GLOBAL TENDER ENQUIRY DOCUMENT

FOR PROCUREMENT OF **Medical Gas Pipeline System** FOR SIX AIIMS

UNDER PMSSY Scheme FOR

GOVT OF INDIA

MINISTRY OF HEALTH & FAMILY WELFARE HLL/PCD/PMSSY/AIIMS-II/14-RT-01/15-16



BY

HLL Lifecare Limited

(A GOVERNMENT OF INDIA ENTERPRISE)

Procurement & Consultancy Services Division B-14 A, Sector-62, Noida-201 307

> PHONE: 0120-4071500 FAX: 0120-4071513 URL: www.lifecarehll.com

Email: pcd@lifecarehll.com

INDEX

Section	Topic	Page No.
Section I	- Notice inviting Tender (NIT)	03
Section II	- General Instructions to Tenderers (GIT)	08
Section III	- Special Instructions to Tenderers (SIT)	28
Section IV	- General Conditions of Contract (GCC)	29
Section V	- Special Conditions of Contract (SCC)	46
Section VI	- List of Requirements	47
Section VII	- Technical Specifications	49
Section VIII	- Quality Control Requirements	100
Section IX	- Qualification Criteria	101
Section X	- Tender Form	108
Section XI	- Price Schedules	109
Section XII	- Questionnaire	114
Section XIII	- Bank Guarantee Form for EMD	115
Section XIV	- Manufacturer's Authorisation Form	119
Section XV	- Bank Guarantee Form for Performance Security /CMC Security	121
Section XVI	- Contract Form (A & B)	123
Section XVII	- Proforma of Consignee Receipt Certificate	127
Section XVIII	- Proforma of Final Acceptance Certificate by the Consignee	128
Section XIX	- Instructions from Ministry of Shipping/Surface Transport (Annexure 1)	130
Section XX	- Check List for the Tenderers	134
Section XXI	- Consignee	137

SECTION I

NOTICE INVITING TENDERS (NIT)

For Global Tender from HLL Lifecare Limited (A GOVERNMENT OF INDIA ENTERPRISE)

Procurement & Consultancy Services Division B-14 A, Sector-62, Noida-201 307 PH: 0120-4071500: FAX: 0120-4071579

Email: pcd@lifecarehll.com;
URL: www.lifecarehll.com;

FOR GOVT OF INDIA

MINISTRY OF HEALTH & FAMILY WELFARE

Tender Enquiry No.: HLL/PCD/PMSSY/AIIMS-II/14-RT-01/15-16 Dated 31.12.2015

NOTICE INVITING TENDERS (NIT)

Procurement & Consultancy Services Division of HLL Lifecare Limited, for and on behalf of Govt. of India, Ministry of Health & Family Welfare, invites sealed tenders, from eligible and qualified tenderers for supply, installation, commissioning, running, maintenance and operation of MGPS for for five years for six All India Institutes of Medical Science (AIIMS) – Bhopal, Bhubaneswar, Jodhpur, Patna, Raipur, Rishikesh under PMSSY:

Sch No.	Event Number	Equipment Name	Consignee Name	Qty.	EMD (Rs.)
1 (a)	Medical Gas Pipeline System with running and operation for 5 years		AIIMS – Bhopal	1	30,00,000
1 (b)			AIIMS - Bhubaneswar	1	30,00,000
1 (c)		AIIMS – Jodhpur	1	30,00,000	
1 (d)		_	AIIMS – Patna	1	30,00,000
1 (e)		_	AIIMS – Rishikesh	1	30,00,000
1 (f)			AIIMS – Raipur	1	30,00,000

Note:

- EMD was kept same for all the sites as it will be the prerogative of the purchaser to allocate site to the responsive bidders on the basis of best benefit to the exchequer/ least cost method mechanism (explained later). Bidders are requested to submit EMD as per their eligibility, however price need to be quoted on the basis of site wise BOQ as per the list of requirement.
- The EMD as indicated in e-tendering portal is the sum of EMDs for all above schedules. The bidder shall furnish the EMD only for the number of schedules offered and as applicable.

(2) Tender No.: HLL/PCD/PMSSY/AIIMS-II/14-RT-01/15-16

Sl. No.	Description	Schedule
i.	End Date of download of tender enquiry document	16.02.16, 1700 hrs IST
ii.	Cost of the Tender Enquiry Document	Rs. 50,000/-
iii.	Pre Tender Meeting Date & Time	12.01.2016, 1100 Hrs
iv.	Pre Tender Meeting Venue	HLL Lifecare Limited, Procurement & Consultancy Services Division, B-14 A, Sector-62, Noida-201307
v.	Closing date & time for submission of tender fee and EMD in physical form	15.02.2016, 1700 Hrs IST
vi.	Due date & time for submission of tender in e-Portal	16.02.2016, 1800 Hrs IST
vii.	Date and Time of opening of Techno – Commercial tenders	17.02.2016, 1400 Hrs IST
viii.	Venue of Opening of Techno Commercial Tender	Same as 2 (iv)

Note:

• If EMD is submitted in the form of BG, then the validity of the BG should be at least 165 days from the date of tender opening, i.e. up to 31.07.2016.

SPECIFIC Instructions for e-Tender Participation:

- 3. Bidders should have valid Class 3 Digital Signature Certificate with encryption.
- 4. Bidders are requested to read the bidders help document on e-tender web site link before proceeding for bidding.
- 5. The prospective bidders have to register with the E-procurement system of HLL at https://etender.lifecarehll.com/irj/portal. On completion of the registration process, the bidders will be provided user ID and password within 48 hours (excepting non-working days). In order to submit the bids electronically bidders are required to have a valid Class 3 Digital Signature Certificate (signing and encryption/decryption certificates).
- 6. Post receipt of User ID & Password, Bidders can log on for downloading & uploading tender document.
- 7. The tenderers shall submit tender fee and EMD in physical form at the scheduled time and venue.

HLL Lifecare Limited

- 8. Tenderer may download the tender enquiry documents from the web site www.lifecarehll.com or www.eprocure.gov.in/cppp or https://etender.lifecarehll.com/irj/portal .
- 9. The submission of tender online can only be done thru' https://etender.lifecarehll.com/irj/portal .
- 10. All prospective tenderers may attend the Pre Tender meeting. The venue, date and time indicated above.
- 11. Tenderers shall ensure that their tenders, complete in all respects, are submitted **online through** HLL's e-portal (as described above) ONLY. No DEVIATION is acceptable.

<u>IMPORTANT NOTE</u>:-Tender fee(Rs.5,000/-) and EMD (As applicable) should be deposited in the Tender Box located at HLL Lifecare Limited, Procurement and Consultancy Division, B-14 A, Sector-62, Noida-201307, Uttar Pradesh on or before 30-Nov-2015, 1700 hrs (IST).

SVP (GB) HLL Lifecare Limited

SECTION - II

GENERAL INSTRUCTIONS TO TENDERERS (GIT) CONTENTS

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

E	TENDER OPENING	
25	Opening of Tenders	21
F	SCRUTINY AND EVALUATION OF TEND	ERS
26	Basic Principle	21
27	Scrutiny of Tenders	22
28	Minor Infirmity/Irregularity/Non-Conformity	22
29	Discrepancy in Prices	23
30	Discrepancy between original and copies of Tender	23
31	Qualification Criteria	23
32	Conversion of Tender Currencies to Indian Rupees	23
33	Schedule-wise Evaluation	23
34	Comparison of Tenders	23
35	Additional Factors and Parameters for Evaluation and Ranking of Responsive Tenders	24
36	Tenderer's capability to perform the contract	25
37	Contacting the Purchaser	25
G	AWARD OF CONTRACT	
38	Purchaser's Right to Accept any Tender and to Reject any or All Tenders	25
39	Award Criteria	25
40	Variation of Quantities at the Time of Award	25
41	Notification of Award	26
42	Issue of Contract	26
43	Non-receipt of Performance Security and Contract by the Purchaser/Consignee	26
44	Return of EMD	26
45	Publication of Tender Result	26
46	Corrupt or Fraudulent Practices	26

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 Ministry of Health & Family welfare Govt of India.
- (ii) "e-Tender" means Bids / Quotation / Tender received from a Firm / Tenderer / Bidder.
- (iii) "e-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 (AIIMS)/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) "Dte. GHS" means Directorate General and Health Services, MOH&FW.
- (xxxii) "CMC" means Comprehensive maintenance Contract (labour, spare and preventive maintenance)
- (xxxiii) "RT" means Re-Tender.

2. Introduction

- 2.1 The Purchaser has issued these TE documents for purchase of goods and related services as mentioned in Section VI "List of Requirements", which also indicates, *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 Ouestionnaire
- ➤ 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, to all prospective tenderers, who have received the TE documents and will be binding on them.
- 9.3 In order to provide reasonable time to the prospective tenderers to take necessary action in preparing their tenders as per the amendment, the purchaser may, at its discretion extend the deadline for the submission of tenders and other allied time frames, which are linked with that deadline.

10. Clarification of TE documents

10.1 A tenderer requiring any clarification or elucidation on any issue of the TE documents may take up the same with the purchaser in writing. The purchaser will respond in writing to such request provided the same is received by the purchaser ON OR BEFORE THE PRE BID MEETING (unless otherwise specified in the SIT). Representation sent after the pre bid meeting date will not be taken into cognizance.

C. PREPARATION OF TENDERS

- 11. The tender shall be submitted online **ONLY EXCEPT TENDER FEE & EMD** (in physical form) as mentioned below:
 - (i) Technical Bid (Consisting of Eligibility Criteria & Technical Specifications viz. Product Specification Sheets/Brochures, OEM Certificate etc.) . Bidders may name the files indicating the nature of content in pdf format which would be required to be attached in etender.
 - (ii) Price Bid (To be filled up in the Proforma , Signed, Stamped, Scanned to pdf mode & attach under PRICE BID .

DO NOT'S

Bidders are requested <u>NOT</u> to submit the hard copy of Financial Bid along with the physical form of tender. In case the hard copy of financial bid is submitted in physical form, the tender shall be straightway rejected. Also, uploading of the price bid in prequalification bid or technical bid will **RESULT IN REJECTION** of the tender.

A) <u>Technical Tender (Un priced Tender)</u>

All Technical details (eg. Eligibility Criterias requested (as mentioned below)) should be attached in C-Folder of e-tendering module, failing which the tender stands invalid & REJECTED.

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

- i) Earnest money furnished in accordance with GIT clause 19.1 alternatively, documentary evidence as per GIT clause 19.2 for claiming exemption from payment of earnest money.
- ii) Tender Form as per Section X (without indicating any prices).
- iii) Documentary evidence, as necessary in terms of clauses 5 and 17 establishing that the tenderer is eligible to submit the tender and, also, qualified to perform the contract if its tender is accepted.
- iv) Tenderer/Agent who quotes for goods manufactured by other manufacturer shall furnish Manufacturer's Authorisation Form.
- v) Power of Attorney in favour of signatory of TE documents and signatory of Manufacturer's Authorisation Form.
- vi) 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.
- vii) Performance Statement as per section IX along with relevant copies of orders and end users' satisfaction certificate.
- viii) Price Schedule(s) as per Section XI filled up with all the details including Make, Model etc. of the goods offered with prices blank (without indicating any prices).
- ix) Certificate of Incorporation.
- x) Checklist.
- xi) Cost of tender document should be payable by DD / pay order. Cheque will not be accepted.
- xii) Self Attested copies of VAT registration certificate and PAN Card.
- xiii) Non conviction / no pending conviction certification issued by Notary on judicial stamp paper for preceding three years.
- xiv) Self Attested copies of quality certificates i.e US FDA / CE Certificate issued by competent authority, if applicable.
- xv) Documentary evidence stating the status of bidder.
- xvi) List of procurement agencies of repute to which the tendered product have been supplied during last 12 months.
- xvii) Self attested copies of annual report, audited balance sheet and profit & loss account for preceding three years from the date of tender opening.
- xix) Notarized affidavit that tenderer does not have any relation with the person authorized to evaluate technically or involve in finalizing the tender or will decide the use of tendered items.

- xx) A self-declaration on Rs 10/ Non-judicial Stamp Paper that the rates quoted in the tender are the lowest and not quoted less than this to any Government Institution (State / Central / other Institute in India).
- xxiii) Product catalogues / original Data Sheet must be enclosed of all quoted items.

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

- 1. Prices are to be quoted in the attached Price Bid format online on e-tender portal in pdf format & apply digital signature certificate. While uploading the price the tenderer has to ensure that the FILE NAME of the attached document SHOULD BE SAME as that of provided price bid format.
- 2. The price should be quoted for the accounting unit indicated in the e-tender document.

The bidder shall not submit hard copy of financial bid otherwise his tender shall be straightway rejected. Also, uploading the price bid in prequalification bid or technical bid will result in rejection of the tender.

- 11.2 A person signing (manually or digitally) the tender form or any documents forming part of the contract on behalf of another shall be deemed to warrantee that he has authority to bind such other persons and if, on enquiry, it appears that the persons so signing had no authority to do so, the purchaser may, without prejudice to other civil and criminal remedies, cancel the contract and hold the signatory liable for all cost and damages.
- 11.3 Tender sent by fax/telex/cable/electronically 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 currency shall be treated as non -responsive and rejected.

13 Tender Prices

13.1 The Tenderer shall indicate on the Price Schedule provided under Section XI all the specified components of prices shown therein including the unit prices and total tender prices of the goods and services it proposes to supply against the requirement. All the columns shown in the price schedule should be filled up as required. If any column does not apply to a tenderer, same should be clarified as "NA" by the tenderer.

The bidders have to quote for all the schedules while quoting. Say if the bidder is quoting for MGPS the bidders have to quote for all six schedules. The purchaser will have the right to award the work to any site as per the eligibility and to the best benefit of the exchequer.

- 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. All sundry equipments, fittings, units assemblies, accessories, hardware items, foundation bolts, termination lugs for electrical connections, and all other items which are useful and necessary for efficient assembly and installation of equipment and components of the work shall be deemed to have been included in the tender irrespective of the fact whether such items are specifically mentioned in the tender documents or not.
- 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. Detailed breakup of the prices for the main equipment and accessories/optional items must be provided separately, item wise in the same serial order as listed in the technical bid
- 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;
 - f) The rates quoted by the tenderer, shall be firm and fixed and inclusive of all taxes including work contract taxes, custom central duties and levies and all charges for packing forwarding, insurance, freight and delivery, installation, testing commissioning etc at site i/c temporary construction of storage, risk, overhead charges general liabilities/ obligations and clearance from local authorities. Rates shall be firm for the contractual period of time and for such time for which department shall grant extension of time till completion of work. Octroi duty shall be paid separately but the department on demand can furnish octroi exemption certificate. However the department is not liable to reimburse the octroi duty in case the concerned authorities do not honour exemption certificate.; and
 - g) 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) the price of goods quoted CIP (name port of destination) in India as indicated in the List of Requirements, Price Schedule and Consignee List;
- c) 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;
- d) The charges for Incidental Services, as in the 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
- g) The running, operation and maintenance charges for initial five years after installation.

13.5 Additional information and instruction on Duties and Taxes:

13.5.1 If the Tenderer desires to ask for excise duty, sales tax/ VAT, Service Tax, Works Contract Tax etc. to be paid extra, the same must be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such duties and taxes and no claim for the same will be entertained later.

13.5.2 Excise Duty:

- a) If reimbursement of excise duty is intended as extra over the quoted prices, the supplier must specifically say so also indicating the rate, quantum and nature of the duty applicable. In the absence of any such stipulation it will be presumed that the prices quoted are firm and final and no claim on account of excise duty will be entertained after the opening of tenders.
- b) If a Tenderer chooses to quote a price inclusive of excise duty and also desires to be reimbursed for variation, if any, in the excise duty during the time of supply, the tenderer must clearly mention the same and also indicate the rate and quantum of excise duty included in its price. Failure to indicate all such details in clear terms may result in rejection of that tender.
- c) Subject to sub clauses 13.5.2 (a) & (b) above, any change in excise duty upward/downward as a result of any statutory variation in excise duty taking place within contract terms shall be allowed to the extent of actual quantum of excise duty paid by the supplier. In case of downward revision in excise duty, the actual quantum of reduction of excise duty shall be reimbursed to the purchaser by the supplier. All such adjustments shall include all reliefs, exemptions, rebates, concession etc. if any obtained by the supplier.

13.5.3 Sales Tax:

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

13.5.4 Octroi Duty and Local Duties & Taxes:

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

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

13.5.5 Customs Duty:

The Purchaser will pay the Customs duty wherever applicable.

- 13.6 For transportation of imported goods offered from abroad, relevant instructions as incorporated under GCC Clause 10 shall be followed.
- 13.7 For insurance of goods to be supplied, relevant instructions as provided under GCC Clause 11 shall be followed.
- 13.8 Unless otherwise specifically indicated in this TE document, the terms FCA, FOB, FAS, CIF, CIP, DDP etc. for imported goods offered from abroad, shall be governed by the rules & regulations prescribed in the current edition of INCOTERMS, published by the International Chamber of Commerce, Paris
- 13.9 The need for indication of all such price components by the tenderers, as required in this clause (viz., GIT clause 13) is for the purpose of comparison of the tenders by the purchaser and will no way restrict the purchaser's right to award the contract on the selected tenderer on any of the terms offered.

14. Indian Agent

- 14.1 If a foreign tenderer has engaged an agent in India in connection with its tender, the foreign tenderer, in addition to indicating Indian agent's commission, if any, in a manner described under GIT sub clause 12.2 above, shall also furnish the following information:
 - a) 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.
 - d) A copy of agreement between the Agent & their principal detailing the terms & conditions as well as services and after sales services as above to be rendered by the agent and the precise relationship between them and their mutual interest in the business as laid out in section VII (Technical specifications).
 - e) Principal/ manufacturer's original proforma invoice with the price bid

15. Firm Price

Unless otherwise specified in the SIT, prices quoted by the tenderer shall remain firm and fixed during the currency of the contract and not subject to variation on any account. Bidders are requested to quote BOQ wise unit price and total price. Item wise price will remain fixed. However actual payment will be based on final measurement.

16. Alternative Tenders

- 16.1 Alternative Tenders are not permitted.
- 16.2 However the Tenderers can quote alternate models meeting the tender specifications of same manufacturer with single EMD.
- 16.3 If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product. In a tender, either the Indian Agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender. It may also be noted that Principal OEM cannot authorize more than one agent for a particular product in a particular tender.

17 Documents Establishing Tenderer's Eligibility and Qualifications

- 17.1 Pursuant to GIT clause 11, the tenderer shall furnish, as part of its tender, relevant details and documents establishing its eligibility to quote and its qualifications to perform the contract if its tender is accepted.
- 17.2 The documentary evidence needed to establish the tenderer's qualifications shall fulfil the following requirements:
 - a) in case the tenderer offers to supply goods, which are manufactured by some other firm, the tenderer has been duly authorised by the goods manufacturer to quote for and supply the goods to the purchaser. The tenderer shall submit the manufacturer's authorization letter to this effect as per the standard form provided under Section XIV in this document.
 - b) the tenderer has the required financial, technical and production capability necessary to perform the contract and, further, it meets the qualification criteria incorporated in the Section IX in these documents.
 - c) in case the tenderer is not doing business in India, it is duly represented by an agent stationed in India fully equipped and able to carry out the required contractual functions and duties of the supplier including after sale service, maintenance & repair etc. of the goods in question, stocking of spare parts and fast moving components and other obligations, if any, specified in the conditions of contract and/or technical specifications.
 - 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.
- 18.2 In case there is any variation and/or deviation between the goods & services prescribed by the purchaser and that offered by the tenderer, the tenderer shall list out the same in a chart form without ambiguity and provide the same along with its tender.
- 18.3 If a tenderer furnishes wrong and/or misguiding data, statement(s) etc. about technical acceptability of the goods and services offered by it, its tender will be liable to be ignored and rejected in addition to other remedies available to the purchaser in this regard.

19. Earnest Money Deposit (EMD)

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

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

20. Tender Validity

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

21. Signing and Sealing of Tender

- 21.1 The tenderers shall submit their tenders as per the instructions contained in GIT Clause 11.
- 21.2 Unless otherwise mentioned in the SIT, a tenderer shall submit two copies of its tender marking them as "Original" and "Duplicate". Duplicate tenders may contain all pages including Technical Literature/Catalogues as per in Original tenders. Tenders are requested to submit tenders duly page numbered and in a binding form.
- 21.3 The original and other copies of the tender shall either be typed or written in indelible ink and the same shall be signed by the tenderer or by a person(s) who has been duly authorized to bind the tenderer to the contract. The letter of authorization shall be by a written power of attorney, which shall also be furnished along with the tender.
- 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.
- The tenderer is to seal the original and duplicate copy of the tender in separate envelopes, duly marking the same as "Original", "Duplicate", and writing the address of the purchaser and the tender reference number on the envelopes. The sentence "NOT TO BE OPENED" before ______ (The tenderer is to put the date & time of tender opening) are to be written on these envelopes. The inner envelopes are then to be put in a bigger outer envelope, which will also be duly sealed, marked etc. as above. If the outer envelope is not sealed and marked properly as above, the purchaser will not assume any responsibility for its misplacement, premature opening, late opening etc.
- TE document seeks quotation following <u>two Tender System</u>, in two parts. First part will be known as <u>'Techno Commercial Tender'</u>, and the second part <u>'Price Tender'</u> as specified in clause 11 of GIT. Tenderer shall seal <u>'Techno Commercial Tender'</u> and <u>'Price Tender'</u> separately and covers will be suitably super scribed. Both these sealed covers shall be put in a bigger cover and sealed and procedure prescribed in Paras 21.1 to 21.5 followed.

D. SUBMISSION OF TENDERS

22. Submission of Tenders

- 22.1 The tender shall be submitted online only.
 - (i) Pre-qualification and Technical compliance as per following documents (**ONLY Online submissions for all the documents.**)
 - a) Manufacturer's authorization in case bid is submitted by an Indian agent (A declaration must be attached here in case directly quoted by a manufacturer or a document establishing the relation of the Indian office with the manufacturer in case quoted by Indian office of the manufacturer).
 - b) Tender Form as per section X.
 - c) Compliance of all terms and conditions of TED like- warranty, delivery period, delivery terms, payment terms etc
 - d) Declaration regarding Fall Clause and Deregistration, debarment from any Govt Dept/ Agencies
 - e) Copy of PAN.
 - f) Certificate of Incorporation/Declaration being a proprietary firm.
 - g) Abridged Annual report of last 05 years (Balance sheet and Profit & Loss Account) in pdf format.
 - h) Name, address and details of account with respect to bidder and/or beneficiary of L/C.
 - i) Quality Control Requirements as per Section VIII
 - j) Performance statement along with required PO copies and its corresponding end user's satisfactory performance certificate as per section IX.
 - k) Technical Bid along with clause-by-clause technical compliance statement for the quoted goods vis-à-vis the Technical specifications along with product catalogue and data sheet in the tender enquiry.
 - The bidder should submit blank proforma invoice from the foreign manufacturer along with his technical bid, duly mentioning the specifications and code number of the parts quoted.
 - m) The original proforma invoices from the foreign principal will be applicable in case of 100% subsidiary companies incorporated in India also.
 - n) In case the bidder quotes an equipment of a foreign manufacturer and submits the documents as per Clause 22.1 (i) 1 & m from the subsidiary company of the foreign Original Equipment Manufacturer in India, the bidder must submit the Power of Attorney given to the subsidiary company by the foreign Original Equipment Manufacturer, authorizing it to do business and perform all obligations for and on behalf of the foreign manufacturer company, in India.

(ii) PRICE BID (ONLY ONLINE).

