

NATIONAL TENDER ENQUIRY DOCUMENT

FOR PURCHASE OF MEDICAL EQUIPMENT

FOR & ON BEHALF OF

Safderjung Hospital, New Delhi

On E-Tender Basis

HSCC/SJH/Medical Equipment/2015/10 Dated 30/10/2015

BY



HSCC (INDIA) LTD

(A GOVERNMENT OF INDIA ENTERPRISE)

Plot No. 6-A, Block-E, Sector-1, NOIDA (U.P.) – 201 301

PHONE: 0120-2540153

FAX: 0120-2542447

URL: www.hsccltd.com

INDEX

| Section | Topic | Page No. |
|----------------|---|-----------------|
| Section I | -- Notice inviting Tender (NIT) ----- | 03 |
| Section II | -- General Instructions to Tenderers (GIT) ----- | 07 |
| Section III | -- Special Instructions to Tenderers (SIT) ----- | 27 |
| Section IV | -- General Conditions of Contract (GCC) ----- | 28 |
| Section V | -- Special Conditions of Contract (SCC) ----- | 46 |
| Section VI | -- List of Requirements ----- | 47 |
| Section VII | -- Technical Specifications ----- | 49 |
| Section VIII | -- Quality Control Requirements ----- | 114 |
| Section IX | -- Qualification Criteria----- | 115 |
| Section X | -- Tender Form ----- | 117 |
| Section XI | -- Price Schedules ----- | 118 |
| Section XII | -- Questionnaire ----- | 122 |
| Section XIII | -- Bank Guarantee Form for EMD ----- | 123 |
| Section XIV | -- Manufacturer's Authorisation Form ----- | 124 |
| Section XV | -- Bank Guarantee Form for Performance Security /CMC Security ----- | 125 |
| Section XVI | -- Contract Form (A & B) ----- | 126 |
| Section XVII | -- Proforma of Consignee Receipt Certificate ----- | 130 |
| Section XVIII | -- Proforma of Final Acceptance Certificate by the Consignee ----- | 131 |
| Section XIX | -- Affidavit/Undertaking | 133 |
| Section XX | -- Check List for the Tenderers ----- | 134 |
| Section XXI | -- Consignee----- | 137 |

SECTION- I

NOTICE INVITING TENDERS (NIT)
For NATIONAL TENDER ENQUIRY DOCUMENT
HSCC (INDIA) LTD
(A GOVERNMENT OF INDIA ENTERPRISE)
 Plot No. 6-A, Block-E, Sector-1, NOIDA (U.P.) – 201 301

PHONE: 0120-2540153
FAX: 0120-2542447
URL: www.hsccltd.co.in

SAFDERJUNG HOSPITAL & VMMC, NEW DELHI
GOVT OF INDIA
MINISTRY OF HEALTH & FAMILY WELFARE

Tender Enquiry No.: HSCC/SJH/Medical Equipment/2015/10

Dated 30.10.2015

NOTICE INVITING TENDERS (NIT) - On E-TENDER BASIS

Medical Superintendent, Safdarjung Hospital & VMMC, New Delhi under Ministry of Health & Family Welfare, Govt. of India through their Consultants HSCC (India) Ltd. invites **On-line bids** from eligible bidders, in single stage two bid system for supply, installation, testing, commissioning & handing-over of various **Medical Equipment for New Emergency Block & Super-Specialty Block at Safderjung Hospital & VMMC, New Delhi:**

| S. No. | Equipment Details | Qty. | EMD (Rs.) |
|---------------|---|-------------|------------------|
| | <u>Neuro Surgery Equipment for Super Specialty Block</u> | | |
| 1 | Gamma Knife - Proprietary | 01 | 60,00,000.00 |
| 2 | Flat Panel DSA Lab. | 01 | 19,00,000.00 |
| 3 | Brain Suite/Intraoperative MRI 1.5T | 01 | 60,00,000.00 |
| 4 | Mobile CT Scan for OT (1 no.) | 01 | 8,00,000.00 |
| 5 | Operative Microscope (Motorized) (1no.) | 01 | 70,000.00 |
| 6 | CUSA (1no.) | 01 | 50,000.00 |
| 7 | Transcranial Doppler with Intraoperative Facility (1no.) | 01 | 40,000.00 |

| | | | |
|----|--|----|--------------|
| 8 | Craniotomy Set (1no.) | 01 | 40,000.00 |
| 9 | Drill & Burn System (1no.) | 01 | 40,000.00 |
| 10 | Neuroendoscope with Spinal Attachment (1no.) | 01 | 40,000.00 |
| | <u>Radio Nuclear Lab. Equipment FOR Super-Specialty Block</u> | | |
| 11 | Gamma Camera with Computer System (Dual Head) (1no.) | 01 | 10,00,000.00 |

The bidders are required to be registered at HSCC e-tender portal www.tenderwizard.com/HSCC. Please log on to www.tenderwizard.com/HSCC only for downloading bid document and for participation through **E-tendering basis**. For submission and other details please refer HSCC e-tender portal www.tenderwizard.com/HSCC. For submission of the bids, the bidders are required to have Digital Signature Certificate (DSC) from the authorized Certifying Authorities.

Complete set of Bid Documents has been made available at E-Tender portal www.tenderwizard.com/HSCC, www.hscltd.com for downloading from **23.10.2015 to 13.11.2015**. Prospective bidders are advised to regularly scan through HSCC E-tender portal www.tenderwizard.com/HSCC, as corrigendum/modification/amendments, if any, will be notified on this portal only and no separate advertisement will be made for this.

(2) Tender No.: HSCC/SJH/Medical Equipment/2015/10

Dated 23.10.2015

| Sl. No. | Description | Schedule |
|----------------|---|--|
| i. | Dates of sale of tender enquiry documents | 30.10.2015 to 20.11.2015, 10.00 hrs to 1400 hrs IST |
| ii. | Place of sale of Tender Enquiry Documents | HSCC (India) Ltd, Plot No. 6-A, Block-E, Sector-1, Noida (U.P)-201301 |
| iii. | Cost of the Tender Enquiry Document | INR 3,000/- |
| iv. | Pre Tender Meeting Date & Time | 09.11.2015, 14.30 hrs. IST |
| v. | Pre Tender Meeting Venue | Medical Superintendent Office, Conference Room, Safdarjung Hospital, New Delhi |
| vi. | Closing date & time for receipt of Tender | 20.11.2015, 1430 hrs IST |
| vii. | Time and date of opening of Techno – Commercial tenders | 20.11.2015, 1500 hrs IST |
| viii. | Venue of Opening of Techno Commercial Tender | Same as 2 (ii) |

2. Interested tenderers may obtain further information about this requirement from this office inviting the tenders.

3. The prospective bidders who have not registered can register with E-procurement system of NIC by paying necessary registration charges. The bidders may prepare a banker cheque/Draft in favour of HSCC (India) Ltd. Office at Noida, payable at Noida/Delhi and deposit it. In order to

submit the bids electronically bidders are required to have type-II Digital Signature Certificate. Digital Signature can be obtained from any of the certifying agency.

The tender shall be submitted all the necessary documents and in physical form (with respect to few documents as mentioned in the SIT) in parts/covers as mentioned below:

Part-I In Original Offline (In separate Envelope) & Copy Online

- (i) Tender Fee and EMD
- (ii) Affidavit as per Section XIX
- (iii) Performance statement along with required PO copies and its corresponding end user"s satisfactory performance certificate as per section IX.
- (iv) Technical compliance for the quoted goods vis-à-vis the Technical specifications and with all related brochures/catalogues in the tender enquiry, technical bid

Part-II Online

- (i) Tender Fee and EMD
- (ii) Power of Attorney
- (iii) Tender Form as per section X.
- (iv) Manufacturers Authorization Form
- (v) Affidavit as per Section XIX
- (vi) Proforma A
- (vii) Performance statement along with required PO copies and its corresponding end user"s satisfactory performance certificate as per section IX.
- (viii) Technical compliance for the quoted goods vis-à-vis the Technical specifications
- (ix) Name, address and details of account with respect to bidder and/or beneficiary of L/C. Copy of PAN. Certificate of Incorporation/Declaration being a proprietary firm.
- (x) Audited Annual report of last 3 completed financial years (Balance sheet and Profit & Loss Account). Certificate of Regn. Issued by Directorate of Industries/NSIC, if SSI unit.
- (xi) Quality Control Requirements as per Section VIII

Price Bid (Only online).

- Price Schedule
- CMC Price Schedule
- Turnkey Price Schedule

4. All prospective tenderers may attend the Pre Tender meeting. For all the above tender IDs, Pre-bid meeting shall be held as mentioned above.

5. To participate in the submission against the tender, it is mandatory for the Applicants to get digital signature and get themselves registered with e-tendering system.

6. Complete set of Bid Documents has been made available at E-Tender portal www.tenderwizard.com/HSCC, www.hsccltd.com for downloading. The cost the Tender Enquiry Document is **INR 3000/ which is payable in the form of Cash/Demand Draft** drawn on a scheduled bank in India in favour of **HSCC (India) Ltd.** payable at Delhi/Noida.. Tenderer may download the tender enquiry documents from the website and submit its tender online after logging in to their user ID. The bidders are required to be registered at HSCC e-tender portal www.tenderwizard.com/HSCC. Please log on to www.tenderwizard.com/HSCC only for uploading its tender on-line for participation through **E-Tendering basis**. For

submission and other details, please refer HSCC e-tender portal www.tenderwizard.com/HSCC.

7. Tenderers shall ensure that their tenders, complete in all respects, are submitted online and desired hard copies in original dropped in the Tender Box located at HSCC (India) Ltd., E-6A, Sector-1, Noida, U.P.-201301 on or before the closing date and time indicated above, failing which the tenders will be treated as late and rejected.

8. In the event of any of the above mentioned dates being declared as a holiday /closed day for the purchase organisation, the physical form of tenders will be received/opened on the next working day at the appointed time. Bidders are requested to regularly visit website www.tenderwizard.com/HSCC & www.hsccltd.com for corrigendum/amendments etc., if any, as these there no separate advertisement for them.

9. Purchaser/HSCC reserves the right to annul the tendering process at any stage without assigning any reason thereof.

**Medical Superintendent
Safderjung Hospital,
New Delhi.**

SECTION - II**GENERAL INSTRUCTIONS TO TENDERERS (GIT)
CONTENTS**

| Sl. No. | Topic | Page No. |
|----------------|---|-----------------|
| A | PREAMBLE | |
| 1 | Definitions and Abbreviations | 09 |
| 2 | Introduction | 10 |
| 3 | Availability of Funds | 11 |
| 4 | Language of Tender | 11 |
| 5 | Eligible Tenderers | 11 |
| 6 | Eligible Goods and Services | 11 |
| 7 | Tendering Expense | 11 |
| B | TENDER ENQUIRY DOCUMENTS | |
| 8 | Contents of Tender Enquiry Documents | 11 |
| 9 | Amendments to Tender Enquiry Documents | 12 |
| 10 | Clarification of Tender Enquiry Documents | 12 |
| C | PREPARATION OF TENDER | |
| 11 | Documents Comprising the Tender | 12 |
| 12 | Tender Currencies | 13 |
| 13 | Tender Prices | 14 |
| 14 | Indian Agent | 16 |
| 15 | Firm Price / Variable Price | 16 |
| 16 | Alternative Tenders | 16 |
| 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) | 17 |
| 20 | Tender Validity | 18 |
| 21 | Signing and Sealing of Tender | 19 |
| D | SUBMISSION OF TENDERS | |
| 22 | Submission of Tenders | 19 |
| 23 | Late Tender | 20 |
| 24 | Alteration and Withdrawal of Tender | 20 |
| E | TENDER OPENING | |

| | | |
|----------|--|----|
| 25 | Opening of Tenders | 20 |
| F | SCRUTINY AND EVALUATION OF TENDERS | |
| 26 | Basic Principle | 21 |
| 27 | Preliminary Scrutiny of Tenders | 21 |
| 28 | Minor Infirmary/Irregularity/Non-Conformity | 22 |
| 29 | Discrepancy in Prices | 22 |
| 30 | Discrepancy between original and copies of Tender | 22 |
| 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 | 23 |
| 36 | Tenderer's capability to perform the contract | 23 |
| 37 | Contacting the Purchaser | 24 |
| G | AWARD OF CONTRACT | |
| 38 | Purchaser's Right to Accept any Tender and to Reject any or All Tenders | 24 |
| 39 | Award Criteria | 24 |
| 40 | Variation of Quantities at the Time of Award | 24 |
| 41 | Notification of Award | 25 |
| 42 | Issue of Contract | 25 |
| 43 | Non-receipt of Performance Security and Contract by the Purchaser/Consignee | 25 |
| 44 | Return of EMD | 25 |
| 45 | Publication of Tender Result | 25 |
| 46 | Corrupt or Fraudulent Practices | 25 |

GENERAL INSTRUCTIONS TO TENDERERS (GIT)

A. PREAMBLE

1. Definitions and Abbreviations

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

1.2. Definitions:

- (i) "Purchaser" means the organization purchasing goods and services as incorporated in the Tender Enquiry document, i.e. Medical Superintendent, Safderjung Hospital & VMMC, New Delhi.
- (ii) "Tender" means Bids / Quotation / Tender received from a Firm / Tenderer / Bidder.
- (iii) "Tenderer" means Bidder/ the Individual or Firm submitting Bids / Quotation / Tender
- (iii) "Supplier" means the individual or the firm supplying the goods and services as incorporated in the contract.
- (iv) "Goods" means the instruments, machinery, equipment, medical equipment, 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 Safderjung Hospital, New Delhi/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) "CMC" means Comprehensive maintenance Contract (labour, spare and preventive maintenance)
- (xxxi) "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 – Questionnaire
- Section XIII – Bank Guarantee Form for EMD
- Section XIV – Manufacturer’s Authorisation Form
- Section XV – Bank Guarantee Form for Performance Security/CMC Security
- Section XVI – Contract Forms A & B
- Section XVII – Proforma of Consignee Receipt Certificate
- Section XVIII – Proforma of Final Acceptance Certificate by the consignee
- Section XIX – Affidavit
- Section XX – Check List
- Section XXI – Consignee

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 the referred website only.

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

10. Clarification of TE documents

10.1 A tenderer requiring any clarification or elucidation on any issue of the TE documents may take up the same with the purchaser **in writing on or before the due date of pre-bid meeting**. No queries will be entertained later on. The purchaser will respond in writing to such request as per the schedule.

C. PREPARATION OF TENDERS

11. Documents Comprising the Tender

11.1 The bids shall be submitted online and in physical form in three parts/covers as mentioned below:

(i) Tender Fee, EMD, Pre-qualification as per Tender Terms and referred in checklist at section XIX and as mentioned in para A below.

(ii) Technical Bid

(iii) Price Bid (Only online).

Tenderers are requested not to submit the hard copy of Price Bid along with the physical form of tender. In case the hard copy of price 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) Techno – Commercial Tender (Un priced Tender)

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

B) Price Tender:

1. Prices are to be quoted in the attached Price Bid format online as per the directions on the official website.

2. The price should be quoted for the accounting unit indicated on the website.

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.

Note:

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

- 11.2 A person signing (manually or digitally) the tender form or any documents forming part of the contract on behalf of another shall be deemed to warrant that he has authority to bind such other persons and if, on enquiry, it appears that the persons so signing had no authority to do so, the purchaser may, without prejudice to other civil and criminal remedies, cancel the contract and hold the signatory liable for all cost and damages
- 11.3 A tender, which does not fulfil any of the above requirements and/or gives evasive information/reply against any such requirement, shall be liable to be ignored and rejected.
- 11.4 Tender sent by fax/telex/cable/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 way shall be treated as non-responsive and rejected.

13 Tender Prices

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

- 13.2 If there is more than one schedule in the List of Requirements, the tenderer has the option to submit its quotation for any one or more schedules and, also, to offer special discount for combined schedules. However, while quoting for a schedule, the tenderer shall quote for the complete requirement of goods and services as specified in that particular schedule.

- 13.3 The quoted prices for goods offered from within India and that for goods offered from abroad are to be indicated separately in the applicable Price Schedules attached under Section XI. Bidders must quote the prevailing taxes and duties as applicable.

- 13.4 While filling up the columns of the Price Schedule, the following aspects should be noted for compliance:

- 13.4.1 For domestic goods or goods of foreign origin located within India, the prices in the corresponding price schedule shall be entered separately in the following manner:

- a) the price of the goods, quoted ex-factory/ ex-showroom/ ex-warehouse/ off-the-shelf, as applicable, including all taxes and duties like sales tax, CST VAT, CENVAT, Custom Duty, Excise Duty etc. already paid or payable on the components and raw material used in the manufacture or assembly of the goods quoted ex-factory etc. or on the previously imported goods of foreign origin quoted ex-showroom etc;
- b) any sales or other taxes and any duties including excise duty, which will be payable on the goods in India if the contract is awarded;
- c) charges towards Packing & Forwarding, Inland Transportation, Insurance (local transportation and storage) would be borne by the Supplier from ware house to the consignee site for a period including 3 months beyond date of delivery, Loading/Unloading and other local costs incidental to delivery of the goods to their final destination as specified in the List of Requirements and Price Schedule;
- d) the price of Incidental Services, as mentioned in List of Requirements and Price Schedule;
- e) the prices of Turnkey (if any), as mentioned in List of Requirements, Technical Specification and Price Schedule; and
- f) the price of annual CMC, as mentioned in List of Requirements, Technical Specification and Price Schedule.

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

- a) The price of goods quoted FOB/FCA port of shipment, as indicated in the List of Requirements and Price Schedule;
- b) 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 Total tender price of goods quoted CIP basis at consignee site in India as indicated in the List of Requirements, Price Schedule and Consignee List
 - g) the price of annual CMC, as mentioned in List of Requirements, Technical Specification and Price Schedule.

13.5 Additional information and instruction on Duties and Taxes:

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

13.5.2 Excise Duty:

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

13.5.3 Sales Tax:

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

13.5.4 Octroi Duty and Local Duties & Taxes:

Normally, goods to be supplied to government departments against government contracts are exempted from levy of town duty, Octroi duty, terminal tax and other levies of local bodies. However, on some occasions, the local bodies (like town body, municipal body etc.) as per their regulations allow such exemptions only on production of certificate to this effect from the concerned government department. Keeping this in view, the supplier shall ensure that the stores to be supplied by the supplier against the

contract placed by the purchaser are exempted from levy of any such duty or tax and, wherever necessary, obtain the exemption certificate from the purchaser.

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

13.5.5 Customs Duty:

The Purchaser will reimburse the Customs duty wherever applicable. Supplier shall be responsible for customs clearances of the consignments.

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) Copy of the agreement between Indian Agent & their principal detailing the scope of work/services during warranty & after sales periods.

15. Firm Price

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

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

16. Alternative Tenders

16.1 Alternative Tenders are not permitted.

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

17 Documents Establishing Tenderer's Eligibility and Qualifications

- 17.1 Pursuant to GIT clause 11, the tenderer shall furnish, as part of its tender, relevant details and documents establishing its eligibility to quote and its qualifications to perform the contract if its tender is accepted.
- 17.2 The documentary evidence needed to establish the tenderer's qualifications shall fulfil the following requirements:
- a) in case the tenderer offers to supply goods, which are manufactured by some other firm, the tenderer has been duly authorised by the goods manufacturer to quote for and supply the goods to the purchaser. The tenderer shall submit the manufacturer's authorization letter to this effect as per the standard form provided under Section XIV in this document.
 - b) the tenderer has the required financial, technical and production capability necessary to perform the contract and, further, it meets the qualification criteria incorporated in the Section IX in these documents.
 - c) in case the tenderer is not doing business in India, it is duly represented by an agent stationed in India fully equipped and able to carry out the required contractual functions and duties of the supplier including after sale service, maintenance & repair etc. of the goods in question, stocking of spare parts and fast moving components and other obligations, if any, specified in the conditions of contract and/or technical specifications.

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

19. Earnest Money Deposit (EMD)

- 19.1 Pursuant to GIT clauses 8.1 and 11.1 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 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 "**HSCC (India) Ltd**" payable at New Delhi/Noida. 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 the original last date for submission of the tender/bid.
- 19.6 Unsuccessful tenderers' earnest money will be returned to them without any interest, after expiry of the tender validity period, but not later than thirty days after conclusion of the resultant contract. Successful tenderer's earnest money will be returned without any interest, after receipt of performance security from that tenderer.
- 19.7 Earnest Money is required to protect the purchaser against the risk of the Tenderer's conduct, which would warrant the forfeiture of the EMD. Earnest money of a tenderer will be forfeited, if the tenderer withdraws or amends its tender or impairs or derogates from the tender in any respect within the period of validity of its tender or if it comes to notice that the information/documents furnished in its tender is incorrect, false, misleading or forged without prejudice to other rights of the purchaser. The successful tenderer's earnest money will be forfeited without prejudice to other rights of Purchaser if it fails to furnish the required performance security within the specified period.
- 19.8 In the case of Bank Guarantee furnished from banks outside India (i.e. foreign Banks), it should be authenticated and countersigned by any nationalised bank in India by way of back-to-back counter guarantee.

20. Tender Validity

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

21. Signing and Sealing of Tender

- 21.1 The tenderers shall submit their tenders as per the instructions contained in GIT Clause 11.
- 21.2 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.
- 21.3 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.

