GLOBAL TENDER ENQUIRY DOCUMENT

FOR PURCHASE OF
MEDICAL EQUIPMENT

UNDER PMSSY SCHEME
FOR

GOVT OF PUNJAB

DEPARTMENT OF MEDICAL EDUCATION AND RESEARCH

HLL/PCD/PMSSY/PUNJAB/GMCA-03/13-14

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 I
NOTICE INVITING TENDERS (NIT)
(Global Tender)

HLL Lifecare Limited
(A GOVERNMENT OF INDIA ENTERPRISE)
Procurement & Consultancy Services Division
B-14 A, Sector-62, Noida-201 307
URL: www.lifecarehll.com
Email: pcd@lifecarehll.com
PHONE: 0120-4071500
FAX: 0120-4071513

FOR

GOVT OF PUNJAB

DEPARTMENT OF MEDICAL EDUCATION AND RESEARCH

Tender Enquiry No.: HLL/PCD/PMSSY/PUNJAB/GMCA-03/13-14 Dated 16.05.2013

NOTICE INVITING TENDERS (NIT)

1. Procurement & Consultancy Services Division of HLL Lifecare Limited, for and on behalf of Govt. of Punjab, Department of Medical Education and Research invites sealed tenders, from eligible and qualified tenderers for supply of following medical equipments for Government Medical College, Amritsar, Punjab under PMSSY:

Sl. No.	Item Name	Total Qty	EMD
1	OT Table	1	40,000
2	Harmonic Scalpel	2	92,000
3	General Surgery Laparoscopic Set	1	56,000
4	Laparoscopic instruments for bariatiric surgery	1 set	30,000
5	Delivery Bed	2	20,000
6	Foetal Monitor with central station	18+2	136,800
7	Cardiotocography	1	10,000
8	Standard operative and diagnostic Hysteroscopy set with TCRE with controlled irrigation and suction	1	40,000
9	Endovision Imaging system for Laparoscopy	1	50,000
10	Electromechanical Morcellator and Vessel Sealling system with inbuilt Electro Surgical Unit for Operating Laparoscopy Surgery	1	50,000
11	Vessel Sealing system with Electro surgical generator for Operating Hysteroscope & LAP	1	30,000
12	Endovision Imaging System for Hysteroscopy	1	40,000
13	Laparoscopic Surgery Hand Instrument with CO2 Insufflator	1	44,000
14	Mobile Examination Light based on LED technology	9	99,000
15	Eye bank Specular Microscope (Eye Bank kerato-analyzer)	1	30,000
16	Clinical Endothelial Micrcoscope	1	30,000
17	Chart Projection for Pediatric Patients	1	9,000
18	Synaptophore	1	16,000

Sl. No.	Item Name	Total Qty	EMD
19	Keratometer	1	5,000
20	OCT Machine	1	90,000
21	Cytocentrifuge	1	12,000
22	Autoclave (Horizontal)	1	10,000
23	Automated Slide Stainers	1	10,000
24	Automatic Microtome	1	10,000
25	Automatic Tissue Processor	1	15,000
26	Dry Heat Water Bath (Heat Block)	1	6,000
27	Paraffin Tissue Embedding Centre	1	9,000
28	Automated Knife Sharpener	1	4,000
29	Table top Micro-centrifuge	1	8,000
30	Tissue Floatation Bath	1	8,000
31	Automated Electrophoresis System with scanner /Densitometer	2	32,000
32	Refrigerated Centrifuge	3	1,08,000
33	Deep Freezer (-20 deg C)	2	12,000
34	PCR Thermocycler	1	8,000
35	Biosafety cabinet	2	24,000
36	Analytical balance	2	24,000
37	Spectrophotometer	1	14,000
38	Deep Freezer (-80 deg C)	1	14,000
39	HPLC System	1	50,000
40	Thin layer Chromatography	1	4,000
41	PNCL Set	1	12,000
42	Electro Surgical Unit (ESU) with vessel sealing system	1	36,000
43	Whole Body combined UV therapy unit	1	32,000
44	Hand foot UV phototherapy device	1	8,000
45	Multi Application Laser Platform	1	40,000
46	PFT Machine (advanced)	2	96,000
47	Video Thoracoscope	1	50,000
48	Computerized dedicated Stress Testing machine along with treadmill with pace maker analysis facility and SAECG	1	36,000
49	Blood Mixer and Collector	1	6,000
50	Walk in Cooler	1	14,000
51	Basic Plastic/ Rhynoplasty /Cleft lip & Palate surgery instrument set	1	12,000
52	PC Based polygraph	1	80,000
53	Paediatric Flexible fiber optic / Video Laryngoscope	1	24,000
54	Anaesthesia Work Station	4	2,24,000
55	Operating microscope complete set for surgery and teaching	1	80,000
56	Conventional surgical operating microscope with zoom magnification 5 steps with high standard optics	1	24,000
57	BERA with ASSR	1	24,000
58	OAE	1	10,000

Sl. No.	Item Name	Total Qty	EMD
59	ENT examination unit with motorized patient chair complete unit	1	10,000
60	General instruments for ENT surgery Instruments for ear surgery	2 Set	8,000
61	Micro motor drill with hand pieces and accessories (2 unit) and Micro drill for cochleostomy (1 unit)	2+1	10,000
62	Instrument set for micro ear surgery	2	4,000
63	Instrument set for micro laryngeal surgery	2	4,000
64	CO2 laser	1	16,000
65	Flexible Rhino Pharyngo Laryngo-Fiberscope	1	20,000
66	Rigid laryngoscope	1 set	10,000
67	Rigid esophagoscope	1 set	8,000
68	Electronystagmographic machine	1	8,000

2. Tender No.: HLL/PCD/PMSSY/PUNJAB/GMCA-03/13-14

Sl. No.	Description	Schedule
i.	The Tender document can be viewed/ downloaded from the Tender Wizard from 26.04.2013 to 27.05.2013 (from 1000 Hrs to 1600 Hrs) i.e. one day prior to last date of submission of the Application.	17.05.2013 to 17.06.2013
ii.	Tender Fee	Rs. 5,000/-
iii.	Pre Tender Meeting Date & Time	24.05.2013 at 11 AM
iv.	Pre Tender Meeting Venue	HLL Lifecare Ltd , B-14 A Sector-62, Noida 201307
v.	Closing date & time for receipt of Tender	18th June 2013, 12.00 hrs
vi.	Time and date of opening of Techno-Commercial tenders	18th June 2013, 12.30 hrs through e-mode online

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. 5,000/- 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://www.tenderwizard.com/. 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: punjabeprocure@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 or www.lifecarehll.com.

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 before 12:00 hours Indian Standard Time on the Tender due date i.e. on 28.05.2013, at the below mentioned address in the manner and form as detailed in the Tender.

   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)
HLL Lifecare Limited,
Procurement and Consultancy Division
B-14 A, Sector-62, Noida-201 307
Uttar Pradesh

SECTION - II
GENERAL INSTRUCTIONS TO TENDERERS (GIT)
CONTENTS

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, 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.
(xxxiv) "DMER"- Directorate Medical Education Research

2. Introduction

2.1 The Purchaser has issued these TE documents for purchase of goods and related services as mentioned in Section – VI – "List of Requirements", which also indicates, *interalia,* the required delivery schedule, terms and place of delivery.

2.2 This section (Section II - "General Instruction Tenderers") provides the relevant information as well as instructions to assist the prospective 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 – Check List for the Tenderers
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) <u>Techno-commercial Tender (Un priced Tender)</u>

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 quote 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) <u>Price Tender:</u>

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.

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.

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) The complete name and address of the Indian Agent and its permanent income tax account number as allotted by the Indian Income Tax authority.
b) The details of the services to be rendered by the agent for the subject requirement.
c) Details of Service outlets in India, nearest to the consignee(s), to render services during Warranty and CMC period.

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.

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.
d) in case the tenderer is an Indian agent/authorized representative quoting on behalf of a foreign manufacturer for the **restricted item**, the Indian agent/authorized representative is already enlisted under the Compulsory Enlistment Scheme of Ministry of Finance, Govt. of India, operated through Directorate General of Supplies & Disposals (DGS&D), New Delhi.

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 misguiding data, statement(s) etc. about technical acceptability of the goods and services offered by it, its tender will be liable to be ignored and rejected in addition to other remedies available to the purchaser in this regard.

19. Earnest Money Deposit (EMD)

19.1 Pursuant to GIT clauses 8.1 and 11.1(d) the tenderer shall furnish along with its tender, earnest money for amount as shown in the List of Requirements. The earnest money is required to protect the purchaser against the risk of the tenderer's unwarranted conduct as amplified under sub-clause 19.7 below.

19.2 The tenderers who are currently registered and, also, will continue to remain registered during the tender validity period with Directorate General of Supplies & Disposals or with National Small Industries Corporation, New Delhi for the specific goods as per tender enquiry specification shall be eligible for exemption from EMD. Vague stipulations in the Registration Certificate such as "to customers' specification" etc. will not be acceptable for exemption from furnishing of earnest money. In case the tenderer falls in these categories, it should furnish copy of its valid registration details (with DGS&D or NSIC, as the case may be).

19.3 The earnest money shall be denominated in Indian Rupees or equivalent currencies as per GIT clause 12.2. The earnest money shall be furnished in one of the following forms:

i) Account Payee Demand Draft
ii) 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.

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, however, may not agree to extend its tender validity without forfeiting its EMD.

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 following documents shall be prepared and scanned in different files (in PDF or JPEG format) and uploaded during the on-line submission of Proposal. These documents shall also be submitted in '**ORIGINAL**' to HLL Lifecare Ltd before the prescribed date & time for submission of Proposals.

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 (if any)

All document(s)/ information(s) other than above including the Financial Proposal (i.e. FORMAT FOR SUBMISSION OF FINANCIAL PROPOSAL) should be uploaded ***online only*** in the prescribed format given in the website. No other mode of submission is accepted.

Note: - Tender will be evaluated as and where basis and no clarification subsequent to opening will be entertained.

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 Prior to the detailed evaluation of Price Tenders, pursuant to GIT Clause 34, the Purchaser will determine the substantial responsiveness of each Tender to the TE Document. For purposes of these clauses, a substantially responsive Tender is one, which conforms to all the terms and conditions of the TE Documents without material deviations. Deviations from, or objections or reservations to critical provisions such as those concerning Performance Security (GCC Clause 5), Warranty (GCC Clause 15), EMD (GIT Clause 19), Taxes & Duties (GCC Clause 20), Force Majeure (GCC Clause 26) and Applicable law (GCC Clause 31) will be deemed to be a material deviation. 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 If a Tender is not substantially responsive, it will be rejected by the Purchaser and cannot subsequently be made responsive by the Tenderer by correction of the nonconformity.

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 the meet the basic requirements, are liable to be treated as non – responsive and will be summarily ignored.

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

(i) Tender form as per Section X (signed and stamped) not enclosed
(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.
(vii) Goods offered are not meeting the tender enquiry specification.
(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.

28. Minor Infirmity/Irregularity/Non-Conformity

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

29 Discrepancies in Prices

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

30. Discrepancy between original and 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

34.1 Unless mentioned otherwise in Section – III – Special Instructions to Tenderers and Section – VI – List of Requirements, the comparison of the responsive tenders shall be carried out on Delivery Duty Paid (DDP) consignee site basis. The quoted turnkey prices and CMC prices for 5 years will also be added for comparison/ranking purpose for evaluation. However, CMC from 6^{th} year to 8^{th} year (after warranty obligation) also to be quoted separately which 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, Customs 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.

36. Tenderer's capability to perform the contract

36.1 The purchaser, through the above process of tender scrutiny and tender evaluation will determine to its satisfaction whether the tenderer, whose tender has been determined as the lowest evaluated responsive tender is eligible, qualified and capable in all respects to perform the contract satisfactorily. If, there is more than one schedule in the List of Requirements, then, such determination will be made separately for each schedule.

36.2 The above-mentioned determination will, interalia, take into account the tenderer's financial, technical and production capabilities for satisfying all the requirements of the purchaser as incorporated in the TE document. Such determination will be based upon scrutiny and examination of all relevant data and details submitted by the tenderer in its tender as well as such other allied information as deemed appropriate by the purchaser.

37. Contacting the Purchaser

37.1 From the time of submission of tender to the time of awarding the contract, if a tenderer needs to contact the purchaser for any reason relating to this tender enquiry and / or its tender, it should do so only in writing.

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

G. AWARD OF CONTRACT

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

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

39. Award Criteria

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

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

40.1 At the time of awarding the contract, the purchaser reserves the right to increase or decrease by up to twenty five (25) per cent, the quantity of goods and services mentioned in the schedule (s) in the "List of Requirements" (rounded of 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 of 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 after one year from the Date of Notification of Award.

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 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 reserves 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)

Preparation and submission of tender in e-tender mode

The instructions have been given by the e- portal service provider to help the bidders in uploading the tender enquiry document are attached in the website link with the Tender document.

The 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.

GIT clause no. 21.5 - The following documents shall be prepared and scanned in different files (in PDF or JPEG format) and uploaded during the on-line submission of Proposal. These documents shall also be submitted in '**ORIGINAL**' to HLL Lifecare Ltd before the prescribed date & time for submission of Proposals.

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 (if any)

All document(s)/ information(s) other than above including the Financial Proposal (i.e. FORMAT FOR SUBMISSION OF FINANCIAL PROPOSAL) should be uploaded ***online only*** in the prescribed format given in the website. No other mode of submission shall be acceptable.

Note:- Tender will be evaluated as and where basis and no clarification subsequent to opening will be entertained.

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

1. Application

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

2. Use of contract documents and information

2.1 The supplier shall not, without the purchaser's prior written consent, disclose the contract or any provision thereof including any specification, drawing, sample or any information furnished by or on behalf of the purchaser in connection therewith, to any person other than the person(s) employed by the supplier in the performance of the contract emanating from this 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, trade marks etc. being made against the purchaser, the purchaser shall notify the supplier of the same and the supplier shall, at his own expenses take care of the same for settlement without any liability to the purchaser.

4. Country of Origin

4.1 All goods and services to be supplied and provided for the contract shall have the origin in India or in the countries with which the Government of India has trade relations.

4.2 The word "origin" incorporated in this clause means the place from where the goods are mined, cultivated, grown, manufactured, produced or processed or from where the services are arranged.

4.3 The country of origin may be specified in the Price Schedule

5. Performance Security

5.1 Within thirty (30) days from date of the issue of notification of award by the Purchaser/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 30 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 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 twenty-one (21) 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 transhipment (if any), rough handling, open storage etc. without any damage, deterioration etc. As and if necessary, the size, weights and volumes of the packing cases shall also take into consideration, the remoteness of the final destination of the goods and availability or otherwise of transport and handling facilities at all points during transit up to final destination as per the contract.

7.2 The quality of packing, the manner of marking within & outside the packages and provision of accompanying documentation shall strictly comply with the requirements as provided in Technical Specifications and Quality Control Requirements under Sections VII and VIII and in SCC under Section V. In case the packing requirements are amended due to issue of any amendment to the contract, the same shall also be taken care of by the supplier accordingly.

7.3 Packing instructions:

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

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

8. Inspection, Testing and Quality Control

8.1 The purchaser and/or its nominated representative(s) will, without any extra cost to the purchaser, inspect and/or test the ordered goods and the related services to confirm their conformity to the contract specifications and other quality control details incorporated in the contract. The purchaser shall inform the supplier in advance, in writing, the purchaser's programme for such inspection and, also the identity of the officials to be deputed for this purpose. The cost towards the transportation, boarding & lodging will be borne by the purchaser and/or its nominated representative(s).

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.

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 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 specified in 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 transhipment 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. The insurance cover for 110% value of the goods 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.

If the equipment is not commissioned and handed over to the consignee within 3 months, the insurance will be got 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 consumable spares for the goods so that the same are supplied to the Purchaser/Consignee promptly on receipt of order from the Purchaser/Consignee.

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 (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 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.
(v) Manufacturer's/Supplier's warranty certificate;
(vi) Inspection Certificate for the despatched equipments issued by recognized/ reputed agency like SGS, Lloyd or equivalent (acceptable to the purchaser) 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 (*except when the design adopted and / or the material used are as per the Purchaser's/Consignee's specifications*) or workmanship or from any act or omission of the supplier, that may develop under normal use of the supplied goods under the conditions prevailing in India.

15.2 The **warranty** shall remain valid for **24 months** from the date of installation & commissioning except for the following (as applicable)

a. for 5 (Five) Years exclusively for items mentioned below:
CT scan, MRI- 1.5 Tesla, Bi Plane DSA, Cath Lab, 1000 mA x ray machine.

followed by a CMC for a period of 5 (Five) Years and additional 3 (three) years as stated GIT clause 34.1 for all the equipments after the goods or any portion thereof as the case may be, have been delivered to the final destination and installed and commissioned at the final destination and accepted by the purchaser/CONSIGNEE in terms of the contract, unless specified otherwise in the SCC.

b. No conditional warranty like mishandling, manufacturing defects etc. will be acceptable.
c. Warranty as well as Comprehensive Maintenance contract will be inclusive of all accessories and Turnkey work and it will also cover the following:-
- X-ray and CT tubes and high-tension cables.
- Helium replacement
- Any kind of motor.
- Plastic & Glass Parts.
- All kind of sensors including oxygen sensors.
- All kind of coils, probes and transducers including ECG cable, BP transducers, SpO2 Probes, Ultrasound and Colour Doppler Transducers/ probes, BP cuffs, Defibrillator internal and external paddles, chart recorders, ventilator reusable patient circuits, servo humidifier with chamber, electrodes and probes for blood gas analyzer, MRI coils.
- All kind of flat panel sensors and cassettes for DR & CR systems and patients handling trolleys etc

- Printers and imagers including laser and thermal printers with all parts.
- UPS including the replacement of batteries.
- Air-conditioners

d. Replacement and repair will be under taken for the defective goods.
e. 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 to a further period of twenty four (24) months from the date such rectified / replaced goods starts functioning to the satisfaction of the purchaser.

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 equipments 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 equipments/machines/goods etc. and shall always give the most competitive price for its machines/equipments 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.

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 equipments issued by recognized/ reputed agency like SGS, Lloyd or equivalent (acceptable to the purchaser) prior to despatch.
(x) Certificate of origin

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.

c) 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 100 % payment to the Foreign Principal.

d) 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. Payment shall be paid in Indian Rupees to the Indian Agent on proof of 100% payment to the Foreign Principal.

C) Payment of Turnkey, if any:

Turnkey payment will be made to the manufacturer's agent 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. Payment shall be made in Indian Rupees to the Indian Agent on proof of 100% payment to the Foreign Principal.

D) Payment for Annual Comprehensive Maintenance Contract Charges:

The **Purchaser/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 respective consignees. 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 receipted 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. Delay in the supplier's performance

22.1 The supplier shall deliver of 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.

22.2 Subject to the provision under GCC clause 26, any unexcused delay by the supplier in maintaining its contractual obligations towards delivery of goods and performance of services shall render the supplier liable to any or all of the following sanctions:

(i) Imposition of liquidated damages,
(ii) Forfeiture of its performance security and
(iii) Termination of the contract for default.

22.3 If at any time during the currency of the contract, the supplier encounters conditions hindering timely delivery of the goods and performance of services, the supplier shall promptly inform the Purchaser/Consignee in writing about the same and its likely duration and make a request to the Purchaser/Consignee for extension of the delivery schedule accordingly. On receiving the supplier's communication, the Purchaser/Consignee shall examine the situation as soon as possible and, at its discretion, may agree to extend the delivery schedule, with or without liquidated damages for completion of supplier's contractual obligations by issuing an amendment to the contract.

22.4 When the period of delivery is extended due to unexcused delay by the supplier, the amendment letter extending the delivery period shall, interalia contain the following conditions:

(a) The Purchaser/Consignee shall recover from the supplier, under the provisions of the clause 23 of the General Conditions of Contract, liquidated damages on the goods and services, which the Supplier has failed to deliver within the delivery period stipulated in the contract.

(b) That no increase in price on account of any ground, whatsoever, including any stipulation in the contract for increase in price on any other ground and, also including statutory increase in or fresh imposition of customs duty, 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.

23. Liquidated damages

23.1 Subject to GCC clause 26, if the supplier fails to deliver 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 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, acts of the Purchaser/Consignee either in its sovereign or contractual capacity, 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.

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. General/ Miscellaneous Clauses

32.1 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.

32.2 Any failure on the part of any Party to exercise right or power under this Contract shall not operate as waiver thereof.

32.3 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.

32.4 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.

32.5 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.

32.6 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.

32.7 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.

SECTION - VI
LIST OF REQUIREMENTS

Part-I

Sl. No.	Item Name	Department	Qty	Total Qty	EMD
1	OT Table	Surgery	1	1	40,000
2	Harmonic Scalpel	Surgery	2	2	92,000
3	General Surgery Laparoscopic Set	Surgery	1	1	56,000
4	Laparoscopic instruments for bariatiric surgery	Surgery	1 set	1 set	30,000
5	Delivery Bed	Gynae & Obstt.	2	2	20,000
6	Foetal Monitor with central station	Gynae & Obstt.	18+2	18+2	136,800
7	Cardiotocography	Gynae & Obstt.	1	1	10,000
8	Standard operative and diagnostic Hysteroscopy set with TCRE with controlled irrigation and suction	Gynae & Obstt.	1	1	40,000
9	Endovision Imaging system for Laparoscopy	Gynae & Obstt.	1	1	50,000
10	Electromechanical Morcellator and Vessel Sealling system with inbuilt Electro Surgical Unit for Operating Laparoscopy Surgery	Gynae & Obstt.	1	1	50,000
11	Vessel Sealing system with Electro surgical generator for Operating Hysteroscope & LAP	Gynae & Obstt.	1	1	30,000
12	Endovision Imaging System for Hysteroscopy	Gynae & Obstt.	1	1	40,000
13	Laparoscopic Surgery Hand Instrument with CO2 Insufflator	Gynae & Obstt.	1	1	44,000
14	Mobile Examination Light based on LED technology	Gynae & Obstt.	9	9	99,000
15	Eye bank Specular Microscope (Eye Bank kerato-analyzer)	Eye	1	1	30,000
16	Clinical Endothelial Micrcoscope	Eye	1	1	30,000
17	Chart Projection for Pediatric Patients	Eye	1	1	9,000
18	Synaptophore	Eye	1	1	16,000
19	Keratometer	Eye	1	1	5,000
20	OCT Machine	Eye	1	1	90,000
21	Cytocentrifuge	Pathology	1	1	12,000
22	Autoclave (Horizontal)	Pathology	1	1	10,000
23	Automated Slide Stainers	Pathology	1	1	10,000
24	Automatic Microtome	Pathology	1	1	10,000
25	Automatic Tissue Processor	Pathology	1	1	15,000

Sl. No.	Item Name	Department	Qty	Total Qty	EMD
26	Dry Heat Water Bath (Heat Block)	Pathology	1	1	6,000
27	Paraffin Tissue Embedding Centre	Pathology	1	1	9,000
28	Automated Knife Sharpener	Pathology	1	1	4,000
29	Table top Micro-centrifuge	Pathology	1	1	8,000
30	Tissue Floatation Bath	Pathology	1	1	8,000
31	Automated Electrophoresis System with scanner /Densitometer	Pathology	1	2	32,000
		Microbiology	1		
32	Refrigerated Centrifuge	Pathology	1	3	1,08,000
		Microbiology	2		
33	Deep Freezer (-20 deg C)	Microbiology	2	2	12,000
34	PCR Thermocycler	Microbiology	1	1	8,000
35	Biosafety cabinet	Microbiology	2	2	24,000
36	Analytical balance	Microbiology	2	2	24,000
37	Spectrophotometer	Microbiology	1	1	14,000
38	Deep Freezer (-80 deg C)	Pharmacology	1	1	14,000
39	HPLC System	Pharmacology	1	1	50,000
40	Thin layer Chromatography	Pharmacology	1	1	4,000
41	PNCL Set	Urology	1	1	12,000
42	Electro Surgical Unit (ESU) with vessel sealing system	Urology	1	1	36,000
43	Whole Body combined UV therapy unit	Skin	1	1	32,000
44	Hand foot UV phototherapy device	Skin	1	1	8,000
45	Multi Application Laser Platform	Skin	1	1	40,000
46	PFT Machine (advanced)	TB & Chest	1	2	96,000
		Physiology	1		
47	Video Thoracoscope	TB & Chest	1	1	50,000
48	Computerized dedicated Stress Testing machine along with treadmill with pace maker analysis facility and SAECG	Cardiology	1	1	36,000
49	Blood Mixer and Collector	Blood Bank	1	1	6,000
50	Walk in Cooler	Blood Bank	1	1	14,000
51	Basic Plastic/ Rhynoplasty /Cleft lip & Palate surgery instrument set	Plastic Surgery	1	1	12,000
52	PC Based polygraph	Physiology	1	1	80,000

Sl. No.	Item Name	Department	Qty	Total Qty	EMD
53	Paediatric Flexible fiber optic / Video Laryngoscope	Anaesthesia	1	1	24,000
54	Anaesthesia Work Station	Anaesthesia	4	4	2,24,000
55	Operating microscope complete set for surgery and teaching	ENT	1	1	80,000
56	Conventional surgical operating microscope with zoom magnification 5 steps with high standard optics	ENT	1	1	24,000
57	BERA with ASSR	ENT	1	1	24,000
58	OAE	ENT	1	1	10,000
59	ENT examination unit with motorized patient chair complete unit	ENT	1	1	10,000
60	General instruments for ENT surgery Instruments for ear surgery	ENT	2 Set	2 Set	8,000
61	Micro motor drill with hand pieces and accessories (2 unit) and Micro drill for cochleostomy (1 unit)	ENT	2+1	2+1	10,000
62	Instrument set for micro ear surgery	ENT	2	2	4,000
63	Instrument set for micro laryngeal surgery	ENT	2	2	4,000
64	CO2 laser	ENT	1	1	16,000
65	Flexible Rhino Pharyngo Laryngo-Fiberscope	ENT	1	1	20,000
66	Rigid laryngoscope	ENT	1 set	1 set	10,000
67	Rigid Esophagoscope	ENT	1 set	1 set	8,000
68	Electronystagmographic machine	ENT	1	1	8,000

Part II: Required Delivery Schedule:

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

90 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).

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: The Purchaser/Consignee reserves the right to extend the delivery period up to one year from the date of NOA at its discretion.

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:

Comprehensive Maintenance Contract (CMC) as per details in Technical Specification.