- 1. The tenderers must ensure that they submit the on-line tenders not later than the closing time and date specified for submission of tenders.
- 2. Along with price bid recent purchase order copies for the same model and technical configuration issued by institute of National importance / reputed central / state government hospitals should be uploaded in pdf form for price reasonability.
- 3. The bidder should submit the original proforma invoice from the foreign manufacturer along with the price bid.
- 4. The bidder should not quote in Indian Rupees any foreign products, which are not already imported at the time of submitting the tender. Price bid in INR, if the product is not imported in India will not be considered and will be ignored.

23. Late Tender

23.1 There is NO PROVISION of uploading late tender beyond stipulated date & time in the etendering system.

24. Alteration and Withdrawal of Tender

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

E. TENDER OPENING

25. Opening of Tenders

- 25.1 The purchaser will open the tenders at the specified date and time and at the specified place as indicated in the NIT.
 - In case the specified date of tender opening falls on / is subsequently declared a holiday or closed day for the purchaser, the tenders will be opened at the appointed time and place on the next working day.
- 25.2 Authorized representatives of the tenderers, who have submitted tenders on time may attend the tender opening provided they bring with them letters of authority from the corresponding tenderers.
 - The tender opening official(s) will prepare a list of the representatives attending the tender opening. The list will contain the representatives' names & signatures and corresponding tenderers' names and addresses.
- 25.3 Two Tender system as mentioned in Para 21.6 above will be as follows. The <u>Techno Commercial Tenders</u> are to be opened in the first instance, at the prescribed time and date as indicated in NIT. These Tenders shall be scrutinized and evaluated by the competent committee/ authority with reference to parameters prescribed in the TE document. During the Techno Commercial Tender opening, the tender opening official(s) will read the salient features of the tenders like brief description of the goods offered, delivery period, Earnest Money Deposit and any other special features of the tenders, as deemed fit by the tender opening official(s). Thereafter, in the second stage, the Price Tenders of only the Techno Commercially acceptable offers (as decided in the first stage) shall be opened for further scrutiny and evaluation on a date

notified after the evaluation of the Techno – Commercial tender. 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. 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.
- 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 meet the basic requirements, are liable to be treated as non responsive and will be summarily ignored.
- 27.5 The following are some of the important aspects, for which a tender shall be declared non-responsive during the evaluation and will be ignored;
 - (i) The bidder has submitted hard copy of financial bid (only online submission price bids are allowed).
 - (ii) Tender is unsigned.
 - (iii) Tender validity is shorter than the required period.
 - (iv) Required EMD (Amount, validity etc.)/ exemption documents have not been provided.
 - (v) Tenderer has quoted for goods manufactured by other manufacturer(s) without the required Manufacturer's Authorisation Form as per Section XIV.
 - (vi) Tenderer has not agreed to give the required performance security of required amount in an acceptable form in terms of GCC clause 5, read with modification, if any, in Section V "Special Conditions of Contract", for due performance of the contract.
 - (vii) Deleted
 - (viii) Tenderer has not agreed to other essential condition(s) specially incorporated in the tender enquiry like terms of payment, liquidated damages clause, warranty clause, dispute resolution mechanism applicable law.
 - (ix) Poor/ unsatisfactory past performance.
 - (x) Tenderers who stand deregistered/banned/blacklisted by any Govt. Authorities.

- (xi) Tenderer is not eligible as per GIT Clauses 5.1 & 17.1.
- (xii) Tenderer has not quoted for the entire quantity as specified in the List of Requirements in the quoted schedule.
- (xiii) Tenderer has not agreed for the delivery terms and delivery schedule.

Violation of any of the conditions mentioned in GIT Clause 22.1 (i - 1, m, & n) and 22.1(ii - 3 & 4) will make the bid non-responsive.

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 copies of Tender

30.1 Deleted

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 will also be added for comparison/ranking purpose for evaluation. "Net Present value (NPV) of the Comprehensive Annual Maintenance charges (CMC) quoted for 5 years after the warranty period shall be added to the bid price for evaluation and will be calculated after discounting the quoted price by a discounting factor of 10% per annum. NPV of running, operation and maintenance charges quoted for 5 years after installation shall also be added to the bid price for evaluation and will be calculated after discounting the quoted price by a discounting factor of 10% per annum."

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

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

- would be allowed to supply up to 20% of the total tendered value. In case there are more than one such eligible MSE, the 20% supply will be shared equally. Out of 20% of the quantity earmarked for supply from MSEs, 4% quantity is earmarked for procurement from MSEs owned by SC/ST entrepreneurs. However, in the event of failure of such MSEs to participate in the tender process or meet the tender requirements and the L 1 price, the 4% quantity earmarked for MSEs owned by SC/ST entrepreneurs will be met from other participating MSEs.
- iii. The MSEs fulfilling the prescribed eligibility criteria and participating in the tender shall enclose with their tender a copy of their valid registration certificate with District Industries Centres or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or any other body specified by Ministry of Micro and Small enterprises in support of their being an MSE, failing which their tender will be liable to be ignored.

36. Tenderer's capability to perform the contract

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

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.

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.
- Within twenty one days from the date of the contract, the successful tenderer shall return the original copy of the contract, duly signed and dated, to the Purchaser/Consignee by registered / speed post. The successful tenderer should also submit Proforma Invoice from the foreign principal (if applicable as per price quote) within 21 days from the date of NOA.
- 42.3 The Purchaser/Consignee reserves the right to issue the Notification of Award consignee wise.

43. Non-receipt of Performance Security, Proforma Invoice and Contract by the Purchaser/Consignee:

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

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

SECTION - III SPECIAL INSTRUCTIONS TO TENDERERS (SIT)

Sl. No.	GIT Clause	Topic	SIT Provision	Page No.
	No.			
A	1 to 7	Preamble	No Change	26
В	8 to 10	TE documents	No Change	26
С	11 to 21	Preparation of Tenders	Change	28
D	22 to24	Submission of Tenders	Change	28
Е	25	Tender Opening	No Change	26
F	26 to 37	Scrutiny and Evaluation of Tenders	No Change	26
G	38 to 46	Award of Contract	No Change	26

SUBMISSION OF e-TENDERS

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

SECTION - IV

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

GENERAL CONDITIONS OF CONTRACT (GCC) TABLE OF CLAUSES

Sl. No.	Topic	Page
1	Application	30
2	Use of contract documents and information	30
3	Patent Rights	30
4	Country of Origin	30
5	Performance Security	30
6	Technical Specifications and Standards	31
7	Packing and Marking	31
8	Inspection, Testing and Quality Control	32
9	Terms of Delivery	33
10	Transportation of Goods	33
11	Insurance	33
12	Spare parts	34
13	Incidental services	34
14	Distribution of Dispatch Documents for Clearance/Receipt of Goods	34
15	Warranty	35
16	Assignment	37
17	Sub Contracts	37
18	Modification of contract	37
19	Prices	38
20	Taxes and Duties	38
21	Terms and mode of Payment	38
22	Delivery	41
23	Liquidated Damages	42
24	Termination for default	42
25	Termination for insolvency	42
26	Force Majeure	43
27	Termination for convenience	43
28	Governing language	43
29	Notices	43
30	Resolution of disputes	44
31	Applicable Law	44
32	Withholding and Lien	44
33	General/Miscellaneous Clauses	44

GENERAL CONDITIONS OF CONTRACT (GCC)

1. Application

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

2. Use of contract documents and information

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

3. Patent Rights

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

4. Country of Origin

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

5. Performance Security

- 5.1 Within 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 66 months from the date of Notification of Award
- 5.2 The Performance security shall be denominated in Indian Rupees or in the currency of the contract as detailed below:

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

- 5.3 In the event of any failure /default of the supplier with or without any quantifiable loss to the government including furnishing of consignee wise Bank Guarantee for CMC security as per Proforma in Section XV, the amount of the performance security is liable to be forfeited. The Administration Department may do the needful to cover any failure/default of the supplier with or without any quantifiable loss to the Government.
- 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 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 and lodging will be borne by the purchaser and/or its nominated representative(s) for the first visit. In case the goods are rejected in the first instance and the supplier requests for re-inspection, and if same is accepted by purchaser/consignee/PSA/PA, all subsequent inspections shall be at the cost of the supplier. The expense will be to and fro Economy Airfare, Local Conveyance, Boarding and Lodging of the inspection team for the inspection period."
- 8.2 The Technical Specification and Quality Control Requirements incorporated in the contract shall specify what inspections and tests are to be carried out and, also, where and how they are to be conducted. If such inspections and tests are conducted in the premises of the supplier or its subcontractor(s), all reasonable facilities and assistance, including access to relevant drawings, design details and production data, shall be furnished by the supplier to the purchaser's inspector at no charge to the purchaser.
- 8.3 If during such inspections and tests the contracted goods fail to conform to the required specifications and standards, the purchaser's inspector may reject them and the supplier shall either replace the rejected goods or make all alterations necessary to meet the specifications and standards, as required, free of cost to the purchaser and resubmit the same to the purchaser's inspector for conducting the inspections and tests again.
- 8.4 In case the contract stipulates pre-despatch inspection of the ordered goods at supplier's premises, the supplier shall put up the goods for such inspection to the purchaser's inspector well ahead of the contractual delivery period, so that the purchaser's inspector is able to complete the inspection within the contractual delivery period.
- 8.5 If the supplier tenders the goods to the purchaser's inspector for inspection at the last moment without providing reasonable time to the inspector for completing the inspection within the contractual delivery period, the inspector may carry out the inspection and complete the formality beyond the contractual delivery period at the risk and expense of the supplier. The fact that the goods have been inspected after the contractual delivery period will not have the effect of keeping the contract alive and this will be without any prejudice to the legal rights and remedies available to the purchaser under the terms & conditions of the contract.
- 8.6 The purchaser's/consignee's contractual right to inspect, test and, if necessary, reject the goods after the goods' arrival at the final destination shall have no bearing of the fact that the goods have previously been inspected and cleared by purchaser's inspector during pre-despatch inspection mentioned above.
 - "On rejection, the supplier shall remove such stores within 14 days of the date of intimation of such rejection from the consignee's premises. If such goods are not removed by the supplier within the period mentioned above, the purchaser/consignee may remove the rejected stores and either return the same to the supplier at his risk and cost by such mode of transport as purchaser/consignee may decide or dispose of such goods at the suppliers risk to recover any expense incurred in connection with such disposals and also the cost of the rejected stores if already paid for."

- 8.7 Goods accepted by the purchaser/consignee and/or its inspector at initial inspection and in final inspection in terms of the contract shall in no way dilute purchaser's/consignee's right to reject the same later, if found deficient in terms of the warranty clause of the contract, as incorporated under GCC Clause 15.
- 8.8 Principal/ Foreign supplier shall also have the equipment inspected by recognised/ reputed agency like SGS, Lloyd, Bureau Veritas, TUV prior to despatch at the supplier's cost and furnish necessary certificate from the said agency in support of their claim.
- 8.9 Following delivery of the items the joint inspection by HLL and respective AIIMS at site will be carried out to verify the quantity and quality of goods.

9. Terms of Delivery

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

10. Transportation of Goods

10.1 Instructions for transportation of imported goods offered from abroad:

The supplier shall not arrange part-shipments and/or 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:
 - in case of supply of domestic goods on Consignee site basis, the supplier shall be responsible till the entire stores contracted for arrival in good condition at destination. The transit risk in this respect shall be covered by the Supplier by getting the stores duly insured for an amount equal to 110% of the value of the goods from ware house to ware house (consignee site) on all risk basis. The insurance cover shall be obtained by the Supplier and should be valid till 6 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 6 months

beyond date of delivery for an amount equal to 110% of the overall expenditure to be incurred by the purchaser from ware house to ware house (consignee site) on all risk basis.

If the equipment is not commissioned and handed over to the consignee within 6 months, the insurance will have to be extended by the supplier at their cost till the successful installation, testing, commissioning and handing over of the goods to the consignee. In case the delay in the installation and commissioning is due to handing over of the site to the supplier by the consignee, such extensions of the insurance will still be done by the supplier, but the insurance extension charges at actuals will be reimbursed.

12. Spare parts

- 12.1 If specified in the List of Requirements and in the resultant contract, the supplier shall supply/provide any or all of the following materials, information etc. pertaining to spare parts manufactured and/or supplied by the supplier:
 - a) The spare parts as selected by the Purchaser/Consignee to be purchased from the supplier, subject to the condition that such purchase of the spare parts shall not relieve the supplier of any contractual obligation including warranty obligations; and
 - b) In case the production of the spare parts is discontinued:
 - i) Sufficient advance notice to the Purchaser/Consignee before such discontinuation to provide adequate time to the purchaser to purchase the required spare parts etc., and
 - ii) Immediately following such discontinuation, providing the Purchaser/Consignee, free of cost, the designs, drawings, layouts and specifications of the spare parts, as and if requested by the Purchaser/Consignee.
- 12.2 Supplier shall carry sufficient inventories to assure ex-stock supply of 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
 - v) Running, operation and maintenance of goods supplied

14. Distribution of Dispatch Documents for Clearance/Receipt of Goods

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

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

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

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

- (i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
- (ii) Two copies of packing list identifying contents of each package;
- (iii) Certificate of origin;
- (iv) Insurance Certificate as per GCC Clause 11.
- (v) 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) Manufacturer's/Supplier's warranty certificate;
- (vi) Inspection Certificate for the despatched equipments issued by recognized/reputed agency like SGS, Lloyd, BUREAU VERITAS, TUV prior to despatch
- (vii) Manufacturer's own factory inspection report;
- (viii) Certificate of origin
- (ix) Port of Loading:
- (x) Port of Discharge and
- (xi) Expected date of arrival.

15. Warranty

The supplier is to assure uninterrupted service without compromising OT/ICU

15.1 Complete system including labour & spares should have comprehensive onsite warranty for five years; commencing from the date of issue of installation certificate by the institute. Post guarantee annual comprehensive maintenance contract (CMC) to cover main equipment/civil construction including all accessories supplied with the unit should be quoted separately for additional five years with year wise break up. The warranty charges shall not be quoted separately otherwise the offer shall be summarily rejected. The price comparison shall be made taking into account on basic price and post warranty CMC.

the Warranty and Post Warranty period.
The Supplier (manufacturer) shall set-up a maintenance base to provide maintenance service
of the entire turnkey system being offered, at short notice during the warranty and pos
warranty period. The technical maintenance personnel of the supplier responsible for

supervision and maintenance shall be available to reach the site(s) within 1 hour's notice.

If the performance of any individual equipment or system is not satisfactory, the same shall
be replaced by the supplier free of cost.
If it is found that to meet the performance criteria, any extra equipment is required the same
will be provided free of cost by the supplier.
All faults appearing and their rectification shall be periodically advised to the hospital, the
period being not more than a month.
Any lacuna or lacunae noticed in the functioning of the installation as a result of any design feature shall be rectified by the supplier free of cost.
The Supplier shall fully associate the engineers and technicians of the Institute during installation, testing, commissioning, operation and maintenance period.
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.
a. The warranty shall remain valid for 60 months from the date of installation & commissioning with a regular up gradation of newer technology as and when evolved followed by a CMC for a period of 5 (Five) Years 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

No conditional warranty will be acceptable.

- a. Warranty as well as Comprehensive Maintenance contract will be inclusive of all accessories and Turnkey work and it will also cover the following wherever applicable:-
 - Any kind of motor.
 - Plastic & Glass Parts against any manufacturing defects.
 - All kind of sensors.
 - All kind of coils, probes and transducers.
 - Printers and imagers including laser and thermal printers with all parts.
 - UPS including the replacement of batteries.
 - Air-conditioners
 - All kinds of painting, civil, HVAC and electrical work
- b. Replacement and repair will be under taken for the defective goods.
- c. 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.
- 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
- In the event of any rectification of a defect or replacement of any defective goods during the warranty period, the warranty for the rectified/replaced goods shall be extended till the completion of the original warranty period of the main equipment.
- 15.6 If the supplier, having been notified, fails to respond to take action to repair or replace the defect(s) within 8 hours on a 24(hrs) X 7 (days) X 365 (days) basis, the purchaser may proceed to take such remedial action(s) as deemed fit by the purchaser, at the risk and expense of the supplier and without prejudice to other contractual rights and remedies, which the purchaser may have against the supplier.
- 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.
- 15.11 The supplier has to run, maintain and operate the MGPS system for 5 years from the date of installation. The detailed scope of work is attached with the technical specification.

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:

Seventy (70%) payment of the delivered goods 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 confirming that dispatch documents has already been sent to all concerned as per the contract within 24 hours;
- (vi) Certificate of origin.
- (vii) Manufacturers warranty certificate

b) Twenty (20%) payment of the delivered goods price shall be paid on installation and commissioning upon submission of following document:-

Installation and commissioning certificate in original issued by the consignee

c) On Acceptance:

Balance Ten (10%) payment of the delivered goods value would be made against 'Final Acceptance Certificate' (FAC) as per Section XVIII of goods to be issued by the consignees subject to recoveries, if any, either on account of non-rectification of defects/deficiencies not attended by the Supplier or otherwise. FAC need to be issued by the designated consignee after installation, commissioning, testing and one month of successful trial run of the equipment.

d) Payment of Other services, installation commissioning charges:- Payment of other services, labour, installation and commissioning charges etc. will be paid only after issuance of final acceptance certificate by the consignee.

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 (70)% 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) Manufacturer's own factory inspection report and
- (vii) Certificate of origin by the chamber of commerce of the concerned country;
- (viii) Inspection Certificate for the despatched equipments issued by recognized/ reputed agency like SGS, Lloyd, BUREAU VERITAS and TUV prior to despatch.
- b) Twenty (20)% 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 the following document
 - i) Installation and commission certificate issued by the end user

c) On Acceptance:

Balance payment of 10% of net CIP price of goods would be made against 'Final Acceptance Certificate' (FAC) as per Section XVIII to be issued by the consignees through irrevocable, non-transferable Letter of Credit (LC) opened in favour of the Foreign Principal in a bank in his country, subject to recoveries, if any. FAC need to be issued by the designated consignee after installation, commissioning, testing and one month of successful trial run of the equipment.

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

e) Payment of Indian Agency Commission:

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

C) Payment of Turnkey, if any:

Turnkey payment will be made to the bidder/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.

D) Payment of Running, Maintenance and Operation for initial five year period after installation:- Payment for running maintenance and operation will be paid quarterly within 7th day of the first month of the following quarter, by the respective institute / consignee on the basis of satisfactory performance certificate issued by the end user.

E) Payment for Annual Comprehensive Maintenance Contract Charges:

The consignee will enter into CMC with the supplier at the rates as stipulated in the contract. The payment of CMC will be made on six monthly basis after satisfactory completion of said period, duly certified by the consignee on receipt of bank guarantee for an amount equivalent to 2.5 % of the cost of the equipment as per contract valid till 2 months after expiry of entire CMC period.

- 21.2 The supplier shall not claim any interest on payments under the contract.
- 21.3 Where there is a statutory requirement for tax deduction at source, such deduction towards income tax and other tax as applicable will be made from the bills payable to the Supplier at rates as notified from time to time.
- 21.4 Irrevocable & non transferable LC shall be opened by the purchaser. However, if the supplier requests specifically to open confirmed LC, the extra charges would be borne by the supplier. If LC is required to be extended and/or amended for reasons not attributable to the purchaser/consignee, the charges thereof shall be borne by the supplier.
- 21.5 The payment shall be made in the currency / currencies authorised in the contract.
- 21.6 The supplier shall send its claim for payment in writing, when contractually due, along with relevant documents etc., duly signed with date, to the purchaser.
- 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,	ce	rtify that I	/We ha	ve not re	ceived bac	k the Fi	inal A	cceptance	Certi	ificat	e duly
receipt	ed by the o	consignee	or ar	y comn	nunication	from	the	purchaser	or	the	consignee
about	non-receip	t, shortage	e or def	ects in th	ie goods su	pplied.	I/We	agree	to n	nake	good any
defect	or deficiend	cy that the	consig	nee may	report with	nin thre	e mor	nths from th	ne da	te of	receipt of
this ba	lance paym	ent.									

22. Delivery

- 22.1 The supplier shall deliver the goods and perform the services under the contract within the time schedule specified by the Purchaser/Consignee in the List of Requirements and as incorporated in the contract. The time for and the date of delivery of the goods stipulated in the schedule shall be deemed to be of the essence of the contract and the delivery must be completed not later than the date (s) as specified in the contract.
- 22.2 Subject to the provision under GCC clause 26, any unexcused delay by the supplier in maintaining its contractual obligations towards delivery of goods and performance of services shall render the supplier liable to any or all of the following sanctions:
 - (i) imposition of liquidated damages,
 - (ii) forfeiture of its performance security and
 - (ii) 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
- 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.
- 22.6 Passing of Property:
- 22.6.1 The property in the goods shall not pass to the purchaser unless and until the goods have been delivered to the consignee in accordance with the conditions of the contract.
- 22.6.2 Where there is a contract for sale of specific goods and the supplier is bound to do something to the goods for the purpose of putting them into a deliverable state the property does not pass until such thing is done.
- 22.6.3 Unless otherwise agreed, the goods remain at the supplier's risk until the property therein is transferred to the purchaser.

23. Liquidated damages

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

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

24. Termination for default

- 24.1 The Purchaser/Consignee, without prejudice to any other contractual rights and remedies available to it (the Purchaser/Consignee), may, by written notice of default sent to the supplier, terminate the contract in whole or in part, if the supplier fails to deliver any or all of the goods or fails to perform any other contractual obligation(s) within the time period specified in the contract, or within any extension thereof granted by the Purchaser/Consignee pursuant to GCC sub-clauses 22.3 and 22.4.
- 24.2 In the event of the Purchaser/Consignee terminates the contract in whole or in part, pursuant to GCC sub-clause 24.1 above, the Purchaser/Consignee may procure goods and/or services similar to those cancelled, with such terms and conditions and in such manner as it deems fit and the supplier shall be liable to the Purchaser/Consignee for the extra expenditure, if any, incurred by the Purchaser/Consignee for arranging such procurement.
- 24.3 Unless otherwise instructed by the Purchaser/Consignee, the supplier shall continue to perform the contract to the extent not terminated.

25. Termination for insolvency

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

26. Force Majeure

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

27. Termination for convenience

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

28. Governing language

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

29. Notices

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

30. Resolution of disputes

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

31. Applicable Law

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

32 Withholding and Lien in respect of sums claimed

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

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

33. General/Miscellaneous Clauses

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

SECTION - V

SPECIAL CONDITIONS OF CONTRACT (SCC)

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

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

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

SECTION - VI

LIST OF REQUIREMENTS

Part -I

Sch No.	Equipment Name	Consignee Name	Qty ·	Total Qty	Warranty required		
1 (a)	Medical Gas Pipeline System with running and operation for initial 5 years	Bhopal	1	6			
1 (b)		Bhubaneswar	1		5 years		
1 (c)		Jodhpur	1				
1 (d)		Patna	1				
1 (e)		Rishikesh	1				
1 (f)		Raipur	1				

Part II: Required Delivery Schedule:

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

300 days from date of Notification of Award to delivery, installation and commissioning at consignee site. The date of delivery will be the date of delivery at consignee site (Tenderers may quote earliest delivery period). If the bidder gets work order for more than one AIIMS, simultaneous deliveries need to be ensured by the bidder/ awardee to each AIIMS.

Although the complete delivery, installation and commissioning has to be completed within 300 days however part delivery, installation and commissioning need to be completed within first 200 days for each AIIMS (except AIIMS Bhopal) as mentioned in the BOQ.

b) For Imported goods directly from foreign:

300 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). 200 days is inclusive of installation and commissioning. If the bidder gets work order for more than one AIIMS, simultaneous deliveries need to be ensured by the bidder/ awardee to each AIIMS.

Although the complete delivery, installation and commissioning has to be completed within 300 days however part delivery, installation and commissioning need to be completed within first 200 days for each AIIMS (except AIIMS Bhopal) as mentioned in the BOQ.

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

Note: Deleted

Part III: Scope of Incidental Services:

Installation & Commissioning, Supervision, Demonstration, Trial run and Training etc. as specified in GCC Clause 13. Five (5) persons each from each AIIMS need to be trained for MGPS.