D. SUBMISSION OF TENDERS

22. Submission of Tenders

- 22.1 The tender shall be submitted online and in physical form (except price bid) in three parts/covers as mentioned below:
- (i) Tender Fee and EMD (Both online and physical)
 - (ii) Pre-qualification and Technical compliance as per following documents (Online submissions for all the documents and physical submission only for affidavit as per point i) below and original Technical brochures/catalogues against point j):
 - 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) b) Tender Form as per section X.
 - c) c) Copy of PAN.
 - d) Certificate of Incorporation/Declaration being a proprietary firm.
 - e) Annual report of last 3 years (Balance sheet and Profit & Loss Account)
 - f) Name, address and details of account with respect to bidder and/or beneficiary of L/C.
 - g) Quality Control Requirements as per Section VIII
 - h) Performance statement along with required PO copies and its corresponding end user"s satisfactory performance certificate as per section IX.
 - i) Affidavit as per Section XIX
 - j) Technical Bid along with clause-by-clause technical compliance statement for the quoted goods vis-à-vis the Technical specifications in the tender enquiry (Both online and physical)

(iii) Price Bid (Only online).

Bidders are requested not to submit the hard copy of Price Bid along with the physical form of tender. Uploading of the price bid in prequalification bid or technical bid will result in rejection of the tender.

Unless otherwise specified, the tenderers are to submit its tender online and deposit the physical form of tenders in the tender box kept for this purpose at HSCC (India) Ltd., E-6A, Sector-1, Noida-201301, ((UP).

22.2 The tenderers must ensure that they deposit their tenders not later than the closing time and date specified for submission of tenders. It is the responsibility of the tenderer to ensure that their Tenders whether sent by post or by courier or by person, are dropped in the Tender Box by the specified clearing date and time. In the event of the specified date for physical submission of tender falls on /is subsequently declared a holiday or closed day for the purchaser, the tenders will be received up to the appointed time on the next working day.

23. Late Tender

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

24. Alteration and Withdrawal of Tender

24.1 The tenderer, after submitting its tender, is permitted to alter / modify its tender so long as such alterations / modifications are received duly signed, sealed and marked like the original tender, within the deadline for submission of tenders. Alterations / modifications to tenders received after the prescribed deadline will not be considered.

24.2 No tender should be withdrawn after the deadline for submission of tender and before expiry of the tender validity period. If a tenderer withdraws the tender during this period, it will result in forfeiture of the earnest money furnished by the tenderer in its tender.

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 The **Techno - Commercial Tenders** are to be opened in the first instance, at the prescribed time and date as indicated in NIT. These Tenders shall be scrutinized and evaluated by the competent committee/ authority with reference to parameters prescribed in the TE document. During the Techno - Commercial Tender opening, the tender opening official(s) will read the salient features of the tenders like brief description of the goods offered, delivery period, Earnest Money Deposit and any other special features of the tenders, as deemed fit by the tender opening official(s).

Thereafter, in the second stage, the Price Tenders of only the Techno - Commercially acceptable offers (as decided in the first stage) shall be opened for further scrutiny and evaluation on a date notified after the evaluation of the Techno – Commercial tender. The prices, special discount if any of the goods offered etc., as deemed fit by tender opening official(s) will be read out.

F. SCRUTINY AND EVALUATION OF TENDERS

26. Basic Principle

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

27. Scrutiny of Tenders

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

27.2 Purchaser will determine the responsiveness of each Tender to the TE Document without recourse to extrinsic evidence.

27.3 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.

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

- (i) Tender form as per Section IX (signed and stamped) not enclosed
- (ii) Tender is unsigned.
- (iii) Tender validity is shorter than the required period.
- (iv) Required EMD (Amount, validity etc.)/ exemption documents have not been provided.
- (v) Tenderer has quoted for goods manufactured by other manufacturer(s) without the required Manufacturer's Authorisation Form as per Section XIV.
- (vi) Tenderer has not agreed to give the required performance security.
- (vii) Goods offered are not meeting the tender enquiry specification.
- (viii) Tenderer has not agreed to other essential condition(s) specially incorporated in the tender enquiry like terms of payment, liquidated damages clause, warranty clause, dispute resolution mechanism applicable law.
- (ix) Poor/ unsatisfactory past performance.
- (x) Tenderers who stand deregistered/banned/blacklisted by any Govt. Authorities.
- (xi) Tenderer is not eligible as per GIT Clauses 5.1 & 17.1.
- (xii) Tenderer has not quoted for the entire quantity as specified in the List of Requirements in the quoted schedule.

27.5 The following are some of the important aspects, for which a tender shall be declared nonresponsive 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 validity is shorter than the required period.

- (iii) Required EMD (Amount, validity etc.)/ exemption documents have not been provided.
- (iv) Tenderer has quoted for goods manufactured by other manufacturer(s) without the required Manufacturer's Authorisation Form as per Section XIV.
- (v) 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.
- (vi) 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.
- (vii) Poor/ unsatisfactory past performance.
- (viii) Tenderers who stand deregistered/banned/blacklisted by any Govt. Authorities.
- (ix) Tenderer is not eligible as per GIT Clauses 5& 17.1.
- (x) Tenderer has not quoted for the entire quantity as specified in the List of Requirements in the quoted schedule.
- (xi) Tenderer has not agreed for the delivery terms and delivery schedule.

28. Minor Infirmary/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 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 In case any discrepancy is observed between the text etc. of the original copy and that in the other copies of the same tender set, the text etc. of the original copy shall prevail. Here also, the purchaser will convey its observation suitably to the tenderer by register / speed post and, if the tenderer does not accept the purchaser's observation, that tender will be liable to be ignored.

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 The tenders will be evaluated and compared separately for each schedule. The tender for a schedule will not be considered if the complete requirements prescribed in that schedule are not included in the tender.

34. Comparison of Tenders

34.1 Unless mentioned otherwise in Section – III – Special Instructions to Tenderers and Section – VI – List of Requirements, the comparison of the responsive tenders shall be carried out on Delivery on DDP basis at Consignee site basis, inclusive of applicable taxes, duties, incidental services. The quoted turnkey prices and CMC prices will also be added for comparison/ranking purpose for evaluation.

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

35.1 Further to GIT Clause 34 above, the purchaser's evaluation of a tender will include and take into account the following:

- i) In the case of goods manufactured in India or goods of foreign origin already located in India, sales tax & other similar taxes and excise duty & other similar duties, Customs Duties, Service Tax, Works Contract Tax etc which will be contractually payable (to the tenderer), on the goods if a contract is awarded on the tenderer; and
- ii) in the case of goods of foreign origin offered from abroad, customs duty and other similar import duties/taxes, which will be contractually payable (to the tenderer) on the goods if the contract is awarded on the tenderer.

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

35.3 The Purchaser reserves the right to give the price preference to small-scale sectors etc. and purchase preference to central public sector undertakings as per the instruction in vogue while evaluating, comparing and ranking the responsive tenders.

36. Tenderer's capability to perform the contract

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

List of Requirements, then, such determination will be made separately for each schedule.

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

37. Contacting the Purchaser

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

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

G. AWARD OF CONTRACT

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

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

39. Award Criteria

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

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

40.1 At the time of awarding the contract, the purchaser reserves the right to increase or decrease by up to fifty (50) per cent, the quantity of goods and services mentioned in the schedule (s) in the "List of Requirements" (rounded off to next whole number) without any change in the unit price and other terms & conditions quoted by the tenderer.

40.2 If the quantity has not been increased at the time of the awarding the contract, the purchaser reserves the right to increase by up to twenty five (25) per cent, the quantity of goods and services mentioned in the contract (rounded off to next whole number) without any change in the unit price and other terms & conditions mentioned in the contract, during the currency of the contract after one year from the Date of Notification of Award.

Further, Purchaser reserves the rights to delete any of the tendered items without assigning any reason whatsoever. Purchaser as deemed fit, out of the total tendered quantity for the tendered items may place Notification of Award for the quantity as per the requirements and may defer the balance quantity of the item(s) to be supplied later.

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

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

42. Issue of Contract

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

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

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

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

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

44. Return of E M D

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

45. Publication of Tender Result

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

46. Corrupt or Fraudulent Practices

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

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

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

(ii) “fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Purchaser, and includes collusive practice among Tenderers (prior to or after

Tender submission) designed to establish Tender prices at artificial non-competitive levels and to deprive the Purchaser of the benefits of free and open competition;

- (b) will reject a proposal for award if it determines that the Tenderer recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;
- (c) will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract by the purchaser if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing the contract.

SECTION - III
SPECIAL INSTRUCTIONS TO TENDERERS
(SIT)

| Sl. No. | GIT Clause No. | Topic | SIT Provision | Page No. |
|---------|----------------|------------------------------------|---------------|----------|
| A | 1 to 7 | Preamble | No Change | 27 |
| B | 8 to 10 | TE documents | No Change | 27 |
| C | 11 to 21 | Preparation of Tenders | No Change | 27 |
| D | 22 to 24 | Submission of Tenders | No Change | 27 |
| E | 25 | Tender Opening | No Change | 27 |
| F | 26 to 27 | Scrutiny and Evaluation of Tenders | No Change | 27 |
| G | 36 to 46 | Award of Contract | No Change | 27 |

The following Special Instructions to Tenderers will apply for this purchase. These special instructions will modify/substitute/supplement the corresponding General Instructions to Tenderers (GIT) incorporated in Section II. The corresponding GIT clause numbers have also been indicated in the text below: In case of any conflict between the provision in the GIT and that in the SIT, the provision contained in the SIT shall prevail.

Submission of Tenders

(i) All the necessary documents as prescribed in the NIT shall be prepared and scanned in different files (in PDF or JPEG format as prescribed) and uploaded for on-line submission of Proposal. However, physical documents as per NIT to be submitted in “**ORIGINAL**” to HSCC (India) Ltd. before the prescribed date & time for submission of physical tender restricted to the following documents only.

- a) Demand Draft towards Tender Fee in favour of HSCC (India) Ltd.
- b) EMD in the prescribed format in favour of HSCC (India) Ltd.
- c) Technical Data Sheet and original technical literature/ Brochure (if any)
- d) Affidavit as per Section XIX

(ii) All document(s)/ information(s) other than above including the Financial Proposal (i.e. **FORMAT FOR SUBMISSION OF PRICE BID/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 prospective bidders may upload Drawing files, if any, in “**.dwf**” format so that the size of document is less. This is a generic format and all software supports this format.

(v) At the time of cover content creation, the prospective bidders would have to define the document type as “**.rar**” format.

(vi) The prospective bidders should be asked to zip all the .dwf files to a .rar file & upload it

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

| Sl No. | Topic | Page |
|---------------|--|-------------|
| 1 | Application | 29 |
| 2 | Use of contract documents and information | 29 |
| 3 | Patent Rights | 29 |
| 4 | Country of Origin | 29 |
| 5 | Performance Security | 29 |
| 6 | Technical Specifications and Standards | 30 |
| 7 | Packing and Marking | 30 |
| 8 | Inspection, Testing and Quality Control | 31 |
| 9 | Terms of Delivery | 32 |
| 10 | Transportation of Goods | 32 |
| 11 | Insurance | 33 |
| 12 | Spare parts | 33 |
| 13 | Incidental services | 34 |
| 14 | Distribution of Dispatch Documents for Clearance/Receipt of Goods | 34 |
| 15 | Warranty | 35 |
| 16 | Assignment | 36 |
| 17 | Sub Contracts | 36 |
| 18 | Modification of contract | 36 |
| 19 | Prices | 37 |
| 20 | Taxes and Duties | 37 |
| 21 | Terms and mode of Payment | 37 |
| 22 | Delay in the supplier's performance | 40 |
| 23 | Liquidated Damages | 41 |
| 24 | Termination for default | 41 |
| 25 | Termination for insolvency | 41 |
| 26 | Force Majeure | 41 |
| 27 | Termination for convenience | 42 |
| 28 | Governing language | 42 |
| 29 | Notices | 42 |
| 30 | Resolution of disputes | 43 |
| 31 | Applicable Law | 43 |
| 32 | With-holding & Lien | 43 |
| 33 | General/Miscellaneous Clauses | 43 |
| 34 | Additional Factors & Parameters for Evaluation & Ranking of Responsive Tenders | 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.

All documents submitted physically or uploaded as scanned copies must be self-attested, legible and numbered.

2. Use of contract documents and information

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

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

2.3 Except the contract issued to the supplier, each and every other document mentioned in GCC sub-clause 2.1 above shall remain the property of the purchaser and, if advised by the purchaser, all copies of all such documents shall be returned to the purchaser on completion of the supplier's performance and obligations under this contract.

3. Patent Rights

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

4. Country of Origin

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

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

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

5. Performance Security

5.1 Within fifteen (15) days from date of the issue of notification of award by the Purchaser/Consignee, the supplier, shall furnish performance security to the Purchaser/Consignee for an amount equal to ten percent (10%) of the total value of the contract, valid up to sixty (60) days after the date of completion of all contractual obligations by the supplier, including the warranty obligations, initially valid for a period of minimum 66 months (as applicable warranty period of 5 years) 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:
- a) It shall be in any one of the forms namely Account Payee Demand Draft or Fixed Deposit Receipt drawn from any Scheduled bank in India or Bank Guarantee issued by a Scheduled bank in India, in the prescribed form as provided in section XV of this document in favour of the Purchaser/Consignee. The validity of the Fixed Deposit receipt or Bank Guarantee will be for a period up to sixty (60) days beyond Warranty Period.
- 5.3 In the event of any failure /default of the supplier with or without any quantifiable loss to the government including furnishing of consignee wise Bank Guarantee for CMC security as per Proforma in Section XV, the amount of the performance security is liable to be forfeited. The Administration Department may do the needful to cover any failure/default of the supplier with or without any quantifiable loss to the Government.
- 5.4 In the event of any amendment issued to the contract, the supplier shall, within 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.

For Radiology, the equipment viz. CT Scan, MRI, Digital Radiography, Digital Radio Fluoroscopy, Ultrasound, X-Ray Machines etc. Should be DICOM 3.0 enabled & complied with HL7 (Health Level 7) Standards. DICOM 3.0 provides reliable protocols for integration of image data between imaging, non-imaging modalities, devices & systems.

For Laboratory Equipment, equipment should be ASTM (American Society for Testing & Materials) compliant for integration of System Software with Lab. Records & Database.

Above standards are required for interfacing of equipment with PACS (Picture Archiving & Communication System) & HMIS (Hospital Management & Information System) during the computerization of the Hospital.

7. Packing and Marking

- 7.1 The packing for the goods to be provided by the supplier should be strong and durable enough to withstand, without limitation, the entire journey during transit including transshipment (if any), rough handling, open storage etc. without any damage, deterioration

etc. As and if necessary, the size, weights and volumes of the packing cases shall also take into consideration, the remoteness of the final destination of the goods and availability or otherwise of transport and handling facilities at all points during transit up to final destination as per the contract.

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

7.3 Packing instructions:

Unless otherwise mentioned in the Technical Specification and Quality Control Requirements under Sections VII and VIII and in SCC under Section V, the supplier shall make separate packages for each consignee (in case there is more than one consignee mentioned in the contract) and mark each package on three sides with the following-g 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 pre-dispatch inspections, inspections and, also the identity of the officials to be deputed for this purpose. The cost towards the transportation, boarding & lodging will be borne by the purchaser and/or its nominated representative(s).

8.2 The Technical Specification and Quality Control Requirements incorporated in the contract shall specify what inspections and tests are to be carried out and, also, where and how they are to be conducted. If such inspections and tests are conducted in the premises of the supplier or its subcontractor(s), all reasonable facilities and assistance, including access to relevant drawings, design details and production data, shall be furnished by the supplier to the purchaser's inspector at no charge to the purchaser.

8.3 If during such inspections and tests the contracted goods fail to conform to the required specifications and standards, the purchaser's inspector may reject them and the supplier shall either replace the rejected goods or make all alterations necessary to meet the specifications and standards, as required, free of cost to the purchaser and resubmit the same to the purchaser's inspector for conducting the inspections and tests again.

8.4 In case the contract stipulates pre-despatch inspection of the ordered goods at supplier's premises, the supplier shall put up the goods for such inspection to the purchaser's inspector well ahead of the contractual delivery period, so that the purchaser's inspector is able to complete the inspection within the contractual delivery period.

8.5 If the supplier tenders the goods to the purchaser's inspector for inspection at the last moment without providing reasonable time to the inspector for completing the inspection within the contractual delivery period, the inspector may carry out the inspection and

complete the formality beyond the contractual delivery period at the risk and expense of the supplier. The fact that the goods have been inspected after the contractual delivery period will not have the effect of keeping the contract alive and this will be without any prejudice to the legal rights and remedies available to the purchaser under the terms & conditions of the contract.

- 8.6 The purchaser's/consignee's contractual right to inspect, test and, if necessary, reject the goods after the goods' arrival at the final destination shall have no bearing of the fact that the goods have previously been inspected and cleared by purchaser's inspector during pre-despatch inspection mentioned above.
- 8.7 Goods accepted by the purchaser/consignee and/or its inspector at initial inspection and in final inspection in terms of the contract shall in no way dilute purchaser's/consignee's right to reject the same later, if found deficient in terms of the warranty clause of the contract, as incorporated under GCC Clause 15.
- 8.8 Principal/ Foreign supplier shall also have the equipment inspected by recognised/ reputed agency like SGS, Lloyd, 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 Third Party Inspection to include only Physical & Relevant records Inspection of the Ordered Goods. However, Dispatch Clearance Certificate is issued without prejudice to the Purchaser's right to accept/reject the Ordered Goods after it's arrival at site/destination, if not found in accordance with the Purchase Order during the installation and testing at site and during the performance guarantee period. This dispatch clearance certificate will not absolve manufacturer from his responsibility to ensure that the Ordered Goods supplied are totally in accordance with the Purchase Order/Notification of Award.

9. Terms of Delivery

- 9.1 Goods shall be delivered by the supplier in accordance with the terms of delivery specified in the contract.

10. Transportation of Goods

- 10.1 Instructions for transportation of imported goods offered from abroad:

The supplier shall not arrange part-shipments and/or transshipment without the express/prior written consent of the purchaser. The supplier is required under the contract to deliver the goods under CIP (Named port of destination) terms; the shipment shall be made by Indian flag vessel or by vessels belonging to the conference lines in which India is a member country through India's forwarding agents/coordinators. In case the forwarding agent/coordinators are unable to provide timely adequate space in Indian flag vessel or by vessels belonging to the conference lines, the supplier shall arrange shipment through any available vessel to adhere to the delivery schedule given in the contract.

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

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

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

11. Insurance:

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

- i) in case of supply of domestic goods on Consignee site basis, the supplier shall be responsible till the entire stores contracted for arrival in good condition at destination. The transit risk in this respect shall be covered by the Supplier by getting the stores duly insured for an amount equal to 110% of the value of the goods from ware house to ware house (consignee site) on all risk basis. The insurance cover shall be obtained by the Supplier and should be valid till 3 months after the receipt of goods by the Consignee.
- ii) in case of supply of the imported goods on CIP Named port of Destination Basis, the additional extended Insurance (local transportation and storage) would be borne by the Supplier from the port of entry to the consignee site for a period including 3 months beyond date of delivery for an amount equal to 110% of the overall expenditure to be incurred by the purchaser from ware house to ware house (consignee site) on all risk basis.

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

12. Spare parts

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

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

12.2 Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the goods so that the same are supplied to the Purchaser/Consignee promptly on receipt of order from the Purchaser/Consignee.

13. Incidental services

13.1 Subject to the stipulation, if any, in the SCC (Section – V), List of Requirements (Section – VI) and the Technical Specification (Section – VII), the supplier shall be required to perform the following services.

- i) Installation & commissioning, Supervision and Demonstration of the goods
- ii) Providing required jigs and tools for assembly, minor civil works required for the completion of the installation.
- iii) Training of Consignee's Doctors, Staff, operators etc. for operating and maintaining the goods
- iv) Supplying required number of operation & maintenance manual for the goods

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

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

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

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

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

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

B) For goods imported from abroad

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

- (i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
- (ii) Original and four copies of the negotiable clean, on-board Bill of Lading/Airway bill, marked freight pre paid and four copies of non-negotiable Bill of Lading/Airway bill;

- (iii) Four Copies of packing list identifying contents of each package;
- (iv) Insurance Certificate as per GCC Clause 11.
- (v) Manufacturer's/Supplier's warranty certificate;
- (vi) Inspection Certificate for the despatched equipments issued by recognized/reputed agency like SGS, Lloyd, Beaureu Veritas, TUV prior to despatch
- (vii) Manufacturer's own factory inspection report;
- (viii) Certificate of origin
- (ix) Port of Loading;
- (x) Port of Discharge and
- (xi) Expected date of arrival.

15. Warranty

- 15.1 The supplier warrants comprehensively that the goods supplied under the contract is new, unused and incorporate all recent improvements in design and materials unless prescribed otherwise by the purchaser in the contract. The supplier further warrants that the goods supplied under the contract shall have no defect arising from design, materials (*except when the design adopted and / or the material used are as per the Purchaser's/Consignee's specifications*) or workmanship or from any act or omission of the supplier, that may develop under normal use of the supplied goods under the conditions prevailing in India.
- 15.2 The **warranty** shall remain valid for **60 months** from the date of installation & commissioning 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.
- a. No conditional warranty will be acceptable.
 - b. Warranty as well as Comprehensive Maintenance contract will be inclusive of all accessories and Turnkey work and it will also cover the following:-
 - X-ray and CT tubes and high-tension cables.
 - Helium replacement
 - Any kind of motor.
 - Plastic & Glass Parts against any manufacturing defects.
 - All kind of sensors including oxygen sensors.
 - All kind of coils, probes and transducers
 - All kind of flat panel sensors and cassettes for DR & CR systems and patients handling trolleys etc
 - Printers and imagers including laser and thermal printers with all parts.
 - UPS including the replacement of batteries.
 - Air-conditioners
 - c. Replacement and repair will be under taken for the defective goods.
 - d. Proper marking has to be made for all spares for identification like printing of installation and repair dates.
- 15.3 In case of any claim arising out of this warranty, the Purchaser/Consignee shall promptly notify the same in writing to the supplier. The period of the warranty will be as per G.C.C

clause number 15.2 above irrespective of any other period mentioned elsewhere in the bidding documents.