Part VI:

Required Terms of Delivery and Destination.

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

At Consignee Site – Specified in the List of Requirements. 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.

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

Schedule no. 1

Equipment Specifications for OT Table

1 Description of Function

1.1 A dedicated system for surgery,

2 Operational Requirements

2.1 Multipurpose Electro hydraulic OT table, C- Arm Fluoroscopic compatible, suitable for all major surgical procedures, complete with a corded handset with battery level indicators (choice of IR/any wireless handset should also be available) and moulded, anti-static, seamless mattress.

3 Technical Specifications

3.1 Table should feature of table top with patient orientation on both sides i.e normal or reverse.

3.2 Full length X-ray translucent top with removable & interchangeable head and leg sections with an auto-locking mechanism.

3.3 Table must allow for unrivalled C-arm access and kidney break positioning without the need to move the patient.

3.4 The handset should offer controls for trendelenberg / reverse trendelenberg, lateral tilt, flexion/extension (90/75 degree), longitudinal tabletop traverse and height functions (min. height around 700-800mm max. height around 1000-1200mm) 'O' position, Base locking of the table and Patient Orientation on both sides of the table top

3.5 The brakes, wheels and castors should be controlled by one foot pedals provided at either end of the table

3.6 The table should feature an integrated stand by panel for controlling the movements in case of handset loss or battery failure

3.7 The Table stem should be located under the middle of the back section making the tabletop eccentric.

3.8 Table should be able to carry heavy patients and have a capacity of min 300kgs with an option for width extension of obese patients.

3.9 Table should also be suitable for tall patients and have a length of at least 2000 mm

3.10 Table should offer low minimum height enabling the surgeon to operate even when seated

3.11 The table should have divided leg section with mattresses, arm board & universal clamp

3.12 The Table should be provided with two same operating systems .i.e back up for hydraulic motor/pump in case the primary motor/pump becomes disabled.

4 System Configuration Accessories, spares and consumables

4.1 System as specified

4.2 The table should be supplied with following necessary accessories including knee crutches and price of all under items to be quoted separately:

a. Arm supports with pad and clamp – 2

b. Gel heel pads – 1 pair

c. Patient positioning gel strap, 20-25cms – 1

d. Hand Surgery Board – 1

e. Anaesthetic screen with sleeve – 1

f. Lithotomy Poles/crutches with pads – 1 pair

g. Douche tray with strainer to be fixed with table – 1

h. Elevated Arm Support - 1

i. Freddicks Lloyd Davis Stirrups – 1 pair

j. Fluoroscopic compatible Kidney Bridges

k. Padded head, shoulder and arm rest – 1 set each

l. Padded lateral support and shoulder supports – 1 set

m. Appropriate accessories' clamp.

4.3 Table should be quoted along with separately with Hydraulic operated foot operation for up/ down and lockable Suitable Chair for the surgeon with arm rest and back rest for endoscopic procedures – 1

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 0-50deg C and relative humidity of 15-90%

6 Power Supply

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

6.2 Battery backup for 3 Hrs operation of table and battery charger

7 Standards, Safety and Training

7.1 Should be USFDA/ CE approved product for model

7.2 Should have current leakage less than 70 U/A AC (0.07m Amp).

7.3 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.

8.3 List of Equipments available for providing calibration and routine Preventive Maintenance Support as per manufacturer documentation in service/technical manual.

8.4 List of important spare parts and accessories with their part number and costing.

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.

Schedule no. 2
Equipment Specifications for Harmonic Scalpel

1 Description of Function

1.1	Ultrasound is the basis for an efficient surgical instrument: the HARMONIC SCALPEL cuts and coagulates by using lower temperatures than those used by electrosurgery or lasers. HARMONIC SCALPEL technology controls bleeding by coaptive coagulation at low temperatures ranging from 50ºC to 100ºC: vessels are coapted (tamponaded) and sealed by a protein coagulum.

2 Operational Requirements

2.1	The system is required for Laparoscopic & other Surgerical Procedures.

3 Technical Specifications

3.1	1. Ultrasonic generator generating ultrasound frequency in between 45-60 KHz 2. Hand-piece with in-built transducer & silicon cable 3. Hand-switch activation adopter for blade & hook probe 4. Cart to house the generator and accessories 5. Single/Dual foot-switch attachment 6. Stand-by mode for better safety 7. System diagnostics and trouble shooting guide 8. Warning system for malfunctioning cable, probe etc 9. Power entry filters to suppress electromagnetic disturbances to monitors 10. It should have a vibration range of 50-100 micrometer

4 System Configuration Accessories, spares and consumables

4.1	B) Accessories 1. Foot-switch with max and min pedals and cable. 2. 5 mm blade system adopter 3. Hand switch adopter or equivalent like-wave guide 4.Open surgery Instruments: a. Coagulation shears- 5mm/10mm dia, 20cm long or more b. Short curved coagulation shears-5mm dia,14cm long c. Dissecting hooks,5mm dia,10cm long d. Hand activated coagulation shears with clicker-5mm dia, curved mode 2cm long. 5. Endoscopic surgery Instruments: a. Dissecting hook, 5mm,32cm long b. Curved blade,5mm dia,32cm long c. Laparoscopic coagulating shears,10mm dia,34cm long d. Laparoscopic coagulating shears, 5mm dia, knife mode,34cm long e. Laparoscopic coagulating shears 5mm dia, curved mode,36cm long. f. Laparoscopic hand activated shears, 5mm dia, curved mode, 36cm long g. Laparoscopic coagulating shears, 5mm dia, curved mode, 45cm long h. Laparoscopic hand activated coagulating shears with clicker-5mm dia curved mode,36cm long C) Probes: 1. It should have both 5mm and 10mm instruments 2. It should have the following types of shears for open and laparoscopic surgery a. 10mm coagulating shear capable of working in 3 modes flat, blunt and sharp b. 5mm laparoscopic curved coagulating shears,360 deg rotable, capable of sealing blood vessels

	upto 5mm diameter with clicker and integrated hand control to enable precise operation of system by hand. 3.All hand pieces & Scissors should be steam autoclavable.

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 -40deg C and relative humidity of 15-90%

6 Power Supply

6.1	Power input to be 220-240VAC, 50Hz fitted with Indian plug
6.2	UPS of suitable rating with voltage regulation and spike protection for 60 minutes back up.

7 Standards, Safety and Training

7.1	The generator must be CF isolated applied device and defibrillator protection must be available.
7.2	Should be USFDA/CE approved Model.
7.3	Manufacturer should have ISO certification for quality standards.
7.4	Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450
7.5	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.

8 Documentation

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

Schedule no. 3
Technical specifications for General Surgery Laparoscopic unit

Full High Definition Three Chip Camera System-1

1. Camera control unit with 3 chip HD camera head having HD CCD chip of same aspect ratio of 16:9
2. Pure Digital signal with high definition video (1920*1080 P) with aspect ration 16:9 with DVID & S-VHS video output.
3. Integrated Flexible Scope filter
4. Progressive scan technology
5. Brightness Control
6. Aperture Control
7. Automatic digital Image Enhancer
8. Should have optical/digital zoom 14-30mm, to increase and decrease the size of image which should remain in focusing zone, without readjusting the focus.
9. Should have integrated Gain, shutter, Enhancement, white balance with brightness control.
10. The Camera head should have integrated zooms and focus lens/rings to make it fully soakable.

High Resolution HD Video medical Monitor-1

1- 26" High Definition Medical grade Monitor, resolution 1920 X 1200 with DVI input, option for wall mounting and desktop in same unit
2- Fast response time
3- Number of colors : 16.8 million
4- Vertical/Horizontal viewing Angle:120 deg or more

Xenon Light Source-1

1- Xenon light source of 300 Watts
2- Should be able to produce colour temperature of 6000 k
3- Should have continuous manual adjustment of light output
4- One spare xenon lamp 300 watts.

Fibre Optic Light Cable-2

Fibre Optic light cable, length: 250cm.

CO2 Electronic Insufflator-1

1- Electronic CO2 insufflators with pin index connection.
2- Adjustable flow rate of Should be upto 40 ltr or above, Per minute and a pressure range adjustable between 0-30 mm Hg.
3- Pre-set and actual value for pressure and flow should be displayed together on the front panel in digital display.
4- Constant monitoring of intra-abdominal pressure; any overpressure is released immediately with back flow with acoustic alarm.
5- Unit should have in-built heater to warm up and preheat the CO2 gas.
6- Should be able to select either central supply (4.5Kg/cm 2) input pressure from central supply as well as direct connection to high pressure CO2 Cylinder and should indicate the right inlet pressure of CO2 gas supply by bar graph on front panel of machine.

7- Unit should produce immediately acoustic alarm in case of sudden blockage in the gas outlet tube or wrongly placed veress Needle.
8- Provided with Silicon autoclave tubing with luer attachment.
9- Instrument should work on a universal power supply of 100-240 V, with a frequency of 50 Hz single phase.

HP Hose-1

1- Suitable high pressure hose pin index to connect the gas to insufflator, length: 1.0 meter.

CO2 Cylinder-2

1- 5 Kg. Carbon Dioxide bottle with pin index connection with wrench

Electro Surgical Unit with vessel sealer-1

1- Microcontroller based Digital Electrosurgical Unit/Cautery having peak power of minimum of 300 Watts, with Digital Display/LCD display Push Switch/touch Control Provides Consistent Performance for laparoscopic Surgical Procedures & Delivers its Optimum & Reliable Power by using latest & Advance Technology, Convenient for all Surgical Application.
2- Unipolar as well as bipolar facility having operating frequency between 450-700 KHz.
3- Must have Mono-polar & Bipolar Coagulation Facility on the unit.
4- Facility for pure cut adjustable from 0-300 watts, blend/haemostatic effects variable up to 0-250 watts, endocut/lapro/gastro cut up to 200 watts, Bipolar cut and Coagulation variable up to minimum of 100 & 120 watts respectively. Spray & Forced coagulation facility should be there up to 120 watts.
5- System should be USFDA or CE approved
6- Unit should be supplied with double paddle footswitch, patient plate, patient cable, hand control pencil with standard accessories

Video Trolley-1

1- Suitable Medical Grade video trolley to be supplied for mounting equipment's having minimum three self in addition to with one drawer, with antistatic wheel casters, front lockable,
2- High grade of electrical insulation and earth protection.
3- 5 Ampere socket, 10Nos, inbuilt with trolley to connect all electronic devices.
4- CO2 bottle stand should be integrated with trolley.

UPS 2.0 KVA-1

1- UPS-2.0 KVA On- line with One hour battery backup and battery should be covered under warranty and CMC

The core Operating laparoscope like Telescopes, Endovision Three chip HD Camera, light source, CO2 Insufflator should be from same manufacturer. .

Telescopes Full HD

Telescope 0º 10MM-1
Telescope 30º 10MM-1
Telescope 0º 5MM-1
Telescope 30º 5MM-1

1- Rod lenses system, Length: 29-31 cm, Autoclavable, Fibre optic light transmission incorporated
2- Straight forward telescope, 0 degree enlarged view
3- Forward Oblique Telescope, 30 degree enlarged view

Trocar & Cannula

Trocar & Cannula size 11mm-2

Trocar & Cannula size 6mm-4

1. Cannula size: 11mm diameter; should have multifunctional valve and automotive valve to prevent damage of sharp instruments. It should have stopcock for CO2 insufflation.
2. Trocar should have pyramida tip with pin holes near the tip for safety outlet of CO2 gas. The working length of the cannula should be 100-110 mm.

Trocar under optical vision-1

1- Trocar with endo tip size: 10mm, cannula rotatable with multifunction valve, working length: 11 cm.
2- The endo tip cannula should compartible with 10mm telescope for under vision entry into peritoneum.

Veress Needle-2

1- Working length 13cm with luer lock.

Forceps

Length-36 cm, 5mm

1- Grasping Forcep Fenestrated-1
2- Grasping Forcep Fenestrated curved Fundus grasper-1
3- Grasping Forcep Atraumatic Hartmann pouch-1
4- Bowel Grasping Forcep-2
5- Unipolar Curved Marryland dissescting and Grasping Forcep-1
6- Insert Forcep Unipolar: Insert forceps only Marryland type curved atraumatic jaw compartible with main Kelley curved dissecting forceps-1
7- Unipolar curved Right angle dissecting and Grasping Forceps-1
8- Unipolar Tooth Grasping forcep-1
9- Scissor curved unipolar length of blade 12mm, connection for unipolar HF cable,-1
10- Bipolar Scissor
11- Insert curved scissor- Scissor curved inset to fit with main curved scissor-2
12- Hook Scissor Unipolar-1
13- L Hook with unipolar HF connection-1
14- Spatula with unipolar HF dissector-2
15- Puncture Needle, size : 5mm, length 36cm-2
16- Claw Forceps, 10 mm claw forceps, 2x3 teeth short with ratchet-1
17- Spoon Forceps, 10mm without ratchet-1
18- Heavy Duty Bipolar Forceps length : 36cm, rotating, wide jaw with spare insert and handle. Suitable bipolar HF cable 2 Nos. to be included along with it-1
19- Bipolar HF Connecting Cable-2
20- Unipolar HF Cable-Unipolar HF cable suitable to connect with forcep and electrosurgical unit-2

21- Clip Applicator-Medium Large clip applicator dismantable rotating size: 10mm, length 36cm, for Titanium clips with ratchet to lock the jaw holding the clip-1
22- Clip Applicator- Large clip applicator dismantable rotating size: 10mm, length 36cm, for Titanium clips with ratchet to lock the jaw holding the clip-1
23- Titanium Clips- Titanium clips medium large & Large, box with 16 sterile cartridges, 10 clips each for use with clip applicator-10
24- Two Way Suction irrigation cannula, size: 5mm&10mm each with special handle with trumpet control for irrigation and suction with silicon tubing-1 each

SUCTION & IRRIGATION DEVICE-1

1. Compact suction and irrigation unit having Irrigation pressure not less than 400mmHg & Suction pressure not less than (-0.75mmHg).

2- The unit should be supplied with 1.5 litre glass bottle with bottle cap and stand ; the unit should be supplied with 1.0 Litre irrigation bottle sterilization in autoclave with bottle cap attachment to connect tubing.
3- The unit should be supplied with reusable irrigation and suction silicon tubing set 2 Nos. each.

Needle Holder –Macro needle holder with tungsten carbide insert, ergonomic pistol handle, with disengageable ratchet, jaw curved to left, size : 5mm, length: 33cm for use with suture material size: 0/0 to 7/0-2

Fan retractor-Fan retractor with simple opening of the fan by axial movement of the outer sheath, dismountable and distendable, size:10mm, length: 36cm-1

CUSHERI Liver retractor- size : 10mm & 5mm; Length: 36cm- 1each

Hassan Cannula-1

Knot Pusher (Open) reusable-2

Knot Pusher (closed) reusable-2

Port closure Needle-2

Laparoscoopic Instrument Tray Compatible with 3mm,5mm,10mm instrument-3

Sterlization/Disinfection Tray having sieve tray to lift. Size: 27”x7”x5”(LXBXD)-4Nos

Formaline Chamber made of Virgin Acrylic 4.5mm thickness; size 26”x8”x8” (LxBxH) with three tray, for sterilizing the laparoscope, preferable with three tray

- Should be US FDA/CE approved product,
- Manufacturer/Supplier should have ISO certification for quality standards.

Schedule no. 4
Laparoscopic instruments for bariatiric surgery

1. Telescope Forward Oblique 45", 10 mm-1
2. Endovision Cannula, 13 mm-1
3. Trocar and Cannula, size 6 mm with automatic and manual opening valve-6
4. Trocar and Cannula, size 11 mm with automatic and manual opeining valve-2
5. Telescope Stopper for endovision cannula 13mm-1
6. Reducer 11 /5mm-1
7. Double reducer 13 /10mm & 13 / 5mm – 1
8. Dismantable into three/ two part, Anvil Grasper, 5 mm, 43 cm-1
9. Dismantable into three/ two parts Grasping Forceps, 5 mm, 43 cm-1
10. Dismantable into three/ two parts Grasping Forceps, 5mm, 43 cm- 1
11. Dismantable into three/ two parts long jaw atraumatic Grasping Forceps, 5mm, 43 cm-1
12. CUSCHIERI Liver Retractor – 1
13. 10mm Retractor, for Gastric- Banding- 1
14. Macro Needle Holder, 5 mm x 43cm long- 1
15. Bipolar strong jaws Grasper, 5 mm, 43 cm – 1
16. Bipolar Cautery Lead – 1
17. Unipolar Cautery Lead – 1
18. MATKOWITZ Grasping Forceps 5mm x 36cm- 1
19. Metalic Outer tube with CM-marking 5mm x 36cm – 1
20. KELLY dissectiong & grasping forceps long, 5mm x 43cm – 1
21. Dismantable Scissors, with serrated jaws curved, 5mm x 43cm – 1
22. Dissecting L- Shape Hook electrode, detach-tip, 5mm x 43cm – 1
23. BABCOCK Grasping forceps 10mm, 36cm – 1
24. Pistol Grip Handle with Trumpet Valves for SUC/IRRI tubes 5mm & 10mm – 1
25. Cannula for Pistol Grip Handle, with lateral holes 5mm x 43cm -1
26. Cannula for Pistol Grip Handle, with lateral holes 10mm x 36cm – 1
27. Oil in Bottle for above handle & other instruments – 1
28. BERCI Fascia Closure Instrument – 1
29. VERESS Needle 15cm long for Obese Patients – Douglas Technique – 1
30. Adjustable Holding System for fixation of Telescopes – 1
31. KOCHLI Endobag Extractor - 1

Should be US FDA/CE approved product,

Manufacturer/Supplier should have ISO certification for quality standards.

Schedule no. 5
Equipment Specifications for DELIVERY BED

1 Description of Function

1.1	Delivery bed is used for Baby Delivery and should incorporate ideal blend of the patient's individual requirements on comfort and the professional needs of the delivery team, focusing on the esthetic and functional design of the entire product.

2 Operational Requirements

2.1	Delivery bed should be supplied with all accessories as mentioned in the technical specifications.

3 Technical Specifications

3.1	Delivery Bed Should have following essential specifications: 1• It should have control device for making height and back adjustments electrically. 2• It should have collapsible side rails, CPR fast drop release lever for emergency. 3• It should have three sectional mattress and seat section should have large perineal cut. 4• It should have head board which can be detached. 5• Should have wheels provided with locking system. 6• Should have retractable foot section so as to convert bed into table. 7• Should have infusion rods which have adjustable heights, quick release and attaches to all corners of bed. 8• Should have adjustable leg rests available as an accessory. 9• Should have push grip handles 10• Stainless steel/ABS Plastic bowl at perineal part of table. 11• It should have catheter bag holder which can be attached on either side of bed. 12• It should be able to give trendelenburg, and 70 degree sitting position. 13• It should have adjustable foot supports for nursing staff 14• It should be easy to clean, sterilize (especially blood stains) and maintain. 15. Frame should be of epoxy powder coated steel 16. Deleted 17. Four 12.5cm castors (3 braking, 1 steering) 18. Four rotary buffers for protection of walls and doors 19. The bed should be supplied with an accessory trolley with 2 braked castors.

4 System Configuration Accessories, spares and consumables

4.1	All consumables required for installation and standardization of system to be given free of cost.

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

6 Power Supply

6.1	Power input to be 220-240VAC, 50Hz fitted with Indian plug
6.2	UPS of suitable rating with voltage regulation and spike protection for 60 minutes back up.

7 Standards, Safety and Training

7.1	Should be FDA/CE or BIS approved product
7.2	Manufacturer should have ISO certification for quality standards.
7.3	Comprehensive training for lab staff and support services till familiarity with the system.
7.4	Deleted
7.5	Electrical safety conforms to standards for Electrical Safety IEC 60601-2-38 Particular safety requirements for Electrically operated hospital beds.

8 Documentation

8.1	User/Technical/Maintenance manuals to be supplied in English.
8.2	List of Equipments available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
8.3	Certificate of calibration and inspection.
8.4	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.
8.5	List of important spare parts and accessories with their part number and costing.
8.6	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.

Schedule no. 6

Foetal Monitor with central Station

Equipment Specifications for Antepartum and Intrapartum foetal monitor (Cardiotocomachine)

1 Description of Function

1.1	Antepartum and Intrapartum foetal monitor (Cardiotocomachine) is used to monitor Foetus during antepartum period (before labour) or intrapartum period (birth process)"

2 Operational Requirements

2.1	The complete unit with printer and all accessories should be offered.

3 Technical Specifications

3.1	The monitor should be provided with 1)Mains operation facility 2) Should have inbuilt LCD screen /LCD TV monitor with facilities to

	display on screen fetal heart tracings and toco tracings. 3) Should be compact, light weight and should have inbuilt carrying handle and waterproof transducers. 4) The unit should have Fetal Heart Rate range 50 to 240 bpm External Toco range 0 to 127 relatives units Should have NST timer for antepartum applications 5) Highly sensitive ultra sound transducer which should be 1.5 MHZ for less signal attenuation and good signal acquisition. Ultrasound transducer should be a waterproof unit. Designed with Snap Clasp closure for easy application and cleaning. Preferably there should be facility to switch between transducers when more than one transducer is used. 6) Ability to give an accurate continuous trace and should be able to detect sudden beat changes upto 25 bpm 7) Audible alert indication of fetal bradycardia and tachycardia 8) External tocotransducer which should be a sealed waterproof unit. Guard ring designed to reduce maternal respiration artifact. 9) Patients event marker. 10) Capability of automatic fetal movement detector. 11) Digital numeric and text display along with audio signal of fetal movement Should have inbuilt keyboard entry screen for patient data entry, name etc. Minimum 5 hour memory of traces with fast printing. 12) Should provide following accessories – Transducer belts, Belt buckles, Main cables, interconnecting cables, ultrasound gel bottles. 13) Inbuilt high resolution thermal/Laser printer with easily available cost effective paper. 14) Should be provided with trolley with wheels with locking facility for mounting the unit on it with accessories for storage of transducers paper etc or the unit must have the facility for wall mounting and a protective cover with cabinet. 15) Following rate to be quoted Separately. (I) facility for intra uterine pressure monitor. (II) facility to record fetal heart rate pattern through fetal ECG. (III) facility to monitor twins. Should have twin offset feature so that both fetal heart traces are clearly visible. (IV) facility of central monitor system.		

4	**System Configuration Accessories, spares and consumables**	
	None	
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 operating continuously in ambient temperature of 20-30 deg C and relative humidity of 15-90%
5.3	The unit shall be capable of being stored continuously in ambient temperature of 0-50deg C and relative humidity of 15-90%

6 Power Supply

6.1	Power input to be 220-240VAC, 50Hz fitted with Indian plug
6.2	Should work on 220-240V AC as well as rechargeable batteries. Mains adaptor to be supplied

7 Standards, Safety and Training

7.1	Should be FDA/CE or BIS approved product
7.2	Deleted
7.3	Comprehensive training for lab staff and support services till familiarity with the system.
7.4	Manufacturer should have ISO certification for quality standards.
7.5	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.

8 Documentation

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

Schedule No. 7

Cardiotocography

Equipment Specifications for Antepartum and Intrapartum foetal monitor (Cardiotocomachine)

UNSPSC Code:
ECRI Code:

1 Description of Function		
1.1	Antepartum and Intrapartum foetal monitor (Cardiotocomachine) is used to monitor Foetus during antepartum period (before labour) or intrapartum period (birth process)"	
2 Operational Requirements		
2.1	The complete unit with printer and all accessories should be offered.	
3 Technical Specifications		
3.1	The monitor should be provided with 1) Mains operation facility 2) Should have inbuilt LCD screen /LCD TV monitor with facilities to display on screen fetal heart tracings and toco tracings. 3) Should be compact, light weight and should have inbuilt carrying handle and waterproof transducers. 4) The unit should have Fetal Heart Rate range 50 to 240 bpm External Toco range 0 to 127 relatives units Should have NST timer for antepartum applications 5) Highly sensitive ultra sound transducer which should be 1.5 MHZ for less signal attenuation and good signal acquisition. Ultrasound transducer should be a waterproof unit. Designed with Snap Clasp closure for easy application and cleaning. Preferably there should be facility to switch between transducers when more than one transducer is used. 6) Ability to give an accurate continuous trace and should be able to detect sudden beat changes upto 25 bpm 7) Audible alert indication of fetal bradycardia and tachycardia 8) External tocotransducer which should be a sealed waterproof unit. Guard ring designed to reduce maternal respiration artifact. 9) Patients event marker. 10) Capability of automatic fetal movement detector. 11) Digital numeric and text display along with audio signal of fetal movement Should have inbuilt keyboard entry screen for patient data entry, name etc. Minimum 5 hour memory of traces with fast printing.	

	12) Should provide following accessories – Transducer belts, Belt buckles, Main cables, interconnecting cables, ultrasound gel bottles. 13) Inbuilt high resolution thermal/Laser printer with easily available cost effective paper. 14) Should be provided with trolley with wheels with locking facility for mounting the unit on it with accessories for storage of transducers paper etc or the unit must have the facility for wall mounting and a protective cover with cabinet. 15) Following rate to be quoted Separately. (must have) (I) facility for intra uterine pressure monitor. (II) facility to record fetal heart rate pattern through fetal ECG. (III) facility to monitor twins. Should have twin offset feature so that both fetal heart traces are clearly visible. (IV) facility of central monitor system. (V) Facility for intrapartum monitoring (VI) Facility for maternal heart rate via maternal ECG electrodes (VII) Non invasive blood pressure & maternal oxygen saturation (SpO2)		

4	**System Configuration Accessories, spares and consumables**		
	None		
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 operating continuously in ambient temperature of 20-30 deg C and relative humidity of 15-90%		
5.3	The unit shall be capable of being stored continuously in ambient temperature of 0-50deg C and relative humidity of 15-90%		
6	**Power Supply**		
6.1	Power input to be 220-240VAC, 50Hz fitted with Indian plug		
6.2	Should work on 220-240V AC as well as rechargeable batteries. Mains adaptor to be supplied		
7	**Standards, Safety and Training**		
7.1	Should be FDA/CE or BIS approved product		
7.2	Deleted		
7.3	Comprehensive training for lab staff and support services till familiarity with the system.		
7.4	Manufacturer should have ISO certification for quality standards.		

7.5	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.