Part IV:

Turnkey (if any) as per details in Technical Specification.

Part V:

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

Part VI:

Supplier has to quote for running, operation and maintenance for initial five year period as defined in tender scope of works.

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

Part VII:

Required Terms of Delivery and Destination.

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

At Consignee Site(s)

b) For Imported goods directly from abroad:

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

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

Insurance (local transportation and storage) would be extended and borne by the Supplier from ware house to the consignee site for a period including 6 months beyond date of delivery.

Destination/Consignee details are given in Section XXI

Section – VII Technical Specifications

- **Note 1:** Tenderer's attention is drawn to GIT clause 18 and GIT sub-clause 11.1 A (iii). The tenderer is to provide the required details, information, confirmations, etc. accordingly failing which it's tender is liable to be ignored.
- 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:** Adequate training of personnel and non-locked open software and standard interface interoperability conditions for networked equipment in hospital management information system (HMIS)

The successful tenderer will be required to undertake to provide at his cost technical training for personnel involved in the use and handling of the equipment on site at the institute immediately after its installation. The company shall be required to train the institute personnel onsite for a minimum period of 1 month

All software updates should be provided free of cost during warranty period and CMC period

Note 4: DISMANTLING AND DEMOLISHING

Providing all tools, tackles, manpower for demolishing /dismantling, alteration/ addition for lime concrete, cement concrete, R.C.C, R.B work, precast concrete or stone slabs in walls, partition walls, stone rubble masonry, dressed stone work, ashlar face stone work, marble work or precast concrete work, dismantling doors, windows and clerestory window (steel or wood) shutter including chowkhats, architrave, holdfasts etc. CI or asbestos rain water pipes of any diameter with fittings and clamps, dismantling G.I. pipes (external work) including excavation and refilling trenches after taking out the pipes, taking out doors, windows and clerestory window shutters (steel or wood), wood work in frames, trusses, purlins and rafters, dismantling steel work in single sections including dismembering and stacking, dismantling steel work in built up sections in angles, tees, flats and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc., old plaster or skirting raking out joints and cleaning the surface for plaster, dismantling of R.C.C. spun vent shaft including excavating the cement concrete pit completely, taking out the shaft, refiling the excavated gap, stacking the useful materials near the site extra for cutting reinforcement bars, Dismantling aluminium/ Gypsum partitions doors, windows, fixed glazing and false ceiling including disposal of unserviceable surplus material and stacking of serviceable material within 1000 meters lead and any other work as directed by engineer-in-charge.

Disposal of building rubbish/ malba/ similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge.

TECHNICAL SPECIFICATIONS

Schedule no. 1 Technical specification for Medical Gas Pipeline System

<u>DOCUMENT FOR SUPPLY, INSTALLATION TESTING A</u> <u>AND COMMISSIONING OF GAS PIPELINE, LIQUID OXYGEN PLANT AND MANIFOLD SYSTEM</u>

Part -A

<u>Technical specifications of Centralized Medical Gas Pipeline system, Liquid Oxygen Plant and Manifold system for All India Institute of Medical Sciences (AIIMS).</u>

The system comprises of

- 1. Liquid oxygen supply system and Oxygen manifold
- 2. Nitrous oxide manifold with automatic control panel and emergency manifold.
- 3. Vacuum (suction) supply system complete.
- 4. Air supply system (4 bar & 7 bar) complete.
- 5. Distribution piping complete with accessories.
- 6. Area Valve Service System.
- 7. Alarm Systems.
- 8. Pendants and bed head panels
- 9. Outlets.
- 10. AGSS system.
- 11. CO2 Systems

RESPONSIBILITY OF BIDDER

Bidder shall be responsible for complete design, supply, installation, testing and commissioning including turnkey works, demolition and construction as applicable. The bidders are required to survey the site before furnishing the quotations.

Bidder shall execute all required civil, electrical, plumbing, lighting, fire safety, exhaust systems and other works as maybe required for complete installation and trouble-free functioning as a part of the 'turnkey work'. Hospital will provide electrical supply with isolator in the plant. The wiring, peripheral lighting, fans, exhaust etc have to be done by the bidder. Control panel for Vacuum system and Air plant system has to be supplied by the bidder. Bidder will be responsible for trenching or other associated work related to installation and commissioning of complete MGPS system.

The MGPS bidder has to terminate all the medical gas lines outside the OT. Installation and commissioning of area valve service unit and alarm unit for the operation theatre shall be done by the MGPS bidder. Medical gas pipe line inside the minor operation theatre has to be done by the MGPS bidder. Medical gas pipe line inside the modular operation theatre shall be done by the MOT bidder. MGPS bidder shall cooperate with the MOT bidder for the successful completion of MGPS inside the modular operation theatres.

The bidder shall be responsible for the complete works including the submission of working Drawings, and isometric views, detailed work schedule and materials. Bidder shall be responsible for design, supply, installation, testing and commissioning of medical gas supply system in coordination with AIIMS authorities. Bidder shall be responsible for free maintenance of Gas pipeline system, other plants and manifolds during warranty period. Bidder shall be responsible for supply, installation, testing and commissioning of Liquid Medical Oxygen tanks, Oxygen manifold system, Vacuum plant,

Air plant ,AGSS system, Medical Gas lines, Area valve service units, Alarm systems Gas out lets and OT pendants, CO2 Systems ie MGPS complete as per HTM 02-01/NFPA 99C/DIN/EN standards. Bidder should provide factory test certificates for the materials used. Bidder should supply complete set of part manuals, service manuals and user manuals for all the systems and subsystems to be supplied. Final electrical safety test, system test, and calibration should be done by authorized persons using calibrated test equipment as per standards. Bidder or his authorized agent should post a trained experienced engineer who should be available at site.

Bidder shall be responsible for connecting the existing pipeline system in the AIIMS to the main pipeline system.

1.1.1 SCOPE:

Supply and installation of Vacuum Insulated Evaporator (VIE)

One vessel of 1X20 KL Liquid oxygen VIE vessel system will be the primary (main) supply source and another vessel of 1X10 KL will be secondary source. The Two VIE vessel system should be interconnected with automatic change over. Each system should have separate tank, VIE, AV coil, controllers etc. Required pipe line including necessary accessories like isolation valves, non-return valves, line regulators etc. has to be supplied. Essential inter connection to the manifolds through automatic change over control should be provided. Manual change over is also to be provided.

The vendor should supply all the above items.

Scope and responsibility of the vendor

- Erection and commissioning of the VIE, AV coil, and the interconnection of LO plant to the manifolds of the hospital with suitable modifications is the vendors responsibility.
- Necessary maintenance of the VIE, AV coil, controllers etc. is the responsibility of the supplier.
- The vendor should liaise with the Chief Controller of Explosives, Nagpur to get the essential safety clearance certificate. Service charge required for this work should be paid by the vendor.

1.1.2 OXYGEN SUPPLY SYSTEM

LIQUID MEDICAL OXYGEN TANK (VACCUM INSULATED EVAPORATOR) AND ALLIED EQUIPMENTS APPLICATION:

Storage of Liquid Oxygen and Supply of High purity Oxygen gas for medical use after conversion of liquid to gas through ambient atmospheric vaporizer.

LIQUID MEDICAL OXYGEN STORAGE TANK:

The double walled Vaccum Insulated Evaporator shall be constructed of stainless steel inner vessel contained within a carbon steel outer vessel. The annular space between the vessels shall be filled with non-inflammable perlite insulation material to insulate under vacuum. The VIE should be self pressurizing type by partial evaporation of liquid oxygen through a pressure building coil by a non ferrous imported pressure regulator. The vessel shall be supplied as a functional whole with all materials of construction & the cleaning regime suitable for medical grade liquid oxygen.

HLL Lifecare Limited

Quantity : 20 KL X 1 No. and 10 KL X 1 No.

Installation : Outdoor

Type : Double walled, vertical

Capacity : Minimum 20,000 liters water capacity- 1no.

Minimum 10,000 litres water capacity- 1 No

Design code : ASME Sec.VIII Div.I latest Edition / EN -

13458-2 Annexure-C/ AD2000 MARKBLATTER 2004 Edition

Max. working pressure : 17 Bar G

Design temperature : -196°C to +50°C

Hydraulic Test Pressure : 26 bar G

Type of Insulation : Vacuum, Perlite filled

Safety Valve Set pressure : 17 Bar G (dual safety valve with three way diverter valve)

Bursting Disc Set Pressure : 23 Bar G (Bursting disc)

Standard fittings : Pressure rising coil, pressure building regulator of adequate capacity and size, dual safety valve with imported three way diverter valve, bursting disc., pressure gauges, liquid over flow line, Liquid level gauge and adequate numbers of extended spindle glove valve etc.

Maximum Evaporation Rate : <0.35% of net value.

Material of Construction : Inner shell and wetted parts of SS 304

Outer shell of CS ASTMA 516 Gr. 70 / CGA 341

2002 EN13455 S275/S355

Joint Efficiency : 100%

Radiography : 100% for inner, for outer spot

External piping : From LMO Tank to Vaporizer SS304

From Vaporizer to inlet of Pressure

Reducing Station SS304

From Outlet of Pressure Reducing Station to

Main header Copper

Cryogenic Valves : Non ferrous (Imported)

Cryogenic Safety Valves : Imported

Pressure Building regulator : Non ferrous

Leak Detection test : Helium Leak detection

HLL Lifecare Limited

Painting : Primer and finish with White RAL 9010

Inspection : By 3rd party (SGS/LLOYDS/TUV)

Cleaning : Degreasing for Oxygen Service and Pressurize

with Nitrogen.

Withdrawal rate : 1000 cum per hr. at 12 Bar G

1.1.3 **ACCESSORIES:**

LMO Tank alongwith P&ID shall be fitted with the following accessories:

- Top Fill Valve
- Bottom Fill Valve
- Liquid charging line blow valve
- Liquid Delivery Valve
- Overflow Valve
- Gas blow valve
- Filling Coupling
- Vaporizer Coupling
- Liquid Level Gauge (Dial 100 mm).
- High Level Valve
- Equalizing Valve
- Low level Valve
- Pressure Gauge (100mm dial, Range 0-25 kg/cm2)
- Pressure Gauge Isolation Valve
- Pressurizing Valve
- Pressurizing Coil
- Filter
- Pressure Regulator
- Economizer
- Check Valve
- Evacuation Port
- Vacuum Gauge Connection Port/vacuum probe valve.

1.1.4 **SAFETY FITTING:**

- Two safety valves for inner vessel fitted on pipe line with flow divert valve.
- Rupture disc for inner vessel.
- Safety valve for inlet pipeline.
- Safety valve for pipeline of pressurizing evaporator.
- One rupture disc/ safety device on outer vessel.

1.1.5. SUBMITTALS:

The Liquid Medical oxygen tank shall accompany the Original Quality Test Certificate covering following Documents:

- Approval letter from CCOE along with approved drawing from CCOE.
- Approval letter from CCOE for use of cryogenic vessel(s) at site.
- Certificate from the authorized inspection agency.
- Heat chart for pressure parts.

- Dimension checks report.
- Dished End reports.
- Mechanical properties test report for production test coupon.
- Visual inspection report.
- Radiography examination report.
- Liquid penetrant examination.
- Cleaning inspection report.
- Hydro-pressure test report.

1.2 Liquid Oxygen supply system

One vessel of 1X20 KL Liquid oxygen VIE vessel system will be the primary (main) supply source and another vessel of 1X10 KL will be secondary source. In case of failure in liquid oxygen supply, it should automatically switch over to an emergency oxygen manifold having 2 X 20 cylinders. Design should be state-of-the-art.

The unit should consist of a double walled vertical vessel (inner pressure vessel made of stainless steel and outer vessel of carbon steel). It should be fitted with standard accessories and should be "passed" the standard inspection requirement at factory for VIE. The copy of the certificate should be forwarded to HLL prior to shipping and original should be enclosed along with the shipping document. Bidder should follow international Standards.

1.2.1 Product and Service Specification:

- Proposed capacity of the primary liquid oxygen storage tank is 20X1 KL and secondary is 10 KL.
- Gas outlet pressure to be maintained at 4.2 kg/cm2.
- Space taken for installation should be as per regulations of Indian explosive controller and having easy access for LMO tank.
- The site would be protected by fence around, well lit by sodium vapour lamps and demarcated with proper signage.
- Indication of liquid oxygen level and outlet gas pressure should be provided.
- Automatic change over should be provided between the primary and secondary LMO tanks. In case of failure in liquid oxygen supply, it should automatically switch over to an emergency oxygen manifold having 2 x 20 cylinders

1.2.2 Specification of Components

Product: The liquid medical oxygen (LMO) supplied at site should be of IP grade. The LMO supplied should comply with all relevant SMPV regulations and standards under the preview of the Indian Drugs and Cosmetic Act rules. They should also satisfy the IP 2007 specifications.

Storage Tank Specifications

The storage tank and the vaporizer coils should be designed as per the ASME Sec.VIII Div.I latest Edition / EN -13458-2 Annexure-C/ AD2000, MARKBLATTER 2004 Edition

The cryogenic vessel will be of cylindrical shape with vaporiser and the pressure control system. It should be provided with the essential components to fill the liquid, to build up pressure, to relieve pressure, to withdraw product and to evacuate the vessel. All protective, safety and alarm provisions mandatory to Liquid Medical Oxygen plants should be supplied.

The requirement of the Cryogenic Vessel should be:

- 1. Configuration: Vertical
- 2. Inner vessel maximum allowable working Pressure: 17 kg/cm2
- 3. Inner vessel hydrostatic test pressure: Greater than 26 kg/cm²
- 4. Outer vessel material of construction: Carbon steel
- 5. Inner vessel material of construction: Stainless steel
- 6. Independent AV coil should be provided with each vessel.

Storage Tank Capacity

Vacuum insulated evaporator vessel should have a capacity of 20X1 kilo liters and other with 1X10 kilo litres. The AV coil should have adequate capacity to handle the gas flow requirements of the hospital.

Vaporiser Coil

- 1. Maximum operating Pressure: 20 kg/cm2
- 2. Design Pressure: 22 kg/cm2
- 3. Pneumatic test Pressure: Greater than 24 kg/cm2
- 4. Inlet temperature: 196 to $+40^{\circ}$ C.
- 5. Duty cycle: Continuous duty
- 6. Flow rate: 1200 cubic metre/ hour

The fence, foundation, lighting, signage, approach gate etc are to be designed and installed by the vendor.

1.2.3 Safety

The vendor should ensure that all international safety norms and standards applicable as implemented and certified by the CCE.

Following are the mandatory provisions for vessel:

- Vessel low liquid level alarm
- Vessel low pressure alarm
- Pipeline low pressure alarm.
- Twin regulator
- Twin safety valve
- Non return valve and 3 way diverter (bypass) valve
- Automatic changeover to manifolds with control panel
- Alarm on indicating manifold in use in case the vessel is not in use.
- Alarm on low pressure back-up manifold cylinders

Statutory Requirements

All statutory requirements of the Chief Controller of Explosives of India and SMPV rules need to be followed, besides all regulations and guidelines put forward by the Govt. Of India from time to time should be followed.

Maintenance

All routine preventive maintenance and break-down maintenance of the liquid oxygen plant should be done by the vendor. Experienced personnel should be readily available.

Log of all works undertaken in the plant should be meticulously maintained by the vendor.

Bulk cylinders for the manifold will be arranged by the hospital. The hospital will ensure that the cylinders are full and ready to use during emergencies.

1.3 Emergency Oxygen Manifold – 2 x 20 Class-D type bulk cylinders. Cylinders to be as per BOQ

Manifold shall consist of two high pressure header bar assemblies to facilitate connection of 20nos of primary and 20nos of secondary cylinder supplies. Each header bar shall be provided with 20 numbers of cylinder pigtail connections to suit cylinder valves as per IS.3224 incorporating a check valve at the header connection. The high-pressure header bar shall be designed in such a manner that it can be extended to facilitate additional cylinder connections. Each header bar assembly shall be provided with a high pressure shut off valve.

Oxygen Manifold should consist of 2 rows of 20no of class D-type bulk oxygen cylinders. The manifold should be hydraulically tested to 3500 psig. The manifold should be so designed that it shall suit easy cylinder changing and positioning. The system should have non – return valves for easy changing of cylinders without closing the bank. The cylinder should be placed with the help of cylinder brackets and fixing chains which should be galvanized.

1.4 Fully Automatic Oxygen Control Panel (*IMPORTED*):

Automatic control panel should be constructed in accordance with the requirement of international standards.

The fully automatic oxygen control panel should comply with *HTM 02-01/NFPA 99C/DIN/EN/ISO-7396-1 standards*. It should be European CE Certified or UL listed under Medical Devices Directive.

The manifold assembly should provide two stages of pressure regulation. A single stage primary regulator, one for each cylinder bank should be used to initially reduce cylinder pressure and two single stage pressure regulators should be provided in the control cabinet for final delivery pressure regulation. One delivery pressure regulator in service and one should be ready for service in a standby mode. The Manifold control panel should be digital, fully automatic type and switches from "Bank in Use" to "Reserve bank" without fluctuation in delivery supply line pressure. Changeover should be performed by electrically/pneumatically operated valves contained in the control cabinet. In the event of an electrical power failure the valves should automatically open to provide an uninterrupted gas flow. It should be 100% automatic and should not require manual adjustment.

The automatic gas manifold control should include:

- supply pressure gauges x 2Nos
- delivery pressure gauge x 1No
- Line pressure regulators with bypass valve x 2Nos
- line pressure relief valve x 1No
- green in service LED indicators, one for each supply bank x 2Nos
- amber / yellow ready for service LED indicators, one for each supply valve x 2Nos
- red LEDs to indicate depleted cylinders, one for each supply bank x 2Nos
- Instruction for changing the cylinders should be clearly identified on the front of panel.
- All functional components should be enclosed in corrosion resistant robust material.

All components inside the Control Panel like Pressure Regulators, piping and control switching equipment should be cleaned for Oxygen Service and installed inside the cabinet to minimize tampering with the regulators or switch settings.

The Control Panel shall include two pressure relief valves, one high pressure approx.200psi and one low pressure approx.75 psi.

The heavy duty control panel should be provided with a flow capacity of 1500 to 2000 LPM at 50 to 60 psi

Control panel should have Alarm reset switch to control and monitor the alarm indications by the operator. All high pressure manifold regulators should contain no halogenated polymers and have adiabatic certification.

1.5 Oxygen Flow meter with Humidifier Bottle

Back Pressure Compensated flow meter for accurate gas flow measurement with following features:

- A) Control within a range of 0-15 LPM.
- B) It should meet strict precision and durability standard.
- C) The flow meter body should be made of brass chrome plated materials.
- D) The flow tube and shroud components should be made of clear, impact resistant polycarbonate.
- E) Flow tube should have large and expanded 0-15 LPM range for improved readability at low flows.
- F) Inlet filter of stainless steel wire mesh to prevent entry of foreign particles
- G) The humidifier bottle is made of unbreakable & reusable polycarbonate /polysulfone material autoclavable at 121 degree centigrade .
- H) Humidifier Bottle should be covered under warranty & CMC.

1.6 High pressure tube for O2, N2O, Compressed Air, CO2, & Vacuum

It should be colour coded for individual services i.e. white for Oxygen, Blue for N2O and Yellow for Vacuum, Black for air. Antistatic rubber tube should be as per ISO standards.

2. NITROUS OXIDE SYSTEM

2.1 Nitrous Oxide Manifold -2 X10 Class-D type bulk cylinders. Cylinders to be supplied as per BOQ.

Manifold shall consist of two high-pressure header bar assemblies to facilitate connection of primary and secondary cylinder supplies. Each header bar shall be provided with 10 number of cylinder pigtail connections to suit cylinder valves as per IS3224 incorporating a check valve at the header connection. The high-pressure header bar shall be designed in such a manner that it can be extended to facilitate additional cylinder connections. Each header bar assembly shall be provided with a high pressure shut off valve. The manifold should be so designed that it shall suit easy cylinder changing and positioning. The cylinder should be locked with the help of cylinder brackets and fixing chains which should be galvanized.

2.2 Fully Automatic Nitrous Oxide Control Panel (*IMPORTED*)

The fully automatic N2O control panel should comply with HTM 02-01/ NFPA 99 C/EN/DIN/ISO 7396-1 STANDARD. It should be European CE Certified or UL listed under Medical Devices Directive.

The manifold assembly should provide two stages of pressure regulation. A single stage primary regulator, one for each cylinder bank should be used to initially reduce cylinder pressure and two

single stage pressure regulators should be provided in the control cabinet for final delivery pressure regulation. One delivery pressure regulator in service and one should be ready for service in a Standby mode. The Manifold control panel should be digital, fully automatic type and switches from "Bank in Use" to "Reserve bank" without fluctuation in delivery supply line pressure. Changeover should be performed by electrically/pneumatically operated valves contained in the control cabinet. In the event of an electrical power failure the valves should automatically open to provide an uninterrupted gas flow. The manifold should not require any manual resetting or adjustments after the replacements of the depleted cylinders.

The automatic gas manifold control should include:

- supply pressure gauges x 2Nos
- delivery pressure gauge x 1No
- Line pressure regulators with bypass valve x 2 Nos
- line pressure relief valve x 1No
- green in service LED indicators, one for each supply bank x 2Nos
- amber / yellow ready for service LED indicators, one for each supply bank x 2Nos
- red LEDs to indicate depleted cylinders, one for each supply bank x 2Nos
- Instruction for changing the cylinders should be clearly shown on a metal plate attached on the front of the removable cover of the control panel.
- All functional components should be enclosed on fire resistant, robust synthetic polymer/SS.

The Control Panel shall include two pressure relief valves, one high pressure approx.200psi and one low pressure approx.75 psi.

The control panel should also have heaters to prevent ice formation on the regulators at high flow rates.

The Control Panel should be made to provide Heavy Duty and have a flow capacity of 1000 LPM at 50 to 60 psi.

Control panel should have Alarm reset switch to control and monitor the alarm indications by the operator. All high pressure manifold regulators should contain no halogenated polymers and have adiabatic certification.

2.3 Emergency N2O Manifold – 2 x 4 Class-D type bulk Cylinders. Cylinders included to be supplied as per BOO.

Manifold shall consist of two high-pressure header bar assemblies to facilitate connection of primary and secondary cylinder supplies. Each header bar shall be provided with 4 numbers of cylinder pigtail connections to suit cylinder valves as per IS 3224 incorporating a check valve at the header connection. The high-pressure header bar shall be designed in such a manner that it can be extended to facilitate additional cylinder connections. Each header bar assembly shall be provided with a high pressure shut off valve. Nitrous oxide manifold should consist of 2 rows of 4 cylinders.

The manifold should be hydraulically tested to 3500 psig. The manifold should be so designed that it shall suit easy cylinder changing and positioning. The system should have non – return valves for easy changing of cylinders without closing the bank. The cylinder should be placed with the help of cylinder brackets and fixing chains which should be galvanized.

3 CARBON DIOXIDE SYSTEM

Medical CO2 Manifold 2 x 4 Nos of Class-D type Cylinders. Cylinders included to be supplied as per BOO.

The Modular Manifold supply system shall provide carbon dioxide piped distribution system.

The Modular Manifold system should be in such a way that it increases flexibility and allows easy enlargement of the manifold capacity in case of future expansion. The system should comprise basic components and shall be constructed of i.e. Primary Header, Secondary Header, cylinder racks, non-return valve, blanking plug, and corner connector.

The primary head should be mounted on an 8 cylinder rack which can be connected to the left and right inlets of automatic Control Panel. Each header should have a class D type bulk cylinders with high pressure shut off valve. Corner connector should be available to enable installation of manifold headers around corners of the room. The manifold supply system cylinder rack should locate vertical gas cylinders which should be restrained by chains. It should be made from steel for durability and with powder coated paint finish.