- 15.4 Upon receipt of such notice, the supplier shall, within 8 hours on a 24(hrs) X 7 (days) X 365 (days) basis respond to take action to repair or replace the defective goods or parts thereof, free of cost, at the ultimate destination. The supplier shall take over the replaced parts/goods after providing their replacements and no claim, whatsoever shall lie on the purchaser for such replaced parts/goods thereafter. The penalty clause for non rectification will be applicable as per tender conditions
- 15.5 In the event of any rectification of a defect or replacement of any defective goods during the warranty period, the warranty for the rectified/replaced goods shall be extended to a further period of sixty (60) months from the date such rectified / replaced goods starts functioning to the satisfaction of the purchaser.
- 15.6 If the supplier, having been notified, fails to respond to take action to repair or replace the defect(s) within 8 hours on a 24(hrs) X 7 (days) X 365 (days) basis, the purchaser may proceed to take such remedial action(s) as deemed fit by the purchaser, at the risk and expense of the supplier and without prejudice to other contractual rights and remedies, which the purchaser may have against the supplier.
- 15.7 During Warranty period, the supplier is required to visit at each consignee's site at least once in 3 months commencing from the date of the installation for preventive maintenance of the goods
- 15.8 The Purchaser/Consignee reserve the rights to enter into Annual Comprehensive Maintenance Contract between Consignee and the Supplier for the period as mentioned in Section VII, Technical Specifications after the completion of warranty period.
- 15.9 The supplier along with its Indian Agent and the CMC provider shall ensure continued supply of the spare parts for the machines and equipments supplied by them to the purchaser for 10 years from the date of installation and handing over.
- 15.10 The Supplier along with its Indian Agent and the CMC Provider shall always accord most favoured client status to the Purchaser vis-à-vis its other Clients/Purchasers of its equipments/machines/goods etc. and shall always give the most competitive price for its machines/equipments supplied to the Purchaser/Consignee.

16. Assignment

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

17. Sub Contracts

- 17.1 The Supplier shall notify the Purchaser in writing of all sub contracts awarded under the contract if not already specified in its tender. Such notification, in its original tender or later, shall not relieve the Supplier from any of its liability or obligation under the terms and conditions of the contract.
- 17.2 Sub contract shall be only for bought out items and sub-assemblies.
- 17.3 Sub contracts shall also comply with the provisions of GCC Clause 4 ("Country of Origin").

18. Modification of contract

- 18.1 If necessary, the purchaser may, by a written order given to the supplier at any time during the currency of the contract, amend the contract by making alterations and modifications within the general scope of contract in any one or more of the following:
- a) Specifications, drawings, designs etc. where goods to be supplied under the contract are to be specially manufactured for the purchaser,
 - b) Mode of packing,

- c) Incidental services to be provided by the supplier
- d) Mode of despatch,
- e) Place of delivery, and
- f) Any other area(s) of the contract, as felt necessary by the purchaser depending on the merits of the case.

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

19. Prices

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

20. Taxes and Duties

- 20.1 Supplier shall be entirely responsible for all taxes, duties, fees, levies etc. incurred until final acceptance of the contracted goods to the purchaser. However, for goods directly imported shall be guided by the INCOTERM.
- 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:

80% payment of the contract price shall be paid on receipt of goods in good condition and upon the submission of the following documents:

- (i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
- (ii) Consignee Receipt Certificate as per Section XVI in original issued by the authorized representative of the consignee;
- (iii) Two copies of packing list identifying contents of each package;
- (iv) Inspection certificate issued by the nominated Inspection agency, if any.
- (v) Insurance Certificate as per GCC Clause 11 and documents also to be submitted for payment of LC confirming that dispatch documents has already been sent to all concerned as per the contract within 24 hours;
- (vi) Certificate of origin.

b) On Acceptance:

Balance 20% payment would be made against 'Final Acceptance Certificate' as per Section XVIII of goods to be issued by the consignees subject to recoveries, if any, either on account of non-rectification of defects/deficiencies not attended by the Supplier or otherwise. Final acceptance certificate will be released by the consignee on completion of installation, commissioning, training, successful running of equipment (at least 2-3 weeks) and handing over the equipment to 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:

80% of the net CIP price (CIP price less Indian Agency commission) of the goods shipped shall be paid through irrevocable, non-transferable Letter of Credit (LC) opened in favour of the supplier in a bank in his country and upon submission of documents specified hereunder:

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

b) On Acceptance:

Balance payment of 20% of net CIP price of goods would be made against 'Final Acceptance Certificate' as per Section XVII 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. Final acceptance certificate will be released by the consignee on completion of installation, commissioning, training, successful running of equipment (at least 2-3 weeks) and handing over the equipment to the consignee.

- c) **Payment of Incidental Costs** till consignee site & Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training) will be paid in Indian Rupees to the Indian Agent on proof of final installation, commission and acceptance of equipment by the consignee.
- d) **Payment of Indian Agency Commission:** Indian Agency commission will be paid to the manufacturer's agent in the local currency for an amount in Indian rupees

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

C) Payment of Turnkey, if any:

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

D) Payment for Annual Comprehensive Maintenance Contract Charges:

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

- 21.2 The supplier shall not claim any interest on payments under the contract.
- 21.3 Where there is a statutory requirement for tax deduction at source, such deduction towards income tax and other tax as applicable will be made from the bills payable to the Supplier at rates as notified from time to time.
- 21.4 Irrevocable & non - transferable LC shall be opened by the respective consignees. However, if the supplier requests specifically to open confirmed LC, the extra charges would be borne by the supplier. If LC is required to be extended and/or amended for reasons not attributable to the purchaser/consignee, the charges thereof shall be borne by the supplier.
- 21.5 The payment shall be made in the currency / currencies authorised in the contract.
- 21.6 The supplier shall send its claim for payment in writing, when contractually due, along with relevant documents etc., duly signed with date, to respective consignees.
- 21.7 While claiming payment, the supplier is also to certify in the bill that the payment being claimed is strictly in terms of the contract and all the obligations on the part of the supplier for claiming that payment has been fulfilled as required under the contract.
- 21.8 While claiming reimbursement of duties, taxes etc. (like sales tax, excise duty, custom duty) from the Purchaser/Consignee, as and if permitted under the contract, the supplier shall also certify that, in case it gets any refund out of such taxes and duties from the concerned authorities at a later date, it (the supplier) shall refund to the Purchaser/Consignee forthwith.
- 21.9 In case where the supplier is not in a position to submit its bill for the balance payment for want of receipted copies of Inspection Note from the consignee and the consignee has not complained about the non-receipt, shortage, or defects in the supplies made, balance amount will be paid by the paying authority without consignee's receipt certificate after three months from the date of the preceding part payment for the goods in question, subject to the following conditions:
- (a) The supplier will make good any defect or deficiency that the consignee (s) may report within six months from the date of despatch of goods.
 - (b) Delay in supplies, if any, has been regularized.
 - (c) The contract price where it is subject to variation has been finalized.
 - (d) The supplier furnishes the following undertakings:

"I/We, _____ certify that I/We have not received back the Inspection Note duly receipted by the consignee or any communication from the purchaser or the consignee about non-receipt, shortage or defects in the goods supplied. I/We ____ agree to make good any defect or deficiency

that the consignee may report within three months from the date of receipt of this balance payment.

22. Delivery/Delay in the supplier's performance

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

22.6 Passing of Property:

- 22.6.1 The property in the goods shall not pass to the purchaser unless and until the goods have been delivered to the consignee in accordance with the conditions of the contract.
- 22.6.2 Where there is a contract for sale of specific goods and the supplier is bound to do something to the goods for the purpose of putting them into a deliverable state the property does not pass until such thing is done.
- 22.6.3 Unless otherwise agreed, the goods remain at the supplier's risk until the property therein is transferred to the purchaser.

23. Liquidated damages

- 23.1 Subject to GCC clause 26, if the supplier fails to deliver any or all of the goods or fails to perform the services within the time frame(s) incorporated in the contract, the Purchaser/Consignee shall, without prejudice to other rights and remedies available to the Purchaser/Consignee under the contract, deduct from the contract price, as liquidated damages, a sum equivalent to 0.5% per week of delay or part thereof on delayed supply of goods and/or services until actual delivery or performance subject to a maximum of 10% of the contract price. Once the maximum is reached Purchaser/Consignee may consider termination of the contract as per GCC 24.
- During the above-mentioned delayed period of supply and / or performance, the conditions incorporated under GCC sub-clause 22.4 above shall also apply.

24. Termination for default

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

25. Termination for insolvency

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

26. Force Majeure

- 26.1 Notwithstanding the provisions contained in GCC clauses 22, 23 and 24, the supplier shall not be liable for imposition of any such sanction so long the delay and/or failure of the supplier in fulfilling its obligations under the contract is the result of an event of Force Majeure.

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

27. Termination for convenience

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

28. Governing language

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

29. Notices

- 29.1 Notice, if any, relating to the contract given by one party to the other, shall be sent in writing or by cable or telex or facsimile and confirmed in writing. The procedure will also provide the sender of the notice, the proof of receipt of the notice by the receiver. The

addresses of the parties for exchanging such notices will be the addresses as incorporated in the contract.

29.2 The effective date of a notice shall be either the date when delivered to the recipient or the effective date specifically mentioned in the notice, whichever is later.

30. Resolution of disputes

30.1 If dispute or difference of any kind shall arise between the Purchaser/Consignee and the supplier in connection with or relating to the contract, the parties shall make every effort to resolve the same amicably by mutual consultations.

30.2 If the parties fail to resolve their dispute or difference by such mutual consultation within twenty-one days of its occurrence, then, unless otherwise provided in the SCC, either the Purchaser/Consignee or the supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided the applicable arbitration procedure will be as per the Arbitration and Conciliation Act, 1996 of India. In the case of a dispute or difference arising between the Purchaser/Consignee and a domestic Supplier relating to any matter arising out of or connected with the contract, such dispute or difference shall be referred to the sole arbitration of an officer in the Ministry of Law and Justice, appointed to be the arbitrator by **Medical Superintendent, Safderjung Hospital, New Delhi**. 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.

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

- 34.1 Further to GIT Clause 34 above, the purchaser's evaluation of a tender will include and take into account the following:
- i) In the case of goods manufactured in India or goods of foreign origin already located in India, sales tax & other similar taxes and excise duty & other similar duties, Customs Duties, Service Tax, Works Contract Tax etc which will be contractually payable (to the tenderer), on the goods if a contract is awarded on the tenderer; and
 - ii) in the case of goods of foreign origin offered from abroad, customs duty and other similar import duties/taxes, which will be contractually payable (to the tenderer) on the goods if the contract is awarded on the tenderer.
- 34.2 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.
- 34.3 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.
- i. 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 L1 price, in a situation where L1 price is from someone other than on 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 L1 price, the 4% quantity earmarked for MSEs owned by SC/ST entrepreneurs will be met from other participating MSEs.
 - ii. 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 on MSE, failing which their tender will be liable to be ignored.

SECTION - V

SPECIAL CONDITIONS OF CONTRACT (SCC)

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

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

SECTION - VI
LIST OF REQUIREMENTS

Part I

| S. No. | Equipment Details | Qty. | EMD (Rs.) |
|---------------|--|-------------|------------------|
| | <u>Neuro Surgery Equipment for Super Specialty Block</u> | | |
| 1 | Gamma Knife - Proprietary | 01 | 60,00,000.00 |
| 2 | Flat Panel DSA Lab. | 01 | 19,00,000.00 |
| 3 | Brain Suite/Intraoperative MRI 1.5T | 01 | 60,00,000.00 |
| 4 | Mobile CT Scan for OT (1 no.) | 01 | 8,00,000.00 |
| 5 | Operative Microscope (Motorized) (1no.) | 01 | 70,000.00 |
| 6 | CUSA (1no.) | 01 | 50,000.00 |
| 7 | Transcranial Doppler with Intraoperative Facility (1no.) | 01 | 40,000.00 |
| 8 | Craniotomy Set (1no.) | 01 | 40,000.00 |
| 9 | Drill & Burn System (1no.) | 01 | 40,000.00 |
| 10 | Neuroendoscope with Spinal Attachment (1no.) | 01 | 40,000.00 |
| | <u>Radio Nuclear Lab. Equipment FOR Super-Specialty Block</u> | | |
| 11 | Gamma Camera with Computer System (Dual Head) (1no.) | 01 | 10,00,000.00 |

Part II: Required Delivery Schedule:**a) For Indigenous goods or for imported goods if supplied from India:**

60 days from date of Notification of Award except, for MRI, CT Scan, DR System, DRF System, DSA, Gamma Knife, Gamma Camera, PET CT, Cath Lab. for which the delivery period will be 90 days from date of Notification of Award. The date of delivery will be the date of delivery at consignee site (Tenderers may quote earliest delivery period).

b) For Imported goods directly from foreign:

60 days from date of opening of L/C except, for MRI, CT Scan, DR System, DRF System, DSA, Gamma Knife, Gamma Camera, PET CT, Cath Lab. for which the delivery period will be 90 days from date of opening of L/C. The date of delivery will be the date of Bill of Lading/Airway Bill. (Tenderers may quote earliest delivery period).

c) Installation & commissioning within 15 days of receipt of goods at site except for MRI, CT Scan, DR System, DRF System, DSA, Gamma Knife, Gamma Camera, PET CT, Cath Lab. for which installation & commissioning to be done within 90 days of receipt of goods at site.

Note: Indigenous goods or imported goods if supplied from India (offered in INR) which are linked with supply of directly imported goods are to be supplied within the contractual delivery period as stated in para b) above.

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

Part III: Scope of Incidental Services:

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

Part IV:

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

Part V:

Warranty & Comprehensive Maintenance Contract (CMC) as per bid document.

Part VI:

Required Terms of Delivery and Destination.

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

At Consignee Site – Specified in the List of Requirements

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

b) For Imported goods directly from abroad:

The foreign tenderers are required to quote their rates on CIP Named Port of Destination Basis giving break up of the price as per the Proforma prescribed in the Price Schedule. Purchaser will place the order on DDP Consignee basis. The shipping arrangements shall be made by the supplier accordingly.

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.

Consignee/destination details as mentioned in Section-XXI.

Section - VII
Technical Specifications

1. GAMMA KNIFE (Propriety item)

| TECHNICAL SPECIFICATION FOR ROBOTIC INTRA CRANIAL GAMMA KNIFE SYSTEM | |
|---|---|
| S. No. | DESCRIPTION |
| 1 | The Gamma Knife intended for intra-cranial neurosurgery gamma radiation with the principle of simultaneous cross-firing from more than 175 radiation |
| 2 | Should be supplied with all components of a fully automated system with integrated single robotic system, consisting of three collimator size and |
| 3 | Should be supplied with treatment planning system Gamma plan pfx, system tool kit, spare part kit for coordinate frame, skull scaling instrument, Ct. |
| 4 | Should be supplied with the model of Cartesian coordinate frame kits with integrated insulated fixation post with plastic inserts confirming to the XYZ |
| 5 | Should be able to treat functional targets as small as 4mm upto several centimeters target. |
| 6 | Radiation source(s) should be stationary during irradiation of patient. |
| 7 | Company should provide the following services |
| 7.B | Site Planning, Installation, source loading, commissioning and other activities for the detailed component list given below. |
| 7.B | Radiation unit should be with radiation shielding doors and collimator system |
| 7.B | Radio-physical data with total 60 cobalt activity <6600Ci (2.44 x10 ¹⁴ Bq) |
| 7.B | Single source activity deviation of <10% of average source activity with dose rate measured in Calibration condition of >3Gy/min. The number of 60 |
| 7.B | The system should have the minimum accuracy data of patient positioning system <0.2mm with Mechanical Isocenter radius of <0.3mm and total radio |
| 7.B | Electrical data with the power consumption of approximate 1.6kVa with 230+-10% |
| 8 | Positioning accuracy should be Better than 0.1 millimeter |
| 9 | Timer accuracy should be Better than 0.2 percent |
| 10 | Total radio-physical uncertainty should be Better than 0.5 millimeter |
| 11 | Positioning principle should be Automatic robotic patient positioning and re-positioning for multiple Isocenters. |
| 12 | Communication with treatment planning system should be Dedicated point-to-point communication over RS232, Ethernet, or other industry standard |
| 13 | Beam penumbra should be Better than 1.2 millimeters for all beam sizes and configurations. |
| 14 | Coilimeter leakage should be Less than 0.4 percent. |
| 15 | QA of Radiosurgical Device should have Fully documented and automated QA. Includes QA tools covering: a) accuracy of patient positioning system b) Dose radio physical accuracy c) Dose spatial accuracy |
| 16 | Integrated Record and Verify System should have the following functions:- Record –Radiosurgical system must automatically record treatment parameters, including treatment time per isocenter, isocenter position to accuracy of 0.2 mm, collimator size(s) per isocenter, all patient positions during treatment, date and time of treatment. |
| 17 | Effective dose rate should be More than 3 Gy/minute at commissioning |
| 18 | Dosimetrical accuracy should be Better than 3 percent for all beam configurations. |
| 19 | Ininterrupted power supply should be able to perform Treatment continued if power supply is interrupted for at least 1 minute. If power supply is |
| 20 | Average treatment time for 6 isocenter treatment, with multiple collimator sizes should be Less than 45 minutes. |
| 21 | Treatment capacity should be documented for at least 600 patients/years |
| 22 | Image import capability should be DICOM Image transfer over network, DICOM on CD-ROM, FTP, Mo-disc, DAT tape |

| | |
|----|--|
| 23 | Image modalities should be MR, CT, PET, DSA, Angio, MEG, Documented use of MRI without the need for fusion of images with CT. |
| 24 | Non stereotactic images Co-registration should be able to automatically co-register non-stereotactic images with stereotactic images, to use both sets in |
| 25 | Color PET display should be Available in software |
| 26 | Stereotactic image fusion should be Automatic |
| 27 | Target outlining should be Automatic and manual |
| 28 | Number of isocenters allowed in treatment plan for a single patient should be at least 50 |
| 29 | Should have Multiple target support |
| 30 | Should have Alternative dose plan support |
| 31 | Graphical presentation should Simultaneous 2D and 3D allowed, simultaneous CT and MR allowed. |
| 32 | Stereotactic scaling should be automatic with full error analysis |
| | Standards and approvals |
| 33 | EN/IEC 60601-1 : Medical electrical Equipment –General Requirements for Safety |
| 34 | EN/IEC 60601-1-2 : Collateral Standard : Electromagnetic Compatibility. |
| 35 | UL 2601: Medical Electrical Equipment – General Requirements for Safety |
| 36 | CAN CSA-C22.2 No 601.1-M90: Medical electrical Equipment, Part 1: |
| | |
| | General Requirements for Safety |
| 37 | Patient Positioning System with patient couch and automatic Patient Positioning System |
| 38 | Covers for radiation unit and patient Positioning System |
| 39 | Electric cabinet with cabling |
| 40 | ECU –central unit and safety system electronic board, circuit breakers and cabling. |
| 41 | SDU –sector drive electronic board, circuit breakers and cabling |
| 42 | PPC1 –software, PPC2- software, medical UPS |
| 43 | Operator area to be equipped with Office cabinet, Keyboard and mouse |
| 44 | Operator console with patient and operator audio/video, power supply, opto insulators, cabling and connectors, Flat screen monitors, Office UPS, MCU |
| 45 | Robotic Treatment couch with height adjustable mattress, Manual controls for treatment setup |
| 46 | Frame adapter Model “Standard G”. For interfacing between Leksell type Coordinate Frame model G and Gamma Knife Clearance check tool, Tool storage cabinet for storage of Frame adaptoer, QA tool, clearance check tool etc. |
| 47 | Document set complete with installation and supplementary document, 2 instruction for use, 2 emergency routines, Signs and labels |
| | |
| | The treatment planning system should include: |
| 48 | Gamma Plan server, one connectivity license for System, One patient database. |
| 49 | One DICOM server |
| 50 | Treatment Plan client with One Treatment Plan base license, one Treatment Plant dose planning license |
| 51 | Workstation with One Hewlett-Packard xw6200 dual-processing Intel |
| 52 | XEON™ workstation, with –Quadro FX high-end graphic card 250Gb |
| 53 | SATA disk and 2Gb RAM, One HP 19” TFT monitor |
| | Treatment plan documentation & Media Kit |
| 54 | Linux Software : Linux operating system (includes RedHat license) |
| 55 | Database backup device one USB 2 external hard disk |
| 56 | Printer 110 or 220V one Hewlett-Packard * Color LaserJet |
| 57 | Gamma system tool kit includes: QA tool for radiation focus precision check |
| 58 | Frame Cap to be used during patient preparation for a treatment with L Gamma Knife. It is intended as a quick measurement tool to facilitate a smooth workflow |
| 59 | Should have an non-invasive repeat fixation device based on vaccum assisted |

| | |
|----|---|
| | mouthpiece and should be fully integrated with the stereotactic robotic system and should enable fractionation. |
| 60 | Coordinate Frame Kit for the System should include |
| | Frame with Feet and Straight Front Piece |
| | Front Piece, Curved |
| | Insulated Fixation Post, Anterior |
| | Insulated Fixation Post, Short Posterior |
| | Insulated Fixation Post, Long Posterior |
| | Locking Screw, 5x 19 mm, Titanium |
| | Locking Piece for Fixation Post |
| | Ear Plug Holder, Right |
| | Ear Plug Holder, Left |
| | Ear Plug |
| | Fixation Screws, Titanium, kit of 20 pairs |
| | Instrument Screw Driver, Double |
| | Sterilizing Tray for Frame |
| | Disposable inserts, 25x4 pieces |
| | Instruction for Use, Leksell* Coordinate frame kit |
| | Instructions for Use, Insulated Fixation Posts |
| | Quick Reference Guide |
| 61 | Spare Part Kit for Leksell* Coordinate Frame* |
| | Consists of 4 pieces of each of the following: |
| | - Locking Screw, 5 x 19mm, Titanium |
| | - Locking Piece for Fixation Post |
| | - Screw, 4 x 10 mm, Titanium |
| 62 | Skull scaling instrument for measurement of skull shape for Gamma Plan modeling |
| 63 | CT planning kit including of CT indicator Fiducial box for CT imaging procedure. |
| 64 | CT adapter for Fixating the stereotactic frame to the CT table fixation |
| 65 | CT table fixation for Fixating the CT adapter to specified CT table |
| 66 | DICOM CT connectivity to allow importation of CT images (regardless of number of CT) |
| 67 | MRI planning kit consisting of MR adapter Fixating the stereotactic frame to specified MR table |
| 68 | MR indicator as the Fiducial box for MR imaging procedure. |
| 69 | DICOM MR connectivity to allow importation of MR images (regardless of number of images) |
| 70 | X-ray planning kit consisting of X-ray indicator Fiducial box for angiography imaging procedure. |
| 71 | X-ray adapter and support for the stereotactic frame to specified angiography table |
| 72 | DICOM XA connectivity to all importation of DICOM XA (Digital Subtraction Angiography) images (regardless of number of image sources per site) |
| 73 | DICOM OT connectivity to allow importation of DICOM OT (OTHER) images (regardless of number of image sources per site) |
| 74 | ⁶⁰ Co Loading: Loading service using specific Loader with certified personnel. |
| 75 | Site planning Site visit and survey by service staff for complete site planning. |
| 76 | Installation and commissioning for the system installation and performance of acceptance test procedures. |
| 77 | Support and Education & Training for System |
| 78 | Education & Training Services with on-site Clinical Start-Upon-site application training with Gamma Knife experience neurosurgeon and/or radiation physicist certified by manufacturer and should include Gamma knife Clinical introductory Course Principle and practice of Gamma Knife Surgery. |
| 79 | Support Service |

| | |
|----|--|
| 80 | The following support services are delivered in addition to parts warranty during the first year. Maintenance System Management Customization of the maintenance schedule for maximum equipment availability, performance and safety with minimum disruption to clinical patient flow. |
| 81 | Planned Maintenance such as scheduled preventive maintenance inspections in accordance with company recommended maintenance intervals and procedures performed by company certified engineers. |

