted along with taxes applicable on the date of Tender Opening. The taxes to be paid extra, to be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such taxes and no claim for the same will be entertained later.
4. Cost of CMC offered will be added (at a discounted rate of 10% per year) for Ranking/Evaluation purpose.
5. The payment of CMC will be made as per clause GCC clause 21.1 (D).
6. The uptime warranty will be 98% on 24 (hrs) X 7 (days) X 365 (days) basis or as stated in Technical Specification of the TE document.
7. All software updates should be provided free of cost during CMC period.
8. The stipulations in Technical Specification will supersede above provisions
9. The supplier shall keep sufficient stock of spares required during Annual Comprehensive Maintenance Contract period. In case the spares are required to be imported, it would be the responsibility of the supplier to import and get them custom cleared and pay all necessary duties.

Name _____

Business Address _____

Place: _____

Date: _____

Signature of Tenderer _____

Seal of the Tenderer _____

D) PRICE SCHEDULE FOR TURNKEY

Schedule No.	BRIEF DESCRIPTION OF TURNKEY GOODS	CONSIGNEE CODE	Turnkey price

Note: -

1. The cost of Turnkey as per Technical Specification (Section VII) may be quoted on lump sum along with taxes applicable on the date of Tender Opening. The taxes to be paid extra, to be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such taxes and no claim for the same will be entertained later.
2. Cost of Turnkey will be added for Ranking/Evaluation purpose.
3. The payment of Turnkey will be made as per clause GCC clause 21.1 (c).
4. The stipulations in Technical Specification will supersede above provisions

Name _____

Business Address _____

Place: _____

Signature of Tenderer _____

Date: _____ **Seal of the Tenderer** _____

SECTION – XII

QUESTIONNAIRE

Fill up the Section XX – Check List for Tenderers and enclose with the Tender

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

SECTION – XIII

BANK GUARANTEE FORM FOR EMD

Whereas _____ (hereinafter called the “Tenderer”) has submitted its quotation dated _____ for the supply of _____ (hereinafter called the “tender”) against the purchaser’s tender enquiry No. _____ Know all persons by these presents that we _____ of _____ (Hereinafter called the “Bank”) having our registered office at _____ are bound unto _____ (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 Tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
- 2) If the Tenderer having been notified of the acceptance of his tender by the Purchaser during the period of its validity:-

fails or refuses to furnish the performance security for the due performance of the contract or fails or refuses to accept/execute the contract or if it comes to notice that the information/documents furnished in its tender is incorrect, false, misleading or forged

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

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

.....
(Signature with date of the authorised officer of the Bank)

.....
Name and designation of the officer

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

SECTION – XIV

MANUFACTURER’S AUTHORISATION FORM

Head (P&CD),
HLL Lifecare Limited, Procurement and Consultancy Division
B-14 A, Sector -62, Noida -201307, Uttar Pradesh

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 tender*) having factories at _____, hereby authorise Messrs _____ (*name and address of the agent*) to submit a tender, 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 tender for the following reason(s):

(*please provide reason here*).

We further confirm that no supplier or firm or individual other than Messrs. _____ (*name and address of the above agent*) is authorised to submit a tender, 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, CMC 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 authorised agent

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 – XV

BANK GUARANTEE FORM FOR PERFORMANCE SECURITY/ CMC SECURITY

Head (P&CD),
HLL Lifecare Limited, Procurement and Consultancy Division
B-14 A, Sector -62, Noida -201307, Uttar Pradesh

WHEREAS _____ (Name and address of the supplier) (Hereinafter called “the supplier”) has undertaken, in pursuance of contract no _____ dated _____ to supply (description of goods and services) (herein after called “the contract”).

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

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

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of. _____ (Amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

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

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

This guarantee shall be valid up to 66 (Sixty Six) months from the date of Notification of Award i.e. up to ----- (indicate date)

.....
(Signature with date of the authorised officer of the Bank)

.....
Name and designation of the officer

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

SECTION – XVI

CONTRACT FORM - A

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

(Address of the Purchaser's/Consignee's office issuing the contract)

Contract No _____ dated _____

This is in continuation to this office's Notification of Award No _____ dated _____

1. Name & address of the Supplier: _____
2. Purchaser's TE document No _____ dated _____ and subsequent Amendment No _____, dated _____ (if any), issued by the purchaser
3. Supplier's Tender No _____ dated _____ and subsequent communication(s) No _____ dated _____ (if any), exchanged between the supplier and the purchaser in connection with this tender.
4. In addition to this Contract Form, the following documents etc, which are included in the documents mentioned under paragraphs 2 and 3 above, shall also be deemed to form and be read and construed as integral part of this contract:

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

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 Tenderers' of the Purchaser's TE document shall also apply to this contract.