Heater should be added to prevent freezing in the line and the line should be insulated properly.

Each Non-return valve shall have a hard seat ceramic ball. Soft seat Non-return valves are not acceptable. The non – return valves should be incorporated into the header assembly to protect the system in the event of tailpipe fracture. For better access and increased safety, the non-return valve block should be positioned on the header rack mid – way between the cylinder positions. Flexible copper tail pipes should be used to connect the gas cylinders and the manifold header connection points.

A custom length corner connector shall also be available to enable header manifolds to be installed in a "U" configuration across 3 adjacent walls of the room. Manifold shall have specific tailpipe connections.

3.1 Fully Automatic Control panel for CO2 System (IMPORTED)

The Manifold Control System should supply any type of medical gas from both left and right hand manifold banks. Operation and performance criteria should fully satisfy the requirements of HTM 02-01/NFPA 99 C/EN/DIN/*ISO* 7396-1 standard. The fully automatic CO2 control panel should comply with the standard. It should be European CE Certified or UL listed under Medical Devices Directive.

The Manifold Control System shall supply on uninterrupted flow of **500 L/min**. to a 400 k Pa (4 bar) distribution system. Either the left or right hand manifold bank may be designated "Duty" and should automatically changeover to supply the distribution system from the "Standby" bank when pressure in the "Duty" bank falls to a predetermined level.

There should be a 2 stage duplex system of pressure regulation to provide a high flow rate. Each side should be capable of being fully isolated, via a full flow ball valve, in order to change any regulator without a cessation of supply. The inlet of the 1st stage regulator should be protected from the particulate matter by a moulded bronze filter.

All regulators should be protected from over-pressurization by relief valves which are vented to atmosphere. There should be a bypass valve fitted to the 2nd stage regulators to allow CO2 to be vented outside the manifold room during the commissioning stage. Regulators shall comply with BS EN ISO 10524-2 and shall have documented test reports available confirming successful completion of the oxygen ignition tests stated therein. Multi stage regulators combined into single unit is not acceptable.

To simplify installation there should be an installation bracket attached to the wall with four screws; the main panel then should locate on to this bracket and be secured. The Control Panel should be housed in a single panel having a solid construction using epoxy technology in a glass reinforced polymer moulding for high strength, high chemical and corrosion resistance. The cover should hinge

upwards but should remain facing outward for manual operation and maintenance accessibility. For added safety the voltage inside the panel should not exceed 12v dc. The mains supply transformer should be in its own housing in a moulded recess at the rear of the panel.

There should be a fail-safe system in the event of power failure so that solenoid valves open and there is full continuity of supply pressure and flow. Upon power restoration the unit should revert back to the original bank of cylinders being used. To avoid inadvertent resetting of the "change cylinder alarm" the solenoid valves should be latched so that once changeover has occurred and the cylinders have been replaced, a reset button must be operated to cancel the alarm condition.

To aid maintenance, the connections within the panel should be flat face/'O' ring design and facilitate easy removal of the regulators and pressure switches. There should be manual changeover buttons so that servicing either side of the system can be simply achieved. The PCB's should be linked with plug and socket connectors for easy removal. The manifold control systems should be 'CE' marked under the Medical Devices Directive (Lloyd's Register Quality Assurance).

Control panel should have Alarm reset switch to control and monitor the alarm indications by the operator. All high pressure manifold regulators should contain no halogenated polymers and have adiabatic certification.

4. VACUUM SYSTEMS

It should be imported.

It should be European CE certified or UL listed under Medical Devices Directive for use in medical vacuum and dual Medical/ Surgical applications.

4.1 Oil Sealed Rotary Vane Medical Vacuum System

Rotary Vane Medical Vacuum System should comply with HTM 02-01/ NFPA 99 C/EN/DIN. It should be European CE Certified or UL listed under Medical Devices Directive for use in medical vacuum and dual Medical / Surgical applications. The unit shall consist of electric motor driven pumps vacuum receiver, electrical control system and interconnection piping and wiring. The components shall be modularly assembled for easy service.

4.1.1 Vacuum Pump Module

- It should fully comply and meets with the requirements of the standard.
- Designed flow capacity should be minimum 5000 LPM \pm 10% variation in pentaplex/Quadraplex configuration.
- It should be European CE marked/UL listed. The medical vacuum plant shall comprise pentaplex/Quadraplex, air-cooled, oil lubricated rotary vane vacuum pumps to provide a flow rate of at least 7000l/min ± 10% as per the relevant standard (i.e. as per HTM 02-01/NFPA99C/DIN/EN/ISO 7396 standard) to provide the desired flow of the hospital to maintain a vacuum level of 450 mmHg at the plant connection point. (Flow rate of at least 5000l/min±10% for AIIMS Rishikesh in lieu of 7000l/min)
- The vacuum plant shall comprise five/four air-cooled; oil lubricated rotary vane vacuum pumps suitable for both continuous and frequent start/stop operation at inlet vacuum levels between 500mmHg and 660 mmHg.
- The control system should normally employ automatic rotation of the lead pump to maximize pump life and ensure even wear.
- Vacuum pump inlets shall include a wire mesh filter and integral non-return valve to prevent oil suck back and pressure increases in the vacuum system.

- Each vacuum pump shall be fitted with anti-vibration pads between the pump foot and mounting frame. The plant shall be fitted with duplex bacteria filter system. Each individual filter shall have the capacity to deliver full design flow such that one set is designated duty and the other will be standby. Bacteria filters shall have efficiency at least 99.999% when tested by the sodium flame method in accordance with BS 3928:1969 utilising particles in the 0.02 to 2 micron size range. The pressure drop across each clean filter at 50% of the system design flow should not exceed 25 mm Hg (3 kPa) at a vacuum of 475mm of Hg (63 kPa). Bacteria filters shall be marked with the legend 'Bio-Hazard'.
- Each bacteria filter shall be provided with a transparent sterilizable collection jar to collect condensate. The total water capacity of the pressure vessels shall be at least 100% of the design flow rate of the plant in 1 minute in terms of free air aspired. The plant control and power management system shall monitor the safe operation of the plant, providing signalling into the alarm system as per the requirements of HTM 02-01/NFPA 99C. Vacuum pump exhaust shall be piped out of the plant room and discharged outside the building at high level away from windows and any other air intakes.

4.1.2 Vacuum Receiver

It should be imported and from the same manufacturer.

The vacuum receiver shall be made of rust free corrosion resistant steel and fabricated as per IS:2825 for a vacuum pressure of 760mmHg. It should include bypass valves, manual drain valves, vacuum gauge. Vacuum reservoir shall have total volume of at least 100 % of plant output in one minute in terms of free air aspired at normal working pressure.

4.1.3 System Controls

The control include individual self-protected combination motor controls with short circuit, single phase and thermal overload protection, individual control circuit transformers with fuse less primary and secondary protection, pressure sensors, temperature switches with reset buttons, and an electronic controller to automatically change the operating sequence of the compressors. The system should have a status display to show the system pressure, elapsed time, maintenance interval, fault conditions, and silence button, lighted Hand-Off-Automatic selector switches and safety disconnect operating handles.

All required local alarm functions should be integrated into the packaged system. The circuitry should be designed so that the audible signal can be silenced and the visual indicator will remain until the fault has been cleared and the reset button resets. Local alarm functions should be annunciated for reserve pump in use.

4.1.4 Accessories

Accessories included for job site installation are inlet and discharge flexible connectors, vibration mounting pads, and source isolation valve, inlet check valve, oil temperature gauge, thermal malfunction switch and vacuum control switch. Flexible connectors on inlet and exhaust of each pump, exhaust tee with union as well as copper tubing with Shut-off-cock for gauge and vacuum switch etc.

4.1.5 Bacterial Filters

The filters should be designed for removal of solid, liquid and bacterial contamination from the suction side of vacuum pump systems, preventing damage to the pump and the potential biological infection of the surrounding environment. The dryer should be particulate filter dryer with ability to remove particles as small as 1 micron.

4.2 Ward Vacuum Units

- It must consists of the following:- 1no of Suction Regulator and 1no of 1000 ml polysulfone /polycarbonate collection jar.
- Suction Regulator: Suction regulator should be supplied with a safety jar, including and antibacterial filter and an anti-overflow safety device. Should have wide membrane continuous suction controller
- Should have vacuum levels: 0-760 mm of Hg
- Should have vacuum gauge fitted with a protective bumper device.
- Should have on/off knob allowing for the quick restoration of a readjusted vacuum level.
- Must have central adjustment knob with a color coded for 0 to 760 mm of Hg. Should have Polysulfone/polycarbonate 1000cc safety jar, autoclavable at 121° C at 5mins, unbreakable, fitted with an anti-overflow safety device and equipped with a plastic antibacterial filter. It should be totally transparent, to ensure perfect sucked liquid visibility.
- Jar should be covered under warranty and CMC

4.3 Theatre Vacuum unit

- It must consist of the following: 1no. Suction Regulator and 2nos. 4000ml polysulfone/polycarbonate collection jar and both to be mounted on a trolley.
- Suction Regulator: Suction regulator should be supplied with a safety jar, including an antibacterial filter and an anti-overflow safety device. Should have wide membrane continuous suction controller
- Should have vacuum levels: 0-760 mm of Hg
- Should have vacuum gauge fitted with a protective bumper device.
- Should have on/off knob allowing for the quick restoration of a readjusted vacuum level.
- Must have central adjustment knob with a color coded for 0-760 mm of Hg. Should have polysulfone/polycarbonate safety jar, autoclavable at 121° C, unbreakable, fitted with an anti-overflow safety device and equipped with a plastic antibacterial filter.
- Collection jar should be totally transparent, to ensure perfect sucked liquid visibility.
- Jar should be covered under warranty and CMC

5. MEDICAL AND SURGICAL AIR SYSTEM

Should have the following main features

- Air-cooled compressors for continuous duty application
- Highest output of compressed air per HP i.e. low power consumption
- Very low vibration resulting in low noise level

5.1 Air Compressor (*Imported*)

Pentaplex /Qudraplex Rotary screw/scroll Continuous duty Compressed Air System with Desiccant Dryers. Air compressor with multistage air/oil filters or oilfree compressor should be supplied.

All compressors to contain timed automatic drain valves for system purging control.

All pressure receivers to contain timed automatic drain valves for system purging control.

5.1.1 Compressor Modules

It should be **Pentaplex/Quadruplex Medical Air Plant** (*Imported*) of 7000 lpm (**Package unit**). The medical air plant shall fully comply with the requirements of the HTM 02-01/ NFPA 99 C/EN/DIN. It should be European CE/ UL listed.

Medical quality air shall be delivered at a nominal pressure of 400 kPa (4 bar) or 700 kPa(7 bar) gauge for supply of the hospital medical air system. The medical air plant shall deliver both medical and surgical air, with a minimum total flow rate of 7000 l/min.

Compressor plant should be designed in such a way that compressors will switch on in a sequential manner as per flow demand.

Three/two identical air compressors should run to provide a flow rate of 7000lpm and two identical air compressors will be standby. The compressors should be standalone ones with independent power supply. *It should comply with the HTM 02-01/NFPA 99 C/EN/DIN/ ISO 7396-1*).

Each rotary screw/scroll compressors should be suitable for both continuous and frequent start/stop operation at a nominal outlet pressure of 13 bar shall be provided. The duty compressors shall be automatically rotated by the plant control system to ensure even wear. Compressors shall be supplied with a block and fin style after cooler with a dedicated quiet running fan to maximize cooling and efficiency. In the case of oil injected compressor, each compressor shall be fitted with a multistage air/oil separator, capable of limiting oil carry over to a maximum of 3 ppm to minimize contamination and maintenance. Each desiccant dryer shall be provided with a dew point sensing switch that shall provide an alarm on the plant control panel and central hospital alarm system when the water concentration in the delivered air rises above the limit. Duplex desiccant dryer and filtration modules shall be provided with three individual stages of filtration as follows:

Stage 1: Coalescing filter upstream of the desiccant dryer for removing liquid water, oil and oil aerosol down to 0.1mg/cu.m (0.1 ppm) and particles down to 1micron.

Stage 2: Particulate filter after the desiccant dryer for dust protection and removing particles down to 1 micron.

Stage 3: Bacteria filter for removing particles down to 0.01 micron.

Purity should be tested as per the standard..

Total air receiver capacity shall be at least 50% of the plant capacity in 1 minute in terms of free air delivered at normal working pressure. Each air receiver shall be protected by a pressure relief valve, a fusible plug and include a pressure gauge with isolating valve and a drain cock. The plant control and power management system shall monitor the safe operation of the plant, providing signal into the alarm system as per the requirements of the standard.

Pressure Reducing Station for 4 bar and 7 bar should fully comply and meet with the requirements of the standard. Simplex pressure reducing station shall comprise as in-line pressure regulator, with downstream pressure gauge. Isolation valves and pressure release valves should be provided as per the standard.

Duplex pressure reducing station to have two branches, connected to the MGPS in parallel in order to allow maintenance on the components of one branch, while the gas flow is maintained in the other branch.

Ball Valves - Full bore which operate from fully open to fully closed position with a quarter turn of the handle.

Complete pressure reducing station with base plate mounted for ease of installation.

Padlocks available to allow locking of the valves in both open and closed positions and must have easy to read pressure gauges. Base plate mounted and supplied with copper stub pipes for ease of installation using inert jointing procedures.

The compressor system should have-

- Intake filter Check Valve Delivery pipe
- Mounting on air tank along with all standard fittings viz. safety valve, pressure gauge, delivery valve, drain valve etc.
- Bidder shall provide all electric control panels, starters etc required for proper functioning of motor.
- Desiccant Air Dryer 2 nos.
- Twin 3-Stage Breathing Air Filters 2 sets
- Outlet pressures for drills/equipment and ventilators should be a minimum of 7 bar and 4 bar respectively.

The compressor should be heavy duty, reliable with long MTBF. Each compressor cylinder is to be protected by a temperature switch, which will stop the drive motor and provide an alarm signal in the event of abnormal discharge air temperature. Each compressor module should include an inline filter with particle retention of 10 microns, inlet isolation valve, discharge isolation valve, and pressure relief valve. The capacity should be capable to take care of total load of all the outlets.

5.2 Vertical Air Receiver

The corrosion resistant coated receiver is to be equipped with tested safety pressure relief valve, sight glass pressure gauge, automatic drain, three-valve by-pass and source isolation valve. Total air receiver capacity shall be at least 50% of the plant capacity in 1 minute in terms of free air delivered at normal working pressure.

5.3 Air Treatment Module

The air treatment module should include dual dryers, dual filtration system and a dewpoint transmitter with local audible and visual signals and dry contacts for remote monitoring. The components should be mounted on a common base with interconnecting copper/brass piping and upstream and downstream isolation valves. The isolation valves must allow either set of components to be serviced without shutting down the system.

Dryers should be of heatless desiccant design and sized to provide for the peak calculated demand. The desiccant dryers should be equipped with dew point dependent switching feature to minimize the need for purge air.

The dual filtration system should remove liquid and particulate matter, consisting of 0.5micron coalescing filters with differential pressure indicators and automatic drain, airline pressure regulators with gauges, final pressure relief valve, and sampling valve.

Each bank should consist of three stage treatment. Digital dew point monitor is to be supplied with alarm contacts as per requirement of the standard.

5.4 System Controls

The electrical control should comply with HTM 02-01/NFPA 99C/EN/DIN standards. .The "Continuous on Demand" feature will stop the operation of the motors during periods of low or no demand. The control include individual self-protected combination motor controls with short circuit

protection, single phase and thermal overload protection, individual control circuit transformers with fuseless primary and secondary protection, pressure sensors, temperature switches with reset buttons, and an electronic controller to automatically change the operating sequence of the compressors. The cabinet shall have status display to include system pressure, dew point pump operation, accumulated time, maintenance interval, fault conditions, and silence button, lighted Hand-Off-Automatic selector switches and safety disconnect operating handles. All required local alarm functions shall be integrated in to the packaged system.

The system should be designed to function even if the programmable controller fails.

5.5 Accessories

Accessories including for job site installation such as inlet and discharge flexible connectors, vibration mounting pads, and source isolation valve should be supplied.

6. DISTRIBUTION PIPING

6.1 Piping specifications

Copper pipe should be as per standard BS: EN 13348:2008 standards; Solid drawn, seamless, deoxidized, non-arsenical, half hard, tempered and degreased copper pipe conforming to the standard. All copper pipes should be degreased & delivered capped at both ends. The pipes should be accompanied with manufacturers test certificate for the physical properties & chemical composition.

Copper pipe must have reputed third party inspection certificate (Eg. Lloyd's or TUV or SGS). Fittings should be made of copper and suitable for a working Pressure of up to 17bar and especially made for brazed socket type connections.

The isolation valve body shall be made of chromium plated brass with non lubricated ball-type. All valves shall be pneumatically tested for twice the working pressure and factory degreased for medical gas service.

Copper fittings should comply with EN 1254:1 factory degreased and brazing filler metals should comply with EN 1044. Fitting should be degreased, individually packed for medical use.

6.2 Installation & testing

Installation of piping shall be carried out with utmost cleanliness. Only pipes, fittings and valves that have been degreased and fittings shall be used at site. Pipe fixing clamps shall be of nonferrous or non-deteriorating plastic suitable for the diameter of the pipe.

Inert gas welding technique should be used by passing oxygen Free Nitrogen Gas inside the copper pipes during silver brazing, in order to avoid carbon deposition inside the copper pipes. Only copper-to-copper joints are permitted on site except threaded or flanged joints may be made where pipelines are connected to items such as valves and control equipment. No flux shall be used for joining Copper to Copper joints and on for joints made on site. Copper to copper joints shall be brazed using a 5% silver-copper phosphorous brazing alloy CP104. A total of 5 joints shall be cut out for examination to establish the quality of the joints being made on site. The insides shall be clean and free from oxides and particulate matter and the minimum penetration of the brazing alloy at any point shall be three times the wall thickness of the tube. If the joints examined do not conform to these requirements, then adjacent joints shall be cut out and examined until the extent of faulty workmanship has been made good. Copper-to-brass or gunmetal joints shall only be made under controlled conditions off site. The joints are ordinarily used to join short copper pipe tails to brass, gunmetal or bronze fittings to permit

their connection into the pipeline. The sub-assemblies shall be degreased and individually sealed in bags or boxes before delivery to site.

Adequate supports should be provided while laying pipelines to ensure that the pipes do not sag. Suitable sleeves shall be provided wherever pipes cross through walls / slabs. All pipe clamps shall be non-reactive to copper.

After erection, the pipes are to be flushed with dry nitrogen gas and then pressure tested with dry nitrogen at a pressure equal to twice the working pressure or 150 psig, whichever is higher for a period of not less than 24 hours.

Length and quantity of individual items (Copper pipes, AVSUs, Alarm panels, Isolation valves, Outlets, pendants etc.) are mentioned. However quantity will be calculated and paid at actuals. Bidder should quote unit price for all the items as detailed

6.3 Painting

All exposed pipes should be painted with two coats of synthetic enamel paint and colour codification should be as per British standards.

Oxygen line.....White Vacuum line....Yellow

Air line...... Black with white band

Nitrous Oxide....Blue

Should have Lloyds certification for pipes and other materials.

The Pipe Sizes to be used are from among as under:

Outside Diameter	Maximum interval between supports (Horizontal and
(mm)	Vertical)(m)
12	1.5
15	1.5
22	2.0
28	2.0
35	2.5
42	2.5
54	2.5
76	3.0
108	3.0

7. ALARM SYSTEM

7.1 Master Alarm

Each Master Alarm should be modular in design and be fitted with required number of master alarm modules. The master alarms should be capable to monitor 10 to 30 Point in a standard box or 10 to 50 points in a large box.

Each point represents an alarm condition that the source equipment might have. When an alarm condition exists, a red light flashes and the audible alarm sounds. If several alarm conditions occur simultaneously, the most recent alarm light should flash, while the other alarm lights should remain lit.

When an alarm condition is created, an audible alarm should be actuated. A dry contact module should be available to interface with a building management system.

The box material should be of gauge steel of requisite thickness and equipped with mounting brackets that are adjustable up to a drywall thickness of 1-1/4" (32 mm). The emissions from alarms should conform with EMC standards.

Bidder shall be responsible for all cabling from local alarm panels to master alarm panel.

Features

- Complies with HTM 02-01 / NFPA 99C/EN/DIN/ ISO 7396-1 Standards.
- High visibility LED/LCD readouts
- Circuitry allows for Normally Open or Normally Closed.
- Adjustable audible alarm repeat (from 1 to 99 minutes)
- Can be interfaced with BMS
- Should be European CE Certified or UL listed under Medical Devices Directive.

7.2 Medical Gas Alarm (Main & Area)

The medical gas central alarms should be capable of monitoring 6 medical gas services by means of pressure sensors which detect deviations from the normal operating limits of either pressure or medical vacuum. The area alarm should have a digital/analogue display of pressures. The medical gas area alarm should fully satisfy the HTM 02-01/ NFPA 99 C/EN/DIN requirements and should be CE Certified or UL listed under Medical Devices Directive.

Each gas service should be displayed by coloured LED's to show 'Normal' (green), 'Low' and 'High Pressure' (red) conditions. Medical vacuum systems should be displayed in the 'Normal' (green) and 'Low Vacuum' (red) conditions only.

Failure indications should be displayed by flashing lights and normal indications should be steady light. An audible warning should sound simultaneously with any failure indication and a mute facility should be provided. Following a mute selection the audible should resound after approximately 15 minutes, or should operate simultaneously should a further alarm condition occur. A maintenance 'Mute' switch should be provided internally to the panel for use during maintenance which results in prolonged pipeline or plant shutdown. This facility should automatically reset when the gas service returns to normal.

The alarm panel should have a 'test' facility to prove the integrity of the internal circuits, LED's and audible warning. The alarm panel should incorporate a volt free normally closed relay to allow for interconnection to either a medical gas central alarm system or an event recording circuit of a building management system.

The alarm should be microprocessor based with individual microprocessor on each module and should provide interface to Gas Delivery Management System. A centralised alarm in the manifold room is also essential.

8. AREA VALVE SERVICE UNIT

Area valve service units should fully comply and meet with HTM 02-01/NFPA 99C/EN/DIN .It Should provide a zone isolation facility for use either in an emergency or for maintenance purpose.

The Area Valve Service Unit should incorporate a ball valve with NIST connectors either side mounted in a lockable box with emergency access. It should be reliable and easy to operate and must have NIST connectors facilitate easy purge, sample & pressure testing and emergency supply system.

The unit should be pre-piped, wired and tested ready for installation into a finished building. Medical gas/vacuum services should be fixed copper, piped to and from their respective area valve service units. A color coded service identity label should be fitted behind the valve handle. The unit should provide a zone isolation facility, for use either in an emergency or for maintenance purposes.

The box shall be made from extruded aluminium to prevent corrosion. All wetted parts (except seals and gaskets) should be brass or copper. Each unit assembly should be factory tested for gas tightness. Rubber pipe grommets should be provided to ensure any leaking gas does not escape from the unit into a wall cavity. All visible aluminum surfaces should be powder coated.

9. PENDANTS AND BED HEAD PANELS - - Deleted

9.1 - Deleted

9.2 Horizontal and Vertical Bed Head Panel.

It shall confirm to HTM 02-01/NFPA 99 C/EN/DIN. It should have following features

- Efficient, Safe & Robust design in extruded aluminium section.
- Smooth curved surfaces, and choice of base colour and fascia plates.
- Unit should have integrated rail system to mount accessories
- The headwall system should be constructed of aluminium extrusions joined together to form a
 carcass to suit the particular application. Unit should be factory assembled for electrical and
 mechanical components.
- Segregation of services i.e. Low voltage supplies, High Voltage supply and Medical gases should be maintained throughout.
- Front fascia plate should be removable individually to access for respective service.
- Bed space management system with optional equipment rail. With all Equipment Rail mount Accessories.
- All down drops should be installed at one end preferably & Vertical drop installed at one end should be covered with Aluminium boxing with matching color.
- Entire pipe line should run in continuous horizontal panels with no break for each unit & length as per area where it has to be installed.
- Each bed-head unit shall be supplied with electrical and electrical outlets prefitted, wired and certified. (wired up to the distribution box provided with leakage protection)
- Facility per unit as under:

Oxygen -2

Vacuum – 2

Medical Air-2

Holder for vacuum collection jar −1

Nurse call switch – 1

Lamp with flexible LED lighting – 1

Infusion pump mount pole with adapter for mounting at least two infusion pumps 5/15 A combined Electrical outlets -6.