2. **FLAT PANEL DSA LAB**

| Sr. No. | Specifications as per tender |
|-----------|--|
| | The system should be the state of the art model to be quoted with feature equivalent to the latest model launched at RSNA 2013 or later. |
| A. | Gantry: |
| | 1. The system should have two gantries : one floor mounted and one ceiling suspended providing full body coverage. The lateral plane should have motorized longitudinal C-arm movement. |
| | 2. It should be possible to pre-program the gantries for multiple examination positions. |
| | 3. All movements of the gantries should be controlled from the joystick on the table side as well as from the control. |
| | 4. The system should have adequate collision protection for the safety of the patient. |
| | 5. Both gantries should have fast speed for angulations and positioning. The frontal system should have a speed of at least 15 degree/sec. for all positions and lateral plane should have a speed of at least 8 degree/sec. |
| | 6. Gantry angulations in both planes frontal and lateral should be freely user selectable to satisfy clinical imaging needs. |
| | 7. Both the gantries should have an automatic positioning capability dependent on the reference image being selected and possibility to select reference image depending on the gantry position. |
| | |
| B. | Patient Table : |
| | 1. The table should have motorized longitudinal, horizontal and vertical travel. |
| | 2. It should have the facility for automatic bolus chase for peripheral angiography. |
| | 3. The table with trendelenburg tilt facility would be preferred. |
| | 4. It should be possible to swivel the table in case of emergencies. |
| | |
| C. | X-Ray Generator: |
| | 1. Generator should be multi-pulse/high frequency for constant output. |
| | 2. Output should be 100 KW or more. |
| | 3. Radiography KVP range should be 40KV – 125 KV or more. |
| | 4. Output at 100 KV should be 1000 MA or more |
| | 5. It should have automatic exposure control device for radiographic fluoroscopy and angio mode |
| | 6. It should have digital display or KVP & MAs. |
| | 7. Anatomical programming radiography should be possible. |
| | 8. It should have over loading protection. |
| | 9. It should have the facility for pulsed fluoroscopy at variable rates for reducing the x-ray dose to the patient during intervention procedure. |
| | |
| D. | X-Ray Tubes: |
| | 1. Both planes should be provided with rotating high speed tubes. |
| | 2. Anode heat storage capacity should be 2.0 MHU or more having liquid bearing technology or metal lubricant. (Price to be quoted separately) |
| | The focal spot should have the following sizes : |
| | i) 1.0 mm or less with load 80 KW or more in minimum one plane. |
| | ii) 0.5 mm or less with load 15 KW or more in minimum one plane. |
| | 3. The system should have adequate cooling facility for the x-ray tubes for uninterrupted performance during procedure. |
| | 1. One collimator for each plane is to be provided. |
| | 2. The collimator should have facility for automatic copper pre-filtration for reducing the x-ray dose. |
| | 3. The collimator leaf should have IRIS type arrangement. |

| | |
|-----------|--|
| | 4. The collimator should have the facility for the dose measurement chamber in order to display the skin dose on the monitors in the lab. |
| F. | Biplane Digital System: |
| | 1. Dynamic flat detector system with high spatial and with Frontal detector of 16 bit and lateral 14 bit contrast resolution with DQE of minimum 70% |
| | 2. Size of frontal plane should be at least 40cm diagonal. |
| | 3. The collimator leaf should have IRIS/rectangular type arrangement. |
| | 4. It should provide multiple formats/fields at least of 4 sizes. |
| | 5. Spatial resolution should be at least 3.0 LP/mm in frontal plane and 2.5 IP/mm in the lateral plane. |
| | 6. Three monitors of at least 19 size TFT/LCD for each plant display of live, reference and subtracted image with high resolution flicker free display should be provided. Monitors should have anti-glare provisions. |
| | 7. Similarly 4 monitors, two for each plane (live & reference image) with high resolution display in the control room should be provided. |
| | ➤ console monitor for patient registration |
| | ➤ Physiology monitor in examination room and in console with the requisite computer system for NIBP, IBP, SpO2 measurement, display and analysis. |
| G. | Digital Imaging System and essential softwares: |
| | 1. Road mapping facility (Real time 2D & 3D) should be available with possibility of superimposing of fluoro image on reference image. Facilities for unlimited subtracted high resolution fluoroscopy should be available. |
| | 2. It should have the capability to acquire images in 1024 x 1024 matrix with a maximum speed of 6 frames or more per second on-line subtraction. Specify the maximum image acquisition rate without subtraction. |
| | 3. Post processing software facilities with real time edge enhancement, positive/negative image display windowing, electronic shuttering, roaming, image reversal, zooming and magnifying with text and annotation junctions. |
| | 4. a. rotational angiography facility (2D & 3D) at speed of at least 30 degree/sec. with acquisition frame rate of at least 25 frames/sec. in 1k matrix with facility for online display of subtracted images should be available. Specify if the rotational angiography is with on-line subtraction in 1024 matrix. |
| | 4. b. Rotation data acquisition with an output of cross sectional CT like images should be possible. |
| | 5. Last image hold or reference image toggling with fluoro should be available. |
| | 6. It should have minimum image storage capacity of 1,00,000 images in the 1024 x 1024/12 bit. |
| | 7. Digital subtraction angiography software of automatic pixel shift enhancement for iodine and CO2 contrast should be possible. |
| | 8. A separate workstation for 3D reconstruction of the rotational angiography images should be provided. The 3D image measurement and slicing should be possible. Facility to display reconstructed images in the procedure room should be provided. |
| | 9. The complete digital system along with workstation should be networked and connected to a DICOM compatible laser system |
| | 10. The digital system should have software for vascular analysis and quantification including stenosis %. All measurement should be possible from the patient table side. |
| | 11. Archiving on a CD/DVD recorder should be provided. Juke box/RAID (4TB) and 5000 CD's R/W or 1000 DVD should be supplied with the unit. |
| | 12. An additional workstation for processing of the DSA images and their documentation should be provided in addition to 3D workstation. |
| | This workstation should have the facility to reconstruct the long leg view for peripheral |

| | |
|-----------|--|
| | images. |
| | 13. The system should be able to receive /display on reference monitor, DICOM format images form other modalities like CT & MR. DICOM print facility should be available. |
| | 14. Bolus chase software should be provided. |
| | 15. it should have facility to measure dose during the procedures. |
| | 16. Specify the time limit minimum 30 seconds for uninterrupted acquisition of on-line subtracted images at 1024 x 1024 matrix with maximum frame rate. |
| | |
| H. | Essential accessories: |
| | The following essential accessories to be provided with the unit:- |
| | 1. On line UPS for the complete system excluding the x-ray system for both planes with 30 min. back up. (Prices to be quoted separately) |
| | 2. Pressure injector of reputed make along with 500 disposable syringes sets. |
| | 3. Dry Chemistry Laser Imager with resolution of 600 DPI or more. DICOM ready and online for film size of 14x17 (Prices to be quoted separately) |
| | 4. Ceiling suspended radiation protection system and table side protection system. |
| | 5. Focused ceiling mounted light with a handle for positioning the light. |
| | 6. Lead gown as per the following specifications : 8 Nos. |
| | i) It should have lead equivalent of 0.5 mm. |
| | ii) It should be double sided type lead apron |
| | iii) it should be light in weight. |
| | |
| | 7. Thyroid Guard – 6 Nos. |
| | 8. Lead spectacles – 6 Nos. |
| | 9. Foot switch for fluoro/acquisition control |
| | 10. Multichannel monitor (with essential accessories) for monitoring physiology. It should be able to record and print the pressures in general and also for stenosis analysis (catheter gradient). It should have a pulse oximeter module, ECG module, SpO2 Module, etc. |
| | 11. Lead protected viewing glss (Size : 200cm x 100cm) |
| | 12. Anaesthesia workstation with ventilator. |
| | 13. Bi Phasic Defibrillator. |
| | |
| | The turnkey Scope of Work – Biplane D.S.A. |
| | 1. TheSupplier should inspect the proposed site offered by the Consignee Institute in which the DR system has to be installed and they are required to submit the plant for the complete DR Centre on a turnkey basis. The scope of work includes complete Civil work, Electrical, Plumbing, Furnishing, Air-conditioning and Fire fighting for the construction of DR Centre. |
| | 2. While preparing the plan, the following aspects have to be addressed. |
| | a) Care should be taken to provide easy negotiation of the patient stretchers / trolleys through corridors and doors. |
| | b) Radiation shielding for doors, walls, windows etc. |
| | c) Furniture like desk, chairs, shelves etc. |
| | |
| | 3. The cost of Turnkey for the area of 1500 sq.ft and air-conditioning of Tonnage 15 TR will be considered for Ranking / Evaluation purpose |
| | |
| | 4. Moreover Bidders will have to quote the Unit Rates of the following components of turnkey work. |
| | a. Civil works |
| | b. Electrical work |

| | |
|--|---|
| | <ul style="list-style-type: none"> c. Public health (plumbing and sanitary fittings) d. Air Conditioning (HVAC) e. Interior Furnishing & Furniture f. Miscellaneous |
| | Scope of work for turnkey Biplane D.S.A system: |
| | The supplier should inspect the proposed site and submit all the detailed structural and architectural drawings and BOQ for the proposed DR Centres along with technical bid of the tender. |
| | The Biplane D.S.A site shall consist of the following rooms: |
| | <ul style="list-style-type: none"> a. Biplane D.S.A Room b. Console room c. Equipment room d. Patient preparation room e. Change room f. Patient waiting area g. Radiologist room |
| | The actual area of turnkey works done will be considered for payment, based on the site measurements. |
| | Civil work |
| | a) Civil construction work including construction of brick wall if any, plastering, flooring as per the approved plan and equipment layout plan. |
| | b) Concrete bed at Biplane DSA equipment area. |
| | c) Platform for unloading and shifting the Biplane DSA should be provided if necessary. |
| | d) Cable tray, trench & channel – necessary trenches, cable tray and channels at required location would be provided. |
| | e) All the construction work to be done as per the final plan approved by the Consignee. |
| | |
| | a) Flooring |
| | 1. 600 x 600 mm vitrified tiles with 100mm tile skirting to match in console room lobby and patient preparation areas, Radiologist room etc. |
| | 2. 50 mm thick cement concrete flooring with Vinyl flooring in Biplane DSA equipment /UPS room. |
| | |
| | b) Painting |
| | 1. Two coats Plastic Emulsion Paint over 2 Coats of wall putty including primer in patient preparation area, Lobby area, console room, Biplane DSA room & Equipment room etc. |
| | |
| | c) False Ceiling |
| | 1. Acoustical tile for ceiling with light weight insulating material of high quality supported on grid or finished seamless with support above ceiling. Finished with white painting or powder coated with white paint, if metallic. Ceiling height to suit the equipment mount and clearances. |
| | |
| | Plumbing work |
| | 3. All water pipes and fittings shall be of high density polythene of approved and standard make the grating shall be brass chrome plated. All plumbing accessories should be of standard make. |
| | |
| | Electrical work |
| | 4. The supplier shall be required to specify the total load requirements for the Biplane DSA centre including the load of air conditioning, room lighting and for the accessories if any. The supply line will be provided by the institute up to one point within the Biplane DSA centre. The distribution panel shall be provided by the vendor. Few lights |

| | |
|--|--|
| | in each room shall be connected to the UPS to provide emergency lighting. |
| | |
| | 5. The electrical work shall include the following: |
| | a. Wiring – All interior electrical wiring – with main distribution panel board, necessary MCBs, DB, joint box, switch box etc. the wires shall be of copper of different capacity as per the load and should be renowned make as listed below. |
| | b. Switches light and power points should be of modular type and of standard make as listed below. |
| | c. General lights – Mirror optical type 1x25 W or 2x28 W/CFL fittings 2x36, 3x36 W with electronic ballasts. |
| | |
| | 6. AIR CONDITIONING: |
| | Ductable package air conditioners and split AC units may be used according to room requirement and suitability. Humidity control should be effective to eliminate moisture condensation on equipment surface. The Air Conditioning should be designed with standby provision to function 24 hours a day. |
| | The outdoor units of AC should have grill coverings to prevent theft and damage. |
| | Ventilation is required in toilet. |
| | |
| | 2. Environment specifications: |
| | a) Humidity range : Relative humidity 60% and 80% in all areas except equipment room which shall be as per requirement of the equipment. |
| | b) Temperature ranges : 22 + 2°C in all areas except equipment room which shall be as per requirement of the equipment. |
| | c) Air conditioning load : The heat load calculations and maintaining the desired temperature and humidity shall be the responsibility of the bidder. |
| | |
| | Furniture: |
| | a) Revolving Chairs height adjustable, medium-back with hand-rest in the control room and radiologist room and viewing area – 4 Nos. |
| | b) Chairs for patient waiting area – Three seater (chrome plated) : 10 Nos. |
| | c) Wall mounted shelves for catheter and other procedural hardware – 4 Nos. |
| | d) Cupboard with laminate door shutters for storage of spare parts and accessories and records as per requirement. – 3 Nos. |
| | e) Drug trolley 1 numbers for patient preparation area. |
| | f) Patient trolley with rubber foam mattress to be kept in the patient preparation room. |
| | g) Name boards for all rooms |
| | h) Tables for Workstation and Radiologist in reporting room – 2 Nos. |
| | i) Charging rooms should have change lockers and dressing table. |
| | j) Dustbins (plastic with lid) to be provided as required. |
| | k) Any other furniture item as per requirement. |
| | All furniture items should be of standard make as mentioned in the table below: |
| | |
| | Miscellaneous : |
| | i. Knee controlled hand free two station scrub unit with disinfectant /soap dispenser. |
| | ii. Reporting room should have LED X-ray Film viewer with adjustable brightness; capable of holding 3 films of 14”x17” size-2 nos. |
| | iii. Cabling of Network (LAN) connectivity for camera system, console system, workstation and computers etc. |
| | iv. Broadband connection : for REMOTE SERVICE of Biplane DSA system |
| | v. Fire extinguisher Dry CO2 type as required for the building safety. |

3. BRAINSUITE INTRAOPERATIVE MRI 1.5T

The Operating Room Theater/Suite should have

1. 1.5 Tesla MRI for Intraoperative Imaging including installation and RF shielding
2. Ceiling Mounted Intraoperative neuro Image guidance system with automatic patient registration
3. Fully Integrated Digital OT with Data Management system & Integration with intra-operative simulation of follow-up SRS/SRT planning
4. Ceiling mounted OR lights with integrated light camera & OR room camera
5. Compatible Microscope
6. Compatible OR equipment
7. Trainings

It should have the following features:

Definition (Schematic Drawing attached):

- DR : Diagnostic Intraoperative Room
- OR : Intraoperative Neurosurgical Room

1. 1.5 Tesla MRI for Intraoperative Imaging (DR):

- a. Stable ultra-short length (150cm or less) whole body superconductive magnet strength of 1.5 Tesla magnet with active shielding.
- b. High Performance gradient system with minimum gradient strength of 30mT/M or better.
- c. MR –compatible OR table with dockable /detachable table top and compatible head holder for stabilizing patients head during the procedures.
- d. Patient table should be able to take at least 150 kg patient load. Patient table should be usable as the operating table & should easily swivel or slide out for operating position. It should be incorporated with operating MR compatible head holder so as to allow imaging during surgery in supine, prone and lateral position.
- e. It should include a tried and tested effective patient transfer / transportation system to shift the patient from the OR to the MRI scanner for intra-operative scanning and back to the OR in a safe and practical manner.
- f. Magnet bore to be sufficiently wide (70cm or more) after positioning of gradient shim and RF antennae to allow positioning the patient during surgery with head frame / head holder for imaging.
- g. Digital RF Transmit and Receive System with 16 independent RF channels to permit PAT factors up to 4 (one direction) or more to help increase speed acquisitions.
- h. Minimum 6 channel Head Coil that can be used for image acquisition and intra-operative applications in Prone, supine & lateral positions.
- i. Should be adequate for comprehensive examinations
- j. It should have Image acquisition for T1, T2, Flair, DTI, BOLD & volumetric 3D sequences
- k. Should have all the necessary coils & supports systems
- l. The MRI Vendor should be responsible for the end to end installation of the MRI machine including interior finish of the DR and the OR, RF shielding and any required turnkey work

2. Ceiling mounted Intraoperative neuro image guidance system with automatic patient registration (OR):

Hardware

- a. The system should be wireless with passive marker technology.

- b. It should have a Zero OR footprint concept provided through ceiling-mounted camera and touch display.
- c. The system should be fully integrated with the Intra-operative MRI and both preoperative & Intraoperative patient data should be automatically registered without any manual registration steps required.
- d. The system should allow automatic patient registration in any patient position i.e separate lateral & prone position with –
 - Pre-operative patient registration allowing patient to be registered automatically immediately as the scan is done using the MRI.
 - It should again automatically recognize and automatically register the patient during intra-operative scan compensating for craniotomy and brain shift by deformity correction and provide an exact visualization for the ‘Brainshift’.
 - All necessary hardware should as registration matrix along with the sterilization tray and specialized MR compatible Cranial reference unit should be included.
- e. It should also included option of manual pre-operative patient registration with skin sensitive touch device for maximum accuracy in prone position & Laser guided registration device for markerless/touch free & fast registration while performing manual patient registration.
- f. It should have flexible positioning of cameras and monitor with multi articulated arms allowing adjustment to virtually any position.
- g. It should have a Ceiling mounted touch screen monitor (min 26”) with brilliant display quality & resolutions beyond full HD (1920x1200pixels per display). Image quality entirely preserved, no visualization limitations from the touch interface (surface acoustic wave technology).
- h. Interface Box for connectivity i.e. with surgical microscopes, fluoroscopes, endoscopes, ultrasound etc. via state-of-the-art digital and analog video inputs supporting up to full HD resolution. HD/SD-SDI up to 1080i/29.9fps, composite (CVBS, NTSC/PAL), S-video (NTSC/PAL), 1x SDI HD (In), 1x S- Video (In), 1x Composite (In), 1x Microscope Connector (with : 1x USB 2.0, 1x RS232, 1x SXGA, 1x SDI HD (In), 1x Composite (In).
- i. System should be operable without keyboard & mouse.
- j. It should have high-end Infrared camera with Optical, laser guided and advanced wireless passive marker tracking technology.
- k. The system should display of a predefined trajectory pathway, inline and probe eye views.
- l. The probe should have capability to show images at 0mm – 180mm in from of it (Tool Tip Extension). The virtual tip should be also have the accuracy verification/ predication system in-built in the system.
- m. The system should have sub-millimetric patient accuracy ideal for deep sealed cranial biopsies, at the same time the system should also have the accuracy verification / prediction system in-built in the system.
- n. The system should have screenshot storage function for documentation purpose.
- o. Fine-adjustment for navigated frameless biopsies, shunt placements & endoscopic examination guided by the navigation system. Allows precise online tracking according to the pre-planned trajectory; Adapts to fit cylindrical instruments of 1.8mm -8.0mm and up to 300g, Holds instruments with length of up to 35 cm and should have the adapter for connecting it to the MRI compatible head holder.

Software

- p. The Advance Cranial applicable software should have a separate workstation with TFT motor for advanced cranial surgery planning enabled with transfer of preoperative data from CT, MRI, DTI, BOLD, SPECT, PET etc in DICOM format from any sources.