8 Documentation

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

Schedule No. 8

SPECIFICATION FOR STANDARD OPERATIVE AND DIAGONOSTIC HYSTEROSCOPY SET WITH TCRE WITH CONTROLLED IRRIGATION AND SUCTION

S.NO	SHORT DESCRIPTION	DETAILED DESCRIPTION	QTY.
1a	HYSTEROSCOPE TELESCOPES STANDARD	**Operating and Contact – HysteroscopeForward - Oblique Telescope 30°,** enlarged view, magnification 1x, 60x, diameter 4 mm, length 30 cm, autoclavable, fiber optic light transmission incorporated.	1
		Forward-Oblique Telescope 30°, enlarged view, diameter 4 mm, length 30 cm, **autoclavable,** fiber optic light transmission incorporated,	2
1b	OFFICE HYSTEROSCOPE TELESCOPE	**Forward-Oblique Telescope** 30°, enlarged view, diameter 2.9 mm, length 30 cm, **autoclavable,** fiber optic light transmission incorporated,	1
	OFFICE HYSTEROSCOPE SHEATH	**Hysteroscope sheath for diagonostic continuous irrigation size 4.5mm outer sheath and 3.8mm inner sheath for use with Bittochi 2.9mm hysteroscope telescope.**	1

2	EXAMINATION SHEATH	**Examination Sheath,** diameter 5.1 mm, with 1 LUER-Lock adaptor	1
3	EXAMINATION SHEATH	**Examination Sheath,** diameter 5.2 mm, with 1 LUER-Lock adaptor	1
4	CF EXAMINATION SHEATH	**Continuous-Flow Examination Sheath,** diameter 6.2 mm, for use with Inner Sheath, with 1 LUER-Lock adaptor	1
5	CF OPERATING SHEATH	Operating Sheath, size 5.4mm, with 5 Fr. channel for operating instruments, with 1 stopcock and 1 LUER-Lock adaptor, for use as Inner Sheath	1
6	CF OPERATING SHEATH	Continuous- Flow Operating Sheath, size 6mm, with 1 stopcock and 1 LUER-Lock adaptor, for use as Outer Sheath with 26154 BI	1
7	SCISSOR	**Scissors**, blunt tips, 5 Fr., length 34 cm, single action jaws	2
8	SCISSOR	**Scissors, pointed jaws,** 5 Fr., length 34 cm, single action jaws, semi-rigid	2
9	BIOPSY & GRASPING FORCEP	**Biopsy- and Grasping Forceps**, 5 Fr. , length 34 cm, double action jaws	2
10	NEEDLE ELECTRODE	**Needle Electrode,** 5 Fr., length 27 cm, unipolar	6
11	BIPOLAR VAPO ELECTRODE	**Bipolar vaporisation electrode**, 5 Fr. length 36 cm	2
12	UNIPOLAR CORD	**High Frequency Cord** with 4 mm plug HF-unit, older models, 300 cm	2
13	BIPOLAR CORD	**Bipolar High Frequency**	2

RESECTOSCOPE FOR TCRE SET

14	CUTTING AND COAGULATING ELECTRODE	Cutting loop 24 Fr and Roller electrode 24Fr 12 Nos. each	12
15	WORKING ELEMENT SET	**Working Element Set** consisting of: 1 Working element, 1 Cutting Loop, angled 1 Coagulating-Electrode ball end, 3 mm 1 Coagulating Electrode ball end, 5 mm 1 Coagulating Needle Electrode, angled 2 High Frequency Cords 1 Protection Tube, for electrodes Motion by means of a spring with movable thumb support and control.	1
16	RESECTOSCOPE SHEATH	**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

17	OBTURATOR	**Obturator**, for use with the sheaths.	1
18	FOLC	**Fiber Optic Light Cable,** diameter 3.5 mm, length minimum 250 cm or more	2

SUCTION / IRRIGATION EQUIPMENT FOR HYSTEROSCOPY

19	IRRIGATION AND SUCTION DEVICE	CONTROLLED IRRIGATION AND SUCTION UNIT FOR OPERATING HYSTEROSCOPE AND TCRE PROCESSURE TO MAINTAIN INTRAUTERINE CAVITY PRESSURE AT DESIRABLE BY SURGEON. PRESSURE OF IRRIGATION TO BE MAINTAINED BETWEEN: (PRESSURE 0-200mmHg). FLOW TO BE MAITAINED BETWEEN: (Flow between 0-500ml/L.) SUCTION PRESSURE TO BE MAINTAINED BETWEEN: Suction controlled pressure between 0-(-50kPa) **consisting of:** **MAIN UNIT WITH DIGITAL DESPLAY, PUMP HEAD, INDICATOR AND PRESET AND ACTUAL VALUE FOR PRESSURE, FLOW, SUCTION WITH SENSOR ATTACHMENT FOR REUSABLE DOME. AUTOMATIC DOME DETECTION FACILITY.** Should be supplied along with following accessories: **HYSTEROSCOPE reusable Tubing Set,** 2 Nos. Reusable Pressure dome 2 Nos. Suction bottle 5.0L 2 Nos. Suction bottle cap with stand and bottle stand holder Suction tubing set reusable 2 Nos. Silicon tubing set for suction, sterlisable	1
20	Image & Data Archiving System	HD Documentation system for digital storage of still images, video sequences and audio files. Latest processor & HDD, which should be specified. Largest possible RAM, which should be specified. Integrated DVD/CD writer with maximum speed which should be specified. Compact key board with drape Cordless mouse All types of connecting cables (BNC, DVI) and connectors, which should be specified. Flat screen colour monitor 17-19''of 1024x768 resolution with all connectors and connection cables (BNC, S-VIDEO (Y/C), VGA), which should be specified. Separate mobile cart with lock and key for housing all the components of the image management system. Suitable color printer laserjet.	01
21	DIS INFECTION TRAY	**Sterlization/Disinfection Tray:** Disinfection/Sterlization tray with sieve tray to lift suitable for hysteroscopic instruments	3

The core Operating Hysteroscope like Telescopes, Controlled suction irrigation unit, hand instruments (bipolar forcep, unipolar forcep, HF needle etc.) fiber optic cable, should be from single manufacturer for system compartibility.

Environmental factors 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. 2. The unit shall be capable of operating continuously in ambient temperature of 20-30 deg C and relative humidity of 15-90% 3. The unit shall be capable of being stored continuously in ambient temperature of 0-50deg C and relative humidity of 15-90% **Power Supply** 1. Power input to be 220-240VAC, 50Hz fitted with Indian plug 2. UPS of suitable rating with voltage regulation and spike protection for 60 minutes back up. **Standards, Safety and Training** 1. Should be FDA, CE, UL or BIS approved product 2. Manufacturer should have ISO certification for quality standards. 3. Comprehensive training for lab staff and support services till familiarity with the system. 4. Shall be certified to be meeting safety standard IEC 60601-2-18 part 2 Particular requirements for the safety of endoscopic equipment. **Documentation** 1. User/Technical/Maintenance manuals to be supplied in English. 2. List of important spare parts and accessories with their part number and costing. 3. 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. 4. Certificate of calibration and inspection. 5. List of Equipments available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual 6. 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. 7. The manufacturer should have their own service centre and local engineer and should be verified by competent authority regarding these facilities.	**CERTIFICATE**

Schedule No. 9

SPECIFICATIONS OF ENDOVISION IMAGING SYSTEM FOR LAPAROSCOPY

Full High Definition Three Chip Camera System with Camera head: 1. Camera control unit with 3 chip HD camera head having HD CCD chip of same aspect ratio of 16:9 2. Pure Digital signal with high definition video(1920*1080 P) with aspect ratio 16:9 with DVI-D, RGB, S-VHS video output. 3. Integrated Flexible Scope filter 4. Progressive scan technology 5. Brightness Control 6. Aperture Control 7. Automatic digital Image Enhancer 8. Should have integrated optical zoom lens 14-30mm, to increase and decrease the size of image which should remain in focusing zone, without readjusting the focus. 9. Should have Integrated Gain, shutter, Enhancement, white balance with brightness control. 10. Should have peripheral control on CCU 11. Should have USB/Image Capture Module interface for direct storage of still & video sequences and to print the still images. 12. The camera head should have integrated zoom and focus lens/rings to make it fully soakable. 13. Should be IEC 601-1, CE according to MDD.	**01**
Xenon Light Source: Xenon light source of 300 Watts Should be able to produce color temperature of 6000 K Should have continuous automatic and manual adjustment of light output. Should have standby mode and automatic recovery of last setting of intensity of light. Should have built in antifog pump. Should be able to display lamp life in digital form and should give visual indication for replacement of xenon lamp in case of lamp life of 500 Hrs is over. Should be certified IEC 601-1 and CE according to MDD.	**01**
Xenon spare lamp of 300 Watts suitable for Xenon light source	**02**
High Resolution HDVideo medical grade Monitor: 26''High Definition Medical grade Monitor, resolution 1920 X 1200 with DVI, RGB, input, option for wall mounting and desktop in same unit. Should have same aspect ratio of 16:9 or 16:10 of the endoscopic HD camera system. Fast response time:(5-12ms) and above Number of colors:16.8 million and above Luminance: 400cd / m2. Contrast ratio: 1000:1 and above Vertical/Horizontal Viewing Angle:176 - 178 degree	**01**
Fiber Optic Light Cable: Fiber Optic light cable of actual bundle size: 4.5-4.8mm, length : 250cm or more	**02**

Video Trolley: Suitable video trolley to be supplied for mounting equipments having minimum four self in addition to with one drawer, with antistatic wheel casters, front lockable, high grade of electrical insulation and earth protection. 5Ampere socket, 10Nos, inbuilt with trolley to connect all electronic devices. CO2 bottle stand should be integrated with trolley. Potential equalization connection to be provided at least 8 points.	**01**
UPS: Suitable UPS with One hour backup time with SMF Batteries & Stand. Should be able to work on wide input range between 160-270 VAC at Frequency between 50Hz ± 2Hz, Should use PWM technology with power conversion with single transformer arrangements with an output of 220VAC ± 5%, protection of overload, short circuit and low battery. Should have indication on front panel for mains load/battery load/ battery overload-low and MCB protection in case of short circuit. ISI/CE approved good quality Indian make.	**01**
Environmental factors 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. 2. The unit shall be capable of operating continuously in ambient temperature of 20-30 deg C and relative humidity of 15-90% 3. The unit shall be capable of being stored continuously in ambient temperature of 0-50deg C and relative humidity of 15-90% **Power Supply** 1. Power input to be 220-240VAC, 50Hz fitted with Indian plug 2. UPS of suitable rating with voltage regulation and spike protection for 60 minutes back up. **Standards, Safety and Training** 1. Should be FDA, CE, UL or BIS approved product 2. Manufacturer should have ISO certification for quality standards. 3. Comprehensive training for lab staff and support services till familiarity with the system. 4. Shall be certified to be meeting safety standard IEC 60601-2-18 part 2 Particular requirements for the safety of endoscopic equipment. **Documentation** 1. User/Technical/Maintenance manuals to be supplied in English. 2. List of important spare parts and accessories with their part number and costing. 3. 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. 4. Certificate of calibration and inspection. 5. List of Equipments available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual 6. 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. 7. The manufacturer should have their own service centre and local engineer and should be verified by competent authority regarding these facilities.	**CERTIFICATE**

Schedule No. 10

SPECIFICATIONS OF ELECTROMECHANICAL MORCELLATOR AND VESSEL SEALLING SYSTEM WITH INBUILT ELECTRO SURGICAL UNIT FOR OPERATING LAPAROSCOPIC SURGERY

Electromechanical Morcellator System: Electronic Drive unit with EC heavy duty motor, for use with: morcellator, power supply: 100-120 / 230-240 VAC, 50/60 Hz,Two-pedal Footswitch, Maintenance of the motor driven components (EC motors, handles, shaver handpieces) must be performed with universal Spray. Different selectable speed. diameter 12mm cutter, for laparoscopic application, for use with Drive system, consisting of: 1x hollow shaft motor 1x obturator, with pyramidal tip, 12mm ø 1x trocarbush, askew, 12mm ø 1x handle, laparoscopic 1x cutter, laparoscopic, 12mm ø 1x protective cap 12mm ø 1x motor valve 12mm ø 1x sealing cap, 10 pieces 1x Tenaculum Forceps, diameter 12mm Maintenance and care of the motor components (EC-motor). Spacer, package of 5pcs, maximum of height clearance 10mm, for use with instruments up to 16, 5mm diameter.	**01**
VESSEL SEALING SYSTEM WITH INBUILT E.S.U(CAUTERY) ✓ **MACHINE SHOULD BE COLOUR LCD BASED WITH VESSEL SEALING FACILITY WITH INBUILT CAUTERY.** **VESSEL SEALING SECTION :-** ✓ UPTO 7-MM VESSEL SEALING WITH PULSATING TECHNOLOGY. ✓ LCD SCREEN SHOULD BE 7 "INCH. ✓ UNIT SHOULD HAVE FACLITY OF BIPOLAR OUTPUT ON LIGATES OUTPUT TO AVOID INSTRUMENT CHANGE. ✓ UNIT SHOULD HAVE FACILITY TO HAVE DUAL MONOPOLAR CUT & COAGULATION SETTING INDEPENDENTLY. ✓ AUTO-STOP AFTER VESSEL SEALED WITH AUDIBLE VISUAL ALARM. ✓ FIVE DIFFERENT MODES FOR VESSEL SEALING – ✓ NOMINAL FREQUENCY : 350- 660 khz. ✓ VESSEL SEALING REUSABLE LAPROSCOPIC PROBE 5 MM 1 no. ✓ SHOULD PROVIDE VESSEL SEALING RESUABLE OPEN CLAMP. 2 nos. **E.S.U (CAUTERY) SECTION :-** ✓ **VARIOUS MONOPOLAR CUTTING MODES**:- Pure Mode , Low cut, Blend Mode (with adjustable cutting and coagulation Ratio) Gives the surgeons Varying degree of hemostasis for better cut.	**01**

- ✓ **SPECIALIZE ENDOCUT MODE** :- Minimum Nine Different Endo-Cut Levels for various endoscopic and other general procedures. Must have interrupted sound indication for cutting and coagulation.

- ✓ VARIABLE BLEND MODES : - It should have variable Blend Mode in which cutting & Coagulation ratio can be varied depending on Surgery.

- ✓ **PROGRAMMING FACILITY FOR DIFFERENT SURGERIES.**
- ✓ **MONO POLAR COAGULATION MODES:-** Six Coagulation Modes like High Spray, Low Spray, Fulgurate , Desiccate & soft for different surgeries & better hemostasis & Two Auto stop mono coagulation modes for pin point coagulation.

- ✓ **BIPOLAR COAGULATION**:- Four Modes like Cut, Force ,Micro & Autostop . Must have Auto Stop Facility providing controlled Coagulation which Measures the tissue Impedance and Automatically Stops H.F. Delivery after obtaining " optimum coagulation" without charring & less lateral thermal spread**.**
- ✓ FACILITY FOR UNDER WATER MONOPOLAR CUTTING & COAGULATION.
- ✓ POWER SUPPLY SAFETY**:-** Switching power supply device accept the wide range of input voltage from 150 VAC to 285 VAC.
- ✓ MICRO CONTROLLER BASED CUTTING AND COAGULATION FUNCTION.
- ✓ DISCREAT CONTROL FOR MONOPOLAR AND BIPLOAR.
- ✓ SEPARATE ISOLATED OUT PUT FOR MONO POLAR AND BIPLOAR.
- ✓ MONOPOLAR CUT:- MINIMUM: 300 W
- ✓ MONOPLOAR COAGULATION :- MINIMUM: 120 W
- ✓ BIPLOR COAGULATION:- 70W

The following accessories should be supplied with the unit:

- Footswitch double pedal with extra button for swap mode
- Twin patient plate
- **CLAMPS FOR OPEN SURGERY SEAL SAFE TECHNIQUE Reusable should be useful for 100 – 200 Cycles**
  - Clamp Curved Length 18cm
  - Clamp Curved Length 23cm
- **BIPOLAR SCISSORS FOR OPEN SURGERY Reusable should be useful for 100 – 200 Cycles**
  - Bipolar Scissors Curved 23cm
  - Bipolar Scissors Curved 21cm
- **BIPOLAR FORCEPS FOR OPEN SURGERY**
  - Bipolar Forceps straight Blunt
- **BIPOLAR ACCESSORIES**
  - Footswitch with Reed Contact
  - Bipolar Cable
- **MONOPOLAR DIATHERMY ACCESSORIES FOR OPEN SURGERY**
  - Electrode Handle with 5m cable
  - Electrode set of 5 consisting of

○ 4mm Lancet Electrode straight ○ 4mm Knife Electrode ○ 4mm Needle Electrode ○ 2mm Ball Electrode ○ 4mm Ball Electrode • **BIPOLAR LAP ACCESSORIES** Reusable Bipolar laproscopic instrument 5 mm with special ceramic to save the instrument from excess heat and with inbuilt cutter – Autoclavable instrument 30 nos of cutter blade to be supplied Unit should be CE/USFDA approved Safety and other standards: Interference immunity in accc.w.IEC 801 specs MDD Class IIb Mark of conformity CD 0297 in conformity w.93/42/EEC Patient leakage current Within the limit values specified in DIN IEC 601,part 1 Housing leakage current Within the limit values specified in DIN IEC 601 Part1	

Schedule No. 11

Vessel Sealing system with Electro surgical generator
FOR OPERATING HYSTROSCOPE & LAP

Technical specifications

SR.NO	PARTICULARS
1	**VESSEL SEALING SYSTEM WITH INBUILT E.S.U(CAUTERY)** ✓ **MACHINE SHOULD BE WITH VESSEL SEALING FACILITY WITH INBUILT CAUTERY WHICH CAN BE OPERATED BY FEATHER BUTTONS AND MANUAL CONTROL .** **VESSEL SEALING SECTION :-** ✓ UPTO 7-MM VESSEL SEALING WITH PULSATING TECHNOLOGY. ✓ UNDER WATER CUTTING FOR TCRE ✓ LCD SCREEN SHOULD BE 7 "INCH or above ✓ UNIT SHOULD HAVE FACLITY OF BIPOLAR OUTPUT ON LIGATES OUTPUT TO AVOID INSTRUMENT CHANGE. ✓ UNIT SHOULD HAVE FACILITY TO HAVE DUAL MONOPOLAR CUT & COAGULATION SETTING INDEPENDENTLY. ✓ AUTO-STOP AFTER VESSEL SEALED WITH AUDIBLE VISUAL

ALARM.

- ✓ FIVE DIFFERENT MODES FOR VESSEL SEALING –
- ✓ NOMINAL FREQUENCY : 330- 800 khz.
- ✓ VESSEL SEALING REUSABLE LAPROSCOPIC PROBE 5 MM 2 nos.
- ✓ SHOULD PROVIDE VESSEL SEALING RESUABLE OPEN CLAMP 2 nos.
- ✓ INCASE OF VESSEL/TISSUE IS NOT SEALED PROPERLY MACHINE SHOULD GIVE RE-GRASP AUDIO-VISUAL ALARM .

E.S.U (CAUTERY) SECTION :-

- ✓ **VARIOUS MONOPOLAR CUTTING MODES**:- Pure Mode , Low cut, Blend Mode (with adjustable cutting and coagulation Ratio) Gives the surgeons Varying degree of hemostasis for better cut.

- ✓ **SPECIALIZE ENDOCUT MODE** :- Endo-Cut Levels for various endoscopic and other general procedures. Must have interrupted sound indication for cutting and coagulation.

- ✓ VARIABLE BLEND MODES : - It should have variable Blend Mode in which cutting & Coagulation ratio can be varied depending on Surgery.

- ✓ **PROGRAMMING FACILITY FOR DIFFERENT KIND OF SURGERIES PRE SETTINGS.**
- ✓ **MONO POLAR COAGULATION MODES:-** Six Coagulation Modes like High Spray, Low Spray, Fulgurate , Desiccate & soft for different surgeries & better hemostasis & Two Auto stop mono coagulation modes for pin point coagulation.

- ✓ **BIPOLAR COAGULATION**:- Four Modes like Cut, Force ,Micro & Autostop. Must have Auto Stop Facility providing controlled Coagulation which Measures the tissue Impedance and Automatically Stops H.F. Delivery after obtaining " optimum coagulation" without charring & less lateral thermal spread**.**
- ✓ FACILITY FOR UNDER WATER MONOPOLAR CUTTING & COAGULATION.
- ✓ POWER SUPPLY SAFETY **:-** Switching power supply device accept the wide range of input voltage from 150 VAC to 285 VAC.
- ✓ MICRO CONTROLLER BASED CUTTING AND COAGULATION FUNCTION.
- ✓ DISCRETE CONTROL FOR MONOPOLAR AND BIPLOAR.
- ✓ SEPARATE ISOLATED OUT PUT FOR MONO POLAR AND BIPLOAR.
- ✓ MONOPOLAR CUT:- MINIMUM :300-350 W
- ✓ MONOPLOAR COAGULATION :- MINIMUM :120 W
- ✓ BIPLOR COAGULATION :- MINIMUM :70W- 120W.
- ✓ Bipolar cut :- 150-160 w

The following accessories should be supplied with the unit:

- Footswitch double pedal
- Twin patient plate

- **CLAMPS FOR OPEN SURGERY SEAL SAFE TECHNIQUE**
  Reusable should be useful for 100 – 200 Cycles
  - Clamp Curved Length 18cm
  - Clamp Curved Length 23cm
- **BIPOLAR SCISSORS FOR OPEN SURGERY**
  Reusable should be useful for 100 – 200 Cycles
  - Bipolar Scissors Curved 23cm
  - Bipolar Scissors Curved 21cm
- **BIPOLAR FORCEPS FOR OPEN SURGERY**
  - Bipolar Forceps straight Blunt
- **BIPOLAR ACCESSORIES**
  - Footswitch with Reed Contact
  - Bipolar Cable
- **MONOPOLAR DIATHERMY ACCESSORIES FOR OPEN SURGERY**
  - Electrode Handle with 5m cable
  - Electrode set of 5 consisting of
  - 4mm Lancet Electrode straight
  - 4mm Knife Electrode
  - 4mm Needle Electrode
  - 2mm Ball Electrode
  - 4mm Ball Electrode

- **BIPOLAR LAP ACCESSORIES**

Reusable Bipolar laproscopic instrument 5 mm with special ceramic to save the instrument from excess heat and with inbuilt cutter – Autoclavable instrument
30 nos of cutter blade to be supplied

- **ACCESSORIES FOR OPEN SURGERY**

LANCET ELECTRODE FOR OPEN SURGERY
Working Length should be 40mm
Lancet Length should be 14mm

- **LANCET ELECTRODE FOR OPEN SURGERY**

Working length should be 40mm
Lancet Length should be 14mm

- **NEEDLE ELECTRODE FOR OPEN SURGERY**

Working length should be 40mm

Unit should be CE/USFDA approved
Safety and other standards:

	Interference immunity in accc.w.IEC 801 specs
MDD Class	IIb
Mark of conformity	CD 0297 in conformity w.93/42/EEC
Patient leakage current	Within the limit values specified in DIN IEC 601,part 1
Housing leakage current	Within the limit values specified in DIN IEC 601 Part1

Schedule No. 12

SPECIFICATIONS OF ENDOVISION IMAGING SYSTEM FOR HYSTEROSCOPY

Three Chip Camera System with Camera head: 1. Camera control unit with 3 chip camera head 2. Pure Digital signal with resolution ≥ 700 lines 3. Integrated Flexible Scope filter 4. Functionality at the touch of a button on camera head with easy to programme operating elements via intuitive control of all function in sterile area 5. Brightness Control 6. Aperture Control 7. Automatic digital Image Enhancer 8. Should have integrated optical zoom lens 25-50mm, to increase and decrease the size of image which should remain in focusing zone, without readjusting the focus. 9. Should have Integrated Gain, shutter, Enhancement, white balance with brightness control. 10. Should have peripheral control on CCU. 11. Should have DV video/Image Capture Module interface for direct storage of still & video sequences and to print the still images. 12. The camera head should have integrated zoom and focus lens/rings to make it fully soakable. 13. Should be IEC 601-1, CE according to MDD. 14. Should have all connecting cables between camera head and video monitor.	**01**
Xenon Light Source: Xenon light source of 175 Watts or more. Should be able to produce color temperature of 6000 K Should have continuous manual adjustment of light output. Should have standby mode and automatic recovery of last setting of intensity of light. Should be able to display lamp life in digital form and should give visual indication for replacement of xenon lamp in case of lamp life of 500 Hrs is over. Built in antifog airpump. Should be certified IEC 601-1 and CE according to MDD.	**01**
Xenon spare lamp of 175 Watts suitable for Xenon light source	**02**
High Resolution Video medical grade Monitor: 21''-23" High resolution Medical grade Monitor, resolution minimum 700 horizontal lines with S-VHS, RGB, input, option for wall mounting and desktop in same unit.	**01**
Fiber Optic Light Cable: Fiber Optic light cable of actual bundle size: 3.5-4.0mm, length : 250cm. or more, compatible with cold light source and telescopes (necessary adaptors may be provided)	**02**
Video Trolley: Suitable video trolley to be supplied for mounting equipments having minimum four self in addition to with one drawer, with antistatic wheel casters, front	**01**

lockable, high grade of electrical insulation and earth protection. 5Ampere socket, 10Nos, inbuilt with trolley to connect all electronic devices. CO2 bottle stand should be integrated with trolley. Potential equalization connection to be provided at least 8 points.	
UPS: Suitable UPS with One hour backup time with SMF Batteries & Stand. Should be able to work on wide input range between 160-270 VAC at Frequency between 50Hz ± 2Hz, Should use PWM technology with power conversion with single transformer arrangements with an output of 220VAC ± 5%, protection of overload, short circuit and low battery. Should have indication on front panel for mains load/battery load/ battery overload-low and MCB protection in case of short circuit. ISI/CE approved good quality Indian make.	**01**
Environmental factors 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. 2. The unit shall be capable of operating continuously in ambient temperature of 20-30 deg C and relative humidity of 15-90% 3. The unit shall be capable of being stored continuously in ambient temperature of 0-50deg C and relative humidity of 15-90% **Power Supply** 1. Power input to be 220-240VAC, 50Hz fitted with Indian plug 2. UPS of suitable rating with voltage regulation and spike protection for 60 minutes back up. **Standards, Safety and Training** 1. Should be FDA, CE, UL or BIS approved product 2. Manufacturer should have ISO certification for quality standards. 3. Comprehensive training for lab staff and support services till familiarity with the system. 4. Shall be certified to be meeting safety standard IEC 60601-2-18 part 2 Particular requirements for the safety of endoscopic equipment. **Documentation** 1. User/Technical/Maintenance manuals to be supplied in English. 2. List of important spare parts and accessories with their part number and costing. 3. 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. 4. Certificate of calibration and inspection. 5. List of Equipments available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual 6. 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. 7. The manufacturer should have their own service centre and local engineer and should be verified by competent authority regarding these facilities.	**CERTIFICATE**