RJ-45 socket -01

Two spare spaces

Monitor Bracket

10. GAS OUTLETS (IMPORTED)

10.1 Terminal Units (Gas Outlets) with probes/Adaptors for O2, N2O, Compressed Air (4), AGSS, Vacuum & CO2 (CO2 can be optional depending on the requirement)

The Medical gas outlets shall confirm to HTM 02-01/ NFPA 99 C/EN/DIN.Front Loading Type Terminal Outlets should be designed to dispense medical gases (or an inlet for medical vacuum) to the secondary equipment (flow meters, Suction regulators, etc.) at the point of use and is gas specific so that secondary devices cannot be "attached" to the wrong gas. When not in use the gas in a non-flowing state within the Outlet (Terminal unit) sealed by "O" ring. The adapter when inserted pushes the poppet inside and the gas starts flowing and sealing is ensured by the "O" ring or a seat. The Outlets are Quick Connect Type and gas specificity is accomplished by "Pin indexing." The outlets should have following features:

- Push to insert and press-to-release mechanism for probes.
- Allows plugging of probes from front.
- Self-sealing valve on disengaging the probe (Quick disconnect)
- Smooth quite action.
- Non return valve for on line servicing/ repairing
- Indexed to eliminate inter-changeability of gas services
- Color-coded gas specific front plate
- Flow rate exceeds the requirements of ISO 9170 1.
- Totally leak proof, safe & easy to operate
- Configurations possible: surface, flush & Bead-head.

Outlet should be European CE certified or American UL listed

11. AGSS (Anesthetic Gas Scavenging System) Plant –2500 LPM)

Duplex Anesthetic Gas Scavenging System (AGSS) of 2500 l/min. should be European CE Certified or UL listed under Medical Devices Directive. It shall confirm to HTM 02-01/ NFPA 99 C/EN/DIN. Duplex AGSS System with twin stand alone AGSS pumps of 3phase 2500 l/min capacity each with built in flow indication and pressure regulation valve. It should be mounted on single frame with control panel and separate warning label. One pump working and one stand by and vice versa. The package should consist of two rotary vane vacuum pumps, a control panel, and mounted on a common base frame.

AGSS pump: AGSS pump shall operate completely dry permanently lubricated and sealed. Each pump should be completely air cooled and have absolutely no water requirements.

Control System: The duplex control system should conform to International Standards. The control system should provide automatic changeover from running to reserve with circuit breaker disconnects for each AGSS pump with external operators, full voltage motor starters with overload protection, control circuit transformers, visual and audible reserve unit alarm with isolated contacts for remote alarm. Should be in duplex format and must be chassis mounted ready for installation. Duplex system in-line non-return values should allow individual pump servicing. Active anesthetic gas scavenging systems should be designed to safely remove exhaled anesthetic agents from the operating environment and dispose of them to atmosphere, thus preventing contamination of the operating department and providing a safe and healthy workspace for the personal. AGSS design should be dependent upon flow rate and pressure drop characteristics of the individual components of a systems, it is essential that terminal units, remote controls and pump units. AGSS Remote Control indicator must be provided for each OT with the system.

Installation should be on roof top. Piping, Non-Return-Valves (NRVs), and inlet nozzle should be suitably placed.

Connecting hose suitable to fit with anaesthesia workstation.

12. NITROGEN MANIFOLD SYSTEM - Deleted (Complete NITROGEN MANIFOLD SYSTEM)

Part -B

Sufficient suitable trained operator for running and maintenance of MGPS for five years should be provided – Rate to be offered separately on monthly basis for five years which will be added for the comparison purposes. Also define the number of person.

Training – Training to be provided at site to five persons from each institute for 2weeks

Note:

- 1. Flowrate zoning has to be done with multiple control panel if flow requirement is more than the control panel capacity.
- 2. <u>The capacity of D- Type Cylinders is 7000 Litres.</u> <u>For e.g if the flow requirement is 3000 LPM with 20 cylinder will be 7777.78 in approx. 8 hours.</u>

BOQ FOR MGPS - AIIMS BHOPAL SN. **Item Description** Quantity LIQUID OXYGEN FACILITY-20KL (1No) and 10KL (1 No) 1 Lump Facility charges including 20KL vessel, 10KL vessel, VIE's, AV Sum coils and accessories 1.1 Installation and commissioning charges - One time lump sum 1.2 Charges for laying of 1" copper line for Hospital block. (Any 1.3 100 extra length will be charged as actuals at the rate quoted.) Total Cost of civil construction for running the pipeline from LO plant to Hospital block either by trenching or by supporting poles if required.(Steel structure for exposed lines with PVC pipe Lump protected(on 2" pole of 20 ft height, on concrete foundation at a 1.4 Sum spacing of 3 m. 1" copper tubing inserted in 1.5" PVC/ HDP heat resistant pipe clamped on support at the top of the pole. PVC pipes sealed by 1.5" PVC coupling & PVC cement) Total Civil Works cost a) Fencing in MS properly anchored and painted to withstand corrosion: b) Foundation for one number of 20 KL tank & one 10 KL Tank. Lump 1.5 c) Gate 5m wide with double leaf & 1 m wicket gate Sum d) 2 no: s of 10 kg DCP fire extinguishers e) 4 no. s of Fire buckets f) 8 no: s of sodium vapour lamps on poles g) Signage for the system 20000 1.6 Basic price of LMOs (including delivery charge) Fully Automatic control Panel for switchning between Primary LMO (20 KL), Secondary (10 KL) and Emergency cylinder Bank 1 as per technical specifications. 1.7 Emergency Oxygen Supply Manifold System, (2x20 size) : Supply, Installation, testing and commissioning of (2x20 size) 2 1 class D type bulk Oxygen cylinder Supply Manifold System as per

technical specifications.

2.1	Fully Automatic Oxygen Control Panel System: Supply, Installation testing and commissioning of Fully Automatic Oxygen Control Panel System as per tender technical specifications and HTM 02-01/NFPA 99 C standards.	1
2.2	Oxygen Flow meter with Humidifier Bottle: Supply installation, testing and commissioning of oxygen flow meter with humidifier bottle 0-15Litres. As per tender technical specifications	1000
3	Fully Automatic Manifold Control Panel for Nitrous Oxide: Supply installation testing and commission of fully automatic control panel for Nitrous Oxide as per tender technical specifications and HTM 02-01/NFPA 99 C standards.	1
3.1	Nitrous Oxide Manifold System, (2x10 size): Supply installation testing and commissioning of (2x10 size) class D cylinder Nitrous Oxide Manifold system as per tender technical specifications.	1
3.2	Emergency Nitrous Oxide Manifold System, 2x4 size: Supply installation, testing and commissioning of (2x4 size) cylinder Emergency Nitrous Oxide supply System as per tender technical specifications.	1
4	Medical Air Plant (Package Unit) with Pentaplex/Quadruplex Air Compressor including electrical control panel: Supply, Installation, testing and commissioning of Rotary Screw/scroll type Pentaplex/Quadraplex Medical Air Plant (Package Unit) having a capacity of 7000LPM as per HTM 02-01/NFPA 99C standards and tender technical specification	1
4.1	Air Filtration System	4
4.2	Pressure reducing station	4
4.3	Desiccant Air Dryer	4
5	Medical Vacuum Plant Package Pentaplex/Quadraplex vacuum pumps: Supply, Installation, testing and commissioning of Rotary Vane type Oil-lubricated Pentaplex/Quadraplex Medical Vacuum Plant (Package Unit) having a capacity of 7000LPM as per HTM 02-01/NFPA 99C standards and tender technical specification	1
5.1	Bacterial Filters as per tender technical specification	1
6	Ward Vacuum Unit: Suply installation testing and commissiong of Ward Vacuum Unit as per tender technical specifications.	1000

7	Theater Vaccum Unit for Operation Theaters: Suply installation testing and commissiong of Theater Vacuum Unit as per tender technical specifications.	40
8	Fully Automatic Manifold Control Panel for CO2: Supply installation testing and commission of fully automatic control panel for CO2 as per tender technical specifications and HTM 02-01/NFPA 99 C standards.	1
8.1	CO2 Manifold System, (2x4 size): Supply installation testing and commissioning of (2x4 size) class D cylinder CO2 Manifold system as per tender technical specifications.	1
9	Duplex AGSS System: Supply installation and commissioning of Duplex AGSS system and AGSS Cabling from Plant to OT's as per technical specifications.	1
10	Copper Pipes	
10.1	Solid drawn, seamless, deoxidised, non- arsenical, half hard, tempered and degreased copper pipes as per tender technical specifications	
	108 mm OD x 1.5 mm thick	100
	76 mm OD x 1.5 mm thick	700
	54mm OD X 1.2mm thick	1000
	42mm OD X 1.2mm thick	2000
	35mm OD X 1.2mm thick	1100
	28mm OD X 1 mm thick	4000
	22mm OD X 1 mm thick	14000
	15mm OD X 1 mm thick	11000
	12mm OD X 1 mm thick	14000
11	Gas Outlet Points/ Terminal Units with probe: Supply, Installation, testing and commissioning of Gas outlet points for Oxygen, Nitrous Oxide, Medical Air 4 Bar, Vacuum, CO2, and AGSS as per technical specifications.	
	Oxygen outlet with probe	1360
	Nitrous Oxide outlet with probe	12
	Medical Air 4 outlet with probe	450
	Vacuum outlet with probe	1360
	CO2 outlet with probe	4
	AGSS outlet with probe	12
12	AREA VALVE BOX (WITHOUT VALVES): Supply, Installation, testing and commissioning of Area Valve Boxes as per technical specifications.	
	Valve Box - 3 Gas Service with NIST Connection	80
	Valve Box - 5 Gas Service with NIST Connection	60
	Valve Box - 6 Gas Service with NIST Connection	10

	·	
13	MEDICAL GAS ALARM PANEL: Supply, Installation, testing and commissioning of Medical Gas Alarm Panel. as per technical specifications.	
13.1	Medical Gas Area Alarm for 2 services (Oxygen, and Vacuum)	60
13.2	Medical Gas Area Alarm for 3 services (Oxygen, MA4 Air and Vacuum)	50
13.3	Medical Gas Area Alarm 5 services (Oxygen, N2O, MA4 Air , AGSS ,and Vacuum)	35
13.4	Medical Gas Area Alarm 6 services (Oxygen, N2O, MA4 Air ,AIR 7 bar AGSS ,and Vacuum)	10
13.5	Master Alarm Panel as per technical specifications.	1
14	LINE ISOLATION VALVES	
	12 mm ball valve	340
	15 mm ball valve	340
	22 mm ball valve	80
	28 mm ball valve	40
	35 mm ball valve	30
	42 mm ball valve	40
	54 mm ball valve	20
	76 mm ball valve	10
	108 mm ball valve	3
15	Supply installation testing and commissioning of Medical gas hose assemblies Hoses shall be color coded throughout their length as specified in British standards.	200
16	Supply of O2 cylinders-Class D type bulk	100
17	Supply of N2O cylinders-Class D type bulk	50
18	Supply of CO2 cylinders-Class D type	10
19	Bed Head Vertical Wall Panel	100
20	Bed Head Horizontal Wall Panel	320
21	Electric wiring inside the gas manifold and plant room including control panel for Vacuum plant & Air plant	1
	I	

Note: For AIIMS Bhopal all work needs to be done in same time. The entire MGPS work need to be completed within 300 days as mentioned in the list of requirement.

	BOQ FOR AIIMS BHUBANESWAR		
SN.	Item Description	Quantity	
1	LIQUID OXYGEN FACILITY-20KL (1No) and 10KL (1 No)		
1.1	Facility charges including 20 KL vessel, 10KL vessel, VIE's, AV coils and accessories	Lump Sum	

1.2	Installation and commissioning charges - One time lump sum charge	Lump Sum
1.3	Charges for laying of 1" copper line for Hospital block. (Any extra length will be charged as actuals at the rate quoted.)	100
1.4	Total Cost of civil construction for running the pipeline from LO plant to Hospital block either by trenching or by supporting poles if required.(Steel structure for exposed lines with PVC pipe protected(on 2" pole of 20 ft height, on concrete foundation at a spacing of 3 m. 1" copper tubing inserted in 1.5" PVC/ HDP heat resistant pipe clamped on support at the top of the pole. PVC pipes sealed by 1.5" PVC coupling & PVC cement)	Lump Sum
1.5	a) Fencing in MS properly anchored and painted to withstand corrosion; b) Foundation for one number of 20 KL tank & one 10 KL Tank. c) Gate 5m wide with double leaf & 1 m wicket gate d) 2 no: s of 10 kg DCP fire extinguishers e) 4 no. s of Fire buckets f) 8 no: s of sodium vapour lamps on poles g) Signage for the system	Lump Sum
1.6	Basic price of LMOs (including delivery charge)	20000
1.7	Fully Automatic control Panel for switchning between Primary LMO (20 KL), Secondary (10 KL) and Emergency cylinder Bank as per technical specifications.	1
2	Emergency Oxygen Supply Manifold System, (2x20 size) : Supply, Installation, testing and commissioning of (2x20 size) class D type bulk Oxygen cylinder Supply Manifold System as per technical specifications.	1
2.1	Fully Automatic Oxygen Control Panel System : Supply, Installation testing and commissioning of Fully Automatic Oxygen Control Panel System as per tender technical specifications and HTM 02-01/NFPA 99 C standards.	1
2.2	Oxygen Flow meter with Humidifier Bottle: Supply installation, testing and commissioning of oxygen flow meter with humidifier bottle 0-15Litres. As per tender technical specifications	760
3	Fully Automatic Manifold Control Panel for Nitrous Oxide: Supply installation testing and commission of fully automatic control panel for Nitrous Oxide as per tender technical specifications and HTM 02-01/NFPA 99 C standards.	1
3.1	Nitrous Oxide Manifold System, (2x10 size): Supply installation testing and commissioning of (2x10 size) class D cylinder Nitrous Oxide Manifold system as per tender technical specifications.	1

3.2	Emergency Nitrous Oxide Manifold System, 2x4 size: Supply installation, testing and commissioning of (2x4 size) cylinder Emergency Nitrous Oxide supply System as per tender technical specifications.	1
4	Medical Air Plant (Package Unit) with Pentaplex/Quadruplex Air Compressor including electrical control panel: Supply, Installation, testing and commissioning of Rotary Screw/scroll type Pentaplex/Quadraplex Medical Air Plant (Package Unit) having a capacity of 7000LPM as per HTM 02-01/NFPA 99C standards and as per tender technical specification	1
4.1	Air Filtration System	2
4.2	Pressure reducing station	2
4.3	Desiccant Air Dryer	2
5	Medical Vacuum Plant Package Pentaplex/Quadraplex vacuum pumps: Supply, Installation, testing and commissioning of Rotary Vane type Oil-lubricated Pentaplex/Quadraplex Medical Vacuum Plant (Package Unit) having a capacity of 7000LPM as per HTM 02-01/NFPA 99C standards and tender technical specification	1
5.1	Bacterial Filters as per tender technical specification	1
6	Ward Vacuum Unit: Suply installation testing and commissiong of Ward Vacuum Unit as per tender technical specifications.	760
7	Theater Vaccum Unit for Operation Theaters: Suply installation testing and commissions of Theater Vacuum Unit as per tender technical specifications.	32
8	Fully Automatic Manifold Control Panel for CO2: Supply installation testing and commission of fully automatic control panel for CO2 as per tender technical specifications and HTM 02-01/NFPA 99 C standards.	1
8.1	CO2 Manifold System, (2x4 size): Supply installation testing and commissioning of (2x4 size) class D cylinder CO2 Manifold system as per tender technical specifications.	1
9	Duplex AGSS System: Supply installation and commissioning of Duplex AGSS system and AGSS Cabling from Plant to OT's as per technical specifications.	2
10	Copper Pipes	
10.1	Solid drawn, seamless, deoxidised, non- arsenical, half hard, tempered and degreased copper pipes as per tender technical specifications	

	108 mm OD x 1.5 mm thick	300
	76 mm OD x 1.5 mm thick	600
	54mm OD X 1.2mm thick	200
	42mm OD X 1.2mm thick	2500
	35mm OD X 1.2mm thick	3000
	28mm OD X 1 mm thick	3000
	22mm OD X 1 mm thick	4000
	15mm OD X 1 mm thick	10000
	12mm OD X 1 mm thick	12000
11	Gas Outlet Points/ Terminal Units with probe: Supply,Installation, testing and commissioning of Gas outlet points for Oxygen, Nitrous Oxide, Medical Air 4 Bar, Vacuum, CO2, and AGSS as per tender specification	
	Oxygen outlet with probe	1100
	Nitrous Oxide outlet with probe	2
	Medical Air 4 outlet with probe	300
	Vacuum outlet with probe	1100
	CO2 outlet with probe	4
	AGSS outlet with probe	2
12	AREA VALVE BOX (WITHOUT VALVES): Supply,Installation, testing and commissioning of Area Valve Boxes as per tender specification	
	Valve Box - 3 Gas Service with NIST Connection	50
	Valve Box - 5 Gas Service with NIST Connection	24
	Valve Box - 6 Gas Service with NIST Connection	6
13	MEDICAL GAS ALARM PANEL : Supply, Installation, testing and commissioning of Medical Gas Alarm Panel. as per tender specification	
13.1	Medical Gas Area Alarm for 2 services (Oxygen and Vacuum)	15
13.2	Medical Gas Area Alarm for 3 services (Oxygen, MA4 bar and Vacuum)	35
13.3	Medical Gas Area Alarm 5 services (Oxygen, N2O, MA4 bar , AGSS,and Vacuum)	24
13.4	Medical Gas Area Alarm 6 services (Oxygen, N2O, MA4 bar , AIR 7 bar AGSS, and Vacuum)	6
13.5	Master Alarm Panel as per technical specifications.	1
14	LINE ISOLATION VALVES	
	12 mm ball valve	240
	15 mm ball valve	210
	22 mm ball valve	70
	28 mm ball valve	30
	35 mm ball valve	35
	42 mm ball valve	20
	54 mm ball valve	10
	76 mm ball valve	5

	108 mm ball valve	2
15	Supply installation testing and commissioning of Medical gas hose assemblies Hoses shall be color coded throughout their length as specified in British standards.	50
16	Supply of O2 cylinders-Class D bulk cylinders	100
17	Supply of N2O cylinders-Class D bulk cylinders	50
18	Supply of CO2 cylinders-Class D bulk cylinders	10
19	Bed Head Vertical Wall Panel	100
20	Bed Head Horizontal Wall Panel	200
21	Electric wiring inside the gas manifold and plant room including control panel for Vacuum plant & Air plant.	1

Note: For AIIMS Bhubaneswar, under Phase-1,i.e, in first 200 days all MOTs covered under Phase I (out of 25 MOT 14 MOTs are covered under Phase I please refer MOT Document AIIMS -15), ALL ICUs in the Hospital Building, all High Dependent Units, 1 No. Block of private ward, 0 Level of Hospital Building, 400 Beds in patients ward in Hospital Building should be made functional. Balance work needs to be done in next 100 days.

	BOQ FOR AIIMS JODHPUR	
SN.	Item Description	Quantity
1	LIQUID OXYGEN FACILITY-20KL (1No) and 10KL (1 No)	
1.1	Facility charges including 20 KL vessel, 10KL vessel, VIE's, AV coils and accessories	Lump Sum
1.2	Installation and commissioning charges - One time lump sum charge	Lump Sum
1.3	Charges for laying of 1" copper line for Hospital block. (Any extra length will be charged as actuals at the rate quoted.)	100
1.4	Total Cost of civil construction for running the pipeline from LO plant to Hospital block either by trenching or by supporting poles if required.(Steel structure for exposed lines with PVC pipe protected(on 2" pole of 20 ft height, on concrete foundation at a spacing of 3 m. 1" copper tubing inserted in 1.5" PVC/ HDP heat resistant pipe clamped on support at the top of the pole. PVC pipes sealed by 1.5" PVC coupling & PVC cement)	Lump Sum

1.5	a) Fencing in MS properly anchored and painted to withstand corrosion; b) Foundation for one number of 20 KL tank & one 10 KL Tank. c) Gate 5m wide with double leaf & 1 m wicket gate d) 2 no: s of 10 kg DCP fire extinguishers e) 4 no. s of Fire buckets f) 8 no: s of sodium vapour lamps on poles g) Signage for the system	Lump Sum
1.6	Basic price of LMOs (including delivery charge)	20000
1.7	Fully Automatic control Panel for switching between Primary LMO (20 KL), Secondary (10 KL) and Emergency cylinder Bank as per technical specifications.	1
2	Emergency Oxygen Supply Manifold System, (2x20 size): Supply, Installation, testing and commissioning of (2x20 size) class D type bulk Oxygen cylinder Supply Manifold System as per technical specifications.	1
2.1	Fully Automatic Oxygen Control Panel System: Supply, Installation testing and commissioning of Fully Automatic Oxygen Control Panel System as per tender technical specifications and HTM 02-01/NFPA 99 C standards.	1
2.2	Oxygen Flow meter with Humidifier Bottle: Supply installation, testing and commissioning of oxygen flow meter with humidifier bottle 0-15Litres. As per tender technical specifications	710
3	Fully Automatic Manifold Control Panel for Nitrous Oxide: Supply installation testing and commission of fully automatic control panel for Nitrous Oxide as per tender technical specifications and HTM 02-01/NFPA 99 C standards.	1
3.1	Nitrous Oxide Manifold System, (2x10 size): Supply installation testing and commissioning of (2x10 size) class D cylinder Nitrous Oxide Manifold system as per tender technical specifications.	1
3.2	Emergency Nitrous Oxide Manifold System, 2x4 size: Supply installation, testing and commissioning of (2x4 size) cylinder Emergency Nitrous Oxide supply System as per tender technical specifications.	1
4	Medical Air Plant (Package Unit) with Pentaplex/Quadruplex Air Compressor including electrical control panel: Supply, Installation, testing and commissioning of Rotary Screw/scroll type Pentaplex/Quadruplex Medical Air Plant (Package Unit) having a capacity of 7000LPM as per HTM 02-01/NFPA 99C standards and tender technical specification	1

4.1	Air Filtration System	2
4.2	Pressure reducing station	2
4.3	Desiccant Air Dryer	2
5	Medical Vacuum Plant Package Pentaplex/Quadraplex vacuum pumps: Supply, Installation, testing and commissioning of Rotary Vane type Oil-lubricated Pentaplex/Quadruplex Medical Vacuum Plant (Package Unit) having a capacity of 7000LPM as per HTM 02-01/NFPA 99C standards and tender technical specification	1
5.1	Bacterial Filters as per tender technical specification	1
6	Ward Vacuum Unit: Suply installation testing and commissiong of Ward Vacuum Unit as per tender technical specifications.	710
7	Theater Vaccum Unit for Operation Theaters: Suply installation testing and commissiong of Theater Vacuum Unit as per tender technical specifications.	34
8	Fully Automatic Manifold Control Panel for CO2: Supply installation testing and commission of fully automatic control panel for CO2 as per tender technical specifications and HTM 02-01/NFPA 99 C standards.	1
8.1	CO2 Manifold System, (2x4 size): Supply installation testing and commissioning of (2x4 size) class D cylinder CO2 Manifold system as per tender technical specifications.	1
9	Duplex AGSS System: Supply installation and commissioning of Duplex AGSS system and AGSS Cabling from Plant to OT's as per technical specifications.	2
10	Copper Pipes	
10.1	Solid drawn, seamless, deoxidised, non- arsenical, half hard, tempered and degreased copper pipes as per tender technical specifications	
	108 mm OD x 1.5 mm thick	400
	76 mm OD x 1.5 mm thick	400
	54mm OD X 1.2mm thick	1500
	42mm OD X 1.2mm thick	2000
	35mm OD X 1.2mm thick	4000
	28mm OD X 1 mm thick	4000
	22mm OD X 1 mm thick	6000
	15mm OD X 1 mm thick	7000
	12mm OD X 1 mm thick	11000