- q. Both the Planning and navigation software should have the functionality of doing advanced 3D Visualization allowing display to bone-vessel, skin overlay. Maximum-intensity-Projection, Digital Radiography (DRR etc) view options with flexibility to superimpose 3D data images on the surgical plan and cut and crop functionality to adjust 3D images.
- r. Software should offer Automatic segmentation of anatomical cranial organs for the fat delineation of the anatomical structures. All anatomical objects such as Brainstem, Cerebrum, Cerebellum, CSF, Edema, gray matter, Hippocampus, Hypothalamus, Putamen, resection cavity, ventricles, thalamus, vessels, white matter, whole brain, eyes, optic apparatus etc should be automatically contoured by the system.
- s. Software should offer automatic Image fusion of the CT, MR, DTI, BOLD, PET & SPECT images.
- t. The software should have the capability to paint the targets and adapt to the complex 3D structure of the lesion/ object /landmark using the HU value so that it becomes quick & time saving to outline the object during pre-operative & intra-operative planning.
- u. Software should offer Conversion of fiber tracts to 3D structures for visualization & interactive selection of Fiber tracks. It should provide automatic Fibretracking base on point to-point, point-to-location/region, and also drawn contoured object to normalshowing different color code for the direction of hydrogen atom in Fibretracking (display of fibers in original red-green-blue color code for detailed functional information.
- v. Software should allow anatomical images to be merged with functional maps to visualize perceptual, motoric & cognitive areas of the brain using the Blood Oxygen level dependent (BOLD) mapping & localization of functional areas. It should include Pre-processing of data including motion correction, since time correction and smoothing, flexible definition of different functional paradigms and should support of block-designed paradigms for motoric and speech areas with automatic detection of functional activations in the time series view for verification of signal to paradigm correlation. It should include Interactive selection and display of functional areas and regions of interest with possibility to Convert into 3D objects for use in navigation.
- w. Software for Frameless Biopsy system
- x. Microscope interface software should have advanced image guided microscope: Tracking of spatial orientation, viewing, direction, and associated focal point of the microscope, Superposition of 3D projections and reformatted contours of pre-planned anatomical structures, targets, and trajectories Injection of such 3D information (contours, trajectories, targets) into the optical pathway of the microscope Injection of non-correlated video images (e.g. endoscope) or diagnostic images (reformatted 2D/3D images) into optical pathway Continuous “smart” auto focus to the instrument or pointer tip.
 - The System should provide additional navigation information like “distance to target”, “tumor extension” and “target/trajectory” information.
 - The microscope integration should deliver Heads up display and image injection module into the microscope eyepiece provided the microscope itself has those features.
 - The system should have the entire kit for microscope integration.

3. Fully Integrated Digital OT with Data Management System & Integration with follow-up Radiosurgery /Radiotherapy

- a. It should include IP based Digital OR with seamless integration with Intra-operative iMRI & the Navigation platform:
 - Minimum 42” wide Full HD (1920x1080 pixel) ON-wall Touchscreen display (2 units required in the OT). Both units should seamlessly integrate with each other and pair with each other.
 - In-built high performance workstation (min. 4GB RAM & 250 GB storage) allowing connection with upto Six video signals and routing contents with pre-designed expandable capabilities/ connection point on the surgical pendant for future addition of Intra-operative devices.

- In-built communication controls such as video conferencing, Recording and Live Streaming should be possible using the touchscreen.
 - Full integration with the Hospital Network and should be able to configure the IP series as provided by the hospital.
 - Full DICOM Import of patient data from Hospital Network / PACS
 - Analog/ Digital import of any modalities such as MRI, CT, X-Ray, PET, SPECT, Ultrasound etc.
 - Transfer of DATA using USB, CD or DVD.
 - In-built patient data privacy & HIPPA compliant with user log-in and auto log-off
 - Possibility to route images, patient data, Intra-operative video sources through touchscreen without the use of keyboard or mouse.
 - The system should include all transfer lines/ cables connection within the OR
 - It should include Intra-operative Device management & Integration including.
 - Video inputs with Full HD with SDI (OT light camera & OT Room Camera) should be integrated.
 - Different input formats such as S-video (Ultrasound), Composite (C-arm), DVI (Endoscope/ Microscope) & also standard RGB/VGA should be supported for integration
 - Special provision of additional input signals on the surgical pendant
- b. Interactive DICOM viewer capabilities should include:
- Capability on Interactive DICOM capabilities including Zoom-in/out, panning, scrolling, add/subtract slices, flipping, Rotating, Adjusting contrast/ brightness
 - Capability of Measurement functionalities for distance, angles and circles should be possible on the modalities.
 - The system should allow instantaneous 3D visualization for analysis
 - 3D volume rendering of CT, MR, PET, SPECT datasets with presets for visualization of skin, bone, vessel, DRR and MIP should be included.
 - Superimposition of 3D dataset visualization and surgical planning data such as 3D contours, trajectories and annotation should be visualized instantaneously.
 - It should allow crop functionality to cut through the planes in 3D along any direction and should allow to manipulate the threshold of the relevant anatomy.
 - The system should allow quick and easy volumetric outlining of pathologies and anatomical structures with instant volumetric contouring and calculation of outlined structure in just two orthogonal slices.
 - It should allow automatic creation of volumetric report defining the geometrical measurements like volume, PECIST & Macdonald criteria
 - It should allow automatic fusion of multiple data CT, MRI, MRA, PET, SPECT, DTI & BOLD
 - The system should also allow planning for multiple trajectories for different Neurosurgical workflow with interactive touchscreen control for target and entry point definition
 - Option for flexible scaling of trajectory diameter should be included in the system
- c. It should include Live Streaming of OR procedure capabilities as-
- Live streaming should be possible using the touchscreen which can be viewed using the hospital network or web browser from anywhere.
 - It should be possible to live stream video signal from HD camera (Room & OT camera), endoscope, Microscope, Ultrasound etc whichever is being used intra-operatively.

- d. Digital Recording capabilities as –
- It should be able to locally record the procedure in digital HD quality on the in-built computer on the wall itself using the touchscreen.
 - The system should allow storing of all recording to the USD or Hard disk once the procedure is finished.
 - It should also allow taking screenshot of the live procedures on the display using the touchscreen. All screenshots taken on the live streaming /videos during the procedures should also be stored on the in-built computer platform on the wall which can later be transferred to USD/Hard disk once the procedure is finished.
 - It should also have the provision of configuring to save of recordings, screenshots etc on the hospital network.
- e. Audio-Video conferencing capabilities should include-
- Web-based/VOiP based audio video conferencing should be provided
 - The system should have built-in camera and microphone for conferencing
 - It should also have the capabilities to configure Bluetooth microphone for conferencing in sterile environment.
 - It should also allow network based remote consulting, viewing and communication from Surgeon's office, Doctor's lounge, Seminar room/ hall, Auditorium room through the network.
- f. The system should allow integration with the existing Hospital HIS platform HL7, DICOM3, IHE standard.
- g. The system should also include display of Surgical checklist for improved patient safety-
- The Electronic checklist should be based on WHO principles
 - Checklist should guide through different questions to make sure that e.g. the correct patient is operated at the correct site, the OR team prepares for risk of high blood loss, the OR team will avoid inducing an allergic drug reaction for which the patient is known to be at risk, etc.\
 - The Checklist should be available in English language.
 - It should have Full integration of checklist in Hospital Information System (HIS). It should create document providing evidence that all steps in the checklist were completed and is sent to HIS and embedded in the electronic medical record of the patient.
- h. Intra-operative simulation of follow-up SRS/SRT planning
- It should allow automated analysis of follow-up Stereotactic Radiosurgery/Radiotherapy simulation plant for residual benign brain tumors during surgery.
 - SRS/SRT plan feasibility should allow reducing surgery time and decreasing morbidity by providing criteria for concluding subtotal resection.
 - It should be have automatic intra-operative plan simulation of follow-up SRS/SRT based on initial or updated tumor volume.
 - It should include Automatic simulation and intuitive side-by-side comparison of single fractionated, hypo-fractionated, and conventional fractionated treatment plans
 - It should have comprehensive visualization of the simulated plan results like dose volume histogram, including dose conformity and constraints and visualization of the dose distribution.
- 4. Compatible ceiling mounted OR lights with integrated camera & OR Room Camera:**
- a. Operating Room should have high-end surgical OR lights with 4-arm system with High illumination intensity, low heat radiation and easy-to-operate swivel arms and integrated video camera

- b. The other tow arm system should hold the navigation camera & display screen
- c. The PTZ HD room camera should also be included.

5. Compatible Microscope:

- a. Compatible high-end surgical microscope which ahs the required softwares for making it navigation ready.
- b. The microscope should offer autofocus and advance 'Image Injection' capabilities
- c. The microscope should have advanced Digital Video System with 3CCD camera.

6. Compatible OR equipment:

- a. Set of boom and spring arms to be installed in the OR to hold monitors, surgical and anesthesia equipment.
- b. MRI Compatible Anesthesia Ventilation System with MR compatible respiratory cylinders – Qty 01
- c. MRI safe I.V Pole 4 hook system – Qty. 04
- d. MRI Compatible Patient Monitoring System with ECG, NiBP, iBP, SpO2, EtCO2, Respiration and Temperature options should be included – Qty. 01
- e. Drug administration system/ pump for exact medication dosage – Qty. 02
- f. OT Chair – Qty 04

7. Installations & Trainings:

- a. Training for surgeons, Radiographers, Nurses & Technicians should be done onsite from the supplier for Two continuous weeks followed by repeat trainings of One weeks each at 6 months & 12 months from the day of going clinical.

All interior and finishing with the Brainsuite intra-operative MRI area shall be done by supplier to make it clinically functional as per the standard.

4. **MOBILE CT SCANNER FOR NEUROSURGERY / TRAUMA**

A COMPACT, PORTABLE, BATTERY & LINE POWERED MULTI-SLICE CT SCANNER IS REQUIRED FOR CRANIAL AND CERVICAL SPINE APPLICATIONS IN NEUROSURGERY ICU, OT & TRAUMA.

THE EQUIPMENT SHOULD BE FDA APPROVED.

X-RAY GENERATOR AND TUBE

1. SHOULD HAVE MULTI-SLICE CAPABILITY WITH MINIMUM OF 8 SLICES PER ROTATION.
2. THE TUBE VOLTAGE SHOULD VARY FROM 100-140 KV
3. TUBE COOLING SHOULD OCCUR IN LESS THAN 15 MINUTES
4. X-RAY TUBE SHOULD BE FIXED ANODE OR BETTER.
5. SHOULD HAVE SOLID-STATE DETECTORS.

GEOMETRY

1. SHOULD HAVE A MINIMUM PATIENT OPENING OF 30 CM.
2. IMAGE FIELD OF VIEW SHOULD BE AT LEAST 250 MM.

IMAGE PROCESSING:

1. SHOULD HAVE CAPABILITY TO PERFORM NON CONTRAST CT (AXIAL), CT ANGIOGRAPHY (HELICAL), CT PERFUSION (AXIAL) AND 3D CT RECONSTRUCTION.
2. SHOULD ALLOW VOLUMETRIC DATA ACQUISITION
3. SCAN TIME FOR CT ANGIOGRAPHY AND CT PERFUSION SHOULD BE LESS THAN 4 MINUTES.

IMAGE QUALITY :

1. THE RECONSTRUCTION MATRIX SHOULD BE AT LEAST 512 X 512

CONNECTIVITY:

1. SHOULD HAVE DICOM FUNCTIONS AND FULL DICOM 3 COMPATIBILITY. GIGABIT ETHERNET CONNECTIVITY IS ESSENTIAL AND WIRELESS CONNECTIVITY IS DESIRABLE. THE VENDOR HAS TO CONNECT THE EQUIPMENT WITH THE EXISTING PACS NETWORK OF THE HOSPITAL COMPATIBLE WITH THE DEPARTMENT OF NEURORADIOLOGY.

ELECTRICAL SUPPLY:

1. SHOULD BE ABLE TO RUN ON SINGLE PHASE 220V AC
2. SHOULD HAVE AN INTERNAL AUTOMATIC VOLTAGE REGULATOR TO PROTECT AGAINST VOLTAGE FLUCTUATIONS AND POWER SURGES.
3. SHOULD BE SUPPLIED WITH INDIAN PLUG

PORTABILITY:

1. SHOULD BE COMPACT AND PORTABLE WITH ABILITY TO MOVE WITHIN ELEVATORS AND THROUGH NORMAL SIZED DOORS.
2. SHOULD HAVE BATTERY BACK UP FOR ATLEAST 2 SCANS.

SAFETY:

1. SHOULD BE SAFE ENOUGH TO BE USED ENVIRONMENTS SUCH AS ICU AND OT
2. SHIELDING UPGRADE IF AVAILABLE SHOULD BE PROVIDED.
3. SHOULD SATISFY INTERNATIONAL RADIATION SAFETY REQUIREMENT.

WORKSTATION:

A MOBILE WORKSTATION WITH ALL IMAGE PROCESSING SOFTWARE SHOULD BE PROVIDED.

PACS COMPATIBILITY, MACHINE SHOULD BE COMPATIBLE WITH ALL PACS SOLUTION AND SHOULD INTERFACE DIRECTLY WITH ANY PACS SOLUTIONS IN THE HOSPITAL.

OPTIONAL ACCESSORIES FOR USE IN OPERATION THEATER & FOR GENERAL USE

1. SKULL CLAMP INCLUDING
 - PARK BENCH BASE UNIT & SPINDLE ADAPTOR
 - 150MM EXTENSION BARS
 - 1 BOX OF TITANIUM PINS CONTAINING 50 PINS
 - TORQUE WRENCHES -2
2. OT TABLE ADAPTOR
3. GEL PADS (ADULT & PEDIATRIC 1 EACH)
4. SILHOUETTE SCAN BOARD
5. CERETOM SURGICAL DRAPER
6. NAVIGATION ADAPTOR
7. PRESSURE INJECTOR
8. LEAD APRON -6 NOS
9. THYROID LEAD SHIELD – 6 NOS
10. X-RAY FIELD DIGITIZER
11. HORSE SHOE HEAD REST (ADULT & PAEDIOTRIC EACH)

5. OPERATING MICROSCOPE FOR NEUROSURGERY

| Item No. | Name of Item | Detailed Description & Technical Specification | Qty. | Unit |
|----------|----------------------|--|------|------|
| 1. | Operating Microscope | <p>SURGICAL OPERATING MICROSCOPE FOR NEUROSURGERY</p> <p>MICROSCOPE BODY and OPTICS:- Should have Motorized zoom magnification system with apochromatic optics, zoom magnification factors to be around the range of 0.4x to 2.4x. All activation should be by handgrip, Stand mounted LCD control panel and foot control panel, with manual override. Total magnification range 2X- 18X or higher. Internal motorized fine focusing system. All activation should be by handgrip, Stand Mounted LCD control panel and foot control panel, and with manual override. These should be continuously adjustable with working distance from about 200 mm to 500 mm without exchange of objective lens. There should be integrated continuously variable illumination field from 60mm – 15mm or less. Beam Splitter should preferably be integrated in the microscope body, without any external attachment with face to face attachment with rotatable dovetail mount for fatigue free surgeries.</p> <p>BINOCULAR TUBE : 0-180 degree range tiltable binocular tube with focal length =170 mm or higher. Should Graduated knob for continuous adjustment of interpupillary distance from 55 mm to 75 mm</p> <p>Auto balance and Auto Drape – System should be capable of auto-balancing the microscope intraoperatively. Autobalance should be fully computerized and should not involve any manual rotation of knobs (automatic self balancing).</p> <p>EYEPIECES : Pair of high eyepoint widefield push-in eyepieces 10x magnification with magnetic locks, with diopter setting range from -8D to +5D for spectacles wearers. The lenses should have rubberized cuffs for comfort and should preferably have antifogging coating. Face to face attachment for spinal surgery. Stereo Co Observation attachment with two joints with side changer. Optics and eyepiece similar to main surgeon unit.</p> <p>ILLUMINATION SYSTEM :Coaxial xenon illumination of about 300W with back up similar rating xenon with quick-action lamp changer in case of failure of main lamp should be integrated within the microscope stand. In case of electronic system failure the light should continue to work with manual overdrive for optics adjustment. Should have automated illumination Brightness control linked to working distance and magnification.</p> | | |

| Item No. | Name of Item | Detailed Description & Technical Specification | Qty. | Unit |
|----------|--------------|---|------|------|
| | | <p>Should have automatic zoom-synchronized illumination field diameter, with manual override and reset feature.</p> <p>HANDGRIPS : Easily maneuverable handgrips with adjustable keys for zoom and focus, Illumination & Magnetic brakes. Programming for magnetic brake for control of stand & Microscope body brakes. Camera controls for video and still images should be programmable on handgrips.</p> <p>FLOOR STAND : Rollable floor stand on base with lockable castors, carrier and swivel arms with large reach of 1.30m or higher, Weight carrying capacity at least 18 Kg. Should have free float magnetic system with Multiple magnetic brakes for Microscope body & Stand with, release of magnetic brakes by handgrips with contrives stand.</p> <p>Touch screen Liquid crystal display (LCD) with user prompts, quick set up of different parameters and their activation at press of a button such as automatic speed adjustment or automatic brightness setting depending on magnification.</p> <p>System may preferably have overhead LCD display for showing important parameters to operating surgeon.</p> <p>INTEGRATED DIGITAL VIDEO CAMERA SYSTEM : Advanced digital 3CCD HD Video camera should be attached to supply output to the stand mounted colour LCD screen. In addition there should be ports for connection to PC via USB/FireWire ports, 15 pin VGA port for color monitor, HDMI port +/- DVI port and preferably LAN connectivity.</p> <p>Should be capable of doing video speed focus for independent focusing apart from microscopic focus. All imaging to be DICOM compatible.</p> <p>USER PROGRAMMING : Programming for starting illumination, magnification working distance, Zoom speed & Focus speed for at least 8-9 different users.</p> <p>VIDEO/IMAGE DATA MANAGEMENT SYSTEM : should have attached video recording system & still photo in the microscope stand with internal HDD of at least 1 TB, and high speed DVD writer. Latest generation macintosh based desktop computer system with video editing software for image processing and editing (video handling – atleast 2 GB hardware) and auto duplex printing laser multifunction printer to be provided separately. Original display adapters for 15 pin VGA and HDMI output also to be provided with the desktop along with a 1 KVA UPS.</p> <p>VIDEO MONITOR : medical grade 19” Touch screen Colour LCD display should be mounted on Microscope stand.</p> | | |

| Item No. | Name of Item | Detailed Description & Technical Specification | Qty. | Unit |
|-----------------|---------------------|--|-------------|-------------|
| | | Fluorescence and ICG – system should be upgradeable to Intraoperative Fluorescence as well as ICG. Systems without this upgradability will not be considered. Image guidance – Microscope should be fully ready for image guidance system integration. | | |

6. CUSA/ULTRASOUNDIC DISSECTOR / ASPIRATORS NEUROSURGERY

Description of function

Ultrasonic aspirators use mechanical ultrasonic vibration and irrigation to fragment and remove soft tissue and high water content growths from the body.

1.
 - a. Unit should be light weight and portable on trolley with US FDA approval certificate to be enclosed. Should have single foot switch.
 - b. Unit and handpieces should not get heated while using continuously. No cooling system should be required to keep unit and handpieces for getting heated.
 - c. Should have inbuilt suction system with vacuum – 0.0 to 0.9 bar.
 - d. Irrigation capacity of 0 – 160 ml/min.
 - e. Power Input to be 220 – 240 VAC.
2. **Handpieces** (choice of out side & insude irrigation)
 1. Hand piece should be light weight with detachable cable intraoperative exchange of handpieces. The handpieces shot
 2. Should be magnetorestrictive or piezoelectric technology based system.
 3. Resonance frequency of tip should be in range of 20 – 36 khz:
 1. Short Angled Macro handpiece 23 -25 khz, Tip Dia outside 2.0 to 2.2 mm, inside : 1.4 to 1.7 mm.
 2. Short Angled macro Handpiece 23 – 25 khz, Tip Dia. Outside 3.0 to 3.5 mm, inside : 2.0 to 2.2 mm.
 3. Long Angled Micro Handpiece 34 – 36 kHz, Total length 250 to 300MM, Working length : 100 to 110 MM, Weight: 80 to 85 g tip diameter Out side : 2.0 to 2.3 MM, Inside 1.5 to 1.7 MM.

NOTE :

If Disposable Handpiece's tips are being offered then 50 tip : diameter to be quoted with the main offer as asked in the specification.

3. Accessories
 - a. Sterilization tray
 - b. Suction bottle with suction lid
 - c. Hose system disposable
 - d. Foot switch
 - e. Suction refill bags
 - f. Cleaning brush for handpieces
 - g. Trolley for main console
 - h. Gallows for irrigation bottle
 - i. Power cable
 - j. Bacteria filter disposable
 - k. Service manual
4. Essential consumables should be freely available. The firm should clearly indicate in the technical bid itself that the prices of all standard accessories / disposables as well as the other terms & accessories specifically mentioned in the above specifications are included in the quoted price.

5. Compliance report to be submitted in a tabulated and point wise manner clearly.
6. The after sales service must be available in Delhi/ NCR. Bidders must attach certificates from users for satisfactory after sales services and the list of users.
7. Power input to be 220 -240 VAC, 50Hz fitted with Indian plug.
8. Suitable UPS with maintenance free batteries for minimum two-hour back-up should be supplied with the system.
9. Manufactures/Supplier should have ISO or equivalent certificate to Quality Standard.
10. Should be compliant with IEC 61010-1: (or any international equivalent e.g. EN/UL 61010) covering safety requirements for electrical equipment for measurement control and laboratory use.
11. Should be US – FDA/ European CE approved product.
12. Comprehensive training for 2 surgeon and 2 assistant at site, till familiarity with the supplied system.
13. User / Technical/Maintenance manuals to be supplied in English.
14. Certificate of calibration and inspection.
15. List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.
16. List of important spare parts and accessories with their part number and costing.
17. Comprehensive Warranty 5 Years and CMS 5 Years to be quoted.
18. Institute reserves the right to have a LIVE demonstration at Sadarjung Hospital, in addition to DRY demo/ catalogue, if required.