Schedule No. 13

TECHNICAL SPECIFICATIONS OF LAPAROSCOPIC SURGERY HAND INSTRUMENT WITH CO2 INSUFFLATOR

Item with Specification.	Qty	
Telescope 30° 10MM : Forward oblique 30 degree enlarged view, size: 10 MM rod lenses system, Length:30- 31 cm, Autoclavable, Fiber optic light transmission incorporated.	**01**	
Telescope 0° 10MM : Straight forward telescope,0 degree enlarged view, size: 10 MM rod lenses system ,Length:30- 31 cm, Autoclavable, Fiber optic light transmission incorporated	**01**	
Telescope 0° 5MM: 01 Straight Forward Telescope 0 degree enlarged view, size: 5.0mm rod lenses system ,Length:29-30 cm, Autoclavable, Fiber Optic Light Transmission Incorporated	**01**	
Telescope 30° 5MM: 01 Forward Oblique Telescope **30°** enlarged view, size: 5.0mm rod lenses system ,Length:29-30 cm, Autoclavable, Fiber Optic Light Transmission Incorporated	**01**	
Trocar & Cannula 11MM : Cannula size : **11 mm diameter**; should have multifunctional valve and automatic valve to prevent damage of sharp instruments and quipme tip lens while passing through the cannula valve. It shoulds have stopcock for CO2 insufflation. Trocar should have pyramidal tip with pin holes near the tip for safety outlet of CO2 gas.The working length of the canula should be 100-110 mm.	**02**	
Trocar under optical vision: Trocar with endo tip size: 10mm, cannula rotatable with multifunction valve, working length: 11cm. The endo tip cannula should compatible with 10mm telescope for under vision entry into peritoneum.	**01**	
Hassan Blunt trocar and its cannula size 11mm	**01**	
Trocar & Cannula 6MM : Cannula size : **6mm diameter**; should have multifunctional valve and automatic valve to prevent damage of sharp instruments and quipme tip lens while passing through the cannula valve. It shoulds have stopcock for CO2 insufflation. Trocar should have pyramidal tip with pin holes near the tip for safety outlet of CO2 gas. The working length of the canula should be 100-110 mm.	**03**	
Reducer 11-5mm	**02**	
Washer for 11 & 6mm Cannula and trocar	**50 No each**	
Veress Needle: Veress needle of working length 10cm, 13 cm & 15cm with luer lock one each	**02 Each**	

Grasping Forcep Fenestrated: Atraumatic serration, fenestrated, grasping forcep with unipolar connection, insulated sheath, handle without ratchet. Should be dismantable into three parts namely, outer tube, handle and inserts. Length between 35-36cm, size: 5.0mm.	**01**	
Grasping Forcep Fenestrated curved: Atraumatic, fenestrated, curved grasping forcep with unipolar connection, insulated sheath, handle without ratchet. Should be dismantable into three parts namely, outer tube, handle and inserts. Length between 35-36cm, size: 5.0mm	**02**	
Bowel Grasping Forcep: Bowel Grasper fenestrated, size: 5.0mm, length 5-36cm, handle with ratchet, insulated shaft.	**01**	
Bipolar Forcep: Bipolar Grasping Forceps size: 5mm, robust type, take apart in nature that it can be dismountable into three parts, handle, insert grasper and working tube; with movable inner sheath and non-retracting jaws. Working length 33cm Handle should be spring type.	**02**	
Bipolar Insert Only: Bipolar grasping insert only, robust type to fit with main bipolar forceps.	**02**	
Inner Sheath: Inner sheath with HF insulation to fit with main bipolar forceps.	**02**	
Bipolar HF Cable: Bipolar HF cable compatible to connect with main bipolar forceps.	**06**	
Unipolar curved Kelly dissecting and Grasping Forcep: Kelly curved dissecting and grasping forceps insulated, atraumatic, working length 36 cm, size: 5mm,dismountable into handle, insert and working tube. Handle without ratchet.	**01**	
Insert Forcep Unipolar: Insert forcep Kelly type curved atraumatic jaw compartible with main Kelley curved dissecting forceps.	**01**	
Unipolar Tooth Grasping Gorcep: Tiger Jaw 2x4 teeth insulated. Dismantable into different parts, insert, handle and working tube, Working length of 36 cm, size: 5mm. Handle with ratchet.	**02**	
Scissor Hook Unipola **Hook** scissor 5mm, connection for unipolar HF cable, dismountable into insert, tube and handle. Working length 36 cm, size: 5mm, handle without ratchet.	**01**	
Oviduct Forcep: Oviduct forceps to hold the fallopian tube, purely atraumatic without serration. Working length 36 cm, size: 5mm, handle without ratchet.	**01**	
Scissor curved Unipolar: METZENBAUM curved scissor 5mm, connection for unipolar HF cable, dismountable into insert, tube and handle. Working length 36 cm, size: 5mm, handle without ratchet.	**02**	
Insert curved scissor: Scissor curved inset to fit with main curved scissor for size 5mm.	**02**	
Scissor curved Unipolar: METZENBAUM curved scissor 10mm, length of blade 12mm, connection for unipolar HF cable, dismountable into insert, tube and handle. Working length 36 cm, size: 10mm, handle without ratchet.	**01**	
Insert curved scissor: Scissor curved inset to fit with main curved scissor.	**02**	
L-shaped hook dissector with unipolar HF connection.	**02**	

Spatula/Blunt dissector with unipolar HF connection	**02**	
Knot pusher 5mm eye type	**01**	
Claw Forcep: 10 mm & 5mm claw forcep 2x3 teeth short with ratchet.	**01**	
Spoon Forcep: Retrieval of foreign body/stones forcep, size 10mm without ratchet	**01**	
Mayoma Fixation Instruments 5mm as well as 10mm one each	**01**	
Heavy Duty Roburst Bipolar Forcep length: 36cm, rotating dismantable, preferably wide jaw with spare insert and handle,	**01**	
Heavy Duty Roburst Bipolar scissor length: 36cm, rotating dismantable, preferably wide jaw with spare insert and handle,	**01**	
Clip Applicator: Medium Large clip applicator dismantable rotating size: 10mm, length 36cm, for PILLING WECK Titanium clips with ratchet to lock the jaw holding the clip.	**01**	
Titanium Clips: Titanium clips medium large, box with 16 sterile cartridges, 10 clips each for use with clip applicator.	**10**	
Two Way Suction irrigation cannula, size: 5mm&10mm each	**01**	
Puncture Needle, size: 5mm, length 36cm	**02**	
Needle Holder: Macro needle holder with tungsten carbide insert, ergonomic pistol handle, with disengageable ratchet, jaw curved to left, size: 5mm, length : 33cm for use with suture material size: 0/0 to 7/0.	**02**	
HF Needle Electrode: High Frequency Needle for splitting and coagulation, insulated, with connection pin for unipolar coagulation, working length 31cm.	**01**	
HF Needle Only: Needle insert only suitable to insert with HF needle electrode.	**02**	
Unipolar HF Cable: Unipolar HF cable suitable to connect with forcep and electrosurgical unit.	**06**	
Fan retractor: Fan retractor with simple opening of the fan by axial movement of the outer sheath, dismountable and distendable, size: 10mm, length: 36cm	**01**	
CUSHERI Liver retractor ; size: 5mm; Length:36cm	**01**	
Facial Close instrument for large opening	**01**	
Uterine manipulator for LAVH, Mobilization of uterus, identification of vaginal fornices and sealing consisting of: Manipulator inserts, Manipulator rod, Manipulator conical-cylindrical and short; silicon seal package; manipulator rod and handle	**01**	
Sterlization/Disinfection Tray: Disinfection/Sterlization stainless steel tray of steel grade 304 with sieve tray to lift. Size: 27”x7”x5”(LxBxD)	**04**	
Suitable Autoclavable plastic tray double tray for sterilization and storage for hand instruments of minimum 20 hand instruments preferably from OEM.	**02**	
Formaline Chamber: Formaline Chamber made of Virgin Acrylic 4.5mm thickness; size:26”x8”x8”(LxBxH) with three tray, for sterilizing the laparoscope, preferably with three tray	**01**	
Cleaning accessories like silicon oil, cotton carrier, set of cleaning brushes, special lubricant for stopcock, silver polish etc.	**1 set**	

CO2 Electronic Insufflator: Electronic CO_2 insufflators with pin index connection Should have an adjustable flow rate of 0 to 30 ltr. Per minute and a pressure range adjustable between 0-30 mm Hg. Preset and actual value for Pressure and flow should be displayed together on the front panel in digital display. Constant monitoring of intra-abdominal pressure; any overpressure is released immediately with back flow with acoustic alarm. Unit should have in-built heater to warm up and preheat the CO2 gas. Should be able to select either central supply (4.5Kg/cm2) input pressure from central supply as well as direct connection to high pressure CO2 cylinder and should indicate the right inlet pressure of CO2 gas supply by bar graph on front panel of machine. Unit should produce immediately acoustic alarm in case of sudden blockage in the gas outlet tube or wrongly placed Veress Needle. Provided with Silicon autoclave tubing with luer attachment. Instrument should work on a universal power supply of 100-240 V, with a frequency of 50 Hz single phase. Electrical Safety certification – IEC-601-1 and CE acc to MDD	**01**	
HP Hose: Suitable high pressure hose pin index to connect the gas to insufflator, length : 1.0 meter.	**01**	
CO2 Cylinder: 5 Kg. Carbon Dioxide bottle with pin index connection with wrench	**02**	
Documentation system for digital storage of still images, video sequences and audio files. Latest processor & HDD, which should be specified. Largest possible RAM, which should be specified. Integrated DVD/CD writer with maximum speed which should be specified. Compact key board with drape Cordless mouse All types of connecting cables (BNC, DVI) and connectors, which should be specified. Flat screen colour monitor 17-19''of 1024x768 resolution with all connectors and connection cables (BNC, S-VIDEO (Y/C), VGA), which should be specified. Separate mobile cart with lock and key for housing all the components of the image management system. Suitable color printer laserjet.	**01**	
The core Operating Laparoscope hand instruments and equipments like Telescopes, hand instruments (bipolar forcep, unipolar forcep, HF needle, needle holder, scissors etc.) fiber optic cable, CO2 Insufflator etc should be from single manufacturer for system compatibility.		
Environmental factors 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. 2. The unit shall be capable of operating continuously in ambient temperature of 20-30 deg C and relative humidity of 15-90% 3. The unit shall be capable of being stored continuously in ambient temperature of 0-50deg C and relative humidity of 15-90% **Power Supply** 1. Power input to be 220-240VAC, 50Hz fitted with Indian plug 2. UPS of suitable rating with voltage regulation and spike protection for 60 minutes back up. **Standards, Safety and Training**		**CERTIFICATE**

1. Should be FDA, CE, UL or BIS approved product 2. Manufacturer should have ISO certification for quality standards. 3. Comprehensive training for lab staff and support services till familiarity with the system. 4. Shall be certified to be meeting safety standard IEC 60601-2-18 part 2 Particular requirements for the safety of endoscopic equipment. **Documentation** 1. User/Technical/Maintenance manuals to be supplied in English. 2. List of important spare parts and accessories with their part number and costing. 3. 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. 4. Certificate of calibration and inspection. 5. List of Equipments available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual 6. 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. 7. The manufacturer should have their own service centre and local engineer and should be verified by competent authority regarding these facilities.	

Schedule No. 14

Mobile Examination Light based on LED technology Nine Nos. Floor mounted

	Specifications - Mobile Examination Light based on LED technology Nine Nos. Floor mounted.
1	Extremely flat, compact and aero dynamical surgical OT light based on innovative Phosphorus coated white LED technology.
2	The single light head should consist of several, symmetrically arranged light emitting modules, using multitudinous white LEDs to form a multi-lens matrix on a single light head for a shadow free and homogeneous illumination of the surgical field.
	Light Head :
3	Light-head made of power-coated aluminium die case.
4	Light-head having smooth and clean surfaces that are easy and safely to clean.
5	One-point suspended on articulating arm , diameter below 300mm
6	Light field should be adjustable from 22 cm to 30 cm and focusing via sterilizable handle in the center of the light head.
7	No heat emission through IR radiation.
8	High fail-safety through optical light system consisting of between 70 to 120 LED's, with its own lens. In case of failure of one light source (LED), the illumination of the light field is not affected.
9	There should be a Sterilizable knob at the lower side of the light head to control of all light intensity and other functions .

10	Lighting intensity at 1m distance : min.120,000 Lux or better
11	Size of light field at 1m distance : 18-28 cm
12	Colour temperature : between 4000k- 5500k (Fixed)
13	Colour rendering index : RA95 to RA97
14	R9 (deep saturated red colour index) : 95 to 96
15	Life span of main light source : 25,000 hours- 30,000hrs
16	Supply voltage : 110 - 240 VAC / 24V DC / 24 V AC
17	Mobile Light should be supplied along with battery back up of about 1hour.
18	LED Surgical Lighting system should meet applicable standards such as FDA or CE approved product.
	WARRANTY, CMC AND CERTIFICATION
	Deleted. The warranty must cover each and every part of the equipment and its accessories.
	The firm should have trained Engineers based in India to provide service within 48 hrs of call.
	The table should be having US-FDA or CE (European directive) certification
	The equipment should be designed to comply with existing international standards in terms of safety and performance i.e. ISO9001/ISO 13485, IEC60601 and UL Standard. Having EMI/EMC testing EN60601-1-2-2001-elevtromagnetic compatibility
	All technical specifications accepted in the compliance statement must be supported by printed literature from the firm.

Schedule no. 15

Eye bank Specular Microscope (Eye Bank kerato-analyzer)

Required for evaluation of Donor Cornea in the Eye Bank
Specifications:-
Type: Non-Contact objective lens
XYZ stage alignment and rocking (swivel) alignment
Analysis method: - centre method, flex-centre method, variable frame method, crossing method and digital method to analyze cells.
Field of view: 450µm x 500µm
Slit width 0.2 mm width slit for wide field imaging
0.1 mm width slit for higher resolution and better contrast
Pachymetry: - Built in digital micrometer enable measurements of corneal thickness.
Multi container holder
Having high resolution CCD camera and compatible analysis computer, LCD Monitor, UPS with software
Illumination: Halogen lamp
Video output
Photo-Printer
Table for the main unit
Table for computer
The product should be CE certified/USA FDA approved

Schedule No. 16

Clinical Endothelial Micrcoscope
(Endothelial Microscope for Evaluation of Patient Cornea)

Clinical Specular Microscope with three modes Auto, Semi-Auto and Manual
Color LCD Screen

Chinrest:	Adjustable, Motorized
Photographic Coverage:	0.25 x 0.5mm
Capturing Magnification:	150 X
Pachimetry Measurement:	0.01 mm step
Working Distance:	25mm
Flash Intensity	High/ Low
Fixation Targets:	1 Central 4 Peripheral (S,T,I,N /12, 2, 6, 10 o' clock)
Photo Targets:	Auto / Semi-auto / Manual

Image Memory 5 images for each eye (total 10 images)

Monitor	5.6 " Color LCD (Minimum)
Base Travel	X±46mm, Y ± 14mm, Z ±20mm
Head Travel	X±10mm, Y ± 14mm, Z ±10mm
Power Voltage	220V-240V

colour Laser printer to be supplied along with
Accessories:

1. Motorized Table with foot control
2. Print Rolls : 10
3. Dust Cover : 1

Product should be CE certified/US FDA approved

Schedule No. 17

CHART PROJECTION FOR PEDIATRIC PATIENTS

Projection Distance:	1.5 – 10 m
Refraction Distance:	2.5 – 8m
Projection magnification:	30x in 5m refraction
Chart rotation speed:	1 frame average 0.2 sec
Chart:	33 Pcs opto types
Lamp:	6V 20 W

Must have charts for infants and paediatric patients
Accessories required: Remote control, Table stand, Screen, dust cover, fuse, power cable.

Schedule No. 18

TECHNICAL SPECIFICATION OF SYNAPTOPHORE

1. Tube movement **:** for Horizontal +50 to -40D
   Vertical 30-30 D
   Cyclotorsion 20-20D with illuminating side tubes

2. Auto-flashing device for slide illumination.
3. After image test and Haidinger brushes
4. Slides including simultaneous macular perception, Simultaneous parafoveal perception
5. Set of slides for fusion
6. Set of slides for steropsis
7. Set of slides after image test
8. Set of slides for angle kappa
9. Rheostat controlled 6 V lamp, 4.35AMP
10. Motorized table for placing synaptophore.
11. Should have CE mark/USFDA approved.

Schedule No. 19

TECHNICAL SPECIFICATION OF KERATOMETER

1. External reading
2. Measurements to 0.2 mm accuracy
3. Adjustable chin rest
4. One position instrument: Measures both meridians without changing optical system
5. Simple vertical adjustment to fit patient
6. Two-way adjustable head and chin rests
7. Dual eye-level sighting system. Facilitates horizontal alignment
8. Positive fixation. Permits rapid measurement of central corneal area
9. Precision objectives, assures durability, achromatic lenses
10. Should have CE mark or USFDA approved.
11. Measurement range: radius of curvature, 9.4-6.5 mm (in 0.05 mm steps), Corneal refractive Power 35.875 to 52D
12. Motorised table for keeping Keratometer
13. Extra Bulb: 5, dust cover, chin rest paper 10 rolls

Schedule No. 20

OCT Machine

For observation and Fundus Photography

Scan Mode:	colour, FA, FAF, Red free
Observation	IR
Picture angle	45°
Diopter scale range	-13D to 12D (in fundus photography)

Operating distance	40.7mm (in fundus photography)		
	63.7 mm (in anterior segment photography)		
Photographic diameter of pupil	45°: 4mm or more		
	Small pupil: 3.3 mm or more		

For observation and Photography of Fundus Image/Anterior segment Tomogram

Scanning range	On fundus	lateral – within 3-12mm	
		Vertical – within 3-9mm	
	On cornea	lateral – within 3-6mm	
		Vertical – within 3-6 mm	
	Macula/Disc:	3D wide	512x128, 12x9mm
	Macula:	5 line cross	1024x10, 9mm
Scan Patterns	Macula:	3D scan	
	Macula:	radial Scan	
	Macula:	7 Line Raster	
	Disc:	3D scan	
	Disc:	Circle scan	
	Anterior:	Radial Scan (for Cornea)	
	Anterior:	Line Scan (For Angle Chamber)	
Scan Speed	50,000 A-scans per second		
Scan depth	2.3 mm		
In depth resolution	below 6µm		
Photographable Diameter of Pupil	2.5 mm or more		

For observation and Photography of Fundus image/Fundus Tomogram

Retinal layer	Macula:	ILM, IS/OS, RPE, BM
	Glaucoma:	ILM, NFL, IPL
OCT reference focus	Vitroeus and choroid	
Fixation	Adjustable internal matrix LCD and external fixation device.	

Light source/Power source/Power supply

Light source	SLD	
Power source	voltage 240V	
	Frequency:	50-60 Mz
Power supply	200 VA	

The monitor screen should be in built or compatible PC should be supplied along with original software

Accessories required

Original Motorized table
Colour Laser Printer
Online UPS
The product should be CE certified and US FDA approved.

Schedule No. 21

Equipment specification for Cytocentrifuge

1. Description of function:

1.1 A cytocentrifuge, which operates at a speed of between 500 and 2000 rpm, forces the cells from a suspension onto a microscope slide and a blotter simultaneously, absorbs the suspension medium. Cyto evaluation of cells under microscope

2. Operational requirements:
2.1 Latest model microprocessor controlled compact centrifuge with sealed rotor head for separation of cells found in body fluids. Cells are directly attached in a monolayer to a microscope slide by means of centrifugal force and a slide and funnel device

3. Technical specification:
3.1 Speed range at least: 500-2000rpm
3.2 Time range at least: 1-60 minutes
3.3 Number of specimen can handle up to 12 samples in one cycle
3.4 Memory to store 20 percent procedures
3.5 There should be a membrane keypad with bright LCD/LED display of time, speed and program controls.
3.6 Audio visual alarm for out of balance, outside speed tolerance or if the lid is not properly locked. The system will not run if the lid is not locked properly.
3.7 Specimen chamber capable of handling low volumes and high volumes.

Prices should be quoted separately

4. (1 case each) consists of
1ml fluid chamber – 50nos
1ml base holder – 50nos
1ml chamber cap – 50nos
6ml fluid chamber – 50nos
6ml gasket – 50nos
6/12 ml base holder – 50nos
6/12 ml chamber cap – 50nos
12ml fluid chamber – 50nos
12ml gasket – 50nos
SS cyto clips- 2 packs each containing 6 nos.
Filter cards – 50 boxes each containing 200nos

5. Environmental factors:
5.1 The unit shall be capable of stored continuously in ambient temperature of 0-50 deg C and relative humidity of 15-90%
5.2 The unit shall be capable of operating in ambient temperature of 20-30 deg C and relative humidity of 80%

6. Power supply:
6.1 Power input to be 220-240VAC, 50Hz fitted with Indian plug.
6.2 Reset table over current breaker shall be fitted for protection.
6.3 Suitable UPS with 60 min backup.

7. Standards and safety:
7.1 Should be compliant with IEC 61010-1: covering safety requirements for electrical equipment for measurement control and laboratory use.
7.2 Should be FDA or CE approved product.
7.3 Comprehensive training for lab staff and support services till familiarity with the system.

8. Documentation:
8.1 User/technical/maintenance manuals to be supplied.
8.2 Certificate of calibration and inspection from factory.

8.3 List of equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service/ technical manual.
8.4 List of important spare parts and accessories with their part number and costing.
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 Compliance report to be submitted in a tabulated and point wise manner clearly mentioning the page / para number of original catalogue

Schedule No. 22

Autoclave- Horizontal

Description of Function: Steam Sterilizers or Autoclaves are required to sterilize objects under high temperature and pressured steam.

Operational Requirements: Suitable for hospital dressings, linen, surgical instruments, glassware, culture media and laboratory ware etc.

Technical Specifications:-

- Single door high pressure steam sterilizer with double/triple walled, steam jacket and separate boiler
- Material of construction:
  a. Sterilizer chamber SS 316
  b. Door SS 316
  c. Jacket MS
  d. Loading carriage SS 316
  e. Transfer trolley: MS, painted
  f. Door Gasket: Silicon or better
  g. Insulation: fiber glass resin bonded wool or better
  h. Insulation cover: SS sheets
- Chamber capacity 100-200 ltrs
- Operating temperature 121^0C - 138^0C pressure 1.1 to 2.2 kg/ cm^2 of steam pressure
- Sterilizer should be provided with steam generator
- Spring loaded safety valves and automatic vacuum breaker for jacket
- Removable plug screen for chamber drain
- SS baffle for even steam distribution in the chamber
- Safety valve protection against poor pressure.
- Safety lock for door :pressure lock safety device
- Low water off

System Configuration Accessories, spares and consumables:

- System as specified-
- Should provide available spares and consumables for at least 10 years
- Should provide a sufficient quality of consumable along with the equipment

Environmental factors: Shall meet IEC-60601-1-2 :200(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.

Power Supply: Power input to be 220-240VAC, 50Hz,/440 V 3 Phase as appropriate and fitted with plug compatible with local sockets

Standards and Safety:

- Comprehensive onsite training for lab staff and support services till familiar with the system.
- Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450 (BIS)
- Should be ISI /CE or equivalent standard approved product.

Documentation:

- User/Technical/Maintenance manuals to be supplied
- Certificate of calibration and inspection from factory.
- List of important spare parts and accessories with their part number and costing.
- 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
- Should submit a report of quality checks using biological indicator.

Schedule No. 23

Automated Slide Stainers

1. Description of Function

1.1 Automatic Slide Stainer is used for staining histological and cytological slides.

2. Operational Requirements

2.1 Should be programmable for routine H & E & other special stains with facility for imuno-histochemical stains & memory of various staining procedures

3. Technical Specifications

3.1 Should hold about 80 slides per basket

3.2 Basket chemical capacity 750-1000ml

3.3 At least 2(two) water stations with 24 work stations,(Programmable) with timing in minutes & second & facility for single & double load.

3.4 Agitational facility

3.5 Can be connected with any make automatic cover-slipper

4. System Configuration Accessories, spares and consumables

4.1 System as specified-

4.2 Bio chemical baskets - 6 Nos.

4.3 Slides Hangers - 4 Nos

4.4 All consumables required for installation and standardization of system to be given free of cost.

4.5 H & E stain, PAS Mucicarniumiue, Alcon and Brumin – 50x10g

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%

5.3 A fume hood completely covering the slide plates to prevent hazardous fumes from entering the lab area and an activated charcoal filter to minimize solvent vapors should be provided.

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.

7 Standards and Safety

7.1 Should be FDA or CE approved marked product

Schedule No. 24

Automatic Microtome

1 Description of Function

1.1 Automatic microtomes are precision instruments designed to cut uniformly thin sections of a variety of materials for detailed microscopic examination. The microtome operation is based upon the rotary action of a hand wheel activating the advancement of a block towards a rigidly held knife.

2 Operational Requirements

2.1 Automatic microtome for histopathological section cutting specimen up to 32 x 27 mm

3 Technical Specifications

3.1 Specimen advance 1 to 30 µm in 1 µm steps
3.2 Integrated, smooth hand wheel that locks in any position
3.3 Fine orientation of specimen with specimen tilt
3.4 Quick charge for all specimen clamps
3.5 Option to use both standard knife holder and disposable blade holder
3.6 Section Waste tray
3.7 Knife holder takes knives from 110 to 185 mm long by 28 to 35 mm wide and has guards for protection both inside and outside clamp
3.8 Standard accessories to include the following:
Object orientation set, Universal Cassette Clamp, universal knife holding base, Std knife holder, sharp blade holder, Waste tray, Dust cover, 50 each low and high profile disposable Microtome blades.
3.9 Automatic and manual operation.

4 System Configuration Accessories, spares and consumables

4.1 System as specified-
4.2 All consumables required for installation and standardization of system to be given free of cost.
4.3 Knives and disposable blades.