11	Gas Outlet Points/ Terminal Units with probe: Supply,Installation, testing and commissioning of Gas outlet points for Oxygen, Nitrous Oxide, Medical Air 4 Bar, Vacuum, CO2, and AGSS as per tender technical specifications.	
	Oxygen outlet with probe	1060
	Nitrous Oxide outlet with probe	3
	Medical Air 4 outlet with probe	300
	Vacuum outlet with probe	1060
	CO2 outlet with probe	4
	AGSS outlet with probe	3
12	AREA VALVE BOX (WITHOUT VALVES): Supply,Installation, testing and commissioning of Area Valve Boxes as per tender technical specifications	
	Valve Box - 3 Gas Service with NIST Connection	40
	Valve Box - 5 Gas Service with NIST Connection	28
	Valve Box - 6 Gas Service with NIST Connection	6
13	MEDICAL GAS ALARM PANEL: Supply, Installation, testing and commissioning of Medical Gas Alarm Panel as per tender technical specifications.	
13.1	Medical Gas Area Alarm for 2 services (Oxygen and Vacuum)	40
13.2	Medical Gas Area Alarm for 3 services (Oxygen, MA4 Air and Vacuum)	40
13.3	Medical Gas Area Alarm 5 services (Oxygen, N2O, MA4 Air , AGSS ,and Vacuum)	28
13.4	Medical Gas Area Alarm 6 services (Oxygen, N2O, MA4 Air ,AIR 7 bar, AGSS ,and Vacuum)	6
13.5	Master Alarm Panel as per technical specifications.	1
14	LINE ISOLATION VALVES	
	12 mm ball valve	300
	15 mm ball valve	220
	22 mm ball valve	80
	28 mm ball valve	35
	35 mm ball valve	10
	42 mm ball valve	10
	54 mm ball valve	20
	76 mm ball valve	10
	108 mm ball valve	2
15	Supply installation testing and commissioning of Medical gas hose assemblies Hoses shall be color coded throughout their length as specified in British standards.	50
16	Supply of O2 cylinders-Class D type bulk cylinders	100
17	Supply of N2O cylinders-Class D type bulk cylinders	50
18	Supply of CO2 cylinders-Class D type cylinders	10
19	Bed Head vertical Wall Panel	100

20	Bed Head Horizontal Wall Panel	150
21	Electric wiring inside the gas manifold and plant room including control panel for Vacuum plant & Air plant.	1

Note: For AIIMS Jodhpur, under Phase-1,i.e, in first 200 days the supply, installation and commissioning of MGPS equipment viz. Compressor, Vacuum unit and Manifold room, MGPS Outlets at 1, 2 & 3 Floor Wards, 4 OT,s on 2 Floor and in labour rooms, High Risk pregnancy monitoring rooms adjoining the OT on 2nd Floor, 10 OT,s on 4 Floor, Pre & Postoperative recovery ward on 4 Floor, ICU in 3 Floor of DT & OT Block should be made functional. Balance work needs to be done in next 100 days.

	BOQ FOR MGPS AIIMS PATNA	
SN.	Item Description	Quantity
1	LIQUID OXYGEN FACILITY-20KL (1No) and 10KL (1 No)	
1.1	Facility charges including 20 KL vessel, 10KL vessel, VIE's, AV coils and accessories	Lump Sum
1.2	Installation and commissioning charges - One time lump sum charge	Lump Sum
1.3	Charges for laying of 1" copper line for Hospital block. (Any extra length will be charged as actuals at the rate quoted.)	100
1.4	Total Cost of civil construction for running the pipeline from LO plant to Hospital block either by trenching or by supporting poles if required. (Steel structure for exposed lines with PVC pipe protected (on 2" pole of 20 ft height, on concrete foundation at a spacing of 3 m. 1" copper tubing inserted in 1.5" PVC/ HDP heat resistant pipe clamped on support at the top of the pole. PVC pipes sealed by 1.5" PVC coupling & PVC cement)	Lump Sum
1.5	Total Civil Works cost a) Fencing in MS properly anchored and painted to withstand corrosion; b) Foundation for one number of 20 KL tank & one 10 KL Tank. c) Gate 5m wide with double leaf & 1 m wicket gate d) 2 no: s of 10 kg DCP fire extinguishers e) 4 no. s of Fire buckets f) 8 no: s of sodium vapour lamps on poles g) Signage for the system	Lump Sum
1.6	Basic price of LMOs (including delivery charge)	20000
1.7	Fully Automatic control Panel for switchning between Primary LMO (20 KL), Secondary (10 KL) and Emergency cylinder Bank as per technical specifications.	1

2	Emergency Oxygen Supply Manifold System, (2x20 size): Supply, Installation, testing and commissioning of (2x20 size) class D type bulk Oxygen cylinder Supply Manifold System as per technical specifications.	1
2.1	Fully Automatic Oxygen Control Panel System : Supply, Installation testing and commissioning of Fully Automatic Oxygen Control Panel System as per tender technical specifications and HTM 02-01/NFPA 99 C standards.	1
2.2	Oxygen Flow meter with Humidifier Bottle: Supply installation, testing and commissioning of oxygen flow meter with humidifier bottle 0-15Litres. As per tender technical specifications	900
3	Fully Automatic Manifold Control Panel for Nitrous Oxide: Supply installation testing and commission of fully automatic control panel for Nitrous Oxide as per tender technical specifications and HTM 02-01/NFPA 99 C standards.	1
3.1	Nitrous Oxide Manifold System, (2x10 size): Supply installation testing and commissioning of (2x10 size) class D bulk cylinder Nitrous Oxide Manifold system as per tender technical specifications.	1
3.2	Emergency Nitrous Oxide Manifold System, 2x4 size: Supply installation, testing and commissioning of (2x4 size) cylinder Emergency Nitrous Oxide supply System as per tender technical specifications.	1
4	Medical Air Plant (Package Unit) with Pentaplex/Quadruplex Air Compressor including electrical control panel: Supply, Installation, testing and commissioning of Rotary Screw/scroll type Pentaplex/Quadraplex Medical Air Plant (Package Unit) having a capacity of 7000LPM as per HTM 02-01/NFPA 99C standards and as per tender technical specification	1
4.1	Air Filtration System	2
4.2	Pressure reducing station	2
4.3	Desiccant Air Dryer	2
5	Medical Vacuum Plant Package Pentaplex/Quadraplex vacuum pumps: Supply, Installation, testing and commissioning of Rotary Vane type Oil-lubricated Pentaplex/Quadraplex Medical Vacuum Plant (Package Unit) having a capacity of 7000LPM as per HTM 02-01/NFPA 99C standards and tender technical specification	1
5.1	Bacterial Filters as per tender technical specification	1

6	Ward Vacuum Unit: Suply installation testing and commissiong of Ward Vacuum Unit as per tender technical specifications.	900
7	Theater Vaccum Unit for Operation Theaters: Suply installation testing and commissiong of Theater Vacuum Unit as per tender technical specifications.	36
8	Fully Automatic Manifold Control Panel for CO2: Supply installation testing and commission of fully automatic control panel for CO2 as per tender technical specifications and HTM 02-01/NFPA 99 C standards.	1
8.1	CO2 Manifold System, (2x4 size): Supply installation testing and commissioning of (2x4 size) class D cylinder CO2 Manifold system as per tender technical specifications.	1
9	Duplex AGSS System: Supply installation and commissioning of Duplex AGSS system and AGSS Cabling from Plant to OT's as per technical specifications.	2
10	Copper Pipes	
10.1	Solid drawn, seamless, deoxidised, non- arsenical, half hard, tempered and degreased copper pipes as per tender technical specifications	
	108 mm OD x 1.5 mm thick	200
	76 mm OD x 1.5 mm thick	400
	54mm OD X 1.2mm thick	1000
	42mm OD X 1.2mm thick	1200
	35mm OD X 1.2mm thick	2000
	28mm OD X 1 mm thick	3000
	22mm OD X 1 mm thick	6000
	15mm OD X 1 mm thick	8000
	12mm OD X 1 mm thick	12500
11	Gas Outlet Points/ Terminal Units with probe: Supply,Installation, testing and commissioning of Gas outlet points for Oxygen, Nitrous Oxide, Medical Air 4 Bar, Vacuum, CO2, and AGSS as per tender technical specifications.	
	Oxygen outlet with probe	1100
	Nitrous Oxide outlet with probe	6
	Medical Air 4 outlet with probe	200
	Vacuum outlet with probe	1100
	CO2 outlet with probe	4
	AGSS outlet with probe	6
12	AREA VALVE BOX (WITHOUT VALVES): Supply, Installation, testing and commissioning of Area Valve Boxes as per tender technical specifications	
	Valve Box - 3 Gas Service with NIST Connection	20

	Valve Box - 5 Gas Service with NIST Connection	30
	Valve Box - 6 Gas Service with NIST Connection	6
13	MEDICAL GAS ALARM PANEL : Supply, Installation, testing and commissioning of Medical Gas Alarm Panel as per tender technical specifications.	
13.1	Medical Gas Area Alarm for 2 services (Oxygen and Vacuum)	40
13.2	Medical Gas Area Alarm for 3 services (Oxygen, MA4 Air and Vacuum)	20
13.3	Medical Gas Area Alarm 5 services (Oxygen, N2O, MA4 Air , AGSS, and Vacuum)	30
13.4	Medical Gas Area Alarm 6 services (Oxygen, N2O, MA4 Air ,Air 7 bar AGSS,and Vacuum)	6
13.5	Master Alarm Panel as per technical specifications.	1
14	LINE ISOLATION VALVES	
	12 mm ball valve	320
	15 mm ball valve	220
	22 mm ball valve	120
	28 mm ball valve	20
	35 mm ball valve	25
	42 mm ball valve	15
	54 mm ball valve	10
	76 mm ball valve	12
	108 mm ball valve	2
15	Supply installation testing and commissioning of Medical gas hose assemblies Hoses shall be color coded throughout their length as specified in British standards.	100
16	Supply of O2 cylinders-Class D type bulk cylinders	100
17	Supply of N2O cylinders-Class D type bulk cylinders	50
18	Supply of CO2 cylinders-Class D type bulk cylinders	10
19	Bed Head Vertical Wall Panel	100
20	Bed Head Horizontal Wall Panel	200
21	Electric wiring inside the gas manifold and plant room including control panel for Vacuum plant & Air plant.	1

Note: For AIIMS Patna, under Phase-1,i.e, in first 200 days, 13 OT' (4 OT s in Trauma Block, 4 OT in hospital block ground floor, 5 OTs in D Block Hospital Building), CCU, Pre & Post-Operative Ward in 6 Floor at Trauma & Hospital Block should be made functional. Balance work needs to be done in next 100 days.

	BOQ FOR MGPS AIIMS RAIPUR	
SN.	Item Description	Quantity
1	LIQUID OXYGEN FACILITY-20KL (1No) and 10KL (1 No)	
1.1	Facility charges including 20 KL vessel, 10KL vessel, VIE's, AV coils and accessories	Lump Sum
1.2	Installation and commissioning charges - One time lump sum charge	Lump Sum
1.3	Charges for laying of 1" copper line for Hospital block. (Any extra length will be charged as actuals at the rate quoted.)	100
1.4	Total Cost of civil construction for running the pipeline from LO plant to Hospital block either by trenching or by supporting poles if required.(Steel structure for exposed lines with PVC pipe protected(on 2" pole of 20 ft height, on concrete foundation at a spacing of 3 m. 1" copper tubing inserted in 1.5" PVC/ HDP heat resistant pipe clamped on support at the top of the pole. PVC pipes sealed by 1.5" PVC coupling & PVC cement)	Lump Sum
1.5	a) Fencing in MS properly anchored and painted to withstand corrosion; b) Foundation for one number of 20 KL tank & one 10 KL Tank. c) Gate 5m wide with double leaf & 1 m wicket gate d) 2 no: s of 10 kg DCP fire extinguishers e) 4 no. s of Fire buckets f) 8 no: s of sodium vapour lamps on poles g) Signage for the system	Lump Sum
1.6	Basic price of LMOs (including delivery charge)	20000
1.7	Fully Automatic control Panel for switchning between Primary LMO (20 KL), Secondary (10 KL) and Emergency cylinder Bank as per technical specifications.	1
2	Emergency Oxygen Supply Manifold System, (2x20 size): Supply, Installation, testing and commissioning of (2x20 size) class D type bulk Oxygen cylinder Supply Manifold System as per technical specifications.	1
2.1	Fully Automatic Oxygen Control Panel System: Supply, Installation testing and commissioning of Fully Automatic Oxygen Control Panel System as per tender technical specifications and HTM 02-01/NFPA 99 C standards.	1

2.2	Oxygen Flow meter with Humidifier Bottle: Supply installation, testing and commissioning of oxygen flow meter with humidifier bottle 0-15Litres. As per tender technical specifications	900
3	Fully Automatic Manifold Control Panel for Nitrous Oxide: Supply installation testing and commission of fully automatic control panel for Nitrous Oxide as per tender technical specifications and HTM 02-01/NFPA 99 C standards.	1
3.1	Nitrous Oxide Manifold System, (2x10 size): Supply installation testing and commissioning of (2x10 size) class D bulk type cylinder Nitrous Oxide Manifold system as per tender technical specifications.	1
3.2	Emergency Nitrous Oxide Manifold System, 2x4 size: Supply installation, testing and commissioning of (2x4 size) cylinder Emergency Nitrous Oxide supply System as per tender technical specifications.	1
4	Medical Air Plant (Package Unit) with Pentaplex/Quadruplex Air Compressor including electrical control panel: Supply, Installation, testing and commissioning of Rotary Screw/scroll type Pentaplex/Quadruplex Medical Air Plant (Package Unit) having a capacity of 7000LPM as per HTM 02-01/NFPA 99C standards and as per tender technical specification	1
4.1	Air Filtration System	2
4.2	Pressure reducing station	2
4.3	Desiccant Air Dryer	2
5	Medical Vacuum Plant Package Pentaplex/Quadraplex vacuum pumps: Supply, Installation, testing and commissioning of Rotary Vane type Oil-lubricated Pentaplex/Quadraplex Medical Vacuum Plant (Package Unit) having a capacity of 7000LPM as per HTM 02-01/NFPA 99C standards and tender technical specification	1
5.1	Bacterial Filters as per tender technical specification	1
6	Ward Vacuum Unit: Suply installation testing and commissiong of Ward Vacuum Unit as per tender technical specifications.	900
7	Theater Vaccum Unit for Operation Theaters: Suply installation testing and commissiong of Theater Vacuum Unit as per tender technical specifications.	33
8	Fully Automatic Manifold Control Panel for CO2: Supply installation testing and commission of fully automatic control panel for CO2 as per tender technical specifications and HTM 02-01/NFPA 99 C standards.	1

8.1	CO2 Manifold System, (2x4 size): Supply installation testing and commissioning of (2x4 size) class D cylinder CO2 Manifold system as per tender technical specifications.	1
9	Duplex AGSS System: Supply installation and commissioning of Duplex AGSS system and AGSS Cabling from Plant to OT's as per technical specifications.	2
10	Copper Pipes	
10.1	Solid drawn, seamless, deoxidised, non- arsenical, half hard, tempered and degreased copper pipes as per tender technical specifications	
	108 mm OD x 1.5 mm thick	300
	76 mm OD x 1.5 mm thick	400
	54mm OD X 1.2mm thick	1000
	42mm OD X 1.2mm thick	1200
	35mm OD X 1.2mm thick	7000
	28mm OD X 1 mm thick	3000
	22mm OD X 1 mm thick	10000
	15mm OD X 1 mm thick	8000
	12mm OD X 1 mm thick	12000
11	Gas Outlet Points/ Terminal Units with probe: Supply,Installation, testing and commissioning of Gas outlet points for Oxygen, Nitrous Oxide, Medical Air 4 Bar ,Vacuum, CO2 , and AGSS as per tender technical specifications .	
	Oxygen outlet with probe	1010
	Nitrous Oxide outlet with probe	2
	Medical Air 4 outlet with probe	160
	Vacuum outlet with probe	1010
	CO2 outlet with probe	4
	AGSS outlet with probe	2
12	AREA VALVE BOX (WITHOUT VALVES): Supply,Installation, testing and commissioning of Area Valve Boxes as per tender technical specifications	
	Valve Box - 3 Gas Service with NIST Connection	20
	Valve Box - 5 Gas Service with NIST Connection	24
	Valve Box - 6 Gas Service with NIST Connection	6
13	MEDICAL GAS ALARM PANEL : Supply, Installation, testing and commissioning of Medical Gas Alarm Panel as per tender technical specifications.	
13.1	Medical Gas Area Alarm for 2 services (Oxygen and Vacuum)	40
13.2	Medical Gas Area Alarm for 3 services (Oxygen, MA4 Air and Vacuum)	20
13.3	Medical Gas Area Alarm 5 services (Oxygen, N2O, MA4 Air , and Vacuum)	24

13.4	Medical Gas Area Alarm 6 services (Oxygen, N2O, MA4 Air ,Air 7 bar and Vacuum)	6
13.5	Master Alarm Panel as per technical specifications.	1
14	LINE ISOLATION VALVES	
	12 mm ball valve	300
	15 mm ball valve	230
	22 mm ball valve	90
	28 mm ball valve	65
	35 mm ball valve	10
	42 mm ball valve	15
	54 mm ball valve	10
	76 mm ball valve	10
	108 mm ball valve	3
15	Supply installation testing and commissioning of Medical gas hose assemblies Hoses shall be color coded throughout their length as specified in British standards.	50
16	Supply of O2 cylinders-Class D	100
17	Supply of N2O cylinders-Class D	50
18	Supply of CO2 cylinders-Class D	10
20	Bed Head Vertical Wall Panel	100
21	Bed Head Horizontal Wall Panel	200
22	Electric wiring inside the gas manifold and plant room including control panel for Vacuum plant & Air plant.	1

Note: For AIIMS Raipur, under Phase-1,i.e, in first 200 days ,10 OT's on 4 Floor, 2 OT's on ground Floor of A Block should be made functional. Balance work needs to be done in next 100 days

BOQ FOR MGPS AIIMS RISHIKESH		
SN.	Item Description	Quantity
1	LIQUID OXYGEN FACILITY-20KL (1No) and 10KL (1 No)	
1.1	Facility charges including 20KL vessel, 10KL vessel, VIE's, AV coils and accessories.	Lump Sum
1.2	Installation and commissioning charges - One time lump sum charge	Lump Sum
1.3	Charges for laying of 1" copper line for Hospital block. (Any extra length will be charged as actuals at the rate quoted.)	100

1.4	Total Cost of civil construction for running the pipeline from LO plant to Hospital block either by trenching or by supporting poles if required.(Steel structure for exposed lines with PVC pipe protected(on 2" pole of 20 ft height, on concrete foundation at a spacing of 3 m. 1" copper tubing inserted in 1.5" PVC/ HDP heat resistant pipe clamped on support at the top of the pole. PVC pipes sealed by 1.5" PVC coupling & PVC cement)	Lump Sum
	Total Civil Works cost	
1.5	 a) Fencing in MS properly anchored and painted to withstand corrosion; b) Foundation for one number of 20 KL tank & one 10 KL Tank. c) Gate 5m wide with double leaf & 1 m wicket gate d) 2 no: s of 10 kg DCP fire extinguishers e) 4 no. s of Fire buckets f) 8 no: s of sodium vapour lamps on poles g) Signage for the system 	Lump Sum
1.6	Basic price of LMOs (including delivery charge)	20000
1.7	Fully Automatic control Panel for switchning between Primary LMO (20 KL), Secondary (10 KL) and Emergency cylinder Bank as per technical specifications.	1
2	Emergency Oxygen Supply Manifold System, (2x20 size) : Supply, Installation, testing and commissioning of (2x20 size) class D type bulk Oxygen cylinder Supply Manifold System as per technical specifications.	1
2.1	Fully Automatic Oxygen Control Panel System : Supply, Installation testing and commissioning of Fully Automatic Oxygen Control Panel System as per tender technical specifications and HTM 02-01/NFPA 99 C standards.	1
2.2	Oxygen Flow meter with Humidifier Bottle: Supply installation, testing and commissioning of oxygen flow meter with humidifier bottle 0-15Litres. As per tender technical specifications	620
3	Fully Automatic Manifold Control Panel for Nitrous Oxide: Supply installation testing and commission of fully automatic control panel for Nitrous Oxide as per tender technical specifications and HTM 02-01/NFPA 99 C standards.	1
3.1	Nitrous Oxide Manifold System, (2x10 size): Supply installation testing and commissioning of (2x10 size) class D bulk cylinders Nitrous Oxide Manifold system as per tender technical specifications.	1
3.2	Emergency Nitrous Oxide Manifold System, 2x4 size: Supply installation, testing and commissioning of (2x4 size) cylinder Emergency Nitrous Oxide supply System as per tender technical specifications.	1
	<u> </u>	

4	Medical Air Plant (Package Unit) with Pentaplex/Quadruplex Air Compressor including electrical control panel: Supply, Installation, testing and commissioning of Rotary Screw/scroll type Pentaplex/Quadraplex Medical Air Plant (Package Unit) having a capacity of 7000LPM as per HTM 02-01/NFPA 99C standards and as per tender technical specification	1
4.1	Air Filtration System	2
4.2	Pressure reducing station	2
4.3	Desiccant Air Dryer	2
5	Medical Vacuum Plant Package Pentaplex/Quadraplex vacuum pumps: Supply, Installation, testing and commissioning of Rotary Vane type Oil-lubricated Pentaplex/Quadraplex Medical Vacuum Plant (Package Unit) having a capacity of 5000LPM as per HTM 02-01/NFPA 99C standards and as per tender technical specification	1
5.1	Bacterial Filters as per tender technical specification	1
6	Ward Vacuum Unit: Suply installation testing and commissiong of Ward Vacuum Unit as per tender technical specifications.	620
7	Theater Vaccum Unit for Operation Theaters: Suply installation testing and commissiong of Theater Vacuum Unit as per tender technical specifications.	24
8	Fully Automatic Manifold Control Panel for CO2: Supply installation testing and commission of fully automatic control panel for CO2 as per tender technical specifications and HTM 02-01/NFPA 99 C standards.	1
8.1	CO2 Manifold System, (2x4 size): Supply installation testing and commissioning of (2x4 size) class D cylinder CO2 Manifold system as per tender technical specifications.	1
9	Duplex AGSS System: Supply installation and commissioning of Duplex AGSS system and AGSS Cabling from Plant to OT's as per technical specifications.	2
10	Copper Pipes	
10.1	Solid drawn, seamless, deoxidised, non- arsenical, half hard, tempered and degreased copper pipes as per tender technical specifications	

	108 mm OD x 1.5 mm thick	250
	76 mm OD x 1.5 mm thick	300
	54mm OD X 1.2mm thick	600
	42mm OD X 1.2mm thick	2000
	35mm OD X 1.2mm thick	800
	28mm OD X 1 mm thick	3500
	22mm OD X 1 mm thick	8000
	15mm OD X 1 mm thick	6000
	12mm OD X 1 mm thick	8000
11	Gas Outlet Points/ Terminal Units with probe: Supply, Installation, testing and commissioning of Gas outlet points for Oxygen, Nitrous Oxide, Medical Air 4 Bar, Vacuum, CO2, and AGSS.	
	Oxygen outlet with probe	775
	Nitrous Oxide outlet with probe	2
	Medical Air 4 outlet with probe	122
	Vacuum outlet with probe	775
	CO2 outlet with probe	4
	AGSS outlet with probe	2
12	AREA VALVE BOX (WITHOUT VALVES): Supply,Installation, testing and commissioning of Area Valve Boxes as per tender technical specifications	
	Valve Box - 3 Gas Service with NIST Connection	20
	Valve Box - 5 Gas Service with NIST Connection	21
	Valve Box - 6 Gas Service with NIST Connection	4
13	MEDICAL GAS ALARM PANEL: Supply, Installation, testing and commissioning of Medical Gas Alarm Panel.as per tender technical specifications	
13.1	Medical Gas Area Alarm for 2 services (Oxygen and Vacuum)	30
13.2	Medical Gas Area Alarm for 3 services (Oxygen, MA4 Air and Vacuum)	26
13.3	Medical Gas Area Alarm 5 services (Oxygen, N2O, MA4 Air , AGSS and Vacuum)	21
13.4	Medical Gas Area Alarm 6 services (Oxygen, N2O, MA4 Air , Air 7 bar, AGSS and Vacuum)	4
13.5	Master Alarm Panel as per technical specifications.	1
14	LINE ISOLATION VALVES	
	12 mm ball valve	170
		170 120
	12 mm ball valve	
	12 mm ball valve 15 mm ball valve	120

HLL Lifecare Limited

	42 mm ball valve	20
	54 mm ball valve	15
	76 mm ball valve	5
	108 mm ball valve	2
15	Supply installation testing and commissioning of Medical gas hose assemblies Hoses shall be color coded throughout their length as specified in British standards.	50
16	Supply of O2 cylinders-Class D bulk cylinders	100
17	Supply of N2O cylinders-Class D bulk cylinders	50
18	Supply of CO2 cylinders-Class D cylinders	10
19	Bed Head vertical Wall Panel	100
20	Bed Head Horizontal Wall Panel	100
21	Electric wiring inside the gas manifold and plant room including control panel for Vacuum plant & Air plant.	1

Note: For AIIMS Rishikesh, under Phase-1,i.e, in first 200 days, Medical Gas Plant Room, 10 OT's, ICU at B6 Block, Fifth Floor Hospital Building, OPD 3 & 4 Floor should be made functional. Balance work needs to be done in next 100 days.