7. TRANSCRANIAL DOPPLER (DIGITAL)

1. The system should be latest and of state of art h fully digital technology to incorporate the facility of 2D, M-mode, CDI, PW, CW-Doppler, power Doppler for trans-cranial, cerebrovascular and peripheral vascular evaluation.
2. System should be portable and the weight of the equipment should not be more than 10 Kg.
3. the system should have 2D, M-mode, Color flow, PW, CW and Color power Doppler facility.
4. System should support broad band Phased and Linear array transducer technologies.
5. The system should have suitable LCD/TFT monitor. Mention the size of the monitor.
6. Frequency processing facility for the transducer should be 2-13MHz. This should be available without need for frequency switching or equivalent.
7. The system should be capable of supporting adaptative image processing technique that performs analysis at the pixel level eliminating speckle noise artifact and dynamically enhancing tissue textures, margins and borders.
8. The system should have independently selectable gain control.
9. Automated measurement of intima-media thickness (IMT) should be possible.
10. Triplex imaging, zoom facility in live and frozen images.
11. Should have one touch image optimization and automatic real time Doppler tracing.
12. Mention the dynamic range. The scanning depth should be minimum 30cm or more.
13. Cineloop review facility should be available. Facility of independent steering of B-mode and color beam on linear probe or equivalent.
14. Tissue harmonic imaging in phased array and linear probe.
15. Minimum 2 active imaging transducer ports or more should be available with the system.
16. Linear array imaging with expandable field of view on both side of linear image or equivalent.
17. PW/CW Doppler facility in all images in phased array sector transducer.
18. Mention the capacity of hard disk and storage facility available.
19. System should have inbuilt image management, with facility for direct storage of images and cineloop in hard disk drive.
20. Archive-should have facility to transfer images to CD-R/W drive.
21. System should have facility to connect to laser color printer for printing images and reports.
22. Full function measurement facility and calculation should be possible.
23. Linear probe should have facility for trapezoidal imaging, should compound imaging.
24. Measurement RI and PI facility should be available.
25. Please attach original manufactures product catalogue, specification sheets. Photo copy or computer printed will not be accepted.
26. All information in the tender document must be supported with original product data sheet. All information asked for must be provided in the same order as in the specifications. Incomplete or ambiguous information's will not be accepted.
27. System should be quoted with the following transducers:-
 - 2-4MHz broad band phased array transducer with tissue harmonic imaging.
 - 1.9MHz CW probe /2 MHz CW probe.
 - Linear probe of 6-12 MHz with tissue harmonic imaging.
 - Laser color printer of best make should be provided.
 - A online UPS with 30 min back up.
 - Boot up time of less than 2 min.
 - Warrantee for at least 5 years for the total system including free replacement of probes able/Optional:
 - The CMC for at least 8 years after the expiry of warranty period.
 - The firm should provide the list of installations in India.

8. CRANIOTOMY SET & NEURO SURGERY HAND INSTRUMENTS LIST

| S.No. | LAMINECTORMY SET-2 sets to be ordered | Qty. Per Set |
|-------|--|--------------|
| 1. | BACKHAUS TOWEL CLAMP 90MM | 4 |
| 2. | BACKHAUS TOWER CLAMP 135MM | 4 |
| 3. | SCALPEL HANDLE #3 125MM | 1 |
| 4. | SCALPEL HANDLE #4 135MM | 1 |
| 5. | TC MAYO SCISSORS STR 170MM | 1 |
| 6. | TC MAYO SCISSORS CVD 170MM | 1 |
| 7. | TC METZENBAUM SCISSORS STR 145MM | 1 |
| 8. | TC METZENBAUM SCISSORS CVD 145MM | 1 |
| 9. | TC METZENBAUM SCISSORS CVD 180MM | 1 |
| 10. | TC METZENBAUM SCISSORS DEL CVD 230 | 1 |
| 11. | SUCTION CANNULA BARRON 1MM | 1 |
| 12. | SUCTION CANNULA BARRON 2MM | 1 |
| 13. | CUSHING TISSUE FORCEPS 1X2 178MM | 1 |
| 14. | WAUGH DEL TISSUE FORCEPS 1X2 200MM | 1 |
| 15. | CUSHING TISSUE FORCEPS 1X2 178MM | 1 |
| 16. | WAUGH DEL TISSUE FORCEPS 1X2 180MM | 1 |
| 17. | FORCEPS BAYO SMOOTH 185MM | 1 |
| 18. | ADSON FORCEPS BAY SHAPED 175MM | 1 |
| 19. | FORCEPS RAMSEY 175MM | 1 |
| 20. | ADSON ELEVATOR SHARP FLAT 8MM | 1 |
| 21. | ADSON RASPATORY CVD. 7MM WL. | 1 |
| 22. | ADSON RASPATORY CVD. 7MM WL. | 1 |
| 23. | ADSON RASPATORY STR. 7MM WL. | 1 |
| 24. | SELF-RETAINING RETR 3X4T. BLUNT 195MM | 2 |
| 25. | LANGENBECK RETRACTOR SOLID 40X10MM 230MM | 1 |
| 26. | LANGENBECK RETRACTOR SOLID 43X13MM 229MM | 1 |
| 27. | LANGENBECK RETRACTOR 64X20MM 210MM | 1 |
| 28. | BECKMANN-ADSON RETR 4X4 SEMI-S 305MM | 2 |
| 29. | ADSON BABY RECTRACTOR 3X4 BLUNT 140MM | 2 |
| 30. | ADSON RETRACTOR SEMI-SHARP 4X4T.210MM | 2 |
| 31. | ADSON DISSECT. FORCEPS W/O T.180MM | 1 |
| 32. | LUER-STILLE BONE RONGEUR STR 225 MM | 1 |
| 33. | STILLE-RUSKIN BONE RONGEUR 240MM | 1 |
| 34. | RUSKIN BONE RONGEUR CVD 190MM | 1 |
| 35. | ECHLIN BONE RONGEUR JAW 3X10MM 230MM | 1 |
| 36. | LEMKPERT BONE RONGEUR STR 2MM 165MM | 1 |
| 37. | LUER BONE RONGEUR STR 175MM | 1 |
| 38. | LUER BONE RONGEUR CVD 175MM | 1 |
| 39. | BEYER BONE BONGEUR CVD 175MM | 1 |
| 40. | JANSEN BONE RONGEUR CVD 175MM | 1 |
| 41. | DAHLGREN SKULL PUNCH W/2 X-HOOKS210MM | 1 |
| 42. | ECHLIN BONE RONGEURJAW 2X10MM 230MM | 1 |
| 43. | ECHLIN BONE RONGEURJAW 3X10MM 230MM | 1 |
| 44. | ECHLIN BONE RONGEURJAW 3X10MM 230MM | 1 |
| 45. | ZAUFAL-JANSEN BONE RONGEUR CVD 180MM | 1 |
| 46. | ECHLIN BONE RONGEUR JAW 3X10MM 230MM | 1 |
| 47. | STILLE BONE RONGEUR 230MM | 1 |
| 48. | LEKSELL RONG FCPSDBACT CVD 5X16MM 245MM | 1 |
| 49. | FRYKHOLM BONE RONGEUR 240MM | 1 |
| 50. | STILLE-RUSKIN BONE RONGEUR240MM | 1 |

| | | |
|--|---|---|
| 51. | RUSKIN BONE RONGEUR CVD 190MM | 1 |
| 52. | LUER BONE RONGEUR STR 175MM | 1 |
| 53. | LISTON BONE-CUTTING FORCEPS STR 280MM | 1 |
| 54. | LISTON BONE-CUTTING FORCEPS CVD 280MM | 1 |
| 55. | LISTON-KEY-HORSLEY BNE-CUTTING FCP254MM | 1 |
| 56. | LISTON BONE-CUTTING FORCEPS STR140MM | 1 |
| 57. | ADSON RETRACTOR 3X4 SHARP 265MM | 2 |
| 58. | SELF-RETAINING RETR 3X4T. SHARP 195MM | 2 |
| 59. | ANDERSON-ADSON RETR 4X4 SHARP 190MM | 2 |
| 60. | SELF-RETAINING RETR 3X4T. BLUNT 195MM | 2 |
| 61. | ANDERSON-ADSON RETR 4X4 SHARP 190MM | 1 |
| 62. | ADSON-BABY RETRACTOR 3X4 BLUNT 140MM | 2 |
| 63. | ADSON RETRACTOR SEMI-SHARP 4X4T. 210MM | 2 |
| 64. | JANSEN RETRACTOR 3X3 BLUNT 100MM | 2 |
| 65. | ALM RETRACTOR 4X4T. SHARP 70MM | 1 |
| 66. | ALM RETRACTOR 4X4T. SHARP 100MM | 1 |
| 67. | WEITLANER RECTRACTOR 3X4T. BL. 130MM | 1 |
| 68. | BECKMANN-ADSON RETR 4X4 SHARP 305MM | 2 |
| 69. | BECKMANN-ADSON RETR 4X4 SEMI-S 305MM | 2 |
| 70. | DE'BAKEY FEMUR RETRACTOR F/ADULT 145MM | 2 |
| 71. | JACKSON-BURROWS RETRACTORBLUNT 180MM | 1 |
| 72. | GELPI VAGINAL RETRACTOR 135MM | 1 |
| 73. | GELPI SKIN/VAGINAL RETRACTOR 175MM | 1 |
| 74. | DE'BAKEY FEMUR RETRACTOR F/ADULT 145MM | 1 |
| 75. | CLOWARD LAMINA SPREADER 135MM | 1 |
| 76. | INGE LAMINA RETRACTOR 170MM | 1 |
| 77. | CLOWARD LAMINA SPREADER 135MM | 1 |
| 78. | CLOWARD LAMINA SPREADER 155MM | 1 |
| 79. | INGE LAMINA RETRACTOR 275MM | 1 |
| 80. | INGE LAMINA RETRACTOR 170MM | 1 |
| STANDARD KERRISON PUNCH-1 SET TO BE ORDERED | | |
| 1. | KERRISON 90DG-UP 2MM 180MM | 1 |
| 2. | KERRISON 90DG-DWN 2MM 180MM | 1 |
| 3. | KERRISON 90DG-UP 3MM 180MM | 1 |
| 4. | KERRISON 90DG-DWN 3MM 180MM | 1 |
| 5. | KERRISON 90DG-UP 4MM 180MM | 1 |
| 6. | KERRISON 90DG-DWN 4MM 180MM | 1 |
| KERRISON, IVD AND BONE RONGEUR SET, BLACK CERAMI COATED NONE REFLECTING DETACHABLE KERRISON PUNCH 1 SET TO BE ORDERED | | |
| 1. | KERRISON BLK COATED 130 UP 180X1MM REG | 1 |
| 2. | KERRISON BLK COATED 130 UP 180X2MM REG | 1 |
| 3. | KERRISON BLK COATED 130 UP 180X3MM REG | 1 |
| 4. | KERRISON BLK COATED 130 UP 180X4MM REG | 1 |
| 5. | KERRISON BLK COATED 130 UP 180X5MM REG | 1 |
| 6. | KERRISON BLK COATED 130 UP 180X1MM THIN | 1 |
| 7. | KERRISON BLK COATED 130 UP 180X2MM THIN | 1 |
| 8. | KERRISON BLK COATED 130 UP 180X3MM THIN | 1 |
| 9. | KERRISON BLK COATED 130 UP 200X2MM REG | 1 |
| 10. | KERRISON BLK COATED 130 UP 200X3MM REG | 1 |
| CURVED KERRISON PUNCH 1 set to be ordered | | |

| | | |
|--|---|---|
| 1. | KERRISON CVD.UP 200MM 2MM | 1 |
| 2. | KERRISON CVD.UP 200MM 3MM | 1 |
| 3. | KERRISON CVD.UP 200MM 4MM | 1 |
| BEYONET KERRISON PUNCH 1 set to be ordered | | |
| 1. | KERRISON BAY.SHAPED 130DEG UP 240MM 2MM | 1 |
| 2. | KERRISON BAY.SHAPED 130DEG UP 240MM 3MM | 1 |
| 3. | KERRISON BAY.SHAPED 130DEG UP 240MM 4MM | 1 |
| DISC FORCEPS 1 set to be ordered | | |
| 1. | SPURLING RONGEUR STR 4X10MM 180MM | 1 |
| 2. | SPURLING RONGCVDUP-BITE 4X10MM 180MM | 1 |
| 3. | SPURLING RONGEUR DWN-BITE 4X10MM 180MM | 1 |
| ANTERIOR CERVICAL SET - 1 set to be ordered | | |
| 1. | BACKHAUS TOWEL CLAMP 90MM | 4 |
| 2. | BACKHAUS TOWEL CLAMP 135MM | 4 |
| 3. | SCALPEL HANDLE #3 125MM | 1 |
| 4. | SCALPEL HANDLE #4 135MM | 1 |
| 5. | TC MAYO SCISSORS STR 140MM | 1 |
| 6. | TC MAYO SCISSORS CVD 140MM | 1 |
| 7. | TC METZENBAUM SCISSORS STR 145MM | 1 |
| 8. | TC METZENBAUM SCISSORS STR 180MM | 1 |
| 9. | TC METZENBAUM SCISSORS CVD 145MM | 1 |
| 10. | TC METZENBAUM SCISSORS CVD 180MM | 1 |
| 11. | ALLIS FORCEPS 4X5 155MM | 4 |
| 12. | CRILE FORCEPS STR 140 MM | 6 |
| 13. | CRILE FORCEPS CVD 140MM | 6 |
| 14. | CRILE FORCEPS STR 160MM | 1 |
| 15. | CRILE FORCEPS CVD 160MM | 6 |
| 16. | FORCEPS BAYO SMOOTH 185MM | 1 |
| 17. | GERALD FORCEPS DEL STR 175MM | 1 |
| 18. | CUSHING TISSUE FORCEPS 1X2 178MM | 1 |
| 19. | WAUGH DEL. TISSUE FORCEPS 1X2 180MM | 1 |
| 20. | CUSHING TISSUE FORCEPS 1X2 178MM | 1 |
| 21. | WAUGH DEL. TISSUE FORCEPS 1X2 200MM | 1 |
| 22. | LANGENBECK RETYRACTORSOLID40X10MM 230MM | 2 |
| 23. | KOCHER-LENGENBECK RETR 55X11MM 216MM | 2 |
| 24. | LANGENBECK RETRACTOR 64X20MM 210MM | 2 |
| 25. | KOCHER-LANGENBECK RETR 70X14MM 216MM | 2 |
| 26. | CLOWARD TYPE RETRACTOR W/S BLADES 250MM | 1 |
| 27. | FRAZIER SUCT X-SM 7FR 108MM WRK-LGTH | 1 |
| 28. | FRAZIER SUCT MED10FR 108MM WRK-LGTH | 1 |
| 29. | FRAZIER SUCT LRG 12FR 108MM WRK-LGTH | 1 |
| 30. | FRAZIER SUCT X-SM 7FR 108MM WRK-LGTH | 1 |
| 31. | FRAZIER SUCT SM 8FR 108MM WRK-LGTH | 1 |
| 32. | WULLSTEIN RETRACTOR 3X3 BLUNT130MM | 1 |
| 33. | #2 PENFIELD DISSECTOR 195MM | 1 |
| 34. | #3 PENFIELD DISSECTOR 195MM | 1 |
| 35. | #4 PENFIELD DISSECTOR 205MM | 1 |
| 36. | VOLKMANN BONE CURETTE #0003.6MM 172MM | 1 |
| 37. | VOLKMANN BONE CURETTE #00 4.4MM 172MM | 1 |
| 38. | VOLKMANN BONE CURETTE #0 5.2MM 172MM | 1 |

| | | |
|---|---|----|
| 39. | VOLKMANN BONE CURETTE #1 6.8MM 172MM | 1 |
| 40. | VOLKMANN BONE CURETTE #2 8.5MM 172MM | 1 |
| 41. | COTTLE PERIOSTEAL ELEVATORCVD 197MM | 1 |
| 42. | ADSON NERVE HOOK SHARP | 1 |
| 43. | ADSON NERVE HOOKBLUNT | 1 |
| 44. | CUSHING RONGEUR STR 2X10MM 180MM | 1 |
| 45. | CASPAR RONGEUR UP-BITE 2MM 155MM | 1 |
| 46. | CASPAR RONGEUR DWN-BITE 2MM 155MM | 1 |
| 47. | CLOWARD LAMINA SPREADER 135MM | 1 |
| 48. | INGE LAMINA RETRACTOR 170MM | 1 |
| 49. | STILLE-RUSKIN BONE RONGEUR 240MM | 1 |
| 50. | LEKSELL-STILLE BONERONGEUR 240MM | 1 |
| 51. | LEXER GOUGE PEEK-HDL 7MM 225MM | 1 |
| 52. | SPONG GOUGE PEEK-HDLCVD10MM254MM | 1 |
| 53. | CAPENER LAMINA GOUGE 6MM WIDE 235MM | 1 |
| 54. | TC RYDER NEEDLE HOLDERDELSERR 175MM | 1 |
| 55. | TC MAYO-HEGAR NDHOLDERHVYSERR150MM | 1 |
| 56. | TC MAYO-HEGAR NDHOLDERHVYSERR185MM | 1 |
| 57. | TC MAYO-HEGAR NDHOLDERHVYSERR205MM | 1 |
| 58. | LISTON-KEY-HORSLEY BNE-CUTTING FCP254MM | 1 |
| FULL CRANIOTOMY SET-2 sets to be ordered | | |
| 1. | BACKHAUS TOWEL CLAMP 90MM | 4 |
| 2. | BACKHAUS TOWEL CLAMP 135MM | 4 |
| 3. | SCALPEL HANDLE #3 125MM | 1 |
| 4. | SCALPEL HANDLE #7 ENGLISH NO.5 160MM | 1 |
| 5. | RANEY APPLY/REMOVING FCPS F/FF002FF015P | 2 |
| 6. | RANEY SCALP HEMOST.CLIP PACK OF 25PCS. | 4 |
| 7. | DANDY DELICATE FORCEPS CVD140MM | 10 |
| 8. | DANDY DEL FCPS LAT-CVD 1X2 140MM | 10 |
| 9. | KOCHER FORCEPS STR 1X2 140MM | 1 |
| 10. | KOCHER FORCEPS CVD 1X2 140MM | 1 |
| 11. | RIGHT ANGLE CLAMP 140MM | 1 |
| 12. | RIGHT ANGLE CLAMP 183MM | 1 |
| 13. | TC MAYO SCISSORS STR 140MM | 1 |
| 14. | TC MAYO SCISSORS CVD 140MM | 1 |
| 15. | TC METZENBAUM SCISSORS STR 145MM | 1 |
| 16. | TC METZENBAUM SCISSORS CVD 145MM | 1 |
| 17. | TC METZENBAUM SCISSORS CVD 180MM | 1 |
| 18. | CUSHING TISSUE FORCEPS 1X2 178MM | 1 |
| 19. | CUSHING TISSUE FORCEPS 1X2 178MM | 1 |
| 20. | WAUGH DEL. TISSUE FORCEPS 1X2 200MM | 1 |
| 21. | FORCEPS RAMSEY 175MM | 1 |
| 22. | ALLIS FORCEKPS 4X5 155MM | 4 |
| 23. | WULLSTEIN RETRACTOR 3X3 BLUNT 130MM | 1 |
| 24. | SENN-MILLER RECTOR. SH. 8X7/18X5.5MM | 1 |
| 25. | BABY-SENN-MILLER RECTOR.BL.8X7/22X7MM | 1 |
| 26. | VOLKMANN RETR4-PRGSHARP9X19MM 222MM | 1 |
| 27. | VOLKMANN RETR4-PRGBLUNT8X19MM 222MM | 1 |
| 28. | FRAZIER SUCT X-SM 7FR 108MM WRK-LGTH | 2 |
| 29. | FRAZIER SUCT MED 10FR 108MM WRK-LGTH | 2 |
| 30. | BENDING RESIST. MICRO SUCTION 4FR 100MM | 1 |
| 31. | BENDING RESIST. MICRO SUCTION 6FR 100MM | 1 |