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 Thu unit shall be capable of operating in ambient temperature of 20-30 deg 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 30 Min backup

7 Standards and Safety

7.1 Should be FDA or CE approved product
7.2 Manufacturer should be ISO certified for quality standards.

Schedule No. 25

Automatic Tissue Processor

1 Description of Function

1.1 Tissues from the body taken for diagnosis of disease processes are processed by the tissue processor in the histology laboratory to produce microscopic slides that are viewed under the microscope by pathologists.

2 Operational Requirements

2.1 Latest Model Fully automatic system with all accessories is required.
2.2 Computer controlled flow through tissue processor to automatically perform fixation, dehydration, cleaning, and paraffin impregnation of tissue. Specimens should remain stationary during processing in a fully enclosed retort while processing reagents and molten paraffin are moved to and from the chamber in a programmed sequence.

3 Technical Specifications

3.1 Capacity (a)200-250 cassettes in organized basket(b) 275-300 random basket
3.2 Reagent stations – Number of vessels: 10 (1.8- 2 litres ea.)
3.3 Paraffin stations– Number: 2 (1.8- 2 litres ea)
– Temperature setting range: 35 - 70°C
– Overtemperature release: 75°C >(± 5°C)
Can be configured for three.
3.4 Following progams should be available:
– Number of programs:10-12 (selectable)
– Programmable time per station:From 1 sec. to 100 hours
– Spiral agitation,Vertical agitation,Centrifuging ,Centrifuging time should be selectable.
– Program can be delayed start or finished upto 5-7 days in advance.
-3 Flush options
3.5 Fume extraction system, with active charcoal filter.
3.6 Quote pricing to upgardation to another basket with similar casstes capacity.
3.7 Activated charcoal/carbon filter.
3.8 Should be an open system capable of using standar cassettes from open markets.
3.9 Screen display of time,date,cycles,step by step record of processing.
3.10 Can be configured for 3 wax bath and 9 reagent station or 2 wax bath and 10 reagent stations each with a capacity of 1.8-2 litres.
3.11 Automatic in process reagent and wax rotation facility.
3.12 Movement of reagents with vacuum and positive pressure.
3.13 Pre heating facility.

3.14 Vacuum selection at any step.
3.15 Remote alarm to signal possible problems and reagent change etc.
3.16 Reagent change based on specific gravity of the first alcohol.
3.17 Clear door/lid for viewing specimens during processing.

4 System Configuration Accessories, spares and consumables

4.1 System as specified-
4.2 SS basket Rotor - 01
4.3 SS tissue basket- 01
4.4 Aluminium reagent vessels of 1.8-2 litre capacity each-10
4.5 Beaker covers- 11
4.6 SS wax baths, tissue capsules with perforations- 02
4.7 Cassettes-10,000
4.8 Plexiglass fume containment shield with Fume outlet Tubes, Activated carbon filter Receptacle and Vaccum function.
4.9 Stainless steel counterweight to keep the samples submerged.-01

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
6.2 Resettable overcurrent breaker shall be fitted for protection
6.4 Suitable UPS with maintenance free batteries for minimum one-hour back-up should be supplied with the system.

7 Standards and Safety

7.1 Should be FDA or CE approved product

Schedule No. 26

Dry Heat Water Bath (Heat Block)

1 Description of Function

1.1	Dry bath system enables sample temperature management. It is far more convenient than water bath systems, requires less space and needs little maintenance		

2 Operational Requirements

2.1	Microprocessor controlled system		

3 Technical Specifications

3.1	Design to uniformly heat the contents of 24 tubes for ambient to 110 degC of variable volumes		
3.2	Block to hold approximately 24 tubes (1.5, 0.5 & 5ml - 8nos each) – 1No. 32 tube (1.5,0.5,5 & 15ml-8nos each)-1No. & 24 Tubes block each for 1.5,0.5 & 5ml)		
3.3	Digital temperature display with temperature accuracy of ± 0.5oC or better.		
3.4	Should have 3 Independent timers with buzzer programmable up to 99 hours 59 mins.		

4 System Configuration Accessories, spares and consumables

4.1	As specified		

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 FDA or CE approved product		
7.2	Should be compliant to ISO 13485: Quality systems - Medical devices - Particular requirements for the application of ISO 9001 applicable to manufacturers and service providers that perform their own design activities.		

Schedule No. 27

Equipment Specifications for Paraffin Tissue Embedding Centre

1 Description of Function

1.1	The Paraffin Tissue Embedding Center (TEC) is a modular unit for moderate to heavy workloads in the preparation of wax tissue blocks.		

2 Operational Requirements

2.1	System should be modular and complete with microprocessor control of the large 3-5-litre paraffin reservoir, base molds warming oven, tissue holding tank, work stage and cold plate; user-friendly touch membrane pad with LED displays; lighted work stage; built-in forceps warmer; foot switch and/or push button-activated paraffin dispenser; and programmable, automatic timer controls.

3 Technical Specifications

3.1	Paraffin Reservoir capacity at least 3 liters
3.2	Temperature ranges: Paraffin Reservoir:50 deg C - 70 deg C (± 2deg C) Work Surface:50 deg C - 70 deg C (± 5 deg C) Tissue Holding Tank:50 deg C - 70deg C (± 2 deg C) Cold Plate: - 5 deg C to -15 deg C to ambient
3.3	Refrigerant :Cold Plate, Cold Spot (peltier controlled)
3.4	There should be a Membrane Keypad with LCD/LED to set and display operating parameters, current status, running time and alarm conditions for time and temperature.
3.5	Resolution of temperature display: +/- 1 deg C
3.6	Unit should have self test on power up and should display error codes in case of malfunction for easy maintenance and troubleshooting. Error codes should be indicative of the System failure or a single module failure.
3.7	Dimensions :(All dimensions variations +/- 10 % rounded off to integral value.) Height of Work Surface: 6 cm or more Cold Plate: (at least to hold 80 to 100 cassettes)
3.8	Receptacle for 6 forceps
3.9	Pre heated forceps of two types (for small and medium size tissue)
3.10	Drain Wax should remain in melted form

4 System Configuration Accessories, spares and consumables

4.1	Prices should be quoted for each separately: Standard size Cassettes – 1000 Nos.
4.2	Large field Magnifying lens with cold light source
4.3	Stainless Steel Moulds of different sizes (Depth 9 to 12 mm) – 80 Nos.
4.4	Paraffin Scrapper – 3 Nos.
4.5	Halogen Bulb – 12 Nos.
4.6	Fuse – 12 Nos.

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	Thu unit shall be capable of operating in ambient temperature of 20-30 deg C and relative humidity of 80%.

6 Power Supply

6.1	Power input to be 220-240VAC, 50Hz fitted with Indian plug
6.2	Reset table over current breaker shall be fitted for protection
6.3	Suitable UPS with 60 min backup.

7 Standards and Safety

7.1	Should be compliant to ISO 13485: Quality systems - Medical devices - Particular requirements for the application of ISO 9001 applicable to manufacturers and service providers that perform their own design activities.
7.2	Should be compliant with IEC 61010-1:covering safety requirements for electrical equipment for measurement control and laboratory use.
7.3	Should be FDA or CE or ISI approved product
7.4	Comprehensive training for lab staff and support services till familiarity with the system.

8 Documentation

8.1	User/Technical/Maintenance manuals to be supplied
8.2	Certificate of calibration and inspection from factory.
8.3	List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.
8.4	List of important spare parts and accessories with their part number and costing.
8.5	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
8.6	Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue.

Schedule No. 28

Automated Knife Sharpener

Specifications :

Automatic knife sharpeners with plates, knife holder which can accommodate all types of knife with facility to sharpen in both the direction, transparent hinged cover, adjustable timer 0-60 minutes, cord and plug with micro abrasive.

Additional Accessories required:

Honing plates – 5 Nos
Universal knife holder – 1 no.
Abrasive paste 1 & 6 Micron – 5 nos. each

Requirements at installation: Installation chart with each machine

Schedule No. 29

Table top Micro-centrifuge

Technical Specification For Table Top Micro centrifuge

- Compact centrifuge for speed up to 14000 rpm & RCF should be up to 20000 xg
- Dials and digital display for easy setting
- Rotor for 24 X 1.5,2ml tubes with ClickSeal bio-containment lid and dual row 18 x 2.0/0.5 ml rotor with screw-on lid.
- Should have option for emergency Lid Opening.
- Brushless motor
- Autoclavable rotors
- Temp. range -9 deg C to 40 deg C per 1 deg increment
- Standby cooling.
- Acceleration time to max. speed <13 s
- Braking time to max. speed <12 s
- Timer 30 s to 99 min, with continuous mode

The system should be CE/FDA approved

Schedule No. 30

Tissue Floatation Bath

1 Description of Function

1.1 Required to thoroughly straighten sectioned paraffin embedded tissue specimens without creating wrinkles, folds or distortions.

2 Operational Requirements

2.1 Chamber completely encircled by sheathed heater for uniform, broad surface heating with insulated body to prevent heat loss and temperature fluctuation is required.

3 Technical Specifications

3.1 Rectangular / Circular with a capacity with in the range of 3-5 liters
3.2 Temperature range with in 30 – 60 ^{0} C
3.3 Temperature controller with increments of 1° C or less. LED Display of temperature.
3. 4 Stainless steel / aluminum body.
Inner surface should permit easy identification of tissue sections
Outer surface should be powder coated
3.5 Safety system to prevent over heating should be present
3.6 Indicators for POWER ON and HEATER ON.
3.7 Indicate if timers / alarms are present

4 System Configuration Accessories, spares and consumables

4.1 System as specified-

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 in ambient temperature of 20-30 deg C and relative humidity of 80%.

6 Power Supply

6.1 Power input to be 220-240VAC, 50Hz fitted with Indian plug
6.2 Reset table over current breaker shall be fitted for protection
6.3 Suitable UPS with 60 min backup.

7 Standards and Safety

7.1 Should be FDA or CE approved product

Schedule No. 31

Automated Electrophoresis System with scanner /Densitometer

Required to carry out electrophoresis based special assays on patient samples for a super speciality hospital which charges the patients. This has to cater to the needs of a complete onocology and nephrology set up.

I. Automated electrophoresis system for hospital clinical laboratory,

Featuring

- Automated electrophoretic run , drying staining and de-staining
- System machine should use Cellulose Acetate or Agarose strips as Matrix for Electrophoresis and separate strips and kits for Immunofixation.
- Should have two sample applicators made of special stainless steel.
- Automated control of voltage, time and current
- Gel temperature control with peltier effect
- Facility to separate serum proteins, haemoglobin, lipoproteins, CK, LDH & Alkaline phosphatase isoenzymes
- Facility for immunofixation
- Facility to store at least 30 application protocols
- Facility to run serum, urine & CSF samples without prior dilution or concentration
- Alarm for level sensing, timer and doors
- Samples for one gel should not exceed 10
- Equipment must not have any water sources or pumps.
- Migration Chamber should be monobloc with carbonium/platinum electrodes and should be able to give uniform distribution of current on the full strip
- Should have multireagent (atleast 7)independent tanks.
- Process Control System should be guided by electromagnetic heads with optical sensor built in the Head.

II. Densitometer (or) Gel scanner with the necessary accessories and software

Either of these with the following features to be procured along with electrophoresis system

- Scanning & processing all gels including those specified above
- Facility to store the scanned image of the gel
- Facility for curve editing and entry of patient demographics
- Availability of quantification and quality control features
- Storage of patient data and results – upto a minimum of 10000 samples
- Facility to generate a comprehensive report containing patient demographics, scanned image of the gel, curve and quantification data

III Software upgradation to be provided free of cost upto 5 years

IV All necessary standard accessories like those required for sample application to be provided along with the instrument.

V Suitable PC with colour ink jet printer to be provided along with the equipment.

VI Online UPS suitable for the entire system with 30 minutes back up.

VII One set of standard spares

VIII Two kits of serum protein electrophoresis, one kit each of Lipoproteins, and isoenzymes of LDH and alkaline phosphatase to be provided as starter kits

Schedule No. 32

Refrigerated Centrifuge

Equipment Specifications for Centrifuge Refrigerated Table Top

1 Description of Function

1.1	The Refrigerated Centrifuge (RC) is a mechanical device used to separate biological substances of differing densities.		

2 Operational Requirements

2.1	Programmable microprocessor control system with self-diagnostic feature and IVD certified		

3 Technical Specifications

3.1	Maximum speed: Approx. 5000 rpm Swing-out / 15000 rpm Angle		
3.2	Maximum RCF: 5000x g Swing-out / 25000 x g Angle		
3.3	Maximum capacity: 4 x 400 ml Swing-out / 30 x 1.5/ 2 ml Angle		
3.4	Temperature range: -10°C / + 40°C.		
3.5	Digital displays for Programme No, temperature, Speed, RCF, & Time.		
3.6	System should have inbuilt program memory		
3.7	Timer 1 - 99 minutes and hold position		
3.8	At least 9 acceleration / 9 braking rates		
3.9	Maintenance free induction motor		
3.10	Totally CFC free refrigerant fluid and insulation		
3.11	Angle Rotor: 30 x 1.5 / 2.0ml, with adaptors for 200/500		
3.12	Angle Rotor: 6x100ml with defined adaptors like 50ml or 15ml for different sizes and aerosol tight lid		
3.13	Swing-out Rotor: 4 x 400 ml with aerosol tight cap and adaptors for different sizes		

4 System Configuration Accessories, spares and consumables

4.1	As specified		

5 Environmental factors

5.1	Shall meet IEC-60601-1-2:200(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.		
5.2	The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%		
5.3	The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%		

6 Power Supply

Sl	Name
6.1	Power input: 220-240V/ 50 Hz AC Single phase or 380-400V AC 50 Hz Three phase fitted with appropriate Indian plugs and sockets.

7 Standards, Safety and Training

Sl	Name
7.1	Should incorporate Safety Features for Imbalance detection, lid interlock, over temperature, rotor over speed etc
7.2	Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450
7.3	Should be FDA or European CE approved product
7.4	Should be compliant to ISO 13485: Quality systems - Medical devices - Particular requirements for the application of ISO 9001 applicable to manufacturers and service providers that perform their own design activities.
7.5	Should comply with IEC/TR 61010-3-020 :Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 3-020: Conformity verification report for IEC 61010-2-020:1992 Particular requirements for laboratory centrifuges"

Schedule No. 33

Equipment Specifications for Deep freezer(-20 deg C)

1 Description of Function

1.1	Deep Freezers are required to preserve blood and blood products, vaccinations etc at specified temperature.

2 Operational Requirements

2.1	Vertical Freezer, at least single door with adjustable 6 to 8 shelves (frost free)
2.2	Separate Chamber racks to be pulled out for easy handling
2.3	Non-CFC refrigerant

3 Technical Specifications

3.1	Capacity within 400 to 450 L		
3.2	Digital display of set and actual temperature, with audiovisual alarm		
3.3	No condensation on storing material with automatic electric defrost		
3.4	Construction:		

	Solid rust free cabinet to prevent corrosion and lockable castor wheels.		
3.5	3.5. Refrigeration System Heavy Duty refrigeration system, maintenance free, below -20 deg C (+ 10C) with hermetically sealed refrigeration compressors and reliable refrigeration to minimize noise and vibration, air cooled with security lock to prevent unintentional switch off shall be supplied. It should have maximum cooling time hours at maximum ambient temperature of 33deg C. The equipment should be of continuous duty and frost free.		
3.6	Alarm It should also have audio visual Electronic Alarm System independent of power supply.		
3.7	Insulation High density polyurethane or equivalent Gaskets - Double seal silicon.		

4 System Configuration Accessories, spares and consumables

4.1	As specified		

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		
6.2	Suitable Servo controlled Stabilizer/CVT		
6.3	Resettable over current breaker shall be fitted for protection		

7 Standards and Safety

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

8 Documentation

8.1	User manual in English	
8.2	Service manual in English	
8.3	List of Equipments available for providing calibration and routine Preventive Maintenance Support.	

	As per manufacturer documentation in service/technical manual.
8.4	Certificate of calibration and inspection from factory.
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 available in stock with the supplier.

Schedule No. 34

Equipment Specifications for PCR Thermocycler

1 Description of Function	
1.1	PCR Thermocyclers are Hardware or machines which are made specifically for PCR (Polymerase Chain Reaction) automatically regulate the optimal temperatures for PCR.
2 Operational Requirements	
2.1	Microprocessor based programmable for precise amplification of nucleic acids for PCR and sequencing PCR
3 Technical Specifications	
3.1	Multiple Peltier based technology with user diagnostic features
3.2	Interchangeable Sample Blocks (96 X 0.2ml, 60 X 0.5 ml)
3.3	Up- gradable to a higher sample well block.
3.4	LCD to display complete profile of PCR/RT-PCR & cycle sequencing
3.5	Efficient Heating and cooling rate (4-5ºC/Sec)
3.6	Heated lid facility
3.7	Temperature range 4-99.9ºC
3.8	Temperature Accuracy +0.25ºC
3.9	Temperature Uniformity + 0.5ºC
3.10	Auto restart facility
4 System Configuration Accessories, spares and consumables	
4.1	As specified
5 Environmental factors	
5.1	Shall meet IEC-60601-1-2 :200(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.
5.2	Thu unit shall be capable of operating in ambient temperature of 20-30 deg C and relative humidity of less than 70%
5.3	The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%
6 Power Supply	

6.1	Power input to be 220-240VAC, 50Hz
6.2	Suitable Servo controlled Stabilizer/CVT
6.3	Suitable UPS with maintenance free batteries for minimum one-hour back-up should be supplied with the system.
7 Standards, Safety and Training	
7.1	Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450
7.2	Should be FDA or CE approaved product
7.3	Should be compliant to ISO 13485: Quality systems - Medical devices - Particular requirements for the application of ISO 9001 applicable to manufacturers and service providers that perform their own design activities.
7.4	Should be compliant with IEC 61010-1:(or any international equivalent eg EN/UL 61010) covering safety requirements for electrical equipment for measurement control and laboratory use
7.5	Comprehensive training for lab staff and support services till familiarity with the system.
8 Documentation	
8.1	User manual in English
8.2	Service manual in English
8.3	Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job descriptin of the hospital technician and company service engineer should be clearly spelt out.
8.4	Certificate of calibration and inspection.
8.5	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.
8.6	List of Equipments available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
8.7	List of important spare parts and accessories with their part number and costing.

Schedule No. 35

BIOSAFETY CABINET

1. The system should be microprocessor based. The microprocessor must display the inflow and down flow air velocities in real time on an LED display to ensure the user knows whether or not the cabinet is working under safe operating conditions.
2. Motor must automatically adjust the air flow speed to ensure continuous safe working condition. Air flow shall be as per requirements of Biosafety regulations in respect of at least BSC II A level cabinet.
3. The cabinet noise level must be less than 60 decibel.

4. Dimensions (Cabinet Size): 4 to 6 feet. The interior of the cabinet shall be of stainless steel or equivalent material and must be smooth to ensure no risk of cuts to the users.
5. Efficiency of HEPA filter should be almost 99%
6. In order to ensure consistent and reliable down flow velocity across the supply HEPA filter over the life of the cabinet, the cabinet must use a pressure sensor (rather than anemometer) to detect pressure drop across the supply filter, rather than in just one point across the down flow. The pressure sensor must be encased in order to protect the sensor form temperature, humidity and other environmental phenomena that can impact the sensor's performance.
7. Fluorescent lamps for lighting of the interior of the cabinet. Front of the cabinet preferably be angled to help minimize glair.
8. A provision for UV light to disinfect the interior of the cabinet. UV light must be programmable to allow for specific exposure time from 0 to 24 hrs. Automatic UV switch 'OFF' on opening of front window. The front window should be made of laminated safety glass to prot4ct against leakage of UV rays and to ensure containment of potential hazardous material.
9. Safety alarm / safety display for :
   - Low air velocity
   - Faulty exhaust fan etc.
10. Power input to be 220-240 v AC, 50 Hz fitted with Indian plug.
11. CE / ISI certified or equivalent standards of repute.
12. Movable stands
13. Warranty and annual maintenance contract as per tender document and CMC should cover UPS and batteries.
14. Calibration certificate shall be provided at the time of installation in respect of all the parameters that require calibration.
15. Comprehensive training for lab staff and support services till familiarity with the system.
16. Attach original manufacturer's product catalogue and specification sheet in English.
17. Satisfactory working of quoted model from Govt. installation of repute preferably from Delhi.
18. List of important spare parts and accessories with their part number and costing.

Schedule No. 36

ANALYTICAL BALANCE

SI. No	**ANALYTICAL BALANCE**
1.1	It should have weighing capacity of 220 gm, Readability: 0.1mg
1.2	Colored Touch Screen Display

1.3	Standard RS 232C for the PC interface
1.4	Fully automatic Time and Temperature internal Calibration with built in weight
1.5	Pace-setting interfacing flexibility - including Ethernet, Bluetooth (wireless connection) and PS/2 - for efficient data capture and easy network integration.
	Technical data:
1.6	Capacity : 220gm
1.7	Readability : 0.1mg
1.8	Repeatability : (+/-) 0.05 mg
1.9	Linearity : (+/-) 0.2 mg
1.10	Weighing Pan size : 78*73mm
1.11	Grid Type Weighing Pan
1.12	Response time : 3sec.
1.13	Display : Colored Touch screen
1.14	IR Sensors for hands-free operation for personnel security and Automatic draft shield opening and closing
1.15	Warns if the balance is not correctly leveled to ensure the accuracy of results.
1.16	Automatic and detachable draft shield
1.17	Detachable and adjustable Terminal
1.18	Alphanumeric data entry of 4 ID's
1.19	Integrated automatic safety functions for external routine operations
1.20	QM-Toolbox, including user administration and password protection
2	Power Supply
2.1	Power input to be 220-240VAC, 50Hz
3	Standards, Safety and Training
3.1	Should be FDA or CE approved product
3.2	Calibration/Acceptance test certificate from the factory required and certificate from department of weights & Measurement.

Schedule No. 37

Spectrophotometer

1	**Description of Function**
1.1	UV/Vis spectroscopy is routinely used in the quantitative determination of solutions of transition metal ions and highly conjugated organic compounds.The instrument used in ultraviolet-visible spectroscopy is called a UV/vis spectrophotometer. It measures the intensity of light passing through a sample (I), and compares it to the intensity of light before it passes through the sample (Io)In a double-beam instrument, the light is split into two beams before it reaches the sample. One beam is used as the reference; the other beam passes through the sample. Some double-beam instruments have two detectors (photodiodes), and the sample and reference beam are measured at the same time.
2	**Operational Requirements**

2.1	System should provide for analysis of Protein, DNA / RNA & Enzyme kinetics etc.
2.2	Microprocessor controlled Double beam spectrophotometer with scanning, kinetic and multi wave length facility ,Self check & self diagnostic facility and Auto wavelength calibration facility

3 Technical Specifications

3.1	Spectral: Wavelength Range 190-1100 nm Wavelength Accuracy:+/- 0.8 nm for full range Bandwidth < 2.0 nm Wavelength Reproducability:+/- 0.5 nm
3.2	Photometric: Photometric Accuracy + 0.005A at 1A Photometric Reproducibility + 0.002A at 1A Stability < 0.001A/nm Absorbance Range -3.000 to 3.000 Scanning Speed 6000 nm/min or better Stray light < 0.1% at 340 nm
3.3	Light Source : Xenon Lamp with 2 Years Warranty
3.4	Dual Detector: Photo Diode
3.5	Detection Mode %, Transmission & Absorbance
3.6	Large LCD display to view complete graphics
3.7	Multi position(six positions preferable) cell holder/chamber.
3.8	Must be supplied with 4 pairs of micro Quartz cuvettes (volume 10 - 200 ul or less), with suitable software for nucleic acid quantification, protein quantification and determination
3.9	Advance version of compatible computer & printer
3.10	Monochromator: 1200 lines/mm grating.

4 System Configuration Accessories, spares and consumables

4.1	As specified

5 **Environmental factors**

5.1	Shall meet IEC-60601-1-2 :200(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 -50deg C and relative humidity of 15-90%
5.3	Thu unit shall be capable of operating in ambient temperature of 20-30 deg C and relative humidity of less than 70%

6 Power Supply

6.1	Power input to be 220-240VAC, 50Hz fitted with Indian plug
6.2	UPS of suitable rating shall be supplied for minimum 1 hour backup for the entire system

7 Standards, Safety and Training	
7.1	Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450
7.2	Should be FDA or 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 manufacturers and service providers that perform their own design activities.

Schedule No. 38
Deep Freezer (-80 deg C)

Operational Requirements

- Internal Minimum Capacity 600-650 L net at least double door with adjustable At least 4- 6 shelves
- Range up to -75^{0}C to -80^{0}C(Adjustable)
- Vertical Cabinet (upright model)

Technical Specification

Construction:

- Solid rust free cabinet to prevent corrosion and lockable castor wheels. Inner surface should be stainless steel

CONTROL SYSTEM

- Micro-processor based temperature controller with digital temperature display LED/LCD with seven days graphic temperature recorder with rechargeable battery back up including charger maintenance free and insensitive to vibration. Details of battery and battery charger shall be indicated

Refrigeration System

- Heavy Duty refrigeration system, maintenance free, below -80^{0}C ($\pm$ 1* C) with hermetically sealed dual compressors, noise free and vibration free, air cooled with security lock to prevent unintentional switch off shall be supplied. It should have maximum cooling time of 4 – 5 hrs

Alarm

- It should also have audio visual Electronic Alarm System independent of power supply

Insulation

- High density polyurethane or equivalent Gaskets - Double seal silicon

Documentation

- Manufacturer should have ISO certification for quality standards
- Should have FDA/CE/BIS certification

Schedule No. 39

Equipment Specifications for HPLC System

1 Description of Function	
1.1	High-performance 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 analyzed (analyte) and the chromatography column.