5. Some terms, conditions, stipulations etc. out of the above-referred documents are reproduced below for ready reference:

- (i) Brief particulars of the goods and services which shall be supplied/ provided by the supplier are as under:

Schedule No.	Brief description of goods/services	Accounting unit	Quantity to be supplied	Unit Price	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
- (iv) Quality Control
 - (a) Mode(s), stage(s) and place(s) of conducting inspections and tests.
 - (b) Designation and address of purchaser's inspecting officer
- (v) Destination and despatch instructions
- (vi) Consignee, including port consignee, if any

- 6. Warranty clause
- 7. Payment terms
- 8. Paying authority

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

Received and accepted this contract

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

For and on behalf of _____

(Name and address of the supplier)

(Seal of the supplier)

Date: _____

Place: _____

CONTRACT FORM – B**CONTRACT FORM FOR ANNUAL COMPREHENSIVE MAINTENANCE CONTRACT**

Annual CM Contract No. _____ dated _____
Between _____

(Address of Head of Hospital (AIIMS))
And _____

(Name & Address of the Supplier)

Ref: Contract No. _____ dated _____ (Contract No. & date of Contract for supply, installation, commissioning, handing over, Trial run, Training of operators & warranty of goods)

In continuation to the above referred contract

2. The Contract of Annual Comprehensive Maintenance is hereby concluded as under:

1 Schedule No.	2 BRIEF DESCRIPTION OF GOODS	3 QUANTITY. (Nos.)	4 Annual Comprehensive Maintenance Contract Cost for Each Unit year wise*.					5 Total Annual Comprehensive Maintenance Contract Cost for 5 Years [3 x (4a+4b+4c+4d+4e)]
			1 st	2 nd	3 rd	4 th	5 th	
			a	b	c	d	e	

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

- b) The CMC 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 CMC)
- c) The cost of Annual Comprehensive Maintenance Contract (CMC) which includes preventive maintenance, labour and spares, after satisfactory completion of Warranty period may be quoted for next 5 years as contained in the above referred contract on yearly basis for complete equipment (including X ray tubes, Helium for MRI, Batteries for UPS, other vacuumatic parts, _____ & _____) and Turnkey (if any).
- d) There will be 98% uptime warranty during CMC period on 24 (hrs) X 7 (days) X 365 (days) basis, with penalty, to extend CMC period by double the downtime period.
- e) During CMC 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 6 months commencing from the date of the successful completion of warranty period for preventive maintenance of the goods.
- f) All software updates should be provided free of cost during CMC.
- g) The bank guarantee valid till _____ [(fill the date) 2 months after expiry of entire CMC 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 XV of the TE document, along with the signed copy of Annual CMC within a period of 21 (twenty one) days of issue of Annual CMC failing which the proceeds of Performance Security shall be payable to the Purchaser/Consignee.

- h) If there is any lapse in the performance of the CMC as per contract, the proceeds Annual CMC bank guarantee for an amount of Rs. _____ (equivalent to 2.5 % of the cost of the equipment as per contract) shall be payable to the Consignee.
- i) **Payment terms:** The payment of Annual CMC will be made against the bills raised to the consignee by the supplier on six monthly basis after satisfactory completion of said period, duly certified by the HOD concerned. The payment will be made in Indian Rupees.
- j) **Paying authority:** _____ (name of the consignee i.e. Hospital/ Institute /Medical College's authorised official)

**(Signature, name and address
of Hospital/Institute/Medical College's authorised official)**

For and on behalf of _____

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 _____

(Name and address of the supplier)

(Seal of the supplier)

Date: _____

Place: _____

SECTION – XVII
CONSIGNEE RECEIPT CERTIFICATE

(To be given by consignee's authorized representative)

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

- 1) Contract No. & date : _____
- 2) Supplier's Name : _____
- 3) Consignee's Name & Address with
telephone No. & Fax No. : _____
- 4) Name of the item supplied : _____
- 5) Quantity Supplied : _____
- 6) Date of Receipt by the Consignee : _____
- 7) Name and designation of Authorized
Representative of Consignee : _____
- 8) Signature of Authorized
Representative of Consignee with
date : _____
- 9) Seal of the Consignee : _____

SECTION – XVIII
Proforma of Final Acceptance Certificate by the Consignee

No _____

Date _____

To

M/s _____

Subject: Certificate of commissioning of equipment/plant.