| | | |
|-----|---|---|
| 32. | BENDING RESIST. MICRO SUCTION 6FR 140MM | 1 |
| 33. | BENDING RESIST. MICRO SUCTION 8FR 140MM | 1 |
| 34. | ADSON ELEVATOR SHARP FLAT 8MM | 1 |
| 35. | ADSON ELEVATOR BLUNT CVD 7MM | 1 |
| 36. | ADSON RASPATORY CVD. 7MM WI. | 1 |
| 37. | ADSON RASPATORY STR. 7MM WI. | 1 |
| 38. | ADSON FORCEPS BAY SHAPED 175MM | 1 |
| 39. | FORCEPS BAYO SMOOTH 185MM | 1 |
| 40. | KEY ELEVATOR 180MM 6.4MM BLADE STR | 1 |
| 41. | VOLKMANN BONE CURETTE #0003.6MM 172MM | 1 |
| 42. | ECHLIN BONE RONGEURJAW 2X10MM 230MM | 1 |
| 43. | ECHLIN BONE RONGEUR JAW 3X10MM 230MM | 1 |
| 44. | ZAUFAL-JANSEN BONE RONGEUR CVD 180MM | 1 |
| 45. | TROTTER BONE RONGEUR LAT-VCD 205MM | 1 |
| 46. | KERRISON THIN-FT 130DG-UP 3MM 180MM | 1 |
| 47. | KERRISON THIN-FT 130DG-UP 4MM 180MM | 1 |
| 48. | KERRISON THIN-FT 130DG-UP 5MM 180MM | 1 |
| 49. | SCALPEL HANDLE #7 ENGLISH NO.5 160MM | 1 |
| 50. | WOODSON PLASTIC FILLING INST 3.2MM 180MM | 1 |
| 51. | COTTLE HOOK SHARP HVY-CVD 159MM DG 180 | 1 |
| 52. | NERVE SCISSORS CVD S/S 150MM | 1 |
| 53. | SCHMIEDEN-TAYLOR DURA SCISSORS 155MM | 1 |
| 54. | BRAIN SPATULA MOD. AACHEN MALL 7/8MM | 1 |
| 55. | BRAIN SPATULA MOD.AACHEN MALL 10/11MM | 1 |
| 56. | BRAIN SPATULA MOD.AACHEN MALL 13/14MM | 1 |
| 57. | BRAIN SPATULA MOD.AACHEN MALL 16/17MM | 1 |
| 58. | BRAIN SPATULA MOD.AACHEN MALL 19/20MM | 1 |
| 59. | BRAIN SPATULA MOD.AACHEN MALL 22/25MM | 1 |
| 60. | ABDOMINAL BLD. RETRACTOR MALEAB. 17X200MM | 1 |
| 61. | ABDOMINAL BLD. RETRACTOR MALEAB.25X250MM | 1 |
| 62. | BRAIN SPATULA FLAT MALL 11 &13MM 178MM | 1 |
| 63. | BRAIN SPATULA FLAT MALL 18 &22MM 178MM | 1 |
| 64. | VENTRICULAR CANNULA DANDY | 1 |
| 65. | TC MAYO-HEGAR NDHOLDERHVYSERR150MM | 1 |
| 66. | TC MAYO-HEGAR NDHOLDERHVYSERR205MM | 1 |
| 67. | HEGAR NEEDLE HOLDER HVY-SERR 150MM | 1 |
| 68. | ADSON NEEDLE HOLDER FEN-SERR 180MM | 1 |
| 69. | SCALPEL HANDLE OFFSET 210MM NO. 3 | 1 |
| 70. | SCALPEL HANDLE OFFSET 210MM NO. 3 | 1 |
| 71. | SAMII KNIFE/TUMOR TISSUE1.5MM 230MM | 1 |
| 72. | SAMII KNIFE/TUMOR TISSRND1.5MM 230MM | 1 |
| 73. | SAMII LANCET KNIFE TISSUE 1.8MM 230MM | 1 |
| 74. | HARDY-FAHLBUSCH DISS DWN SHARP 245MM | 1 |
| 75. | HARDY-FAHLBUSCH DISS DWN SHARP 245MM | 1 |
| 76. | YASARGIL TUMOR FCPS SERR 3MM 220MM | 1 |
| 77. | MICROFORM TUMOR FORCEPS 3MM 240MM | 1 |
| 78. | TREND CUR. HARDY BAYO.D6 130MM 90DG LE-LO | 1 |
| 79. | HARDY CURETTE MALL D:6/260MM | 1 |
| 80. | NICOLA CURETTE MALL RT-CUT 260MM | 1 |
| 81. | HUDSON SPHERICAL BURR 22MM DIA | 1 |
| 82. | ADSON KPERFORATING BURR 15MM DIA | 1 |
| 83. | NICOLA CURETTE MALL LFT-CUT 260MM | 1 |
| 84. | TREND CUR. HARDY BAYO.D4 130MM 90DG LE-LO | 1 |

| | | |
|---|--|---|
| 85. | HARDY CURETTE MAL D:4/260MM | 1 |
| 86. | TREND CUR.HARDY BAYON.D4 130MM 45DEG LE | 1 |
| 87. | YAS.MICRO SCISSDEL BAYOSTS/S225MM | 1 |
| 88. | YAS.MICRO SCISS BAYOUP-CVDS/S225MM | 1 |
| 89. | YASARGIL MICRO SCISS.BAYOSTS/225MM | 1 |
| 90. | YAS.MICRO SCISBAYOUP-CVDS/S225MM | 1 |
| 91. | YAS.MICRO SCISS BAYOUP-CVDS/S225MM | 1 |
| 92. | CASPAR RONGEURSTRSERR 2X12MM 140MM | 1 |
| HUDSON CRANIAL DRILL SET- 2 Sets to be ordered | | |
| 1. | HUDSON DRILL BRACE F/FFO55R | 1 |
| 2. | HUDSON CEREBELLAR ATTACHMENT F/FFO55R | 1 |
| 3. | HUDSON BURR 9MM DIA | 1 |
| 4. | HUDSON BURR 14MM DIA | 1 |
| 5. | HUDSON SPHERICAL BURR 16MM DIA | 1 |
| 6. | HUDSON SPHERICAL BURR 22MM DIA | 1 |
| 7. | HARTMANN MOSQUITO FCPSDEL CVD 100MM | 1 |
| 8. | CUSHING FLAT DRILL 14MM DIA | 1 |
| 9. | CUSHING FLAT DRILL 14MM DIA | 1 |
| 10. | HARTMANN MOSQUITO FCPSDEL CVD100MM | 1 |
| 11. | GIGLI WIRE SAW FINE 6-WIRE5500MM | 2 |
| 12. | DEMARTEL CONDF/WIRE SAWFLEX350MM | 4 |
| 13. | HOOK HANDLE F/WIRE SAWS | 2 |
| TRANSPHENOIDAL PITUITARY SET 1 set to be ordered | | |
| 1. | BIPOLAR FRCP W/IRRIG CHANNEL .7MM205MM | 1 |
| 2. | KILLIAN SEPTUM SPECULUM SCREW 56X7MM | 1 |
| 3. | KILLIAN SEPTUM SPECULUM SCREW 70X7MM | 1 |
| 4. | HARDY DISSECTOR BLUNT/RIGHT 245MM | 1 |
| 5. | HARDY DISSECTOR SHARP/RIGHT 245MM | 1 |
| 6. | SCALPEL HANDLE OFFSET 210MM NO.3 | 1 |
| 7. | SCALPEL HANDLE OFFSET 210MM NO.3 | 1 |
| 8. | HARDY-FAHLBUSCH DISS DWN SHARP 245MM | 1 |
| 9. | HARDY-FAHLBUSCH DISS DWN SHARP 245MM | 1 |
| 10. | HARDY DISSECTOR BLUNT/RIGHT 245MM | 1 |
| 11. | HARDY DISSECTOR BLUNT/RIGHT 245MM | 1 |
| 12. | LANDOLT CURETTE MALL RND-TIP 260MM | 1 |
| 13. | HARDY IMPLANT FORKF/HYPOPHSEC 245MM | 1 |
| 14. | HARDY DISSECTOR BLUNT/RIGHT 245MM | 1 |
| 15. | TREND CUR.HARDY BAYO.D6 130MM 90DG LE-LO | 1 |
| 16. | HARDY DISSECTOR SHARP/RIGHT 245MM | 1 |
| 17. | NICOLA CURETTE MALL RT-CUT 260MM | 1 |
| 18. | HUDSON SPHERICAL BURR 22MM DIA | 1 |
| 19. | ADSON PERFORATING BURR 15MM DIA | 1 |
| 20. | NICOLA CURETTE MALL LFT-CUT 260MM | 1 |
| 21. | LANDOLT CURETTE MAL RND-TIP260MM | 1 |
| 22. | TREND CUR.HARDY BAYO.D4 130MM 90DG LE-LO | 1 |
| 23. | HARDY CURETTE MAL D:4/260MM | 1 |
| 24. | TREND CUR.HARDY BAYON.D4 130MM 45DEG LE | 1 |
| 25. | TREND CUR.HARDY BAYO.D4 130MM 90DG LE-SH | 1 |
| 26. | CUSHING LANDOLT SPECULUM 70X15MM | 1 |
| 27. | CUSHING LANDOLT SPECULUM 110X15MM | 1 |
| 28. | CUSHING-LANDOLT SPECULUM 110X15MM | 1 |

| MICRONEUROSURGERY SET 1 set to be ordered | | |
|--|--|---|
| 1. | KRAYENBUEHL NERV HKSHRTBALL-TIP185MM | 1 |
| 2. | KRAYENBUEHL NERVE HOOK SMOOTH SM.185MM | 1 |
| 3. | JACOBSON PROBE W/BALL-TIP185MM | 1 |
| 4. | CASPAR MICRO-DISSDWN-CVD2.0MM230MM | 1 |
| 5. | BENNETT BONE LEVER 235MM | 1 |
| 6. | IRIS FORCEPS X-FINE 1X2 STR 100MM | 1 |
| 7. | IRIS FORCEPS X-FINE 1X2HALF-CVD100MM | 1 |
| 8. | YAS.MICRO SCISSDELBAYOSTS/S225MM | 1 |
| 9. | YAS.MICRO SCISS BAYOUP.CVDS/S225MM | 1 |
| 10. | YAS.MICRO SCISSDELBAYOSTS/S225MM | 1 |
| 11. | YASARGIL MICRO SCISSORS UP-CVD245MM | 1 |
| 12. | MICRO-NEEDLE HLDR STR FLAT-HDL184MM | 1 |
| 13. | MICRO-NEEDLE HLDR CVD FLAT-HDL184MM | 1 |
| 14. | YAS.MICRO SCISS BAYOUP-CVDS/S225MM | 1 |
| 15. | YASARGIL MICROFORM BAYO FCPS.6MM240MM | 1 |
| 16. | YASARGIL MICROFORM BAYO FCPS.9MM240MM | 1 |
| 17. | MICROFORM TUMOR FORCEPS 3MM 240MM | 1 |
| 18. | YASARGIL TUMOR FORCEPS 5MM220MM | 1 |
| 19. | NICOLA FCPS SCOOP-SHP2.5MM DIA165MM | 1 |
| 20. | MICRO-ADSON FORCEPS SERR 120MM | 1 |
| 21. | SCISSORS STR.LENGTH OF SHAFT 165MM | 1 |
| 22. | SAMII KNIFE/TUMOR TISSUE1.5MM 230MM | 1 |
| 23. | SUCTION CANNULA BARRON 1MM | 2 |
| 24. | SUCTION CANNULA BARRON 2MM | 2 |
| 25. | MICRO-NEEDLE HLDR CVD RND-HDL 185MM | 1 |
| 26. | YASARGIL MICRO SCISSORS STR 185MM | 1 |
| 27. | JACOBSON MICRO SCISSORS CVD185MM | 1 |
| 28. | MICRO SCISSORS 60DG FINE 165MM | 1 |
| 29. | RND BODY SUTURE FORCEPTSCVD0.6MM180MM | 1 |
| 30. | ALM RETRACTOR 4X4T SHARP 70MM | 1 |
| 31. | ALM RETRACTOR 4X4T.SHARP 100MM | 1 |
| ANEURYSM SET-1 set to be ordered | | |
| 1. | DOUBL.BAY.APPLFCPS.STD.TI.110/245MM | 1 |
| 2. | YASARGIL VARIO A.FCPS.MINI TI.90/220MM | 1 |
| 3. | DOUBL.BAY.APPL.FCPS.MINI TITAL 110/245MM | 1 |
| 4. | YASARGIL VARIO A.FCPS.STD.TI.90/220MM | 1 |
| 5. | YASARGIL REMOVER FCPS.MINI.TI.90/220MM | 1 |
| 6. | YASARGIL REMOVER FCPS.STD.TI.90/220MM | 1 |
| SCHEDULE 02, HIGH SPEED ELECTRICAL DRILL SYSTEM | | |
| 1. | MICROSPEED UNI CONTROL UNIT/WCOOL.UNIT | 1 |
| 2. | MICROSPEED UNI FOOT CONTROL ONE PEDAL | 1 |
| 3. | MICROSPEED UNI PERFORATOR DRIVER | 1 |
| 4. | CRANIAL PERFORATOR 9/12MM HUDSON SHANK | 1 |
| 5. | SPARE CUTTER F/GB302R/GB303R/GB307R | 9 |
| 6. | CRANIAL PERFORATOR 6/9MM HUDSON SHANK | 1 |
| 7. | SPARE CUTTER F/GB300R/GB303R/GB307R | 9 |
| 8. | MICROSPEED UNI XS HIGHSPEED MOTOR | 1 |
| 9. | HI-LINE XS CRANIOTOME HANDPIECE | 1 |
| 10. | HI-LINE XS FIXED DURAGUARD I | 1 |

| | | |
|-----|---|----|
| 11. | HI-LINE XS FIXED DURAGUARD II | 1 |
| 12. | HI-LINE XS FIXED DURAGUARD III | 1 |
| 13. | HI-LINE XS DISP.CRANIOTOME CUTTER II | 30 |
| 14. | HI-LINE XS DISP.CRANIOTOME CUTTER I | 10 |
| 15. | HI-LINE XS DISP.CRANIOTOME CUTTER III | 5 |
| 16. | HI-LINE XS DISP.SPRAY NOZZLE I | 1 |
| 17. | HI-LINE XS DISP.SPRAY NOZZLE II | 1 |
| 18. | HI-LINE XS DISP.SPRAY NOZZLE III | 1 |
| 19. | MICROSPEED UNI MOTOR CABLE F/FOOT CTRL | 1 |
| 20. | MICROSPEED UNI MICRO 150 MOTOR | 1 |
| 21. | HI-LINE XS PIN POINT CUTTER II D1.0MM | 10 |
| 22. | HI-LINE XS STRAIGHT HANDPIECE I | 1 |
| 23. | HI-LINE XS STRAIGHT HANDPIECE III | 1 |
| 24. | HI-LINE XS ANGLED HANDPIECE I | 1 |
| 25. | HI-LINE XS ANGLED HANDPIECE III | 1 |
| 26. | HI-LINE XS DISP.ROSEN BURR I D2.3MM | 10 |
| 27. | HI-LINE XS DISP.ROSEN BURR I D4.0MM | 10 |
| 28. | HI-LINE XS DISP.ROSEN BURR I D6.0MM | 10 |
| 29. | HI-LINE XS DISP.DIAMOND BURR III D2.3MM | 5 |
| 30. | HI-LINE XS DISP.DIAMOND BURR III D4.0MM | 5 |
| 31. | HI-LINE XS DISP.DIAMOND BURR III D6.0MM | 5 |
| 32. | HI-LINE XS DISP.ROSEN BURR I D1.0MM | 5 |
| 33. | HI-LINE XS DISP.ROSEN BURR I D2.3MM | 5 |
| 34. | HI-LINE XS DISP.ROSEN BURR I D4.0MM | 5 |
| 35. | HI-LINE XS DISP.DIAMOND BURR I D1.0MM | 5 |
| 36. | HI-LINE XS DISP.DIAMOND BURR I D2.3MM | 5 |
| 37. | HI-LINE XS DISP.DIAMOND BURR I D4.0MM | 5 |
| 38. | HI-LINE XS DISP.DIAMOND BURR I D6.0MM | 5 |
| 39. | ECCOS FIXATION F/HI-LINE XS HANDKPIECE | 4 |
| 40. | ECCOS FIXATION F/GD675 | 1 |
| 41. | ECCOS FIXATION F/GD685 | 1 |
| 42. | ECCOS FIXATION F/MICROSPEED MOTOR CABLE | 1 |
| 43. | ECCOS FIXATION F/HI-LINE XS DURAGUARDS | 1 |
| | | |

9. Drill System (High Speed) for Neurosurgery & Spiral Surgery

- a. Electrically Controlled High Speed Drill System
- b. Motor speed should be adjustable.
- c. Speed selection up to 100,000 rpm for select handpieces
- d. Motor should be in hand piece. Two motor attachment at same time.
- e. Console should have a digital display of speed, direction of rotation, irrigation and switch.
- f. Built in Irrigation system with irrigation speed controlled by foot switch.
- g. Two Motor system with variety of handpieces.
- h. Forward & Reverse, speed control via foot switch (single)
- i. The system must comprise of 1 Qty. of each of the following
Toper design.
Short straight hand piece (40MM)
Extra long curved hand piece (100MM)
Long straight hand piece (70MM)
Short curved hand piece (70MM)
Craniotomy handpiece with duraguard
Perforator handpiece (with low speed motor if needed)
Irrigation spray nozzle with all handpiece attachment.
- j. Accessories to be supplied with drill:
2 adult and 2 paediatric size perforators
10 drill bits of different sizes to be supplied with drill machine.
10 craniotomy blades should be supplied
4 saws to be supplied which fit in hand piece motor
2 autoclavable cords to be supplied
Sterilization tray made of stainless steel for better durability sterilization
- k. Should be FDA/CE approved.
- l. Five years warranty with spares and five years additional AMC to be quoted.
- m. Service center should be present in Delhi or surrounding area.
- n. CVT to be supplied with drill machine.
- o. Touch screen display panel with display for motor type, maximum rpm, current rpm level. Console should be allow visible display & setting of maximum speed limit.
- p. Motor housing should be made of titanium.
- q. Should have customizable setting like acceleration & tapping characteristics for individual motors oscillation angle.
- r. System should give audible beeps/ alerts while in reverse action.
- s. Should have quick release & touch system
- t. Motor, Motor cable & hand piece should auto cleavable.

10. Neuro Endoscope with Spinal Endoscopy & Attachments

| S. No. | Specification – Neuro & Spine Endoscopy |
|--------|---|
| 1) | <p style="text-align: center;">HD – Endovision system</p> <p><u>Full High Definition Digital Camera</u> The system should be truly Digital HDTV endoscopic video camera. The system should have the Resolution of 1920 x 1080 pixels. Progressive scan The consistent use of 16:9 format for Input & Output to guarantee genuine HDTV. Optimizes to any Size : The system should have Optical Zoom to enhance the quality of Image size & cross specialty standardization of the camera system, regardless of the telescope used. White balance control and two peripheral controls on camera head Video output: Composite signal to BNC SOCKET Y/C signal to S-VHS SOCKET RGB SIGNAL to D-SUB SOCKET HDTV SIGNAL TO DVI D SOCKET</p> <p>Plug and Go: The system should automatically optimize all settings. The system should be ready-to-use as soon as it is connected to the camera control unit. The system should be Menu driven thus allowing the surgeon to program the camera head functions as per the surgical needs & requirement.</p> <p>Any Head – Any Time : The system should have the facility to use a single camera control unit for all camera heads (either single chip or three chip) thus minimizing preparation & maximizes inter speciality standardization. Should have patient safety : enhanced light sentivity of Endovision to the light source to run at lower power levels that can reduce the risk of patient/drape burns while still providing premium optical performance. Visibly Improved Imaging : CCD sensing chip should optimizes image quality & Digital source Sampling thus maximizing hi-fidelity image transmission Camera System should be compatible with communication bus system for remote controlled operation of the various. Optical Zoom coupler provides dynamic zoom range with no compromise in image clarity.</p> |
| 2) | <p><u>Technical Specifications:</u> Chip set : 3x1/3” CCD-Chip (3 chip camera) Image system : 1/3” progressive scan CCD Pixels 1920 x 1080P PIXELS AGC : Microprocessor controlled Lens: Integrated Zoom Lens Video output: Composite signal to BNC socket. Y/C signal to S-VHS socket (2 x) RGB signal to D-sub socket HDTV signal to DVI-d socket Power supply :- 100-240 VAC 50/60 Hz INPUT : KEYBOARD INPUT FOR CHARACTER GENERATOR 5 POLE DIN SOCKET Control Output/Input</p> |

| | |
|----|--|
| | <ul style="list-style-type: none"> • 3.5mm Stereo Jack Plug (ACC1, ACC2) • Serial Port at RJ-11 • USB Port with ICM (2x) • Mains Cord • BNC/BNC Video Cable Length 180 cm • S-Video (Y/C) connecting Cable Length 180 cm • Special RGB Connecting Cable length 180 cm • Connecting Cable for controlling peripheral units length 180 cm (2) • DVI-D Connecting Cable length 300 cm • Keyboard with US English Character • Certified to : IEC 601-1, 601-2-18, CSA 22.2 No. 601, UL 2601 and • CE according to MDD, protection class I/CF • CAMERA HEAD WEIGHT-150-250 GMS <p>HIGH RESOLUTION MONITOR The system should have : High Definition Colored Monitor 26' Flat Panel Monitor Video Inputs: S-video Signal to 4 pol. Mini DIN Socket RGB signal to 5 x 8NC socket. Composite to stoic socket HO-SOI sign", 1 t6 8NC socket OVI signal to DVI-D socket SDI signal to BNC socket Compact & Lightweight design HDTV led Display 16:10 HDIY Format 1080p/50 and 1 D80p/SO display possible On Screen Menu for Monitor setting (Possible in several Languages) Liquid Crystal Display Resolution H)20/1200 Anti Reflection coated front glass Easy to access control buttons on the housing franl Drip water protected dustproof housing Low voltage Protection via external 24VDC Main power supply Picture in Picture display (PIP) Mirror imaging kPossible Upto 5 different users profile can be stored Medical grade FDA, UL and CE Approval PAL system compatible</p> |
| 3) | <p><u>Technical Specifications</u></p> <p>HD TFT Flat Screen Monitor with stand size 26" Ratio 16:10 HD FORMAT BRIGHTNESS :500 CD/M2 Resolution over 1100 lines Max Resolution Pixels : 1920/1200 pixels 16 Million Display colors. Maximum viewing angle: 178" vertical The monitor should support direct fiber Input Contrast ratio: 800:1 Rated power : 115 watts Power Supply 100-240 VAC Screen dimensions : 627 x 427 x 100mm Video inputs : S-Video signal to 4 pol. Mini DIN Socket RGB signal to 5 x BNC socket Composite to BNC socket HD-SDI signal to BNC socket DVI signal to DVI-D socket</p> |