2 Operational Requirements

2.1	System should be complete with columns, Quaternary pump with inbuilt online degassing system, detector, column oven along with state of the art PC, printer with software

3 Technical Specifications

3.1	Quaternary pump Programmable flow rate range from 0.001 to 10 ml/min with 0.01 ml/min increments Flow precision ≤0.1% RSD. Maximum Operating pressure: 5800psi. Safety and maintenance aids: extensive diagnostic error detection and display. leak detection, safe leak handling Flow accuracy± 1%.
3.2	Manual injector: (1no) Rheodyne injector with 20µl loop and mounting bracket Additional loops of 5, 50,100 & 200 µl to be included.
3.3	Photo Diode Array Detector Detection type: photodiode array Number of diodes: 512 or more Wavelength range: 190-900nm. Light source: Deuterium and Tungsten Lamps Data rate: 80 Hz or more $< \pm 0.7 \cdot 10^{-5}$ AU at 254 and 750 nm Drift: $< 0.9 \cdot 10^{-3}$ AU/hr at 254 nm Wavelength Accuracy ± 1nm. Slit width 1, 2, 4, 8nm or more. Flow cell: < 15µl volume, path length 10mm.
3.4	Data Processing System – 1 no. Microprocessor of speed not less than 3 GHz, computer with 4GB RAM, 500GB hard disk drive, DVD/CD writer, Windows, 17" flat colour monitor, mouse, key board, colour laser printer.
3.5	Software for HPLC: Should be 21 CFR part 11 compliance. Should have minimum 5 or more user login facility
3.6	Columns For Drug Abuse – 2Nos Estimation of Drug Level – 2Nos
3.7	Guard columns- 2/pack for each column.
3.8	Compatible imported Water purification system to generate HPLC grade water of minimum sp. Resistivity of 18.2 M Ohms, capacity 10 ltrs per day (1 no.)
3.9	Column Oven (1 no): • Temperature range: 5ºC below room temperature to 75ºC • Temperature accuracy: ± 0.8º C. • Temperature precision: ±0.15ºC • Capacity: Minimum 2 Columns of 250mm length or better
3.10	Sample/Solvent filtration assembly with vacuum pump
3.11	System should be supplied with tool kit for maintenance of the machine.

4 System Configuration Accessories, spares and consumables			
4.1	As specified		
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 - 40deg C and relative humidity of 15-90%		
5.3	Thu unit shall be capable of operating in ambient temperature of 20-30 deg C and relative humidity of 80%.		
6 Power Supply			
6.1	Power input to be 220-240VAC, 50Hz fitted with Indian plug		
6.2	3 KVA Online 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 FDA or 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 manufacturers 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 factory. IQ/OQ/ PQ		
8.3	List of Equipments 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 catalogue or specification data sheet.		
8.6	List of important spare parts and accessories with their part number and costing. Available in stock with the supplier.		

Schedule No. 40

THIN LAYER CHROMATOGRAPHY

1 Description of Function	
1.1	Instrumental Thin-Layer Chromatography (or Planar Chromatography) is a modern separation technique, established worldwide and distinguished by flexibility, reliability and cost efficiency
2 Operational Requirements	
2.1	Complete with IP/BP/USP standards having movable applicator with in-built thickness arrangement between 0.25 mm to 0.35 mm having following components as per Technical Specifications
3 Technical Specifications	
3.1	Technical Specifications Thin Layer Chromatography System: 1. Spreader (Applicator) made of anodized aluminum, with fixed thickness and width of 5 cm, 10 cm and 20 cm. 2. Perspex brass size 125 x 25 cm to support 5 glass plate of size 20 x 20cm and two plates of size 20x5 em 3. Plate store rack aluminum for ten 20x20 plates 4. Spotting template Perspex 5. Developing tank with lid 6. TLC plate set 20x20 cm or 20x 10 cm 7. Micro-Pipette 5 microliter and 10 microliter 8. Scriber for making lines 9. Glass sprayer with rubber bellow 10. TLC plate store cabinet 11. Special drying cabinet with inspection window 12. Desicator cabinet 13. U.V. Chromatography inspection cabinet with two U.V. tubes 254 and 365nm
4 System Configuration Accessories, spares and consumables	
4.1	All consumables required for installation and standardization of system to be given free of cost.
5 Environmental factors	
5.1	The unit shall be capable of operating continuosly in ambient temperature of 10-40 deg C and relative humadity of 15-90%
5.2	The unit shall be capable of being stored continuously in ambient temperature of 0-50deg C and relative humidity of 15-90%
6 Power Supply	
7 Standards, Safety and Training	
7.1	1. Should be FDA,CE,UL or BIS approved product. 2. Manufacturer should have ISO certification for quality standards. 3. Comprehensive training for lab staff and support services till familiarity with lthe system on site. 4. Deleted. 5. Certified to be compliant with Electrical Safety Standard for Medical Equipments- IEC- 60601-1-

	1 OR equivalent BIS OR international standard for electrical safety.

8 Documentation

8.1	1. User/Technical/Maintenance manuals to be supplied in English. 2. Certificate of calibration and inspection. 3. List of Equipments available for providing calibration and routine Preventive Maintenance Support. as per manufacturer service/ maintenance manual. 4. List of important spare parts and accessories with their part number and costing. 5. Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of clerarlyt spelt out. 6. Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number with authenticated catalogue/manual,without which it will not be considered.

Schedule No. – 41

SPECIFICATION OF PNCL SET

PNCL Set 20.8 Fr.

1. Operating telescope with laterally offset eyepiece, 12 Deg, 14 Fr. Instrument channels, automatic valve with sealing membrane and sealing cap working length should be 224 mm.

2. Amplatz sheath, 24.3 Fr. For application of Nephroscope with sheaths upto 24 Fr. Working length 150 mm

2. Sheath 20.8 Fr.

3. Hollow Obturator

5. Telescope dilator. 9-27 Fr. for use over a J-guide wire Consisting of: 1 hollow guide rod 6 Fr., 7 telescope dilators 9-27 Fr.

PNCL 24 Fr.

1. Universal Nephroscope, 24Fr. should be with oblique Eyepiece, 20º angle of view, capacity 3.5 mm working length should be 224 mm

2. Amplatz sheath should be 24.3 Fr. for application of Nephroscope with sheaths up to 24 Fr. working length should be 150 mm

3 Sheath 24Fr.

4 Hollow Obturator

5. Telescope dilator should be 9-27 Fr. for use over a J-guide wire, Consisting of 1 hollow guide rod 6 Fr and 7 telescope dilators 9-27 Fr.

PNCL 27 Fr.

1. Operating telescope, 25 deg, with oval probe channel for 4 mm accessory instruments, working length should be 195mm.

2. Operating sheath 27 Fr. with rotatable irrigation tap

3. Dilator 30 Fr. to fit over 27 Fr. Dilator

4. Telescope dilator 9-27 Fr. consisting of: 1 hollow guide rod 6 Fr. and 7 telescope dilators 9-27 Fr.

PNCL Set 27 Fr.

Nephroscope 01

- Should be autoclavable and suitable for processing with all normal methods.
- Should be angle of view of 25º
- Should have oval instrument chanel of 4 mm auxitiary instruments can also be use for irrigation or aspiration.
- Should have working length of 195 mm
- Should come with operating sheath with irrigation outlets at the distal tip, including hollow obturator for use over a J-guide wire with swiveling irrigation tap size 27 Fr WL 175 mm
- Should produce large, bright image with optimum depth of focus
- Should come with rigid forceps alligator jaws
- Should come 3.5 mm rigid three pronged
- Should come with 3.5 mm with peanut shape

PNCL 24 Fr.

1. Universal Nephroscope, 24Fr. should be with oblique eyepiece, 20º angle of view, capacity 3.5 mm working length should be 224 mm - 01

2. Amplatz sheath should be 24.3 Fr. for application of Nephroscopes with sheaths up to 24 Fr. Working length should be 150 mm - 01

3. Sheath 24 Fr., 01

4. Hollow Obturator 01

5. Telescope dilator should be 9-27 Fr. for use over a J-guide wire, Consisting of:
   1 hollow guide rod 6 Fr. and 7 telescope dilators 9-27 Fr. - 01

6. Stone grasping forceps, diam. 3,5 mm, working length 250 mm 01

7. Three-pronged stone grasper, diam. 3.5 mm, WL 350 MM 01

8. Stone forceps rigid, finely serrated jaws “peanut shape” 01

PNCL 20 Fr.

1. Operating telescope with laterally offset eyepiece, 12 degs, 14 Fr. instrument channel, automatic valve with sealing Membrane and sealing cap - 01

2. Sheath 20,8 Fr. round, distal tip straight, with swiveling irrigation Connector and automatic locking mechanism - 01

3. Amplatz sheath 24,3 Fr. suitable for nephroscopes with Sheath up to 24 Fr., WL 150 mm - 01

4. Obturator, hollow - 01

5. Telescope dilator 9-27 Fr. consisting of: 1 hollow guide rod 6 Fr. And 7 telescope dilators 9-27 Fr. - 01

6. Dilator 30 Fr. to fit over 27 Fr. dilator out 01

7. Stone grasping forceps, diam. 3.5 mm, working length 350 mm - 01

8. Three-pronged stone grasper, diam. 3.5 mm, WL 350 MM - 01

9. Stone forceps rigid, finely serrated jaws “peanut shape” 01

System consisting of the following

High Definition Camera

Should have high definition video with 1280 x 1024 native output.
Standard Aspect Ratio 4:3
Over 1000 Lines Resolution with Progressive Scan
Electronic Flexiable Scope Filter
Multi Specialty Settings
Automatic Brightness Control
Full Digital Siginal Processing
Digital Zoom & Multi step Image Enhancer
White Balance, Digital Zoom and Brightness Level Control on Camera Head.
RGB,DVI,S-VIDEO & Composite Outputs

Xenon Light Source

220 Volts, 300 watts Xenon Bulb with Elliptical Bulb Design, High color temperature – more than 6000 K corresponds to brightness of sunlight resulting in high visual and photographic clarity for color retention, Monitoring of lamp function. Bulb Life Counter on Light Source, Standby Mode, Universal Jaw Assembly to adapt any make of Fiber Optic Cable, Light intensity adjustment continuously adjustable from 0 to 100% manually.

Fibre optic light Cable

High Definition Monitor
Hi Definition Colored Monitor 26” Flat Panel Monitor, PAL system compatible Composite, S-Video and DVI inputs, Compact & Lightweight design Resolution over 1100 lines, Native Resolution 1280 x 1024 dots. The monitor should support Direct Fibre input. Should be of same make as HD camera.

Pneumatic Lithotripter with compatible ultrasound

Schedule No. – 42

Specifications for Electro Surgical Unit (ESU) with Vessel Sealing System

1 Description of Function	
1.1	ESUs are used for surgical cutting and for controlling bleeding by causing coagulation (hemostasis) at the surgical site. They deliver high-frequency electrical current through an active electrode tip, causing desiccation, vaporization, or charring by resistive heating in the target tissue.
2 Operational Requirements	
2.1	Microprocessor/Microcontroller technology
3 Technical Specifications	
3.1	Integrated touch screen system with 350W output generator for monopolar cut, 120Watt for monopolar coagulation, bipolar cut 150Watt and Bipolar coagulation 120Watt and vessel sealing system for open and laparoscopic surgery
3.2	Compatible with Argon Plasma Coagulator
3.3	Should provide monopolar output for cut, coagulation (fulguration & spray) & blend in multiple levels
3.4	Should have bipolar cut and coagulation in multiple levels with automatic bipolar coagulation.
3.5	Activation by foot switch and hand switch for all the modes.
3.6	Activation of bipolar by foot switch and automatic start/stop system
3.7	Capable of sealing vessels up to 7 mm diameter
3.8	Auto diagnosis on switching on and during working to continuously monitor all parameters
3.9	Automatic stoppage of output in case of malfunction with acoustic and visual signal with display of error code.
3.10	Output powers adjustable automatically or manually from the control panel.
3.11	Programmable memory for output settings
3.12	Simultaneous access to mono and bipolar by 2 or more users
3.13	Should be usable with laparoscopic monopolar and bipolar instruments, for which programmes and accessories must be available
3.14	System for neutral plate safety by continuous monitoring of contact quality and connection
3.15	System for monitoring and control of leakage current
3.16	Frequency leakage on the patient should be less than 10 micro Amp.

4 System Configuration Accessories, spares and consumables	
4.1	System as specified
4.2	The accessories should include (a) trolley, (b) mains cable with power plug for standard Indian sockets, (c) foot switches for different outputs, (d) reusable and single use neutral electrode for adults and children along with cable for neutral electrode and fixation device wherever required, (e) sterilisable and disposable electrode handle with and without finger switch with cable for electrode handle, (f) set of electrodes (long and short) with electrode container with holder, (g) tip cleaner, (h) bipolar forceps with cable, (i) cable for connecting to standard mono polar and bipolar laparoscopic instruments, (j) Resuable dedicated instruments for open and laparoscopic monopolar, bipolar and vessel sealing use. *The accessories and their quantity will be chosen from among the ones listed above as well as those listed at 4.4 depending upon actual requirement*.
4.3	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 quoted Complete System and all accessories should be from same manufacturer.
4.4	The codes and rates of all possible individual accessories should be quoted separately with clear mention of period of validity of rates
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	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 power-plug
6.2	Suitable UPS
7 Standards & Safety	
7.1	Should be USFDA/ Eupron CE approved product.
7.2	Manufacturer and Supplier should have ISO certification for quality standards.
7.3	Electrical safety conforms to standards for electrical safety IEC 60601-1 General Requirements (or equivalent BIS Standard)
7.4	Shall meet internationally recognised standard for Electro Magnetic Compatibility (EMC) for electromedical equipment: IEC-60601-1-2 :latest edition Or Equivalent

	BIS) or should comply with 89/366/EEC; EMC-directive as amended
7.5	Certified to be compliant with IEC 60601-2-2 Medical Electrical Equipment Part 2-2: Particular requirements for the safety of High Frequency Surgical Equipments: latest edition

8 Training	
8.1	Comprehensive training for staff of user department and support services till familiarity with the system.

9 Service	
9.1	Deleted
9.2	Percentage of uptime guarantee of the equipment during warranty and CMC period for which commitment is to be given must be specified with acceptance of applicable penalty clauses in case of failure to do so.
9.3	After sales service must be provided in the city of installation. In situations requiring service/repair of the unit outside the city of installation, the expenditure on account of this will have to be borne by the supplier

10 Documentation	
10.1	Product Literature in original along with that of accessories and indigenous components if any. Photocopies/computer generated copies are not acceptable
10.2	Statement of compliance with tender specifications with clear and unambiguous links to relevant portions of product literature/authentic document, which should be highlighted. Alternatives provided for noncompliant specifications with justification must be described in detail with supporting literature.
10.3	Certificate of compliance with standards and approvals stated above
10.4	Certificate of manufacturer/principal regarding authorisation of service facility provided by the supplier
10.5	List of Equipment available in the Service Centre for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
10.6	List of important spare parts and accessories, which are required for maintenance and repair, with their part number and costing.
10.7	Deleted
10.8	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.

- **Complete system and accessories should from same make.**

Schedule No. – 43

WHOLE BODY COMBINED UV THERAPY UNIT

Description of Function

Whole body UV treatments, i.e, the trioxsalen (TMP) bath PUVA, the NB-UVB, and the UVA plus UVB phototherapy.

Operational Requirements

System complete with all accessories should be quoted

Technical specifications

1. Whole body unit should be equipped with minimum 21 UVA + 21 NB UVB tubes, 120W of 2m length
2. Unit should have shape to match the human contour
3. Unit Should have constant monitoring of UV and electrical power levels with real time readings.
4. Unit should have Viewing window to monitor patient during treatment.
5. Unit should have open-top phototherapy unit to prevent claustrophobia.
6. Unit should have safety screen snaps out for easy lamp replacement.
7. Unit should have hand rail and non-skid floor for patient safety.
8. Dose limit should be preset and cumulative doses should be displayed instantaneously.
9. Unit should have built in memory system, which avoids error in treatment.
10. System should switch off automatically with warning alarm at the end set irradiation time.
11. Homogenous all round irradiation is required.
12. Safety interlock to automatically shut the unit off when the door is open.
13. Unit should have integrated ventilation system with low noise fans for increased patient comfort.
14. Unit should work with 230 V +/-10V, 50Hz, single phase.
15. Unit should have 10-foot, 4 conductor # 10 AWG power cable included.
16. Unit should have min depth of 49 inches, min width of 46 inches and min height of 82 inches.

Shall meet IEC-60601-1-2 :2001 (Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC:-directive

Standards, Safety and Training

Should be FDA or CE or BIS approved product

Manufacturer should have ISO certification for quality standards.

Comprehensive warranty for 2 years and 5 years CMC after warranty including UPS.

Comprehensive training for lab staff and support services till familiarity with the system.

Schedule No. – 44

Equipment specification for hand foot UV phototherapy device

1. Unit should have 311nm NB-UVB lamps, min 4 numbers 36W lamps
2. It should work with 220V VAC 50Hz, 3.0 Amps with grounded plug.
3. It should include goggles and user's manual.
4. Unit should have sturdy, protective lamp shield and electronic digital timer.
5. It should be shipped fully assembled.
6. Mobile trolley should have the provision for 4 units/modules, two for hands and two for foot.
7. Unit should include UPS and back up batteries.
8. Ventilated fans should be included.
9. Should be FDA or CE or BIS approved

Schedule No. – 45

Specification for Multi Application Laser Plateform

1. Equipment should be approved by USFDA
2. Should have inbuilt Power Meter
3. Should have Ability to store & Locate each patient's record compatible to Microsoft office
4. Should have Pre Programmed treatment parameters
5. Should have Long Pulse Nd: YAG with Cool Tip for Treatment of Leg Veins, Large Telangiectasias, Hemangiomas

    - Should have 1064nm Wavelength
    - Should have 2-20ms Pulse Duration
    - Should have 5-100ms Pluse Delay
    - Should have Multi Sequential Pulsing
    - Should have Repetition Rate up to 1 Hz
    - Should have Energy Density between 10-200J/cm Square
    - Should have 3 spot Sizes : Small-2mm x 4 mm, Medium: 6 mm, Large: 10 mm

6. Should have IPL System with one Treatment Head with Cool Tip for various skin Treatment, Vascular Lesions, Pigmented lesions, Hemangiomas, Angiomas, Light & Deep Pigments, Skin rejuventation & Collagen Stimulation:
    - Should have 6-7 IPL Wavelength: 515nm, 560nm, 590nm, 615nm, 640nm, 695nm, 755nm
    - Should have 3-100ms Pulse Duration
    - Should have 1-120ms Pulse Delay

- Should have Multi Sequential Pulsing
- Should have Repetition Rate up to 1 Hz
- Should have 2 Spot Sizes : Small- 8mm x 15mm, Large: 15mm x 35mm
- Should have Optimum Pulse technology

7. Should have Diode Laser with Cool Tip for Hair Removal
   - Should have 800nm Wavelength
   - Should have Pulse Duration between 5-400ms
   - Should have Repetiton Rate up to 2 Hz
   - Should have Energy Density between 1-100J/cm Square
   - Should have Spot Size of 9mm x 9 mm
   - Should have 6 KVA Online Up
   - Should have 5 Physician Safety Goggles for each technology
   - Should have 2 Eye Shield

Schedule No. – 46

Equipment Specifications for PFT Machine (Advanced)

1 Description of Function	
1.1	Pulmonary function tests are a broad range of tests that are usually done in a health care provider's office or a specialized facility. They measure how well the lungs take in and exhale air and how efficiently they transfer oxygen into the blood.
2 Operational Requirements	
2.1	System should be supplied complete with printer.
3 Technical Specifications	
3.1	1. The following tests should be performed by the PFT Equipment. a. Spirometry & Flow Volume Parameters and all sub-divisions, b. Maximum Ventilation Volume (MVV), C. Single Breath Diffusion Capacity of Lungs (DLCO-He) D. Diffusion Capacity of lungs – Intrabreath E. RV & FRC by Single Breath Helium Dilution Method. F. Pre & Post Bronchodilator Comparison. G. System Should be able to measure DLCO in patients with IC of 1 Litre. 2. System should incorporate Precision Bi-directional Reusable Heated Pneumotach for highest accuracy & reproducibility : **Minimum Flow Range : 0 - 14 Litre/Sec (Linear)** **Actual range can be set by user upto 20L/Sec.** Resistance : < 0.5cm H2O/L/Sec. Accuracy : < 3%. (Should meet Criteria for ATS Standards), 3. **Should have Precision Rapid Analyzers for :** Helium Analyzer, Range 0-14% Helium or higher, Accuracy < 0.15%. Carbon Monoxide Analyzer, Range 0-0.300% CO or higher, Accuracy < 0.15%.

	Response Time for He & CO Analyzers <200msec. 4. Should have Electronic Barometer & Temperature sensors for automatic BTPS Correc 5. Automatic Gas Control Module. Fully automatic Test & calibration procedure. 6. Should incorporate easily removable Mouthpiece Assembly for rapid cleaning & Sterilization. 7. Mobile Trolley with Isolation Electrical Circuit should be probided 8. Should be supplied complete with Computer Interface, cables, PFT Software, Manual, 3 Litre Calibration Syringe and Standard accessories. 9. Additional accessories – a. Pulmonary Filters (100 Nos) : Pneumotach Screens (10 Nos). b. Gas Mixture Cylinder for DLCO Test (CO & He) – 2 Nos, to be supplied. c. Computer HP – Core 2 Duo Processor, 2 GB RAM, 18.5" TFT Colour Monitor, DVD R/W, Keyboard, Mouse, Windows, Hard Disc Drive (1 x 320 GByte) and Deskjet Printer. 10. Should have networking support

4 System Configuration Accessories, spares and consumables

	None

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 operating continuously in ambient temperature of 20-30 deg C and relative humidity of 15-90%
5.3	The unit shall be capable of being stored continuously in ambient temperature of 0-50deg C and relative humidity of 15-90%

6 Power Supply

6.1	Power input to be 220-240VAC, 50Hz fitted with Indian plug
6.2	UPS of suitable rating with voltage regulation,spike protection and maintenance free batteries for 60 minutes back up

7 Standards, Safety and Training

7.1	Should be FDA/ CE/ UL or BIS approved product
7.2	Manufacturer should have ISO certification for quality standards.
7.3	Comprehensive training for lab staff and support services till familiarity with the system.
7.4	Comprehensive warranty for 2 years and 5 years CMC after warranty including UPS

8 Documentation

8.1	User/Technical/Maintenance manuals to be supplied in English.
8.2	List of important spare parts and accessories with their part number and costing.
8.3	Certificate of calibration and inspection.
8.4	Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job descriptin 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/data sheet.Any point ,if not substantiated with authenticated catalogue/manual, will not be considered.
8.6	List of Equipments available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.

Schedule No. – 47
Equipment Specifications for Video Thoracoscope

1 Description of Function

1.1	A thoracoscope is a thin, tube-like rigid endoscope instrument with a light and a lens for viewing.

2 Operational Requirements

2.1	Thorcoscope with video processing and monitoring is required

3 Technical Specifications

3.1	SPECIFICATION OF SCOPE: **Telescope and Instruments** Thoracoscopy set with only 5.5 mm diameter Optimum image quality with 50.000 pixels Large working channel for 3.5 mm instruments Suction of fluids possible with inserted instrument High level of incision quality for the sample excision forceps **Consisting of:** Operating Laparoscope Set, 5.5 mm Operating Laparoscope with 3.5 mm working channel, direction of view 0°, WL 210 mm, with silicate image guide, seal and seal cap Flexible Trocar Sleeve, ø 5.5 mm, Plastic sheath with thread, distal straight, WL 60 mm with spherical trocar Flexible Trocar Sleeve, ø 5.5 mm, Plastic, WL 75 mm with tip tapered blunt trocar Sample Excision Forceps, modular, ø 3.5 mm, spoon-shaped, and WL 310 mm Hook Electrode, monopolar, ø 3.5 mm, and WL 310 mm

	Coagulation Button Electrode, monopolar, ø 3.5 mm, WL 310 mm Probe Rod, ø 3.5 mm, graduated, and WL 310 mm Suction Tube, ø 3 mm, graduated, and WL 450 mm Set consisting of powder spray, adaptor for attaching disposable tubes for suction & irrigation device, disposable glass containers (pack of 100); disposable membrane (pack of 50 pc); double bellow and suction tube for children with dia. 3mm and WL 350 mm with central & lateral openings Fiber light guide, 2.3 m long Reprocessing tray for machine reprocessing and sterilization, for operating laparoscope			
3.2	Video processor with light source and Monitor: **3.2.1. High Definition Camera** Should have high definition video with 1280 x 1024 native output. Standard Aspect Ratio 4:3 Over 1000 Lines Resolution with Progressive Scan Electronic Flexiable Scope Filter Multi Specialty Settings Automatic Brightness Control Full Digital Siginal Processing Digital Zoom & Multi step Image Enhancer White Balance, Digital Zoom and Brightness Level Control on Camera Head. RGB,DVI,S-VIDEO & Composite Outputs **3.2.2. Xenon Light Source** 300 watts Xenon Bulb and Monitoring of lamp function. Bulb Life Counter on Light Source, Standby Mode, Universal Jaw Assembly to adapt any make of Fiber Optic Cable, Light intensity adjustment Fibre optic light Cable **3.2.3. High Definition Monitor** Hi Definition Colored Monitor 19" or above Flat Panel Monitor, PAL system compatible Composite, S-Video and DVI inputs, Compact & Lightweight design Resolution over 1100 lines, Native Resolution 1280 x 1024 dots The monitor should support Direct Fiber input. Should be of same make as HD camera **3.2.4. HD Recording system with Suitable PC.**			
4 System Configuration Accessories, spares and consumables				
4.1	System as specified			
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	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 220-240VAC, 50Hz fitted with Indian plug		
6.2	UPS of suitable rating with voltage regulation, spike protection and maintenance free batteries for 60 minutes back up for complete system.		

7 Standards, Safety and Training

7.1	Should be FDA / CE or BIS approved product		
7.2	Manufactures/Supplier should have ISO certificate to Quality Standard.		
7.3	Comprehensive warranty for 2 years and 5 years AMC after warranty		

8 Documentation

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

Schedule No. – 48

Specification for Computerized dedicated Stress Testing machine along with treadmill with pace maker analysis facility and SAECG

- The system should be state of the art with advanced features of stress testing.
- It should have three basic mechanical units, viz TREDMILL, Defibrillator and computing system with compatible system with compatible colored laser printing unit with movable trolley base.
- The machine should give multicolor display on minimum 15" flat LED monitor. The unit should have preset protocols such as Bruce, modified Bruce, Elisted, Balke etc and facility to add any number of protocols.
- The machine should have a set up for user's performance to record the new test as per his choice for the parameters such as ST segment and J point variation delay, speed, protocol, gain, lead display etc – all in different colour formats.
- Unit should display and can print 4 times enlarged medial complex of his choice or with maximum/minimal ST depression/elevations.
- The unit should have facility of comparison of superior position of current enlarged median complex

with pre exercise median complex of any lead.