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

- (a) Contract No _____ dated _____
- (b) Description of the equipment(s)/plants: _____
- (c) Equipment(s)/ plant(s) nos.: _____
- (d) Quantity: _____
- (e) Bill of Loading/Air Way Bill/Railway Receipt/ Goods Consignment Note no _____ dated _____
- (f) Name of the vessel/Transporters: _____
- (g) Name of the Consignee: _____
- (h) Date of commissioning and proving test: _____

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

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

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

The supplier has fulfilled its contractual obligations satisfactorily ## or

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

- a) He has not adhered to the time schedule specified in the contract in dispatching the documents/ drawings pursuant to ‘Technical Specifications’.
- b) He has not supervised the commissioning of the equipment(s)/plant(s) in time, i.e. within the

period specified in the contract from date of intimation by the Purchaser/Consignee in respect of the installation of the equipment(s)/plant(s).

- c) The supplier as specified in the contract has not done training of personnel.

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

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

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

(Signature)

(Name)

(Designation with stamp)

Explanatory notes for filling up the certificate:

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

SECTION – XIX ANNEXURES

Annexure 1

DETAILS OF SHIPPING ARRANGEMENT FOR LINER CARGOES IN RESPECT OF C & F/CIF/TURNKEY/F.O.R CONTRACTS FOR IMPORTS

1. (a) SHIPMENT FROM PORTS OF U.K INCLUDING NORTHERN IRELAND (ALSO EIRE), FROM THE NORTH CONTINENT OF EUROPE (GERMANY, HOLLAND, BELGIUM, FRANCE, NORWAY, SWEDEN, DENMARK, FINLAND AND PORTS ON THE CONTINENTAL SEABOARD OF MEDITERRANIAN (I.E. FRENCH WESTERN ITALIAN PORTS), TO PORTS IN INDIA.

The Seller should arrange shipment of the goods by vessels belonging to the member lines of the India-Pakistan-Bangladesh Conference. If the Seller finds that the space on the 'Conference Lines' vessels is not available for any specific shipment, he should take up with India-Pakistan-Bangladesh Conference. Conferity House, East Grinstead, Sussex (UK), for providing shipping space and also inform the Shipping Co-ordination Officer, Ministry of Surface Transport, New Delhi, (Cable: TRANSCHART, NEW DELHI, Telex: VAHAN IN – 031 – 61157, 61158, 61159)

The Seller should arrange shipment through the Government of India's Forwarding Agents, M/s Schenker & Co., 2000-Hamburg (Cable: SCHENKER CO., HAMBURG) OR obtain a certificate from them to the effect that shipment has been arranged in accordance with instructions of the Ministry of Surface Transport, (TRANSCHART), New Delhi.

(b) SHIPMENT FORM PORTS OF U.K. INCLUDING NORTHERN

Goods under this contract would be shipped by the national shipping companies of the Contracting Parties operating bilateral shipping service and vessels under the flag of third countries in accordance with the Agreement between the Government of German Democratic Republic and the Government of the Republic of India in the Field of Merchant Shipping signed on 9.1.1979, as amended up-to-date.

(c) ISHIPMENT FROM ADRIATIC PORTS OF EASTERN ITALY AND YUGOSLAVIA

The seller should arrange shipment of the goods by vessels belonging to the following Indian member lines;

1. The Shipping Purchaser of India Ltd.
2. The Scindia Steam Navigation Co., Ltd
3. India Steamship Co., Ltd

For the purpose of ascertaining the availability of suitable Indian vessels and granting dispensation in the event of their non-availability, the Seller should give adequate notice about the readiness of each consignment from time to time at least six weeks in advance of the required position to M/s Schenker & Co. 2000 HAMBURG (Cable: SCHENKER CO., HAMBURG) and also endorse a copy thereof to the Shipping Co-ordination Officer, Ministry of Surface Transport, New Delhi, (Cable: TRANSCHART, NEW DELHI, Telex: VAHAN IN – 031 – 61157, 61158, 61159)

The seller should arrange shipment through the Government of India's Forwarding Agents M/s Schenker & Co. 2000 HAMBURG (Cable: SCHENKER CO., HAMBURG) or obtain certificate from them to the effect that shipment has been arranged in accordance with the instructions of the Ministry of Surface Transport, (TRANSCHART), New Delhi.