Operation and Maintenance of Medical Gas system at AIIMS

Scope of the work

The primary objective of the bidder is to ensure safe and reliable MGPSs and their efficient Operation and use as per HTM2022 PART B standards. Bidder will be responsible for operational management and maintenance of

- Medical oxygen System -Liquid oxygen system , Manifold and Control panels
- Nitrous oxide System-Manifold and Control Panel
- Medical and Surgical Air System-Compressor systems , Control panel, Dryers, Reservior . Filters etc
- Medical vacuum System- Vacuum pumps, Control panel, Reservoir, Filters etc.
- Waste anesthetic gas scavenging systems (AGSS)
- Carbon dioxide manifold system
- Nitrogen manifold system
- Copper pipelines
- Area Valve Service Units
- Isolation Valves
- Area Alarm panels and Master alarm panels
- Gas Outlets
- Bed Head Panels
- Pendants

Staff responsible for plant operation should be aware of the activities necessary to ensure the continued safe operation of the system and what action should be taken in an emergency. The authorised person (MGPS) in particular should take a lead in explaining to users the function of the system and will have to be adequately trained and informed about the system. Operator will be responsible for safe cylinder handling, storage and transportation. Any work involving alterations, extensions or maintenance work on the system should be subject to the permit-to-work procedure as per HTM standards.

Operation of Medical Gas

The contractor should provide manpower to operate the plant throughout the day,365 days in an year. The duty of the worker should be limited to 8 hous per day.

Sl. No.	Designation	Shift-1 6AM-2 PM	Shift- 2 2-10 PM	Shift-3 10PM- 6AM	General Shift 8-4 PM	Leave Substitu tes	Total

1.	Supervisor (Diploma in Mechanical/Electrical) With 5 years Experience in installation maintenance & operation of MGPS				1		1
2.	Medical Gas Technicians (Diploma in Mechanical/Electrical) With 3 year Experience in installation maintenance & operation of MGPS				3		3
3	Plant operator (SSLC with minimum 4 years experience or ITI with electrical/fitting/plumbing) With Experience in installation maintenance & operation of MGPS	4	3	2		3	12
4	Helpers (8 th Standard or more with minimum 6 years experience in installation, maintenance & operation of MGPS	4	3	2		3	12
	Salary-per month Supervisor-20000 Medical gas technician- 14000						
	Plant operator-10000- 11000 Helpers-7000-8000						

The operators should ensure a trouble free supply at the outlets at the required pressure. They should Monitor the consumption of O_2 & N_2O on hourly basis and submit a consolidated report weekly,. Timely intimation of cylinders refill due date, Timely intimation of oxygen plant refill due date based on consumption, and other service maintenance has to be done by the operator.

The contractors and operator should be fully aware of the safety regulation applied to Medical gas System. It is the mandatory responsibility of the contractor to conduct training sessions of adequate level to the workforce to keep them fit for handling the plants and associated systems. All tests to be conducted by authorized persons, competent persons, quality controller etc have to be arranged by the contractor additionally as required. The contractor may refer to relevant part of HTM for details like responsibilities.

Operational Policy

Refer Section: 5, HTM 2022 Part B (operational Management)

Operational Procedures

Refer Section: 6, HTM 2022 Part B (operational Management)

- Permit to work procedure
- Test of work on MGPS
- Procedure for cleaning & contamination of vacuum systems

Training &Communication

Refer Section: 7,HTM 2022 Part B (operational Management)

Cylinder Management

Refer Section: 8,HTM 2022 Part B (operational Management)

External safety and Fire Precautions

Refer Section: 9,HTM 2022 Part B

Maintenance

Refer Section: 10, HTM 2022 Part B

For : Organization

: General Work Procedures

: Competency of Contractor's staff

: Test equipment

: Records

: Emergency callout procedures

: Responsibility of the user to monitor the services

: Specific maintenance checks

: Medical Vacuum Bacterial filter change

: Schedule of Maintenance service

: General safety requirements

Routine Activity

1) Oxygen plant

- Checking oxygen pressure and liquid level
- Enering details in the log
- Checking for leaks
- Checking the change over
- Intimating the preventive Maintenance one week ahead of the schedule
- Supervising Maintenance jobs and checking reports

2) Manifold (Oxygen and Nitrous oxide)

- Inspection of working
- Checking for leakage
- Checking inlet and outlet pressure
- Checking the change over
- Loading the cylinder as required
- Replacement of defective parts
- Notifying breakdown
- Logging details

3) Compressed Air

- Checking change over
- Checking pressure
- Checking the dryer and change over
- Checking the receiver
- Checking the filter

4) Medical Vacuum system

- Checking vacuum pump
- Checking vacuum level
- Checking controls
- Checking change over
- Checking for drop in Vacuum level
- Checking the filters

5) Medical Gas Lines

- Checking for leakage
- Checking the isolation valves
- Checking the vacuum lines for block
- Checking alarms
- Replacing leaking lines

6) Bedhead Panels, Gas outlets, Pendants

- Checking for leakage
- Checking for defective valves
- Replacement of defective parts

GENERAL TECHNICAL SPECIFICATIONS

GENERAL POINTS:

1. Warranty:

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

Turnkey:

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

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

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

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.

- 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
- O2 Plant and machinery details
- 03 Manufacturing process details
- 04 Monthly (single shift) production capacity of goods quoted for
 - a. normal
 - b. maximum
- O5 Total annual turn-over (value in Rupees)
- Quality control arrangement details
 - a. for incoming materials and bought-out components
 - b. for process control
 - c. for final product evaluation
- 07 Test certificate held
 - a . type test
 - b . BIS/ISO certification
 - c any other
- 08 Details of staff
 - a. technical
 - b skilled
 - c unskilled

Signature and seal of the Tenderer

Section - IX

Qualification Criteria

- 1. **Status:** The Bidder should be a Manufacturer or its authorized Agent.
- 2. **Turnover:** Eligible Bidders should have an average annual turnover in the consequetive past three financial years (2012-13, 2013-14, 2014-15) as mentioned in **Eligibility Table.** The turnover requirement is, caluculated considering estimated cost and delivery/completion period. Bidder has to meet turnover requirement depending upon no of schedules/subschedule for which bid is submitted. Turnover criteria has to be met on cumulative basis if bid is submitted for multiple schedules/subschedules.
- 1. **Minimum Work of Similar Nature: Eligible** bidders should have successfully executed globally in last five years from the date of tender opening, similar turnkey project of value, equivalent to exceeding 50% of the estimated tender value. Out of total 50 % value, atleast one single order similar work of minimum 10% value should have been excecuted globally. The detials of reuirement of MWSN (minimum work of similar nature) for different schedules, multiple schedules are mentioned in **Eligibility Table.** The value of the executed works shall be brought to the current costing level by enhancing the actual value of work at simple rate of 7% per annum, calculated from the date of completion to last date of receipt of applications for tenders.

3.

Example/Clarification: Similar Project means for means MGPS meeting major technical parameters of the current BOQ floated in the tender enquiry document.

- 4. Solvency Certificate: Eligible bidders should submit a solvency certificate of not less than 30% of the estimated value of work from a Nationalized / Scheduled bank. If the bid is submitted for multiple schedules/subschedules, the bidder has to meet as per the details given in Eligibility Table. In case of a foreign bidder the solvency certificate can be submitted from a branch of a foreign bank having banking operations in India.
- 2. Office in India:- The bidder must have office/offices in India at the time of submitting bid. Proof of having office in India must be submitted along wih the bid. In case the bidder does not have an office in India, at the time of submitting the bid, he should give an undertaking that he will open an office in India within 90 days from the date of award of contract if the contract is awarded and also should submit an undertaking in a non-judicial stamp paper duly notarised that they they will continue operation in India during the post installation period of atleast 10 years to ensure required standard of service delivery with respect to warrwnty, operations and maintenance of the equipments supplied and installed.

5.

- 6. **Financial Status:** Eligible Bidders should not have incurred any loss in more than 2 years during the last five years ending 31st March 2013. Audited Profit & Loss account and Balance Sheet (duly notarized copies) for the immediate last five consecutive financial years should be submitted along with the bid
- 7. **Manufacturer Authorization:** Eligible bidders should submit a mandatory letter of authority from the Foreign Principal / Manufacturer, mentioning country of origin with name of manufacturing company for major products quoted by them.

For the following major items, Manufacturer's Authorization as per Section XIV- A should be submitted:

1. Fully Automat	cic Oxygen Control Panel
2. Oxygen Flow	meter
3. Fully Automat	cic Nitrous Oxide Control Panel
4. Fully Automat	cic Control panel for CO2 System
5. VACUUM SY	STEMS
6. MEDICAL A	ND SURGICAL AIR SYSTEM
7. ALARM SYS	TEM
8. AREA VALV	E SERVICE UNIT
9. BED HEAD P	ANELS
10. GAS OUTLE	ΓS
11. AGSS (Anesth	netic Gas Scavenging System)

For the all the other items, Manufacturer's Authorization as per Section XIV- B should be submitted.

8. **Bid for Complete Schedule/Part Schedule:** Bidder cannot choose to submit bid for part schedule/part sub schedule. If the bid is submitted for part schedule/sub schedule, the same will be termed as non-responsive. A bidder intending to get qualified and be considered for award of work for more than one schedule, will be required to meet the above qualification criteria on cumulative basis related to experience as well as financials, for such number of schedules.

Eligibility Table

For MGPS:-

MGPS											
Sch No.	Qty Per AII MS	Estim ated Cost Rs. Cr.	EM D Rs. Cr.	Turnover (Rs. Cr)		Minimum work of similar nature		similar in last fi	of the product ive years oted in	of the	
				Aver age Annu al Turn over Rs. Cr	Cum ulativ e Aver age Annu al Turn over Rs. Cr.	Singl e orde r value of last five years glob ally Rs.	Single order value cumulat ive of last five years Globall y Rs.	Similar project in last five years Globall y Rs.	Simila r Projec t of last five years cumul ative Global ly	Solve ncy of atleas t 30% of the estim ated tender value Rs. Cr	Solv ency of atlea st 30% of the esti mate d tend er

						Cr			Rs. Cr.		valu
											e Rs. Cr
7	1	15.00	0.20	1.50	4.50	1.50	1.50	7.50	7.50	1.50	1.50
1	1	15.00	030	4.50	4.50	1.50	1.50	7.50	7.50	4.50	4.50
2	1	15.00	030	4.50	9.00	1.50	3.00	7.50	15.00	4.50	9.00
3	1	15.00	030	4.50	13.50	1.50	4.50	7.50	22.50	4.50	13.5
4	1	15.00	030	4.50	18.00	1.50	6.00	7.50	30.00	4.50	18.0 0
5	1	15.00	030	4.50	22.50	1.50	7.50	7.50	37.50	4.50	22.5
6	1	15.00	030	4.50	27.00	1.50	9.00	7.50	45.00	4.50	27.0

Note: The bidders have to quote for all the schedules while submitting bids. Say, if a bidder is quoting for MGPS, the bidder has to quote for all six schedules, i.e. for all six AIIMS. The purchaser will have the right to award the work for any site considering bidders eligibility, considering best benefit (Least Cost) to the purchaser. However, in case a Bidder intending to get qualified in more than one schedule they should submit EMD accordingly for such number of schedules on cumulative basis. Thus, the bidder must quote for all six schedules mandatorily, **otherwise their bid will be summarily rejected**. However, the principle of least cost to the exchequer would continue to be applied with above changes.

Least Cost Method: - Least cost method to the purchaser means award of work that has least cost to the purchaser.

Sample Examples:

	Example N	0.1	(I)	(II)	(III)	(IV)	(V)	(VI)
			BHUBANESW	BHOPA	JODHPU			
	Bidders		AR	L	R	PATNA	RAIPUR	RISHIKESH
		L1						
	Qualified	for						
	in No. of	sites						
	schedules	(Nos.)	Rs. Cr	Rs. Cr	Rs. Cr	Rs. Cr	Rs. Cr	Rs. Cr
`								
A	1	1	14	15	16	19	18	12
В	3	2	12	13	18	18	15	14
C	1	1	16	14	15	16	13	18
D	2	2	18	17	14	15	16	13
Е	1	-	15	20	17	21	19	16
F	3	-	13	14	16	17	14	15

L1 bidder and cost Sch. Wise	B (12)	B(13)	D(14)	D(15)	C(13)	A(12)
Award to Bidder (based on least cost)	B(12)	B(13)	D(14)	D(15)	C(13)	A(12)

In this example, the no(s) of schedules for which each bidder is L1 is equal to or less than the no. of schedules for which it is qualified. Therefore, Bidders will be awarded the work on L1 basis for each schedule as per the above table.

	Example N	0.2	(I)	(II)	(III)	(IV)	(V)	(VI)
			BHUBANESW	BHOPA	JODHPU			
	Bidders		AR	L	R	PATNA	RAIPUR	RISHIKESH
	Qualified L1 for							
	in No. of schedules	sites (Nos.)	Rs. Cr	Rs. Cr	Rs. Cr	Rs. Cr	Rs. Cr	Rs. Cr
A	1	1	14	15	16.5	19	18	12
В	3	2	12	13	18	18	15	14
C	1	1	16	14	17.5	16.5	13	18
D	1	2	18	17	14	15	16	13
Е	1	-	15	20	17	21	19	16
F	3	-	13	14	16	16	14	15
L1t	oidder and co	ost Sch.						
	Wise		B (12)	B(13)	D(14)	D(15)	C(13)	A(12)
	Award to Bions				D(14)	F(16)	C(13)	A(12)

Bidder D is eligible for only one site. However, D is L1 for two sites, i.e. Jodhpur and Patna.

Case 1: D(L1) for Jodhpur and F(L2) for Patna=(14+16)=30.

Case 2: D(L1) for Patna and F(L2) for Jodhpur=(15+16)=31.

Thus, by least cost method, D will be awarded Jodhpur and F will be awarded Patna.

F	Example No	0.3	(I)	(II)	(III)	(IV)	(V)	(VI)
			BHUBANESWA	BHOPA	JODHPU			
	Bidders		R	L	R	PATNA	RAIPUR	RISHIKESH
	Qualifie d in No.	L1 for						
	schedule s	sites (Nos)	Rs. Cr	Rs. Cr	Rs. Cr	Rs. Cr	Rs. Cr	Rs. Cr
Α	1	1	14	15	16.5	19	18	12
В	3	2	12	13	18	18.5	15	14
C	1	1	16	14	15	15.5	13	18
D	1	2	18	17	14	15	16	13
Е	1	ı	15	20	17	21	19	16
F	3	-	13	14	16	18	14	15
	•				•		•	·

L1bidder and cost Sch. Wise	B(12)	B(13)	D(14)	D(15)	C(13)	A(12)
Award to Bidder (based on least cost)	B(12)	B(13)	D(14)	C(15.5)	F(14)	A(12)

Bidder D is eligible for only one site. However, D is L1 for two sites, i.e. Jodhpur and Patna.

Case 1: D(L1) for Jodhpur, C(L2) for Patna and F(L2) for Raipur=(14+15.5+14)=43.5.

Case 2: C(L2) for Jodhpur, D(L1) for Patna and F(L2) for Raipur=(15+15+14)=44.

Case 3: D(L1) for Jodhpur, F(L3) for Patna and C(L1) for Raipur=(14+18+13)=45.

Case 4: F(L3) for Jodhpur, D (L1) for Patna and C (L1) for Raipur= (16+15+13)=44

Thus, by least cost method, D will be awarded jodhpur, C will be awarded Patna and F will be awarded Raipur.

E	xample No	.4	(I)	(II)	(III)	(IV)	(V)	(VI)
			BHUBANESWA	BHOPA	JODHPU	PATN		
	Bidders		R	L	R	A	RAIPUR	RISHIKESH
	Qualifie d in No. of L1 for							
	schedule s	sites (No)	Rs. Cr	Rs. Cr	Rs. Cr	Rs. Cr	Rs. Cr	Rs. Cr
A	1	-	14	15	16.5	19	18	19
В	3	2	12	13	18	18	22	15
C	1	-	16	14	14.5	16.5	20	18
D	5	4	18	17	14	15	14	13
Е	1	1	15	20	17	21	19	16
F	3	ı	13	14	16	17	21	14
L1bid	L1bidder and cost Sch.							
	Wise		B(12)	B(13)	D (14)	D(15)	D(14)	D(13)
	vard to Bide ed on least		B(12)	B(13)	C(14.5)	D(15)	D(14)	D(13)

Note: As per terms and conditions of the bidding document, maximum three sites can be awarded to a bidder. In the present case bidder D is eligible for 4 sites and is L1 for 4, however since maximum three sites can be awarded to D the award will be on least cost basis.

Case 1: D(L1) for Jodhpur, D(L1) for Patna, D(L1) for Raipur and F(L2) for

Rishikesh=(14+15+14+14)=57

Case 2: D(L1) for Jodhpur, D(L1) for Patna, A(L2) for Raipur and D(L1) for

Rishikesh=(14+15+18+13)=60

Case3: D(L1) for Jodhpur, C(L2) for Patna, D(L1) for Raipur and D(L1) for

Rishikesh=(14+16.5+14+13)=57.5

Case 4: C(L2) for Jodhpur, D(L1) for Patna, D(L1) for Raipur and D(L1) for

Rishikesh=(14.5+15+14+13)=56.5

Thus, by least cost method, C will be awarded Jodhpur and D will be awarded Patna, Raipur and Rishikesh

The above are only sample examples and do not cover all situations. In any and all situations the method and principle of least cost to the purchaser will be followed.

Notes:

In support of 2 (a), the bidder shall furnish Performance statement in the enclosed Proforma 'A'.

The bidder shall furnish Satisfactory Performance Certificate in respect of above, duly translated in English and duly endorsed by country embassy with counter endorsement of Indian embassy in the country of origin, alongwith the tender .

- 1. The bidder shall furnish a brief write-up, along 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.
- 2. 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.
- 3. 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)

Τ	ender Referer	ice No.		:				
Г	Date of opening	g		:				
T	ime			:				
Name and address of the Tenderer								
N	Vame and addr	ress of the m	nanufacturer	:				
	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 completio Contract As per contract	n of Actual	Remarks indicating reasons for delay if any	Have the goods been functioning Satisfactorily (attach documentary

5

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

4

Signature and seal of the Tenderer

7

6

proof)**

8

- ** The documentary proof will be a certificate from the consignee/end user with crossreference of order no. and date in the certificate along with a notarized certification authenticating the correctness of the information furnished.
- ** The bidders are requested to submit the latest purchase order copies supplied to AIIMS, PGIMER, JIPMER, Institute of National importance for the specific model quoted along with the price bid.

2

3

Section – X TENDER FORM

			Date
Γο			
SVP(GB), HLL Lifecare Limited, Pr Noida -201307, Uttar Pradesh	ocurement and Con	sultancy Division, B-14	A, Sector -62,
Ref. Your TE document No	dated	-	
We, the undersigned have examendment/corrigendum Noconfirmed. We now offer to supply a conformity with your above referred deferewith and made part of this tendand perform the services as mentioned with of Deguirements.	, dated and deliver ocument for the sum der . If our tender is a	(if any), the receipt of (Description of goods as shown in the price scaccepted, we undertake to	which is hereby s and services) in hedules attached supply the goods
List of Requirements. We further confirm that, if our tender required amount in an acceptable form Section - V – "Special Conditions of Conditions of Comparison of the Amount of Section - V – "Special Conditions of Comparison	m in terms of GCC of Contract", for due perf for acceptance as r "Special Instructions to accordingly confirmed any time before the sexecuted, this tende itute a binding contract not bound to accept quiry. gistered/banned/black	clause 5, read with modifformance of the contract. required in the GIT clau to Tenderers" or for subsent to abide by this tender use expiry of the aforesaid per read with your written a ct between us. the lowest or any tender listed by any Govt. Author	se 20, read with equently extended p to the aforesaid eriod. We further exceptance thereof you may receive rities.
		(Sign	nature with date)

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

<u>SECTION – XI PRICE SCHEDULE</u>

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

1	2	3	4		5					
Schedule	Brief	Country of	Quantity				Price per unit (I	Rs.)		
	Description of Goods	Origin	(Nos.)	Ex - factory/ Ex -warehouse /Ex-showroom /Off - the shelf (a)	(%age & value]	Sales Tax/ VAT(if any) [%age & value]	Inland Transportation, Insurance for a period including 6 months beyond date of delivery, loading/ unloading and Incidental costs till consignee's site	Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training) at the Consignee's site	Unit Price (at Consignee Site) basis (g) = a+b+c+d+e	Total Price (at Consignee Site) basis (Rs.)
					(b)	(c)	(d)	(e)	-	4 x 5(g)

	Total Tender price in Rupees:	
	In words:	
Note:	-	
	* *	ce and total price THE UNIT PRICE shall prevail.
	2. The charges for Annual CMC after warrant	shall be quoted separately as per Section – XI – Price Schedule C
		Name
		Business Address
Place	:	Signature of Tenderer
Date:		Seal of the Tenderer
HLL/P	CD/PMSSY/AIIMS-II/14-RT-01/15-16	Page No.109 Dated 31.12.2015

B) PRICE SCHEDULE FOR GOODS TO BE IMPORTED FROM ABROAD

1	2	3	4		5							j
Schedul	Brief	Country					Price per uni	t (Currency)				
e	Description of Goods	of Origin		FOB price at port/ airport of Lading	Indian Agency Commission (% of FOB)**	Net FOB	Freight & Insurance (port of	Unit Price on CIP named port of Destination	Incidental Services (including Installation & Commissioning, Supervision,	Extended Insurance (local transportation and storage) from port of entry to the consignee site for a	Total pric Named Destir 4X 5	Port of nation
							loading to port of entry) and other Incidental costs		Demonstration and Training) at the Consignee's site**	period including 6 months beyond date of delivery**	In foreign currency	In Indian Rupees
					(a)	(b)	(c)	(d)	(e)	(f)	4*d	4*(a+e+f)
** To	be paid in	Indian	Currency	(Rs.)				•				

(A) Total Tender price in foreign currency:

In words: _____

B) Total Tender price in Indian Rupees:			
In words:			
Note: -			
1. If there is a discrepancy between the unit price and to	otal price THE UNIT PRI	CE shall prevail.	
2. The charges for Annual CMC after warranty shall be	quoted separately as per	Section – XI – Price	e Schedule C
3. The Tenderer will be fully responsible for the safe an INCOTERMS, if applicable	rival of the goods at the n	amed port of entry	in good condition as per terms of CIP as per
4. Custom duty @ 11.64% and 2% C& F charges will b	be added to the CIP price	to arrive at the DDP	' price for evaluation purpose.
ndian Agent:			
ndian Agency Commission% of FOB Signature of Tenderer			
ngnature of Tenderer			Name
			Business Address
Place:			Signature of Tenderer
Oate:			Seal of the Tenderer
HLL/PCD/PMSSY/AIIMS-II/14-RT-01/15-16	Page No.110	Dated 31.12.2015	

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

1	2	3	4		5	6				
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 Each Unit for 5 years (4a+4b+4c+4d+4e)	Annual Comprehensive Maintenance Contract Cost for	
140.	OF GOODS	(1105.)	1 st	2 nd	3^{rd}	4 th	5 th		05 years	
			a	b	c	d	e		(3 x 5)	

^{*} After completion of Warranty period

HLL/PCD/PMSSY/AIIMS-II/14-RT-01/15-16

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. "Whether service tax on CMC is inclusive or extra, if extra, indicate the present rate.......". 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.