- The unit should have ST level bar graph for current and reference for all 12 leads.
- The unit should be able to display all the 12 leads together and be able to given other display options such as 4 lead display and 12 leads and median complex showing.
- ST slope, ST level, ST integral of all 12 leads should be available at any point of time during the test and review.
- The unit should preferably have distinguished display of lead having maximum depression.
- The unit should have facility of baseline correction.
- The unit should have facility of J point, Post J point setting, and Isoelectric point setting as per the need of user and patient requirement.
- The unit should have trend report of R wave amplitude, ST level, ST slopes of all the leads of HR, respiratory rate, METS, BP and PVC/minutes.
- The unit must have auto alarm of beep for hear rate increase than target HR, ST depression and for measuring for BP at different intervals during the test.
- The unit should be able to take print out on high-resolution laser printer on plane or pre printing stationary.
- The sensitivity should be from 0.25-8 cm/Mv.

TREADMILL

- The treadmill should be compatible and controlled by main stress test unit.
- The treadmill speed range should be from 0-15 Km/hour or more.
- The grade of held should be from 0-22% or more. The walking area of held should be approximately 1500 mm X 500 mm or more.
- The unit should not be weighing more than 200 Kgs.
- The unit should have emergency stopwatch.

DEFIBRILATOR

- Unit should be main as well as battery operated with minimum 90 minutes battery backup.
- The system should have energy selection from 0-360 Joules with charging time less than 5 seconds. Unit should have synchronized and cardioversion facility.

- In build thermal ECG recorder with minimal 5" LCD/ TFT display.
- 5 lead ECG cable with adult paddles required.
- 20 ECG rolls and 1000 electrodes to be supplied.

ALL PARTS SHOULD HAVE

- Equipment should comply FDA/CE rules and regulations.
- Must be ISO certified.
- UPS support for the entire system

Schedule No. – 49

Equipment Specifications for BLOOD MIXER AND COLLECTOR

1 Description of Function			
1.1	The system is used to collect donated blood from the donor at the same time mixing the blood for quality collection of blood.		
2 Operational Requirements			
2.1	It is meant for stationary and mobile use. Gentle end to end mixing and control of collection time to give high quality blood (platelets). Suitable for all blood bags on the market. Automatic check on blood flow and collection time with buzzer alarm. Shall continuously display collected volume, flow and time during collection. Shall provide repetitive notification of completed collection every minute including gentle mixing to avoid coagulation		
2.2	Should be advanced technologically and modern blood collection scale and mixer. It should be light weight & portable		
3 Technical Specifications			
3.1	Volume Setting: Pre-selection of volume to be collected. Tarring of bag volume before collection. Tarring range: 0 – 600 g. Automatic storage and recall of set volume. Measure volume with best accuracy		
3.2	Indications and Alarms 1.LED indication on commencement of collection. 2. LED indication and audible alarm at the end of collection. 3. Indication of time taken for collection. 4. Indication of blood flow with audio alarm when blood flow is higher or lower than desired. Continuous display of collected volume, flow and time during collection		
3.3	Automatic clamping at termination of preset volume collection		
3.4	Automatic release of bag when lifted.		

3.5	Continuous agitation of blood bags during collection: 12 – 16 rpm.			
3.6	Easy provision to change preset volume.			
3.7	Should operate on mains as well as rechargeable battery. On battery it should operate for a minimum of 5-8 hours.			
3.8	Should be less than 5 Kg			

4 System Configuration Accessories, spares and consumables

4.1	Blood Mixer & collection unit-01		

5 Environmental factors

5.1	The unit shall be capable of operating continuously in ambient temperature of 10 -400 C and relative humidity of 15-90%			
5.2	The unit shall be capable of being stored continuously in ambient temperature of 0 -500 C and relative humidity of 15-90%			

6 Power Supply

6.1	Power input to be 220-240VAC, 50Hz,/440 V 3 Phase as appropriate fitted with Indian plug			
6.2	Resettable over current breaker shall be fitted for protection			
6.3	Suitable UPS with maintenance free batteries for minimum one-hour back-up should be supplied with the system			

7 Standards and Safety

7.1	Should be FDA/ CE or BIS approved product			
7.2	Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450			
7.3	Manufacturer should have ISO certification for quality standards.			
7.4	Protection type class B			

8 Documentation

8.1	User manual in English			
8.2	Service manual in English			
8.3	List of important spare parts and accessories with their part number and costing			
8.4	Certificate of Calibration and inspection from the factory			
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 Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.			

Schedule No. – 50

Equipment Specifications for Walk in Cooler

1 Description of Function

1.1 Walk in Cooler is required to store Blood at a temperature between 2 deg to 8 deg C.

2 Operational Requirements

2.1 To be constructed of prefabricated, modular complete with floor and ceiling panels, mounted on a flat, solid concrete base. The vaccine cold store must provide total, 24-hour, all-season reliability under all conditions for the stored materials

2.2 All refrigeration machinery must be provided with 100% standby capacity, with duplicate, independent controls, pipe work, instrumentation and machinery, to provide against failure of the primary system. Automatic changeover and starting of the secondary system is to be provided, activated by thermostatic or electrical control.

2.3 Recommended spare parts kits to provide normal operation, provision of a service contract covering routine and emergency maintenance requirements, and details of installation-commissioning and guarantee-period charges are each to be stated as separate items in the tender price quoted.

3 Technical Specifications

3.1 Internal Temperature : +2 deg to +8 deg C adjustable (i)during 43 deg C continuous ambient(ii) 32 deg continuous ambient (iii) 45/05 deg C day/night cycling temperatures

3.2 Fabrication: Outer and inner: PVC sheet coated (minimum thickness 70 micron), made of galvanized steel panels double wall having minimum thickness 0.6 mm each. Panel shall have minimum 100 mm insulation material as specified sandwiched between two walls.
Dimensions- Internal Height of 2.4 m. Room Dimensions 8feetX10feet
Flooring: 1st layer: 75 mm cement concrete (dimensions suitable to the size of cold room); 2nd layer: of specified insulation of suitable thickness to meet the requirement of specified performance parameter of minimum 8 hrs hold over time; and 3rd layer of 6mm (minimum) Aluminum checker plate. The floor should be capable to support load of 250 kg/m2.

3.3 Insulation: CFC-Free Urethane foam or extruded polystyrene foam core bonded sandwiched between two galvanized steel sheet having minimum thickness 100 mm for WIC larger than 40 cum capacity and 80 mm for less than 40 cum capacity, density of not less than 40 kg/m3 and having a thermal conductivity of 0.17 w/m2k or better for hot zone climate. The insulation should be suitable for maintaining 8 hrs hold over time at 43^{o}C ambient temperature.

3.4 Door with frame heating heavy duty lock with internal safety release, shelving system and plastic curtains on the door way. Door to cold rooms to be lockable with 100% fail-safe provision for opening from inside. Entrance door shall have an incandescent vapor-proof light mounted on the interior of the door section. The door dimensions will be 34" to 40"(W)x72" to 80"(H). Internal ceiling-mounted tungsten filament lighting with an external switch and pilot light should be provided. The external light and light switch must be fixed to the wall of the cold room enclosure near to the entrance door. The minimum illumination level on the vertical face of the lowest shelves must be 150 lux. The lighting should be evenly distributed inside the cold room.

3.5 Dual Refrigeration system (100% standby) air cooled refrigeration units, split type, automating defrosting (electric or hot gas) CFC free refrigerant. Tropicalized units suitable for ambient temperature up to 45 deg C.

3.6 Wall mounted seven days digital thermometer of 4 digits LCD/LED Display with data logging capability of 7 days with suitable printer for report generation with remote sensor.

3.7 High and Low temperature alarm unit.

3.8 Condensing unit(s) to comprise compressor, forced air condenser, oil separator, liquid receiver to carry full charge, filter/dryer with flare connections, service and isolating stop valves, high and low pressure dial gauges and oil level sight glass.

3.9 Storage conditions to be maintained at + 6 deg C ±2 deg C continuously, control by thermostat on each cold room, condensing unit(s) fitted with high and low pressure cutouts, time-operated electric defrost control and compressor motor overloads.

3.10 Cold room(s) to be fitted with locally made/manufactured, running adjustable (slatted shelves will be preferred) shelves 600 mm wide at 600 mm spacing; four shelves above the ground all around the wall and intermediate shelves should be placed suitably. The total area covered by shelves should be at least 42% of the ground area. There should be a minimum 900 mm distance in between two intermediate racks, to facilitate the movement of men and material. The final drawing of the room with shelves will have to be got approved from the authorities after placement of NOA. The material of the shelves should be non corrosive medical grade stainless steel to take load of at least 20 kg/sq.foot. The top face of the lowest shelf must be mounted 200 mm above the floor. Shelving must be washable.

3.11 Evaporators to be forced-draught, electric-defrost, ceiling-mounted units with fitted condensate drip tray and drain connection.

3.12 The room should be fitted with a pressure release vent which should open and allows enough outside air to enter and rebalance any pressure difference.

3.13 Voltage stabilizer broad specifications:
KVA Rating : As suitable.
For single phase Input Voltage 160-260 V AC 50 Hz and output 220-240 V AC 50 Hz
For three phase : Input Voltage 275-440 V 50 Hz ;Output : 400 V+/- 1%, 50 Hz. Three phase four wires (for more than 16.5 cum capacity cold room)
Common Specs:
3-4 sec cut off and 2 minutes restart delay. Facilities for manual control of output. Arrangements for direct supply bypassing the stabilizer in case of failures, voltmeter and indicators on front panel, suitable safety and protection devices. Quick start arrangement for bypassing restart delay
The voltage stabilizers would be one but should be able to run both the working and stand by units simultaneously.

4 System Configuration Accessories, spares and consumables

4.1 System as specified-

4.2 Recommended Spare parts kit for operations should be quoted. The quote should include the following components in one kit:
evaporator/condenser fan motor; Compressor: capacitor; contactor; auxiliary relay; defrost timer; dual pressure switch; thermostat; drier; control switch; fuse, automatic; transformer; high pressure switch and any other recommended item.

4.3 Special I service tools for cold/freezer rooms should be quoted for refrigeration unit for non CFC refrigerant used. The quote should include: leak detector; serviceman's kit in special case (R-134a or R404 or other non CFC refrigerant), including valves, hoses and manometers; refrigerants cylinder (R-134a or R404 or other non CFC refrigerant)),12 kg; compressor oil to be used with (R-134a or R404 or other non CFC refrigerant)

5 Environmental factors

5.1 The unit shall be capable of operating continuously in ambient temperature of 5 to 45 deg C and relative humidity of 15-90%

5.2 Complete installation to be done by the supplier inclusive of installation of stabilizer, drainage system and assembly of the panels and installation of refrigerator units, data logger, and complete earthing and smoke evacuation system, including all civil, electrical and all other related work required for installation.

6 Power Supply

6.1 Power input: 220-240V/ 50 Hz AC Single phase or 380-400V AC 50 Hz Three phase fitted with appropriate Indian plugs and sockets.

7 Standards, Safety and Training

7.1 Electrical and refrigeration components and the panels should have national or international approvals like UL, NSF or BIS.
7.2 Deleted
7.3 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.
7.4 All operational and maintenance training to the end users after successful installation and commissioning.

8 Documentation

8.1 Certificate of inspection of any capacity from an independent laboratory approved /recognized by WHO/UNICEF/National Accreditation Board /STQC Labs is essential and is required to be submitted along with techno-commercial bid.
8.2 List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.
8.3 List of important spare parts and accessories with their part number and costing.
8.4 User/Technical/Maintenance manuals to be supplied in English.
8.5 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

Schedule No. – 51

Basic Plastic/ Rhynoplasty /Cleft lip & Palate surgery instrument set

The instrument should be of imported steel with high precision quality and USFDA approved
The fine cutting instruments should be of tungsten carbide super cut variety.
The needle holders should be with Tungsten carbide inserts of extra durability.

Converse skin hook small	8
Converse skin hook large	8
Mathieu retractor (Cat's paw)	8
Hajek's retractor	2
Langenbeck's retractor small	4
Langenbeck's retractor large	4
Waislander Retractor (self retaining)	2
Dental syringe	4
Stainless steel scale 6"	4
Stainless steel 12"	2
Castroviejo callipers	2
Bristow bone lever	2
Smith Peterson Osteotome 10mm	2

Smith Peterson Osteotome 20mm	2
Smith Peterson Osteotome 25mm	2
Tessier Osteotome set of 8	1
Gouge 7" 2mm	2
Gouge 7" 4mm	2
French Chisel 11mm	4
Halsted Mosquito artery forceps 5 ¾ " curved	24
Halsted Mosquito artery forceps 5 ¾ " straight	24
Kochers forceps	12
Kelly artery forceps st	24
Kelly artery forceps cvd	36
Danty tissue forceps	24
Debakay tissue forceps straight non traumatic jaws 4.5mm jaws 8"	4
Mcindoe dissecting forceps 6" non toothed serrated jaws	6
Potts smith dressing forceps 7"	4
Adson tissue forceps 4 ¾ " toothed delicate	8
Adson tissue forceps serrated jaws 4 ¾"	8
Gillies dissecting forceps 6" 4X5 teeth	4
Elevator double ended, angled right and left	4
Elevator double ended, spoon shaped	4
Molt dissector	2
Howarth elevator	2
Scissor angle short blades 18mm with serrated blades Tungsten carbide tip	4
Kilner scissors straight with fine points Tungsten carbide tip	8
Kilner scissor s curved on flat 12cm Tungsten carbide tip	8
Mcindoe scissors cvd. On flat with round points 7" Tungsten carbide tip edge	4
Iris scissors straight sharp TC supercut Tungsten carbide tip edge	6
Iris scissors cvd. Sharp TC supercut Tungsten carbide tip edge	4
Surgical scissors 5" st. sharp points TC	6
Stevens tenotomy scissors cvd. 12cm TC	2
Brown dessecting scissors st. 5 ¾"	4
Mayo dissecting supercut scissors 17cm cvd. Tungsten carbide	4
Mayo dissecting supercut scissors 17cm st. Tungsten carbide	4
Fomon supercut scissors cvd. 5" Tungsten carbide	2
Fomon supercut scissors cvd. 5" Dorsal angle 15cm Tungsten carbide	1
Metzenbaum scissors cvd. 18mm TC supercut	2
Gorney scissors cvd 9" Tungsten carbide	2
Mayo hegar needle holder 6 1/4" Tungsten carbide	4
Derf needle holder 4 ¾" Tungsten carbide	4
Maltz Rasp TC	2
Mcindoe Rasp TC	2
Mallet 8 oz	1
Asch forceps	1
Ruskin Bone cutting forceps	2
Luc's forceps	2
Padgett angled bone cutting forceps	2
Padgett angled bone cutting forceps	2
Bunnel bone drill small	1

Knuckle bender large	20
Knuckle bender medium	20
Knuckle bender small	20
Mcindoes raspatory	4
Bard parker knife handle no.3	8
Bard parker knife handle no. 4	4
Bard parker long knife handle no.3	4
Barron knife handle octagonal	4
Backhaus Towel clips 3 ½"	24
Sponge holding forceps 9 ½"	12
Frazier suction tube 8 French	4
Frazier suction tube 10 French	4
Magilli's suction tube size 2	4
Meade wire cutter pliers	4
Dressing trolley	6

SCHEDULE NO. 52

PC Based polygraph

Should be able to Record and analyze

1. GSR, temperature, pulse, respiration, airflow, blood pressure, Heart Rate Variability [HRV]
2. ECG recording with all leads, phono cardiogram to record heart sounds and correlate the sound with the electrical events of the cardiac cycle
3. Blood Pressure- Beat to Beat BP recording with wireless HRV
4. EMG data to investigate the properties of skeletal muscle, Record and display raw and integrated EMG signals, Measure strength and repeat trials for motor unit recruitment, summation and fatigue,
5. Dynamometer to study handgrip strength profile
6. EEG under variety of conditions to explore relaxation and brain rhythms, Software to filter and display each rhythm separately. Delta, Theta, Alpha & Beta : EOG (ocular signal) to study eye movements saccades, tracking angular displacement or ocular fixations.

1. Specifications:

- Number of channel : 8
- Transducers & couplers: Pressure, Plethysmography, strain guage Isotonic & Isometric Force.Respiration, Pulse, Surface Temperature probe, Biopotential Internal Temperature probe GSR Electrode, wireless HRV and any other needed for the measurement of the above parameters
- Computer : Intel Core i5-760 processor (2.80GHz, 1333MHz FSB, 8MB Cache) Genuine Windows 7 professional, 64bit (English): 21.5 " Full HD Widescreen Flat Panel Monitor : 6GB DDR3 5DRAM, 500GB SATA Hard Drive ; Single Drive: Blu-ray Disc Combo (DVD+/RW+BD-ROM). Facility for internet connectivity, with facility of up gradation ; color laser printer
- UPS with 20 minutes back up for whole system required
- System should be backed by software capable of rapid analysis of the acquired date and presenting it in various formats while reporting

2. **Software**: File compatibility with other applications like MS word, MS excel; Data storage on CD, Data analysis
3. standard accessories, a set of essential spares for trouble free operation for minimum 5 Years

SCHEDULE NO. 53

Equipment Specifications for Paediatric Flexible fiber optic / Video Laryngoscope

Should have following components:

A. Video Laryngoscope

1. It should have field of View 85 ° or more
2. It should have minimum depth of field 3-50mm
3. It should have Tip Deflection Up/Down 130°/130° or more
4. Rigid Distal Diameter should not be more than 3.1 mm
5. Insertion Tube Diameter should be less than of 3.1 mm
6. It should have minimum working length of 300 mm
7. Leak test facility

B. DIGITAL COLOR VIDEO PROCESSOR

1) It should be compact, lightweight Digital color video processor integrated with 100 Watts Xenon Light source for high resolution with full screen images.
2) It should have CCD color camera system
3) It should have 2 RGBS Connectors, 2 Y/C Connectors and 1 Composite video connector
4) It should have facility for External Device Controls such as printer etc.
5) It should have facility for automatic drying mechanism of scope.
6) It should have facility of extra illumination for more light apart from normal brightness control.
7) Provision for still image capturing / Digital recording of images. Ability to output video in DVD/CD.
8) At least 1.2 or more mega pixels stored images.
9) Automatic light adjustment to maintain optimum brightness.

C. 15-inch Medical Grade Monitor.

D. Trolley for mounting the complete system.

E. Leakage Tester should be supplied along with the system.

F. Suitable Computer, Printer and Software should be supplied.
G. System should be USFDA or European CE approved.

RECORDER –

- **Storage of Video Sequences of CD ROM.**
- **Battery powered cold light source, Compatible with the flexible Fiber Optic Laryngoscopy.**

Should have local service facility.

SCHEDULE NO. 54

Equipment Specifications for Anaesthesia Workstation

1 Description of Function			
1.1	Anesthesia Workstation is used for delivering anesthesia agents to the patients during surgery. The complete unit also monitors the vital signs and ventilates the patients.		
2 Operational Requirements			
2.1	1) Anaesthesia machine complete and integrated with Anaesthesia gas delivery system; Circle absorber system; Precision vaporizer for halothane, isoflurane/ Sevoflurane; Anaesthesia ventilator. Monitoring system to monitor Anaesthetic gases, ECG, $EtCO_2$, FiO_2 (Online O_2 Analyzer), Pulse Oximeter and airway pressure, NIBP, IBP (No as required), rectal/&skin temperature. 2) Essential accessories to make the system complete and compatible with the existing system of gas outlets.		
2.2	Demonstration of the equipment as per specifications is a must.		
3 Technical Specifications			
3.1	Flow management 1. Should be Compact, ergonomic & easy to use 2. Multi-color TFT display of at least 12" size, with virtual flow meters for O2, N2O or Air 3. Dual flow sensing capability at inhalation and exhalation ports. 4. Should have back-up O2 control which provides an independent fresh gas source and flow meter Control in case of electronic failure. 5. Gas regulators shall be of modular design/ graphic display 6. One no. yoke each for Oxygen & Nitrous Oxide. Separate Pipeline inlet for Oxygen, Nitrous Oxide and Air 7. Hypoxic Guard to ensure minimum 25% O2 across all O2-N2O mixtures and Oxygen Failure Warning. 8. Machine should provide electronic gas mixing.		
3.2	Breathing system 1. Latex free fully autoclavable. 2. Flow sensing capability at inhalation and exhalation ports, sensor connections shall be internal to help prevent disconnect. 3. Sensor should not require daily maintenance. 4. Bag to vent switch shall be bi-stable and automatically begins mechanical ventilation in the ventilator position. 5. Adjustable pressure limiting valve shall be flow and pressure compensated.		
3.3	Standard Circle Absorber System - Should have adjustable pressure limiting valve, breathing circuit pressure measuring device. - Should have a bag/ventilator selecting valve integrated onto the absorber. - Should be suitable to use low flow techniques - Facility to attach oxygen sensor. Should have CO_2 absorbent chamber canister		

3.4	Vaporizers 1.New generation Vaporizer must be isolated from the gas flow in the off position and prevent the simultaneous activation of more than one vaporizer. 2.Vaporizer should mount to a Selectatec manifold of 3 vaporizers, which allows easy exchange between agents. Temperature, pressure and flow compensated vaporizers and Maintenance free - for Isoflurane, Halothane, and Desflurane		
3.5	Ventilator (Integrated) 1.The workstation should have integrated Anesthesia Ventilator system for adult and paediatric. 2.Ventilator should have Volume Control and Pressure Controlled SIMV and PEEP. 3.Ventilator should have a tidal volume compensation capability to adjust for losses due to compression, compliance and leaks; and compensation for fresh gas flow. 4.The workstation should be capable of delivery of low flow anesthesia. 5.Ventilator should be capable of at least 120-150 L/min peak flow to facilitate rapid movement through physiologic “dead space” in the Pressure Control mode.		
3.6	1.Anesthesia Monitoring System should be modular: a) Monitoring of vital parameters: ECG (5 leads) with ST segment analysis, NIBP, SPO_2 and 2 Invasive Blood Pressure & Spirometry with display of flow volume loops. b) Twin temperature measurement with skin and rectal probes- Two sets with each monitor c) Automatic identification and measurement of anesthetic agents, $EtCO_2$, O_2 and N_2O and MAC value. FiO_2 measurement d) Depth of Anesthesia Monitoring module - one per monitor with 50 sensors with each monitor e) Neuromuscular Transmission Monitoring with all accessories. One set with each monitor integrated. f) Cardiac Output measurement facility by continuous cardiac output technology with all accessories- one set for three monitors. g) 24hrs of graphical and numerical trending h) Should have Hemodynamic, Oxygenation and Ventilation calculation package i) Should include inbuilt Anaesthesia record keeping software facility in all OT monitor to document anesthesia event using standardized menu based entries. j) Facility to store snapshots during critical events for waveform review at a later stage k) Audio visual and graded alarming system 2.Display of Ventilator: a) Tidal volume (VT)) b) Inspiratory/expiratory ratio (I:E) c) Inspiratory pressure (Pinspired) d)Pressure limit (Plimit) e)Positive End Expiratory Pressure (PEEP)		

4 System Configuration Accessories, spares and consumables

4.1	Anaesthesia Gas Delivery system -01		
4.2	Circle absorber –01 (Twin Chamber)		
4.3	Ventilator -01		
4.4	Monitor -01		

4.5	Vaporizer Halothane -01		
4.6	Vaporizer Savoflurane -01		
4.7	Vaporizer Isoflurane -01		
4.8	Adult and Paediatric autoclavable silicone breathing circuits -02 ea		
4.9	Reusable IBP Transducer -04		
4.10	Disposable domes-100		
4.11	Temp probe Skin reusable- 02		
4.12	Temp probe Rectal Reusable-02		
4.13	Accessories Anesthetic gases-01 set		
4.14	Depth of Anesthesia Sensors-50		
4.15	Accessories for Cardiac Output module- 01 set		
4.16	Accessories for neuromuscular transmission monitor- 01 set		
4.17	Standard accessories to make all parameters working- 01 set		
4.18	Disposable Adult & Paediatric circuits- 50 each.		
4.19	HME filters- 50		
4.20	Vital Parameter Accessories-01 Set		
4.21	Should be supplied with negative pressure leak test equipment		
4.22	SPO2 resuable probes Adult & Pead – 2 Each		

5 Environmental factors

5.1	The unit shall be capable of operating continuously in ambient temperature of 10^0C - 40^0C and relative humidity of 15-90%		
5.2	The unit shall be capable of being stored continuously in ambient temperature of 0^0C - 50^0C and relative humidity of 15-90%		
5.3	Shall meet IEC-60601-1-2: 2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.		
5.4	Safe disposal system/port of waste anesthetic gases (AGSS Anesthetic Gas Scavenging System/Port) should be in place. Supplier will be held responsible if this is not ensured at the time of installation		

6 Power Supply

6.1	Power input to be 220-240VAC, 50Hz,/440 V 3 Phase as appropriate fitted with Indian plug		
6.2	Resettable over current breaker shall be fitted for protection		
6.3	Suitable Servo controlled Stabilizer/CVT		
6.4	UPS of suitable rating shall be supplied for minimum 1 hour backup for the entire system		

7 Standards, Safety and Training

7.1	Should be FDA or CE approved product		

7.2	Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450		
7.3	Manufacturer should be ISO certified for quality standards.		
7.4	Certified to be compliant with IEC 60601-2-13-Medical Electrical Equipments part 2-13:Particular requirements for the safety of Anaesthesia Workstations		
7.5	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.		
7.6	All imported components like anaesthesia machine, monitor and ventilator should be from one manufacturer/principal.		
7.7	Deleted		

8 Documentation

8.1	User Manual in English		
8.2	Service manual in English		
8.3	List of important spare parts and accessories with their part number and costing		
8.4	Certificate of Calibration and inspection from the factory		
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 Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.		
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.		