(d) SHIPMENT FROM POLAND & CZECHOSLOVAKIA

(i) IMPORTS FROM POLAND

Shipment under this contract would be made by the National flag lines of the two parties and vessels of the third flag conference lines, in accordance with the agreement between the Govt. of the Republic of India and the Govt. of the Polish People's Republic regarding Shipping Co-operation dated 27.6.1960 as amended up-to-date.

(ii) IMPORTS FROM CZECHOSLOVAKIA

Goods under this contract would be signed by the National flag lines of the two parties and vessels of the third flag conference lines, in accordance with the Agreement Co-operation in shipping between India and Czechoslovakia signed on 3.11.1978 and ratified on 19.12.1979, as amended up-to-date.

Shipping arrangement should be made by the Sellers in consultation with Resident Representative of the Indian Shipping Lines in Gdynia, Co., Morska Agencja W. Gdyniul, Pulaskiego 8, P.O. Box 246, Gdynia (Poland) – Telex : MG PL. 054301, Tel.: 207621, to whom details regarding contract number, nature of cargo , quantity, port of lading, discharging, name of Government consignee, expected date of readiness of each consignment etc. should be furnish at least six weeks in advance of the required position, with a copy thereof endorsed to the Shipping Co-ordination Officer, Ministry of Surface Transport, (Chartering Wing), New Delhi, (Cable: TRANSCHART, NEW DELHI, Telex: VAHAN IN – 031 – 61157, 61158, 61159)

(e) SHIPMENT FROM U.S.S.R

Shipment under this contract should be made in accordance with the agreement between the Government of the Republic of India and the Government of U.S.S.R on Merchant Shipping 1976, as amended up-to-date, by vessels of Indo-Soviet shipping Service.

(f) SHIPMENT FROM JAPAN

The shipment of goods should be made of India vessels to the maximum extent possible subject to the minimum of 50%.

The Seller should arrange shipment of the goods in consultation with the Embassy of India in Japan, Tokyo to whom details regarding contract number, nature of cargo, quantity, port of loading/discharge, name of Govt. consignee, expected date of readiness of each consignment etc. should be furnished at least six weeks in advance of the required position.

Note: The copies of such contracts are to be endorsed both to the Attached (commercial) embassy of India in Japan, Tokyo, and the shipping Co-ordination Officer, Ministry of Surface Transport, New Delhi.

(g) SHIPMENT FROM AUSTRALIA, ALGERIA, BULGARIA, ROMANIA, EGYPT

The Seller shall arrange shipment of the goods by Indian flag vessels to the maximum extent possible subject to a minimum of 50 %. For the purpose of ascertaining the availability of suitable Indian vessels, the seller shall give adequate notice of not less than six weeks about the readiness of each consignment to the Shipping Purchaser of India Ltd., SHIPPING HOUSE, 245, Madame Cama Road, Bombay – 400 021 (CABLE: SHIPINDIA BOMBAY) and also endorse a copy thereof to the Shipping Co-ordination Officer, Ministry of Surface Transport, New Delhi, (Cable: TRANSCART, NEW DELHI, Telex: VAHAN IN – 031 – 61157, 61158, 61159)

(h) SHIPMENT FROM PAKISTAN

The shipment of cargoes should be made by Indian vessels to the maximum extent possible subject to a minimum of 50 %.

Shipment arrangement should be made by the sellers in consultation with M/s Mogul Line Ltd., 16-Bank Street, Fort, Bombay – 400023 (Cable: MOGUL BOMBAY: Telex: 011 – 4049 MOGUL), to whom, details regarding contract number, nature of cargo, quantity, port of lading discharging, name of government consignee, expected date of readiness of each consignment etc. should be furnish at least six weeks in advance of the required position, with a copy thereof endorsed to the Shipping Co-ordination Officer, Ministry of Surface Transport, New Delhi, (Cable: TRANSCART, NEW DELHI, Telex: VAHAN IN – 031 – 61157, 61158, 61159)