Dated 31.12.2015

Name

	Business Address
Place:	Signature of Tenderer
Date:	Seal of the Tenderer

Page No.111

D) PRICE SCHEDULE FOR OTHER SERVICES, TURNKEY, LABOUR, INSTALLATION, COMMISSIONING ETC:-

Schedule No.	BRIEF TURNKEY DESCRIPTION OF GOODS	CONSIGNEE CODE	Price (Rs.)

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:		S	ignature of Tenderer
Date:			Seal of the Tenderer
HLL/PCD/PMSSY/AIIMS-II/14-RT-01/15-16	Page No 112	Dated 31.12.2015	

E) PRICE SCHEDULE FOR RUNNING AND OPERATION:-

Schedule No.	CONSIGNEE	Running and Operation cost for initial 5 years from the date of Installation and commissioning as per the scope of work defined in the technical specification (Rs.)

Note: -

- 1. The cost of running and operation need to be quoted in monthly lump sum manner inclusive of all statutory taxes.
- 2. Cost of running and operation will be added for Ranking/Evaluation purpose.
- 3. The payment will be made by respective AIIMS on quarterly basis on satisfactory performance before 7th in the following quarter.
- 4. No employee employed by the supplier can claim to be an employee of AIIMS and the principal employer status will always be with the MGPS equipment supplier on whom the notification of award will be placed.

	Name	
	Business Address	
Place:	Signature of Tenderer	
Date:	Seal of the Tenderer	

SECTION – XII QUESTIONNAIRE

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

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

SECTION - XIII

BANK GUARANTEE FORM FOR EMD

Whereas	(hereinafter called the "Tenderer") has submitted its quotation dated for the supply of (hereinafter called the "tender") ourchaser's tender enquiry No Know all persons by these presents
	for the supply of (hereinafter called the "tender")
against the j	of (Harainefter called the "Panta")
having our	of (Hereinafter called the "Bank") registered office at are bound unto (hereinafter called the "Purchaser) in the sum of
naving our	(hereinafter called the "Purchaser) in the sum of
	(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
	isday of 20 The conditions of this obligation are:
the p 2) If the	e Tenderer withdraws or amends, impairs or derogates from the tender in any respect within period of validity of this tender. Tenderer having been notified of the acceptance of his tender by the Purchaser during the od of its validity:-
	fails or refuses to furnish the performance security for the due performance of the contract or fails or refuses to accept/execute the contract or if it comes to notice that the information/documents furnished in its tender is incorrect, false, misleading or forged
without the note that th	ke to pay the Purchaser up to the above amount upon receipt of its first written demand, Purchaser having to substantiate its demand, provided that in its demand the Purchaser will e amount claimed by it is due to it owing to the occurrence of one or both the two specifying the occurred condition(s).
_	tee will remain in force for a period of forty-five days after the period of tender validity and in respect thereof should reach the Bank not later than the above date.
	(Signature with date of the authorised officer of the Bank)
	Name and designation of the officer
	Seal, name & address of the Bank and address of the Branch

To be enclosed with Techno-Commercial Bid

ANNEXURE-A

BIDDER PARTICULARS

- 1. Name of the Bidder
- 2. Address of the Bidder :
- 3. Name of the Manufacturer (s):
- 4. Address(es) of the Manufacturer:
- 5. Name and address of the person: To whom all references shall be Made regarding this tender inquiry.

Telephone: Telex : Fax

:

E-mail address:

Witness:

Signature

Name Address Designation Company Date Company Seal

To be enclosed with Techno-Commercial Bid

ANNEXURE-B

UNDERTAKING
To,
Sir,
Having examined the Bidding Documents of Tender No. undersigned offer to supply, install, commission, operate maintain and we undertake, if our bid is accepted, to complete delivery of all the items specified in the contract withinweeks calculated from the date of receipt of your Notification of Award and to complete the installation, testing commissioning
Signature and Seal
(In the capacity of)
Only Authorized to sign bid for and on behalf of

To be enclosed with Techno-Commercial Bid

ANNEXURE-C

BIDDER PROFILE

A. <u>General Information</u> :
(i) Location of Corporate Headquarters : (ii) Date and Country of Incorporation : (iii) Manufacturing Facility (S) Location Size Capacity (iv) No. of Service Facility(S) in India Location Strength Area Covered (iv) Average yearly turnover for lost three years:
(v) Average yearly turnover for last three years: (vi) Geographical Distribution of the Supplier:
No. of Offices
Locations Staff strength (vii) Total No. of installations of the system offered. (viii) No. of Employees Total No. Manufacturing R&D (If any) Hardware Maintenance Software
B. Reference of Major installation with similar products (attach documents in support, if available) S. No. Customer Name, Address Product Description
Telephone Fax Number (No. of Machines installation year wise).
Date Signature and seal of bidder

SECTION – XIV - A

MANUFACTURER'S AUTHORISATION FORM

SVP(GB),
HLL Lifecare Limited, Procurement and Consultancy Division
B-14 A, Sector -62, Noida -201307, Uttar Pradesh
Dear Sir,
Ref: Your TE document No dated
We, who are proven and reputable manufacturers of (name and description of the goods offered in the tender) having
of(name and description of the goods offered in the tender) having
factories at, hereby authorise Messrs(name and address
of the agent) to submit a tender, process the same further and enter into a contract with you against your requirement as contained in the above referred TE documents for the above goods manufactured by us.
We also state that we are not participating directly in this tender for the following reason(s):
We further confirm that no supplier or firm or individual other than Messrs. (name and address of the above agent) is authorised to submit a
tender, process the same further and enter into a contract with you against your requirement as contained in the above referred TE documents for the above goods manufactured by us. We also hereby extend our full warranty, CMC as applicable as per clause 15 of the General Conditions of Contract, read with modification, if any, in the Special Conditions of Contract for the goods and services offered for supply by the above firm against this TE document.
We also hereby confirm that we would be responsible for the satisfactory execution of contract placed on the authorised agent
We also confirm that the price quoted by our agent shall not exceed the price which we would have quoted directly"
Yours faithfully,
[Signature with date, name and designation] for and on behalf of Messrs
[Name & address of the manufacturers]
 Note: 1. This letter of authorisation should be on the letter head of the manufacturing firm and should be signed by a person competent and having the power of attorney to legally bind the manufacturer. 2.Orginal Letter may be sent. Photocopy not acceptable.

SECTION – XIV - B

MANUFACTURER'S AUTHORISATION FORM

SVP(GB),
HLL Lifecare Limited, Procurement and Consultancy Division
B-14 A, Sector -62, Noida -201307, Uttar Pradesh
Dear Sir,
Ref: Your TE document No dated
We, who are proven and reputable manufacturers of (name and description of the goods offered in the tender) having factories at, hereby authorise Messrs (name and address of the agent) to submit a tender, process the same further and enter into a contract with you against your requirement as contained in the above referred TE documents for the above goods manufactured by us.
We also state that we are not participating directly in this tender for the following reason(s):
We also hereby extend our full warranty, CMC as applicable as per clause 15 of the General Conditions of Contract, read with modification, if any, in the Special Conditions of Contract for the goods and services offered for supply by the above firm against this TE document.
We also hereby confirm that we would be responsible for the satisfactory execution of contract placed on the authorised agent
We also confirm that the price quoted by our agent shall not exceed the price which we would have quoted directly"
Yours faithfully
[Signature with date, name and designation] for and on behalf of Messrs
[Name & address of the manufacturers]
Note: 1. This letter of authorisation should be on the letter head of the manufacturing firm and should be signed by a person competent and having the power of attorney to legally bind the manufacturer. 2.Orginal Letter may be sent. Photocopy not acceptable.

SECTION – XV

BANK GUARANTEE FORM FOR PERFORMANCE SECURITY/ CMC SECURITY

SVP(GB),	
HLL Lifecare Limited, Procurement and Consultancy Divisi	ion
B-14 A, Sector -62, Noida -201307, Uttar Pradesh	
WHEREAS (Name a called "the supplier") has undertaken, in pursuance of cont to supply (description of goods and services	and address of the supplier) (Hereinafter tract no dated
AND WHEREAS it has been stipulated by you in the said with a bank guarantee by a scheduled commercial bank reco as security for compliance with its obligations in accordance AND WHEREAS we have agreed to give the supplier such	contract that the supplier shall furnish you gnised by you for the sum specified therein with the contract;
NOW THEREFORE we hereby affirm that we are guarante supplier, up to a total of figures), and we undertake to pay you, upon your first write default under the contract and without cavil or argument, an of guarantee) as aforesaid, without your needing to prove demand or the sum specified therein.	(Amount of the guarantee in words and ten demand declaring the supplier to be in y sum or sums within the limits of (amount
We hereby waive the necessity of your demanding the said with the demand.	debt from the supplier before presenting us
We further agree that no change or addition to or other more performed there under or of any of the contract documents supplier shall in any way release us from any liability under of any such change, addition or modification.	which may be made between you and the
This guarantee shall be valid up to 66 (sixty six) months fro to (indicate date)	m the date of Notification of Award i.e. up
(Signature with	h date of the authorised officer of the Bank)
	Name and designation of the officer
	dress of the Bank and address of the Branch

To be enclosed with Techno-Commercial

ANNEXURE

PROFORMA OF GUARANTEE FOR SUPPLY OF SPARES DURING POST WARRANTY PERIOD

To,
Sub: Tender No
Dear Sir,
In consideration of the (hereinafter referred to as "Purchaser" which expression shall unless repugnant to the context or meaning thereof include its successors, administrators and assignees) having awarded to M/s with its Registered/Head office a
to the context or meaning thereof, include its successors, administrators, executors and assignees), a contract by issue of the Purchaser's letter of Award no
We the supplier hereby give a guarantee for the supply of all necessary spares demanded for the routine and emergency maintenance of being supplied by us to for a period of not less than 5 years after the warranty period of 5 years and life time spares thereafter in case asked for by the purchaser.
We further clarify that for the first 5 years i.e. warranty period of 5 years, we are covered by the warranty clause as mentioned. For the remaining period of 5 Years and thereafter for the life time, a detailed list o spares will be supplied to the purchaser for the purpose of enabling him to decide spares needed for routine and emergency maintenance.
Dated
(Signature) Name: For & on behalf of M/s

SECTION – XVI

CONTRACT FORM - A

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

() 1 1	D 1	, /0 : ,							
(Address of the Purchaser's/Consignee's office issuing the contract)									
office issuing	tne contrac	et)							
Contract No		_ dated							
		to this office's Notific		rd No	dated				
1. Name & ad	dress of the	e Supplier:			_				
2. Purchaser's	TE docum	ent No date	ed	and subsequ	ent Am	endment			
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 1	l'ender No_	dated	and su	bsequent comn	nunicati	ion(s)			
No	date	ed (if any)	, exchanged be	etween the supp	olier and	d the pure	chaser in		
connection	with this te	ender.							
4. In addition	to this Cor	tract Form, the follow	ving document	s etc, which are	e includ	led in the	documents		
mentioned t	under para	graphs 2 and 3 above,	, shall also be	deemed to form	n and be	e read an	d construed		
as integral p	oart of this	contract:							
 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 									
	Schedule	Brief description of	Accounting	Quantity to	Unit	Total	Terms of		
	No.	goods/services	unit	be supplied	Price	price	delivery		
	Any other	additional services (i	f applicable) a	nd cost thereof	:				

HLL Lifecare Limited

	Total value (in figure) (In words)
	 (ii) Delivery schedule (iii) Details of Performance Security (iv) Quality Control (a) Mode(s), stage(s) and place(s) of conducting inspections and tests. (b) Designation and address of purchaser's inspecting officer (v) Destination and despatch instructions
	(vi) Consignee, including port consignee, if any
6.	Warranty clause
7.	Payment terms
8.	Paying authority
	(Signature, name and address
	of the Purchaser's/Consignee's authorised official) For and on behalf of
Re	For and on behalf ofeceived and accepted this contract
(Si	For and on behalf ofeceived and accepted this contract ignature, name and address of the supplier's executive ly authorised to sign on behalf of the supplier)
(Si du Fo	For and on behalf ofeceived and accepted this contract ignature, name and address of the supplier's executive ly authorised to sign on behalf of the supplier) or and on behalf of
(Si du Fo (N	For and on behalf ofeceived and accepted this contract ignature, name and address of the supplier's executive ally authorised to sign on behalf of the supplier) or and on behalf of tame and address of the supplier)
(Si du Fo (N	For and on behalf ofeceived and accepted this contract ignature, name and address of the supplier's executive ly authorised to sign on behalf of the supplier) or and on behalf of Iame and address of the supplier) eal of the supplier)
(Si du Fo (N	For and on behalf ofeceived and accepted this contract ignature, name and address of the supplier's executive ally authorised to sign on behalf of the supplier) or and on behalf of tame and address of the supplier)

CONTRACT FORM – B

CONTRACT FORM FOR ANNUAL COMPREHENSIVE MAINTENANCE CONTRACT

Annual CM Cont Between	ract No						dated	
(Address of Head of And	of Hospital (AII	MS)						
supply, ins warranty of In continua	Nostallation, commof goods)	date nission	oning erred	g, ha	nding ract	g ovei	Contract No. & date or, Trial run, Training of	of operators &
2	3			4			5	6
BRIEF DESCRIPTION OF GOODS	QUANTITY. (Nos.)		Com inten lost fo	Annu preh ance or Ea ar wi	ensive Cont ich U	tract	Total annual comprehensive maintenance contract for 5 years for each unit for 5 years	Total Annual Comprehensive Maintenance Contract Cost for 5 Years
OF GOODS		1 st	2 nd	3 ^r	4 th	5 th		$[3 \times (4a+4b+4c+4d+4e)]$
		a	b	С	D	e	4a+4h+4c+4d+4e	(3*5(4a+4h+4c+4d+4e)
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 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 the date) 2 months after expiry of entire CMC period] for an amount of Rs [(fill the date) 2 months after expiry of entire CMC period] for an amount of Rs [(fill the date) 2 months after expiry of the								

Sche dule No.

HLL Lifecare Limited

CO	est of the equipment as per contract] shall be furnished in the prescribed format given in
	ection XV of the TE document, along with the signed copy of Annual CMC within a period of
	(twenty one) days of issue of Annual CMC failing which the proceeds of Performance
	ecurity shall be payable to the Purchaser/Consignee.
	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)	
	(Signature, name and address
	of Hospital (AIIMS) authorised official) For and on behalf of
Received	
	For and on behalf of
(Signatur	For and on behalf ofand accepted this contract
(Signature	and accepted this contract e, name and address of the supplier's executive
(Signature duly auther For and o	and accepted this contract e, name and address of the supplier's executive orised to sign on behalf of the supplier)
(Signature duly auther For and o (Name an	and accepted this contract e, name and address of the supplier's executive orised to sign on behalf of the supplier) n behalf of
(Signature duly author For and or (Name and (Seal of the seal of t	and accepted this contract e, name and address of the supplier's executive orised to sign on behalf of the supplier) n behalf of d address of the supplier) ne supplier)
(Signature duly author For and o (Name and (Seal of the Date:	and accepted this contract e, name and address of the supplier's executive orised to sign on behalf of the supplier) n behalf of d address of the supplier)

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							
IVI/S							
Subje	ect: (Certificate of commissioning of equipment	ment/plant.				
condi in Par	tions a ra no.0	ertify that the equipment(s)/plant(s) a long with all the standard and special 2) in accordance with the contract/tec sioned.	accessories and a s	set of spares (subject to remarks			
(a)	Contr	act No	d	ated			
(b)	Descr	ription of the equipment(s)/plants:					
(c)	Equip	oment(s)/ plant(s) nos.:					
(d)	Quan	tity:					
(e)		f Loading/Air Way Bill/Railway pt/ Goods Consignment Note no	date	d			
(f) (g)		e of the vessel/Transporters:e of the Consignee:					
	Date	of commissioning and proving test:					
Detai	ils of a	ccessories/spares not yet supplied a	nd recoveries to b	e made on that account.			
	Sl. No.	Description of Item	Quantity	Amount to be recovered			
The p	oroving	test has been done to our entire satis	faction and operato	ors have been trained to operate			

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

The supplier has fulfilled its contractual obligations satisfactorily ## or

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

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

HLL Lifecare Limited

- period specified in the contract from date of intimation by the Purchaser/Consignee in respect of the installation of the equipment(s)/plant(s).
- c) The supplier as specified in the contract has not done training of personnel.

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

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

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

(Signature) (Name) (Designation with stamp)

Explanatory notes for filling up the certificate:

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

SECTION – XIX ANNEXURES

Annexure 1

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

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

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

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

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

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

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

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

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

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

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

(d) SHIPMENT FROM POLAND & CZECHOSLOVAKIA

(i) IMPORTS FROM POLAND

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

(ii) IMPORTS FROM CZECHOSLOVAKIA

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

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

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

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

(f) SHIPMENT FROM JAPAN

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

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

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

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

(i) 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 <u>CHECKLIST</u> Name of Tenderer:

Name of Tenderer: Name of Manufacturer:

Sl No.	Activity	Yes/ No/ NA	Page No. in the TE document	Remarks
1. a.	Have you enclosed EMD of required amount			
	for the quoted schedules?			
b.	In case EMD is furnished in the form of			
	Bank Guarantee, has it been furnished as per			
	Section XIII?			
c.	In case Bank Guarantee is furnished, have			
	you kept its validity of 165 days from			
	Techno Commercial Tender Opening date as			
	per clause 19 of GIT?			
2. a.	Have you enclosed duly filled Tender Form			
	as per format in Section X?			
b.	Have you enclosed Power of Attorney in			
	favour of the signatory?			
3.	Are you a SSI unit, if yes have you enclosed			
	certificate of registration issued by			
	Directorate of Industries/NSIC			
4. a.	Have you enclosed clause-by-clause			
	technical compliance statement for the			
	quoted goods vis-à-vis the Technical			
	specifications?			
b.	In case of Technical deviations in the			
	compliance statement, have you identified			
	and marked the deviations?			
5. a.	Have you submitted satisfactory			
	performance certificate as per the Proforma			
	for performance statement in Sec. IX of TE			
	document in respect of all orders?			

HLL Lifecare Limited

Sl No.	Activity	Yes/ No/ NA	Page No. in the TE document	Remarks
b.	Have you submitted copy of the order(s) and			
	end user certificate? It is requested not to			
	hide prices as the same will be required			
	for establishing price reasonability.			
	Provide latest purchase order copies			
	issued by INI.			
6.	Have you submitted manufacturer's			
	authorization as per Section XIV?			
7.	Have you submitted prices of goods, turnkey			
	(if any), CMC etc. in the Price Schedule as			
	per Section XI?			
8.	Have you kept validity of 120 days from the			
	Techno Commercial Tender Opening date as			
	per the TE document?			
9. a.	In case of Indian Tenderer, have you			
	furnished Income Tax Account No. as			
	allotted by the Income Tax Department of			
	Government of India?			
b.	In case of Foreign Tenderer, have you			
	furnished Income Tax Account No. of your			
	Indian Agent as allotted by the Income Tax			
	Department of Government of India?			
10.	Have you intimated the name an full address			
	of your Banker (s) along with your Account			
	Number			
11.	Have you fully accepted payment terms as			
	per TE document?			
12.	Have you fully accepted delivery period as			
	per TE document?			
13.	Have you submitted the certificate of			
	incorporation?			

HLL Lifecare Limited

Sl No.	Activity	Yes/ No/ NA	Page No. in the TE document	Remarks
14.	Have you accepted the warranty as per TE document?			
15.	Have you accepted terms and conditions of TE document?			
16.	Have you furnished documents establishing your eligibility & qualification criteria as per TE documents?			
17.	Have you furnished Annual Report (Balance Sheet and Profit & Loss Account) for last three years prior to the date of Tender opening?			

N.B.

- 1. All pages of the Tender should be page numbered and indexed.
- 2. The Tenderer may go through the checklist and ensure that all the documents/confirmations listed above are enclosed in the tender and no column is left blank. If any column is not applicable, it may be filled up as NA.
- 2. It is the responsibility of tendered to go through the TE document to ensure furnishing all required documents in addition to above, if any.

(Signature with date)

(Full name, designation & address of the person duly authorised sign on behalf of the Tenderer)

For and on behalf of

(Name, address and stamp of the tendering firm)

Section – XXI Consignee List

Consignee Code	Medical Institutions	Contact Address.	AirPort	Sea Port
Bhopal	All India Institute of Medical Science, Bhopal	The Director, All India Institute of Medical Science, Near Saket Nagar, Bhopal-462020	NEW DELHI	DRY PORT NEW DELHI
Bhubaneswar	All India Institute of Medical Science, Bhubaneswar	The Director, All India Institute of Medical Science, AIIMS-Bhubaneshwar, Near Biju Patnaik Police Academy, Village- Sijua, Bhubaneshwar-751019, Orissa	KOLKATA	KOLKATA
Jodhpur	All India Institute of Medical Science, Jodhpur	The Director, All India Institute of Medical Science, Basani Ph-2, Jodhpur-342005, Jodhpur	NEW DELHI	DRY PORT NEW DELHI
Patna	All India Institute of Medical Science, Patna	The Director, All India Institute of Medical Science, AIIMS-Patna, Phulwari Sharif, Infront of DAV School, WALMI, Danapur, Patna-801105, Bihar	KOLKATA	KOLKATA
Raipur	All India Institute of Medical Science, Raipur	The Director, All India Institute of Medical Science, AIIMS-Raipur, Old TB Hospital, Tatibandh, Raipur- 492001, Chattisgarh	KOLKATA	KOLKATA
Rishikesh	All India Institute of Medical Science, Rishikesh	The Director, All India Institute of Medical Science, AIIMS-Rishikesh, Barrage Road, Pashulok, Rishikesh-249203, Uttarakhand	NEW DELHI	DRY PORT NEW DELHI

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