SCHEDULE NO. 55

Operating microscope complete set for surgery and teaching Specifications

- Motorized zoom magnification 6:1 ratio
- Magnification from 1.8x to 15.8x or more with 10x eyepiece
- Variable working distance from 207mm(+/- 25mm) to 470mm(+/- 25mm) through motorized multi focal lens
- Pair of wide field eyepieces for spectacle wearers 10x, dioptric setting +5D to -5D
- Ergonomic handles with buttons for motorized control of focus and zoom both hand and foot
- Facility for adjusting speed of the focusing motor to adapt for different magnifications
- 300W Xenon illumination and 12V/150W same independent Xenon back up lamp through fiber optic cable
- Facility for spot illumination
- Inclinable binocular tube, inclinable over range of minimum 0-180 degrees
- Floor stand with electromagnetic brakes on castors with freedom of movement in all 6 axes
- Floor stand should have adjustable carrying capacity, not less than 13kg
- System should be upgradable for neuro navigation and fluorescence
- Tool tracking facility
- Graphic display LCD with background illumination with atleast 6 user defined settings

- Should stabilize in less than 3 sec and should reboot in less than 1min
- Camera independent of microscope
- Facility of manual balance
- Facility of binocular teaching attachment with LCD monitor and recording facility

SCHEDULE NO. 56

Conventional surgical operating microscope with zoom magnification 5 steps with high standard optics Specifications

- Motorized zoom magnification 6:1 ratio
- Magnification from 1.8x to 15.8x or more with 10x eyepiece
- Variable working distance from 207mm(+/- 25mm) to 470mm(+/- 25mm) through motorized multi focal lens
- Pair of wide field eyepieces for spectacle wearers 10x, dioptric setting +5D to -5D
- Ergonomic handles with buttons for motorized control of focus and zoom both hand and foot
- Facility for adjusting speed of the focusing motor to adapt for different magnifications
- 300W Xenon illumination and 12V/150W same independent Xenon back up lamp through fiber optic cable
- Facility for spot illumination
- Inclinable binocular tube, inclinable over range of minimum 0-180 degrees
- Floor stand with electromagnetic brakes on castors with freedom of movement in all 6 axes
- Floor stand should have adjustable carrying capacity, not less than 13kg

SCHEDULE NO. 57
BERA with ASSR Specifications

- Diagnostic and threshold estimation
- 2 channels 3rd virtual
- Pre-programmed auto tests
- Auto Jewett mark suggestion
- Soft attenuator for baby screening
- Very low noise amplifier
- 16 bit resolution
- Bone conduction ABR
- EchoG (non invasive)
- Middle latencies
- Late latencies (p300, MMN, etc)
- Computer with accessories with Windows XP or 7
- Upgradable with OAE and VNG
- With standard accessories
- International medical safety certification of equipments
- With ASSR facility
- With DPOAE and TEOAE

SCHEDULE NO. 58
OAE Specifications

- Standard accessories- probe, PC software compatible with Windows 7, vista, XP, download cable, manuals, charging cradle, carry bag.
- Hi resolution color display 65K color LCD
- With TEOAE and DPOAE
- With wireless printer, printer charger and paper
- With English alphanumeric keypad with cursor control and menu soft keys
- Test capacity of 250 cycles and At least 4GB non volatile memory
- Frequency response- 160Hz to 12kHz
- With probe connector, USB 1.1/2.0 compatible with PC connection for data and charging
- For indoor use at 5-40 degrees Celsius, non condensing

SCHEDULE NO. 59

ENT examination unit with motorized patient chair complete unit Specifications

- User friendly design harboring common ENT instruments in a tray with suitable cover
- Facilities to attach additional items such as endoscopes, suction, irrigation facility and microscope
- Power consumption 150-300W
- Voltage 220V/60Hz
- Dimensions W800 X L 455X850mm approx
- Compressor pump 1.5kg/sq cm
- Weight 80kg
- Anti fog device 500W
- Suction pump 3000cc
- Light source 150W X 24V
- Telescope 4mm, 0 degree and 45 degree (1 each)
- Doctors' chair: pneumatic foot operated with 4 or 5 wheels (castor) with brake
- Patient chair- electrically operated ENT examination cum treatment chair. Electrical/hydraulic height adjustment lifts 20cm with foot switch control. Upper part should be swiveling all around and fixable with a brake. The tall back rest should be adjustable forward beyond vertical line and backward to varying degree to the desired position even slightly more than horizontal, changing into a long and stable couch. Arm rests should be sturdy and can be swiveled backwards.
- Standard accessories-
  - Head light with adjustable head band (halogen) with suitable fibre optic cable
  - Spray-2
  - Suction-1
  - Waste receptacle-1
  - Medicine bottles-6
  - Instrument tray- 2 or 3
  - Pen light- 1
  - Anti fog- 1

The equipment should be USFDA or international CE approved and should be manufactured by single parent company.

SCHEDULE NO. 60

General instruments for ENT surgery Instruments for ear surgery

- Tumarkin tapered slotted aural speculum (set of 4)
- Rosen aural slotted speculum
- Holmgren self retaining aural speculum
- Eustachian catheter
- Formby cerumen scoop and hook
- Wilde aural forcep (angled forcep)
- Fagge aural bayonet forcep
- Adson forcep with 1x2 teeth
- Hartmann aural forceps long shape 15cm
- Ossicle holding forceps
- Tilley aural forceps
- Lempert endaural speculum right/left
- Plaster self retaining retractor 2x2 prongs
- Wullstein self retaining retractor 3x3 prongs
- Wullstein self retaining retractor 4x4 prongs
- Plaster jansen retractor solid blade right/left
- Glegg aural snare
- Jansen chisel
- Jansen osteotome (2mm, 4mm, 8mm)
- Lempert mastoid curette (1mm-5mm, 5 sizes.)
- Kerrison punch upward cutting
- Homoe graft press forcep
- Mastoid suction tube (1,2,3,4)
- Verhoeven suction tube SWG 14-24
- Verhoeven suction tube holder
- Micro aural forceps serrated (micro straight, micro 1x2teeth)
- Micro aural forceps serrated 2mm micropipe straight
- Micro aural cup forceps (straight, left curved, right curved, upwards)
- Micro aural scissors (fine straight, left curved, right curved, upwards)
- Teflon piston holding forceps
- Teflon piston introducing forceps
- Grommet tube inserter
- House dieter malleus punch forceps
- House dieter malleus nipper (up and down)
- Caw thorne hooks
- Stapedectomy set (set of 9)
- Zoellner set of 7 instruments:

1. Raspatory fine curved left and right
2. Needle spear pointed fine, curved, left and right
3. Knife upward cutting and downward cutting
4. Small hook

- Hanging drill with cable and foot switch
- Burrs set- complete set of cutting diamond burrs and tungsten carbide burrs.
- Sickle knife
- Allis tissue forcep
- Myringotomy knife

- Ball probe
- Circular and straight knife
- House curette double end
- Rosen drum elevator

Instruments for Tonsillectomy

- Tongue depressor
- Birkett tonsil artery forcep, straight and curved
- Negus tonsil artery forcep V shaped curved
- Tonsil scissor straight
- Tonsil holding forceps
- Tonsil needle holder
- Peritonsillar forceps
- Eve tonsil snare
- Tonsil dissector with anterior pillar dissector
- Negus pusher knot tier
- Tonsil suction tube
- Waugh tonsil dissection forceps
- Jennings mouth gag
- St Clair Thompson adenoid curette with guard
- Boyle Davis mouth gag
- Tonsil holding forceps
- Tongue tie probe
- Towel forceps
- Towel clips

Tracheostomy set

- Magill intratracheal catheter forceps
- Tracheal wound dilating forceps
- Langen Beck retractor
- Tracheal retractor 2 prong blunt
- Tracheal retractor 1 prong blunt/sharp
- Artery forceps, curved/straight
- Blade handle
- Mac intosh laryngoscope with 4 blades
- Jackson/Fuller tracheostomy tubes

Instruments for nasal surgery

- Killians nasal speculum (5cm, 6.5cm, 7.5cm, 9cm)
- St claire Thompson nasal speculum
- Howarth elevator
- Freer elevator double end
- Tilley Lichtwitz trocar and cannula
- Turbinectomy scissors
- Heymann turbinectomy scissors angle shape
- Killian nasal gouge
- Tilleys septum gouge V shape cutting edge
- Luc's turbinate forcep (cutting and non cutting)
- Suction tubes
- Straight scissors

- Fine dressing scissors
- Suture removal scissors
- St Bartholomews punch straight
- Nasal polyp forceps
- Walsham septum straightening forceps left and right
- Walshams septum straightening forceps
- Ash septum straightening forceps
- Tilley harpoon trocar
- Tilley antrum burrs
- Kerrison punch
- Hammer

All instruments should be USFDA approved or European CE approved.

SCHEDULE NO. 61

Micro motor drill with hand pieces and accessories (2 unit) and Micro drill for cochleostomy (1 unit)

System should consist of two types of drills-

1. Surgical micro motor drill system: should have the following vital features and accessories
- Micro surgical drill having speed between 500-40000 rpm, should have clockwise and anticlockwise movements possible, should have dual control foot and hand operated for control of torque and speed, should have autoclavable micro motor and cable (at least 3m length)
- Intra hand piece for standard burrs, angled – 70mm, 95mm, 125mm for speed40000rpm
- Intra hand piece for standard burrs, straight- 44.5mm, 70mm, 95mm, 125mm for speed 40000rpm
- Tungsten carbide burrs, length 70mm of following sizes- 0.6mm, 0.7mm, 0.8mm, 1.0mm, 1.4mm, 1.8mm, 2.3mm, 2.7mm, 3.0mm, 3.5mm, 4.0mm, 4.5mm, 5.0mm, 6.0mm, 7.0mm (5 of each type)
- Diamond burrs length 70mm of following sizes- 0.6mm, 0.7mm, 0.8mm, 1.0mm, 1.4mm, 1.8mm, 2.3mm, 2.7mm, 3.0mm, 3.5mm, 4.0mm, 4.5mm, 5.0mm, 6.0mm, 7.0mm (5 of each type)

2. Micro drill for cochleostomy: micro drill hand piece powered by brushless motor, with curved nose for stapedectomy and middle ear ossiculoplasty.

Specifications-

- Speed range 2000-12000rpm
- Length 105-110mm with maximum outer diameter 15/16mm.
- Guiding tube Ø 2.1x64.5 long, curved 15°, with reinforcement for improved stability.
- Should have control unit, battery powered brushless control system for handpiece, battery power reserve at least for 100 cycles, motor power supply with push and pull type connector with 12V
- Should have energy saving mode like auto off after 15 min
- Soft start and speed according to foot position between 2000 and 12000 rpm
- Compatible carbide burrs for stapes drill Ø 0.5, Ø 0.6, Ø 0.7, Ø 0.8, Ø 1.0, Ø 1.4mm, Ø 1.8, Ø 2.3mm
- Compatible diamond burrs Ø 0.6, Ø 0.7, Ø 0.8, Ø 1.0, Ø 1.4mm, Ø 1.8, Ø 2.3mm

The equipment should be USFDA or international CE approved and should be manufactured by single parent company.

SCHEDULE NO. 62

Instrument set for micro ear surgery

The surgical instruments should be made using top quality medical grade hardened stainless steel with defined specifications like AISI-410, AISI-420, AISI-304, AISI-303, AISI-440 etc using guidelines of ASTM standard F899-94 and ISO 7153and with a dull finish.

- Mollison's mastoid wound retractor
- Ear speculum (black finish)- set of 5 different sizes
- Self retaining ear speculum- set of 3 different sizes
- Peichondrium/ periosteal elevator
- Cell seaker
- Lempart curette- set of 3 different sizes
- Crocodile forceps- micro
- Cup forceps/granulation forceps- micro
- Myringotomy knife
- Tympanomeatal flap elevator
- Circular knife
- Flag knife/ radial knife
- Straight needle/pick
- Curved needle/pick
- Right angled needle
- Sickle knife
- Micro scissor- straight
- Set for stapedetomy
- Micro suction tips- set of 5 different sizes.
- Set of burrs: tungsten carbide cutting and diamond polishing burrs (2mm, 3mm, 4mm, 5mm, 6mm, 7mm, cutting and polishing)
- Otoscopes with 3.5 volts rechargeable batteries with battery charger

All instruments should be USFDA approved or European CE approved.

SCHEDULE NO. 63

Instrument set for micro laryngeal surgery Specifications

- Laryngeal cutting forceps- 23cm, 2mm round cupped jaws, straight
- Laryngeal cutting forceps- 23cm, 2mm round cupped jaws, angular upwards
- Laryngeal cutting forceps- 23cm, 2mm round cupped jaws, bent to right
- Laryngeal cutting forceps- 23cm, 2mm round cupped jaws, bent to left
- Laryngeal artery forceps with rachet- 23cm; straight, serrated
- Laryngeal alligator forceps- 23cm; straight, serrated
- Laryngeal alligator forceps- 23cm; serrated, bent to right
- Laryngeal alligator forceps- 23cm; serrated, bent to left
- Laryngeal scissors 23cm straight
- Laryngeal scissors 23cm angular 45 degrees up
- Laryngeal scissors 23cm bent to right
- Laryngeal scissors 23cm bent to left
- Laryngeal scissors 23cm straight horizontal cutting
- Laryngeal cutting forceps- 23cm, 5mm round cupped jaws, straight, double action
- Laryngeal grasping forceps for arytenoids 23cm
- Laryngeal biopsy forceps – 23cm oval cupped shaped jaws

- Laryngeal needle holder with rachet
- Atraumatic vocal cord retractor-23cm, self retaining with rachet
- Arnold vocal cord holding forceps 23cm, triangular jaws, for right side
- Arnold vocal cord holding forceps 23cm, triangular jaws, for left side
- Laryngeal knife 23cm, straight cutting
- Laryngeal knife 23cm, sickle shaped, curved
- Laryngeal knife 23cm, round vertical cutting
- Laryngeal hook 23cm, blunt
- Laryngeal hook 23cm, sharp
- Laryngeal needle 23cm, curved to right
- Laryngeal needle 23cm, curved to left
- Laryngeal elevator with suction channel-23cm
- Laryngeal knot tier 23cm
- Laryngeal hook, blunt with probe end
- Instrument handle For use with instruments mentioned above
- Laryngeal suction tube (micro laryngeal) 25cm, dia 3mm, dia 2mm
- Laryngeal insulated cannula 25cm
- 3mm OD for suction and coagulation
- Laryngeal cotton wool carrier 25cm, straight, serrated
- Bipolar electrode 3mm, length 23cm, with removable suction tube
- Cable for bipolar forceps-5m long

All instruments should be USFDA approved or European CE approved.

SCHEDULE NO. 64

CO2 laser Specifications

- Wavelength 10.6 microns, infrared
- Power 40W
- 5mw red diode aiming beam, 635nm, adjustable intensity
- Should be microprocessor based
- Should have a sealed CO2 laser tube
- Should have a continuous, single pulse and repeat pulse tissue exposure modes
- Avg continuous power of 1-40W
- Super pulse power of 0.5-15W
- Beam delivery should be through a light weight carbon fibre, fixed mirror, spring balanced arm
- The reach of the arm should be at least 120cm with 360 degrees rotation.
- It should have a timed exposeure of following durations- on time (single pulse)- 0.05-1.0 sec at 1.0-4.5W; 0.01-1.0sec at 5-40W; (repeat exposure)- 0.05-1.0 sec at 1.0- 4.5W; 0.01-1.0sec at 5-40W
- Repeat delay, off time, 0.01 to 1.0sec
- Should have atleast 100 user defined memory settings
- Should have a 0.2mm focused hand piece
- Should have at least 2 bacterial filters
- Should have 5 laser safety glasses
- Inbuilt scanner with present recommendations for parameters and delivery devices for different applications
- Multi color touch screen panel
- Self contained closed loop cooling system
- Should be supplied with a micromanipulator with following requirements

- Optical design to assure perfect co-incidence of the diode and CO2 beams even at highest microsurgical magnifications
- Should be easily adjustable and should have variable working distance from 200-400mm
- Should have continuously variable defocus with a user adjustable defocus limiter
- Joystick handle should be tension adjustable and autoclavable
- Should be user selectable for left or right handed controls
- Lightweight, to mentain balance of the surgical microscope
- Atleast spot size of 160 microns
- Focus range of 0.16mm-0.27mm
- Maximum defocus range of 2.8mm-4.6mm
- Should have a robotic laser microsurgery system with following requirements
- It should have a penetration depth of 0.2mm-2mm (user defined)
- It should have nasal probes kit, which should include:
  - Nasal and laryngeal probe fiber coupler
  - Straight nasal probe
  - Straight nasal probe with 90 degrees rh mirror
  - Straight nasal probe with 90 degrees lh mirror
  - Straight nasal probe with smoke evacuator
  - Straight nasal probe with 90 degrees rh mirror and smoke evacuator
  - Straight nasal probe with 90 degrees lh mirror and smoke evacuator
  - 20 degrees angled nasal probe
  - Non sterile fiber insert for nasal probes
  - Inplastic tube with cao sleeve
  - Catheter suction tube
  - Lens cleaning tissues
  - Pipe cleaner
  - Soft bristle brush
  - Folding magnifying glass
- It should have oral, pharyngeal and nasal handpiece set which should include 230mm handpiece unit (cvd optical unit, ports holder, conical main extender, contamination collector), extra conical main extender, backstop extender(3), tip extender (3), straight tip, kamami nasal tip(3), kamami tonsil tip (3), 90 degree angled mirror tip extender, cleaning brush, tygon tube (8mm id, 1.5mm long) w/reducer fitting.
- Clinical demonstration will be required

The equipment should be USFDA or international CE approved and should be manufactured by single parent company.

SCHEDULE NO. 65

Flexible Rhino Pharyngo Laryngo-Fiberscope
Specifications-

- First class optical quality of both objective lens system and fiber optic image transmitting bundle
- Resistant construction and sturdy mechanical components
- Easy orientation due to wide angle of view and large deflection range of the steerable distal tip
- Waterproof, fully immersible for cleaning and disinfection
- Outer diameter -3.5mm
- Working length -30 cm
- Direction of view- 0 degrees
- Angle of view- 70 dergees

- Cold light xenon source with built in antifog air pump and integrated power supply – 100 to 125 VAC/ 220-240 VAC, 50/60Hz including 400A mains cord 100cms connecting cord, 250 cms autoclavable silicon tubing set
- Spare lamp module xenon with heat sink 300watt/ 15 volt
- Xenon spare lamp 300watt/ 15 volt

The equipment should be USFDA or international CE approved and should be manufactured by single parent company.

SCHEDULE NO. 66

Rigid laryngoscope

Specifications-

- Anterior commissure laryngoscope adult size- 18cm
- Anterior commissure laryngoscope pediatric size
- Operating laryngoscope adult size 18cm
- Operating laryngoscope pediatric size
- Laryngoscope holder and chest support for use with above laryngoscopes adult size (ring 9.5cm, rod 34cm)
- Laryngoscope holder and chest support pediatric size (ring 9.5cm, rod 24cm)
- Fiber optic light carrier to fit in operating laryngoscope adult and pediatric size.
- Cold light xenon source-
- Power supply-100 to 125 VAC/ 220-240 VAC, 50/60Hz including 400A mains cord
- Xenon spare lamp 300watt/ 15 volt Xenon spare lamp 300watt/ 15 volt

The equipment should be USFDA or international CE approved and should be manufactured by single parent company.

SCHEDULE NO. 67

Rigid esophagoscope

Rigid optical telescopes for examining the inside of the esophagus during oesophagoscopy procedures. Made of high-grade surgical steel; these endoscopes provide crystal clear optics for everything from examinations to surgical procedures.

Specifications-

- For biopsy and foreign body removal
- Adult and pediatric sizes
- Straight Forward Telescope 0 degree,. 2.9 mm diameter, length 36 cm, autoclavable, fiber optic light transmission incorporated
- Esophagoscope Tube size - 6, outer diameter 8.2 mm, inner diameter 7.5 mm length 30 cm - 1No
- Esophagoscope Tube size- 5 outer diameter 7.7 mm inner diameter - 1No
- Esophagoscope Tube size 3.5 Outer diameter 4.8 mm inner diameter 5.1 mm length 18.5 cm - 1No
- Esaphagoscope Tube size 3.5 outer diameter 4.8 mm inner diameter 4.3 mm length 30 cm - 1No
- Esaphagoscope Tube size outer, diameter 4.8 mm inner diameter 4.3 length 30 cm - 1No
- Rubber Telescope Guide for use with telescope and optical forceps. - 1No
- Adjustable Magnifier autoclavable, swing away type - 1No
- Forces alligator for hard foreign bodies, double action jaws, sheath diameter 1.5 mm working length 35 cm - 2No

- Forceps peanuts and soft foreign bodies, double action jaws, sheath diameter 1.5 mm working length 35 cm - 1No
- Forceps with round cupped jaws, for biopsy, double action jawas, diameter 3 mm sheath diameter 1.5 mm working length 35 cm - 1No
- Forceps for biopsy and foreign bodiesermoval, double action jawas, shealth diameter 1.5 mm working length 35 cm - 1No
- Guide piece for suction catheter short bronchoscope for children and infants - 1No
- Fulvog adaptor with sliding glass window plug, sealing cap, notched lens and keyhole opening, movaable - 1 No
- Injection cannula for positive pressure assisted ventilation, Luer lock, outer diameter 3.5 mm for use with bronchoscope – 1

The equipment should be USFDA or international CE approved and should be manufactured by single parent company.

SCHEDULE NO. 68

Electronystagmographic Machine

Specifications

- High quality ISO certified with sensitivity of 105 images per second binocular, 174 images/sec monocular
- Goggle with one camera and goggle with 2 cameras (non occluded and occluded view)
- Able to perform all vestibular test including smooth pursuit test (tracking)
- Compatible with latest window software
- Laptop with minimum 1.8GHz, 2GB DDR3 RAM, 160GB hard disc with resolution of 1024x768 resolution or better
- Rotatory chair, irrigator for water and air included

The equipment should be USFDA or international CE approved and should be manufactured by single parent company.

GENERAL TECHNICAL SPECIFICATIONS

GENERAL POINTS:

1. Warranty:

   a) Two years Comprehensive Warranty as per Conditions of Contract of the TE document(Except for Biplane DSA) 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.

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 and additional 3 (three) years (as per GIT clause 34.1 & GCC clause 15.2) 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 as indicated in GIT clause 34.1 & GCC clause 15.2.
   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(c). 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 equipments for carrying out routine and preventive maintenance wherever asked for and should make sure that Electrical Safety Analyzer / Tester for Medical equipments 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 equipments. If the Electrical Safety Analyzer/Tester is not available they should provide a commitment to get the equipments 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

01. The Tenderer must be a Manufacturer or its authorized Agent.

02. (a) The Manufacturer should have supplied and installed in last **Five** years from the date of Tender Opening, atleast 100% of the quoted quantity of the similar equipment meeting major specification parameters which is functoning satisfactorily. The foreign Manufacturer satisfying the above criteria should also have supplied and installed in last **Five** years from the date of Tender Opening, at least 50% of quoted quantity of similar model which is functoning satisfactorily any where outside the country of manufacture.

02. (b) The Tenderers quoting as authorized representative of the manufacturer meeting the above criteria 02 (a) should have supplied and installed in last **Five** years from the date of Tender Opening, atleast 50% of the quoted quantity of similar equipments which is functoning satisfactorily, any where in India of any manufacturer.

Note

1. In support of 2 (a) & 2 (b), the Tenderer shall furnish Performance statement in the enclosed Proforma 'A'.

   The manufacturer as well as the 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.

2. 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.

3. 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.

4. 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

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. If at any time, information furnished is proved to be false or incorrect, the earnest money furnished will be forfeited

Scan copy of order, performance certificate issued by the end user to be uploaded while submitting tender in e mode along with performance statement.

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 of _____ (total tender amount in figures and words), as shown in the price schedule(s), 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	Brief Description of Goods	Country of Origin	Quantity (Nos.)	Price per unit (Rs.)							Total Price (at Consignee Site) basis (Rs.)
				Ex - factory/ Ex -warehouse /Ex-showroom /Off - the shelf (a)	Excise Duty (if any) [%age & value] (b)	Sales Tax/ VAT(if any) [%age & value] (c)	Packing and Forwarding charges (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	4 x 5(g)

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: _____ **Signature of Tenderer**_____

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

NOTE:- AS PER PRICE FORMAT UPLOADED IN E -TENDER

B) PRICE SCHEDULE FOR GOODS TO BE IMPORTED FROM ABROAD

1	2	3	4	5					6
Schedule	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)	Carriage & Insurance (port of loading to port of entry) and other Incidental costs** (b)	Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training) at the 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)	Unit Price on CIP Named Port of Destination + Extended Insurance (local transportation and storage) (e) = a+b+c+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

Indian Agent:

Indian Agency Commission - ___% of FOB

Signature of Tenderer_____Name_____

Business Address_____

Place: _____

Signature of Tenderer_____

Date: _____

Seal of the Tenderer_____

NOTE:- AS PER PRICE FORMAT UPLOADED IN THE E -TENDER

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

1	2	3	4					5
Schedule No.	BRIEF DESCRIPTION OF GOODS	QUANTITY. (Nos.)	Annual Comprehensive Maintenance Contract Cost for Each Unit year wise*.					Total Annual Comprehensive Maintenance Contract Cost for 5 Years [3 x (4a+4b+4c+4d+4e)]
			1st	2nd	3rd	4th	5th	
			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 will be added 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.
10. **Separate similar to this sheet should be used for quoting 3 (three) years additional CMC cost as indicated in GIT clause 34.1, GCC clause 15.2 & General Technical Specification.**

Name_____
Business Address_____
Signature of Tenderer_____
Seal of the Tenderer_____

Place: _____
Date: _____

NOTE:- AS PER PRICE FORMAT UPLOADED IN THE E- TENDER

D) PRICE SCHEDULE FOR TURNKEY

Schedule No.	BRIEF TURNKEY DESCRIPTION OF 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**_____

NOTE:- AS PER PRICE FORMAT UPLOADED IN THE E- TENDER

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:-

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

or

b) fails or refuses to accept/execute the contract.

or

c) 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 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

To

Head (P&CD),

HLL Lifecare Limited, Procurement and Consultancy Division,

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

Dear Sirs,

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 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.

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

To
HLL Lifecare Ltd.

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 30 (thirty) 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) _____

2. 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

3. Warranty clause
4. Payment terms
5. 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/Institute/Medical College)
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

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

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

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:
He has not adhered to the time schedule specified in the contract in dispatching the documents/drawings pursuant to 'Technical Specifications'.

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).
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:

He has adhered to the time schedule specified in the contract in dispatching the documents/drawings pursuant to 'Technical Specification'.

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).

Training of personnel has been done by the supplier as specified in the contract

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) SHIPMENT 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, EGYPY

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: TRANSCHART, 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: TRANSCHART, 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: TRANSCHART, 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: TRANSCHART, 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.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: TRANSCHART, 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 an 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

Deleted

Section – XXI
Consignee List

Consignee Code	Medical Institutions	Contact Address.	AirPort	Sea Port
AMC	Amritsar Medical College	Principal Govt Medical Collage Amritsar	Delhi	Mumbai/ Kolkatta

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