(i) SHIPMENT FROM U.S ATLANTIC & GULF PORTS

The Seller should arrange shipment of the goods by vessels belonging to the member lines of the India – Pakistan – Bangladesh – Ceylon and Burma Outward Freight Conference. If the Seller finds that the space of the ‘Conference Lines’ vessels is not available for any specific shipment he should take up with India – Pakistan- Bangladesh – Ceylon and Burma Outward Freight Conference, 19, Rector Street, New York, N.Y. 10006 USA, for providing shipping space and also inform the Shipping Co-ordination Officer, Ministry of Surface Transport, New Delhi, (Cable: TRANSCART, NEW DELHI, Telex: VAHAN IN – 031 – 61157, 61158, 61159)

(j) SHIPMENT FROM ST. LAWRENCE AN EASTERN CANADIAN PORTS

The Seller should arrange shipment of the goods by vessels belonging to the following shipping lines;

1. The shipping Purchaser of India Ltd.
2. The Scindia Steam Navigation Co., Ltd

If the Seller finds that the space in the vessels of these Lines is not available for any particular consignments, he should inform the Shipping Co-ordination Officer, Ministry of Surface Transport, New Delhi, (Cable: TRANSCART, NEW DELHI, Telex: VAHAN IN – 031 – 61157, 61158, 61159) immediately so that dispensation from the shipping lines concerned to use alternative lifting may be sought.

(k) SHIPMENT FROM WEST COAST PORTS OF U.S. CANADA AND OTHER AREAS NOT SPECIFICALLY MENTIONED ABOVE

The Seller should arrange shipment of the goods by Indian vessels to the maximum extent possible subject to a minimum of 50 %. For the purpose of ascertaining the availability of suitable Indian vessels and granting dispensation in the event of their non-availability, the Seller should furnish the details regarding contract number, nature of cargo, quantity, port of lading, discharging, name of government consignee, expected date of readiness of each consignment etc. to the Shipping Co-ordination Officer, Ministry of Surface Transport, New Delhi, (Cable: TRANSHART, NEW DELHI, Telex: VAHAN IN – 031 – 61157, 61158, 61159) at least six weeks in advance of the required position.

2. BILLS OF LADING

(i) C.I.F./C&F/TURNKEY SHIPMENTS

The Bills of lading should be drawn to indicate Shipper and 'Consignee' as under:

SHIPPER: The C.I.F (C&F)/TURNKEY SUPPLIERS concerned.

CONSIGNEE: As per consignee's particulars in the contract (The name and address of the 'Port Consignee' and 'Ultimate' both should be indicated).

(ii) F.O.R SHIPMENTS

The Bills of lading should be drawn to indicate shipper Consignee as under:

SHIPPER: The F.O.R suppliers Concerned

CONSIGNEE: Supplier's Indian Agent on order

Note:

1. Moreover the name of the 'Purchaser' and 'Ultimate' Consignee should appear in the body of the Bills of Lading as the 'Notify' or as a remark.
2. Two non-negotiable copies of the Bills of Lading indicating the freight amount and discount, if any allowed, should be forwarded to The Shipping Co-ordination Officer, Ministry of surface Transport (Chartering Wing), New Delhi after the shipment of each consignment is effected.
3. The seller should avoid the use of over-aged vessels for the shipment of the goods under the contract and if so used the cost of additional. Insurance, if any, shall be borne by the seller.

SECTION – XX

AFFIDAVIT/UNDERTAKING

I/ We have read and understood the instructions and the terms and conditions contained in the document. I/We accordingly accept all terms and conditions of the tender enquiry document including the essential conditions specially incorporated in the tender enquiry like terms of terms of payment, liquidated damages clause, warranty clause, dispute resolution mechanism applicable law. I/ We confirm that we do not stand deregistered/banned/blacklisted by any Govt. Authorities. I/ We do hereby declare that the information furnished/ uploaded is correct to the best of my/our knowledge and belief. I/ We also hereby certify that if at any time, information furnished by us is proved to be false or incorrect; I/ We are liable for any action as deemed fit by the purchaser in addition to forfeiture of the earnest money.

Date:

(Signature of the bidder)

NAME & ADDRESS OF THE BIDDER

NOTE: To be submitted on non-judicial stamp paper of Rs. 10/- duly certified by Public Notary

Section – XXI
Consignee List

Consignee Code	Medical Institutions	Contact Address.	Air Port	Sea Port
PMC	Government Medical College-Patiala	The Principal Government Medical Collage Patiala	Delhi	ICD, Tughlakabad New Delhi

NB: The consignee will ensure timely issue of NMIC, CDEC, Octroi Exemption Certificates, Road Permits & Entry Tax Exemption Certificates, wherever applicable, to the suppliers.