| | |
|--|---|
| | <p>SOI signal to 13NC socket Accessories External 24VOC Power supply, Mains Cord, pedestal. Certified to : EN 60601-1, protection class 1PX 1</p> |
| | <p>The system should have :- Increased patient safety & added protection in OR with safelight technology. Instuitive simple user interface with LCD touch screen Standby mode. Single port Universal Jaw Assembly to adapt any make of fiber Optic Cable. More than 25000 hours bulb life. Quite operation : NO noise During Operation. Should have stand by button with memory function. Light Intensity control from feather touch / Camera Head Buttons. Ready for OR integration. Increased patient safety & added protection in or with safe light technology. Intuitive simple user interface with LCD touch screen standby mode. Single port universal jaw assembly.</p> |
| | <p>Technical Specification: Light Outlet 1 Light intensity adjustment continuously adjustable from 0 to 100% manually. Lamp Type : LED Universal power supply : 100-240 VAC, 50 ISO Hz. Operating Temperature :- 10-40C. Light Weight : 5 Kg. Dimensions 305' '110'233 mm (W''h''d.) Color Temp. of 64000k IEC 60601 – 1 – 20001 Size should be diameter 5.5 mm, length > 160 cm. 200 volts, 300 Watts</p> |
| | <p>Fiber Optic Light Cable Qty. -1 Size should be diameter > 5.5mm, length > 160em. Patient Data Management System HO:- It should have 1 terabyte hard drive. It should have dual channel recording capability. It should have Recording format of MPEG 1.2 and 2HD. It should have Capable to archive videos. It should have, Capable to archive upto approx 500 cases. It should have capable to record native HD image. It should have capable to record 16:9. It should have in built Dual Rotated Integrated Touch Screen so that no side screen is required. It should have DVD video formatting with At-the end burring. It should have expandable USB port. It should be Able to pre load, patient surgical lists making it easier and more efficient for or Staff. It should be able to captures 1m ges and video independently on two separate video channels, synchronized mode, or in PIP-format. Allows for the recording of all surgical footage in crisp, high definition video supports 4:3 and 16:9 which makes it backwards compatible with all camera systems. It should have ability to Import / Export via use external devise. It should have landscape and portrait printing layout capabilities, which utilizes more space on each printout. It should be Dicom or PACS compatible for any future up gradation.</p> <p>Endocart Trolley:-</p> |

| | |
|--|---|
| | <p>Maximum shelf load 16 kg (35 lbs) per Shelf. It should have extendible arm for Monitor Mount. Total loading capacity 17 kg (170 lbs). Endo Cart Position heavier components towards to bottom of the trolley Endo Cart for optimum stability. It should have isolation Transformer. Should have Extendible Video Arm to Mount Medical Grade LCO Monitor. It should have high Quality Caster wheels. It should have Inbuilt Electric Switches channeled through isolation Transformer. Voltage Rating : Input : 240V – 50Hz 2KVA Output : 220/240V -50Hz 2.4KVA MAX. Should be fully autoclavable. Should be in both 0 and 30 degree Should be wide angled distortion free view. Must be equipped with Universal Adaptor for other Light Sources. Should have yellow Sapphire Glass Tip Index for Optimum Evenness of Focus & Contrast.</p> |
|--|---|

| | | |
|-----|---|---|
| | Instrumentation Set for Percutaneous Lumbar Interlaminar and Transforaminal Endoscopic surgery without GA (General Anaesthesia) | |
| | Telescope & Sheath | |
| 1. | Wide Angle Telescope 25" oblique view, outer diameter 6.6 mm, working channels diameter 3.6 mm, length 18 cm, autoclavable, fiber optic light transmission incorporated | 1 |
| 2. | Operating Sheath, distal 45" oblique, integrated irrigation adaptor, outer diameter 7.5 mm, inner diameter 6.8mm, length 17 cm. | 1 |
| 3. | Dilation Sleeve, with two ports, outer diameter 6.5 mm, inner diameter 1.4 mm, length 22 cm, color code : red | 1 |
| 4. | Punch Sleeve, for use with operating sheaths | 1 |
| 5. | Fixation Handle, for adjustment of dilation sleeves with outer diameter 2.5 – 6.5 mm | 1 |
| | Hand Instruments | |
| 6. | Puncture Needle, including stylet, diameter, diameter 1.2 mm, working length 25 cm, with 0.8 mm opening for guide wire | 1 |
| 7. | Guide wire, blunt on both sides, Ø 0.7 mm, working length 41 cm, package of 5 pc. | 1 |
| 8. | X-ray Ruler, with special marking for midline and 2 mm and cm-slots for radiologic measurement, total length 30 cm | 1 |
| 9. | Mallet, with Nylon replacement, length 22.5 cm | 1 |
| 10. | Palpation Hook, rotating, dismantling, not insulated, without connector pin for unipolar coagulation, with LUER-Lock irrigation connector for cleaning, with distal ball, bendable to 90°, diameter 2.7 mm, working length 36 cm consisting of: Metal handle, without ratchet, with plastic rings with larger contact area Outer Sheath with Palpation Hook Working Insert. | 1 |
| 11. | Palpation Hook, with distal ball, bendable to 90°, with irrigation connector for cleaning, diameter 3.5mm, working length 36cm, consisting of: metal Handle, without ratchet, Outer Sheath with palpation Hook Working Insert. | 1 |
| 12. | Palpation Hook, distally angled 45 °, diameter 2 mm, working length 34 cm. | 1 |
| 13. | Dissector, Ø 2.6mm, working length 36 cm, distally 45 ° bended. | 1 |
| 14. | Forceps with distal hook, rotatable, single action jaws, size 3.5mm, working length 36cm, consisting : Plastic Handle, without ratchet with connector pin for unipolar coagulation, Biopsy forceps insert with distal hook, working length 36 cm, diameter 3.5 mm | 1 |
| 15. | Grasping forceps with 90° opening, single action jaws, Ø 3.5mm, working length 36mm | 1 |
| 16. | Grasping Forceps, double action jaws, diameter 2.7 mm, length 36 cm. | 1 |
| 17. | Grasping Forceps, rotating, dismantling, insulated, with connector pin for unipolar coagulation, with-Lock-adaptor for cleaning, single action jaws, fenestrated, size 3 mm, length 36 cm consisting of: Plastic Handle, without ratchet, Outer Sheath, with forceps insert | 1 |
| 18. | Deflectable punch, Ø3.5mm, working length 360mm. | 1 |
| 19. | Trephine, inner diameter 1.6 mm, outer diameter 2.7mm, working length 30 cm with edged handle. | 1 |
| | Bipolar & cords | |
| 20. | Angled bipolar probe, Ø2.5 mm, working length 36 cm consisting of Bipolar probe insert, Sheath for probe, Bipolar Spring Handle. | 1 |
| 21. | Bipolar High Frequency Cord with 2 x 4 mm banana-plug, length 300 cm. | 1 |

| | | |
|-------------------------------------|--|---|
| 22. | Bipolar High Frequency Cord, Length 300 cm. | 1 |
| Containers for Sterilization | | |
| 23. | Plastic Container for Sterilizing and Storage, perforated, with transparent lid, with insert for two angled rigid telescopes, external dimensions (w x d x h): 515 x 240 x 84 mm | 1 |
| 24. | Plastic container for Sterilizing and storage, perforated, with lid, for two-level storage, for use with 30 cm and 36 cm Click Line – instruments, external dimensions (w x d x h): 600 mm x 145 mm x 260 mm | 1 |

| | | |
|--|--|---|
| Endoscopic Lumbar Disectomy & Root decompression for all types if disc herniation from Central to Far – lateral disc and for treatment of Lumbar stenosis along with bi – lateral decompression using Unilateral Approach | | |
| Telescope | | |
| 1. | Forward-Oblique Telescope 30°, eyepiece angled 45 °, diameter 4mm, length 9.5 cm, autoclavable, fiber optic light transmission incorporated. | 1 |
| Localizer | | |
| 2. | Puncture Needle, including stylet, diameter 1.8 mm, working length 18 cm, with 1.3 mm opening for guide wire. | 1 |
| 3. | Guide wire, not sterile, diameter 1.2 mm, length 31 cm, package of 10 | 1 |
| Dilation sleeves | | |
| 4. | Dilation Sleeve, OD5.2mm, ID 1.5mm, graduated, length 23 cm, colour code white. | 1 |
| 5. | Dilation Sleeve, OD 8.9mm, ID 5.3 mm, graduated, length 21 cm, colour code yellow | 1 |
| 6. | Dilation Sleeve, graduated, inner diameter 9 mm, outer diameter 12.7 mm, length 19 cm, color code : orange | 1 |
| 7. | Dilation Sleeve, OD 14.9mm, ID 12.9 mm, graduated, length 17 cm, colour code red | 1 |
| 8. | Dilation Sleeve, OD 16.9mm, ID 15.1mm, graduated, length 15 cm, colour code green | 1 |
| 9. | Dilation Sleeve, OD 18.9mm, ID 17.1mm, graduated, length 14cm, colour code blue | 1 |
| 10. | Dilation Sleeve, OD 20.9mm, ID 19 mm, graduated, length 13 cm, colour code black | 1 |
| Trocar & Attachments diameter 15 cm | | |
| 11. | Trocar, diameter 15 mm, working length 70 mm, for use with Attachment and Telescope 30°. | 1 |
| 12. | Attachment diameter 15 mm for use with Trocar and telescope | 1 |
| 13. | Telescope sheath, movable, for use with Telescope 30° and attachments. | 1 |
| 14. | Telescope Sheath | 1 |
| Trocar & Attachments diameter 19 mm | | |
| 15. | Trocar, diameter 19 mm, working length 74 mm, for use with Attachment and Telescope | 1 |
| 16. | Trocar, diameter 19 mm, working length 97 mm, for use with Attachment and Telescope 30°. | 1 |
| 17. | Attachment, diameter 19 mm, for use with Trocars and Telescopes 30°. | 1 |
| Trocar & Attachments diameter 23 mm | | |
| 18. | Trocar, diameter 23mm, working length 76 mm, color code : black, for use with Attachment. | 1 |
| 19. | Trocar, diameter 23 mm, working length 99 mm, color code : black, for use with Attachment and Telescope 30°. | 1 |
| 20. | Attachment, diameter 23 mm, for use with Trocars, and Telescopes 30°. | 1 |

| Bone Puches | | |
|--|---|---|
| 21. | Bone Punch, dismantling, 90° upbiting, not through-cutting, 2 mm, working length 24 cm | 1 |
| 22. | Bone Punch 40° upbiting forward, size 2 mm, working length 24cm | 1 |
| 23. | Punch, dismantling, bayonet-shaped, fixed, downbiting 40° forward, 2 mm, working length 17 cm. | 1 |
| 24. | Punch, dismantling, bayonet-shaped, fixed, upbiting 40° forward, 2mm, working length 17 cm | 1 |
| Hand Instruments | | |
| 25. | Spoon Forceps, dismantling, robust, oval, spoon size 3 x10mm, single action jaws, working length 20 cm | 1 |
| 26. | Spoon Forceps, dismantling, curved 30°, robust, oval, spoon size 3 x 10 mm, single action jaws, working length 20 cm. | 1 |
| 27. | Surgical handle, bayonet-shaped with working length 15 cm for blades | 1 |
| 28. | Suction tube, with cut-off hole and stylet, LUER, working length 15 cm, 2.5 mm | 1 |
| 29. | Suction tube, with distal nerve retractor, with cut-off hole, LUER-Lock connector, diameter 2.7 mm, working length 15 cm | 1 |
| 30. | Tube, with cut-off hole and stylet, LUER, diameter 4 mm, working length 15 cm | 1 |
| 31. | Palpation Hook, bayonet-shaped, distally angled 90°, with ball end, with round handle, working length 20 cm. | 1 |
| 32. | Dissector dead hand, bayonet shaped, 3 mm, curved upwards, with round handle, sharp, working length 16 cm | 1 |
| 33. | Nerve Hook, distal width 3 mm, bayonet-shaped, working length 16cm | 1 |
| 34. | Nerve Retractor, hook length 2 mm, diameter 4 mm, angled sheath, working length 20cm | 1 |
| 35. | Nerve Retractor, angled 30°, distal width 5 mm, working length 17 cm | 1 |
| 36. | Curette, small, curette size (l x w) :2.7 x 4 mm, bajonet-shaped, distal angled 45°, working length 20 cm | 1 |
| Bipolar & Cords | | |
| 37. | Take-apart Bipolar Forceps, width 1 mm delicate jaws, distally angled 45°, horizontal closing, outer diameter 3.4 mm, working length 20 cm, consisting of: handle, Outer Tube, Inner tube, Bipolar Insert. | 1 |
| 38. | Bipor High Frequency Cord, Length 300 cm | 1 |
| Accessories to perform Spinal endoscopy | | |
| 39. | Articulated Stand, reinforced version, only, L-shaped, with one mechanical central clamp for all live joint functions, height 48 cm, operating range 52 cm, with fastene. | 1 |
| 40. | Socket to clamp on the operating table, for use with European and United States standard rails, also suited for rails from 25 x 10 up to 35 x 8 mm, with lateral clamping element for height adjustment of the articulated stand. | 1 |

| Exoscope – Telescope for visualization magnification and broadcasting of all neuro and spine surgical procedures | | |
|---|--|---|
| Telescope | | |
| 1. | Exoscope with Integrated Illuminator, working distance 25-75 cm, length 11 cm, autoclavable, with fiber optic light transmission incorporated and condenser lenses. | 1 |
| 2. | Fiber Optic Light Cable, size 4.8 cm, length 300 cm, heat-resistant | 1 |
| 3. | Clamping Cylinder, folding, for flexible mounting of 10 mm telescopes to telescope sheath, autoclavable. The clamping cylinder allows vertical movement and rotation of the telescope. For use Clamping Jaw. | 1 |

| Retractor System | | |
|-------------------------|--|---|
| 4. | Spine Retractor, complete, with retractor frame, 2 retractor arms, X-ray transparent blades in 3 different lengths, light carrier with corresponding tools, consisting of : retractor Frame, Retractor Arm, Drive Screw, Retractor Arm, extra Retractor Blade, 70mm, Retractor blade, 50 mm Retractor Blade, 30mm Holder, for blades, Light Carrier, Holder. | 1 |
| Holding device | | |
| 5. | Articulated Stand, reinforced version, only, L-shaped, with one mechanical central clamp for all five joint functions, height 48 cm, operating range 52 cm. | 1 |
| 6. | Socket to clamp on the operating table, for use with European and United States standard rails, also suited for rails from 25 x10 up to 35x8 mm, with lateral clamping element for height adjustment of the articulated stand | 1 |
| 7. | Clamping jaw, metal, for use with all square headed Telescopes, clamping range 16.5 up to 23 mm. | 1 |

| Endoscopic Lumbar Disectomy & Root Decompression for all types of Disc Herniation | | |
|--|--|----------|
| Sr.No. | Product Description | Quantity |
| 1. | Localization Device, for fluoroscopic determination of the point of incision | |
| 2. | Straight Forward Telescope 0°, enlarged view, diameter 4 mm, length 18 cm, autoclavable. Fiber optic light transmission incorporated. | |
| 3. | Obturator, blunt, for use with operating tube | |
| 4. | Operating Tube, oval, with obturator, for use with working insert | |
| 5. | Working Insert with positioning detend, for use with operating tube working channel diameter 8 mm, with irrigation channel | |
| 6. | Nerve Protector, adjustable, width 5 mm, length 112 mm, for use with working Insert | |
| 7. | Suction Tube, angled, with cut-off hole, diameter 3.7 mm, working length 11 cm | |
| 8. | Chisel, flat, straight, with handle, distal width 15 mm, working length 9 cm | |
| 9. | Spoon Forceps, dismountable, robust, oval, single action jaws, spoon size 3 x 10 mm, working length 15 cm | |
| 10. | Bone Punch 45 degree, upbiting, 3 mm, working length 18 cm | |
| 11. | Bone Punch, 90 degree, upbiting, 3 mm, working length 18 cm | |
| 12. | Take-apart Bipolar Coagulating Forceps, width of jaws 1 mm, diameter 5 mm, working length 20 cm, consisting of: Ring Handle, Outer tube, insert Forceps. | |
| 13. | Trephine, diameter 3mm, working length 22 cm | |
| 14. | Elevator, spatual slightly curved, distal width 5 mm, working length 13 cm | |
| 15. | Palpation Hook, blunt, distally angled 90°, hook length 5.5 mm, working length 13 cm | |
| 16. | Bipolar High Frequency Cord with 2 x 4 mm banana-plug to coagulator, length 300 cm | |
| 17. | Sterilization tray | |

| Sr.No. | Specification | Quantity |
|--------|---|----------|
| | Neuro Endoscopy Set for the Treatment of Obstructive Hydrocephalus, Marsupialization of the Arachnoid Cysts, Colloid Cyst, Ventricular Biopsy | |
| | Telescope & Sheath | |
| 1. | Ventriculoscope with Wide Angle Straight Forward Telescope 6°, angled eyepiece, outer diameter 6.1 mm, length 18 cm, working channel diameter 2.9 mm, irrigation/suction channel diameter 1.6, autoclavable, fiber optic light transmission incorporated. | 1 |
| 2. | Forward Oblique- telescope 0°, enlarged view, diameter 2 mm, length 26 cm, autoclavable, fiber optic light transmission incorporated. | 1 |
| 3. | Telescope 45°, enlarged view, Ø 3.3 mm, length 25 cm, autoclavable, fiber optic light transmission incorporated. | 1 |
| 4. | Operating Sheath, graduated, rotating, outer diameter 6.8 mm, working length 13 cm for use with Ventriculoscope. | 1 |
| 5. | Obturator for use with Operating Sheath | 1 |
| 6. | Obturator for use with optic. | 1 |
| | Hand Instruments | |
| 7. | Scissors, pointed, rotating, dismantling, with LUER-Lock irrigation connector for cleaning, single action jaws, diameter 2 mm, working length 30 cm consisting of: Metal handle, without ratchet, Outer Sheath, with scissors insert. | 1 |
| 8. | Biopsy Forceps, rotating, dismantling, with LUER-Lock irrigation connector for cleaning, double action jaws, diameter 2 mm, working length 30 cm consisting of: Metal Handle, without ratchet Outer Sheath, with forceps insert. | 1 |
| 9. | Ventriculostomy Forceps, rotating, dismantling, with LUER-Lock irrigation connector for cleaning, single action jaws, diameter 2mm, working length 30 cm consisting of: Metal handle, without ratchet Outer Sheath, with forceps insert | 1 |
| 10. | Grasping Forceps, rotating, dismantling, with LUER-Lock irrigation connector for cleaning, single action jaws, diameter 2mm, working length 30 cm consisting of: Metal handle, without ratchet Outer Sheath, with grasping forceps insert | 1 |
| 11. | Biopsy Forceps, rotating, dismantling, with LUER-Lock irrigation connector for cleaning, single action jaws, diameter 2.7mm, working length 30 cm consisting of: Metal handle, without ratchet Outer Sheath, with forceps insert | 1 |
| 12. | Ventriculostomy Forceps, diameter 1.7 mm, working length 30 cm | 1 |
| 13. | Forceps, for ventriculostomy, flexible, double action jaws, diameter 1 mm, working length 30cm | 1 |
| 14. | Biopsy Forceps, double action jaws, flexible, diameter 1 mm, working length 30 cm | 1 |
| 15. | Scissors, pointed, lightly curved jaws, double action jaws, diameter 1.7 mm, length 30 cm | 1 |
| 16. | Ventriculostomy Forceps, diameter 1.7 mm, working length 30 cm | 1 |
| 17. | Scissors, single action jaws, pointed, diameter 1.3 mm, length 30 cm | 1 |
| 18. | Puncture Needle | 1 |
| | Monopolar, Bipolar & cords | |
| 19. | Spatula Electrode, unipolar, flexible, diameter 1mm, working length 45 cm | 1 |
| 20. | Bipolar Coagulation Electrode, diameter 1.7 mm, working length 30 cm | 1 |
| 21. | Bipolar Forceps, long, flat jaws, outer diameter 2.4 mm, consisting of Bipolar Ring handle, Outer Sheath, Bipolar Insert, for single use, package | 1 |

| | | |
|-----|---|---|
| | of 5. | |
| 22. | Unipolar High Frequency Cord, with 4 mm plug, length 300 cm. For use with HF units. | 1 |
| 23. | Bipolar High Frequency Cord, with 2 x 4 mm banana-plug to Coagulator, length 300 cm | 1 |
| 24. | Bipolar High Frequency Cord, length 300cm. | 1 |
| | Accessories to perform Cranial endoscopy | |
| 25. | Articulated Stand, reinforced version, only, L-shaped, with one mechanical central clamp for all five joint functions, height 48 cm, operating range 52 cm, with fastene. | 1 |
| 26. | Socket to clamp on the operating table, for use with European and United States standard rails, also suited for rails from 25x10 up to 35x8 mm, with lateral clamping element for height adjustment of the articulated stand. | 1 |
| 27. | Clamping Jaw, metal, for use with instrument and telescope sheaths, clamping range 4.8 up to 12.5 mm, with fastener. | 1 |
| 28. | Adaptor autoclavable, permits telescope changing under sterile conditions | 1 |
| | Container for Sterilization | |
| 29. | Plastic Container for Sterlizing and Storage, perforated, with lid, for two-level storage, for use with 30 cm and 36 cm Click Line-instruments, external dimensions (w x d x h) 600 mm x 145 mm x 260 mm | 1 |

| Sr.No. | Specification | Quantity |
|--------|---|----------|
| | Neuro Endoscopy Set for the Treatment of Obstructive Hydrocephalus, Marsupialization of the Arachnoid Cysts, Colloid Cyst, Ventricular Biopsy | |
| | Telescope & Sheath | |
| 1. | Ventriculoscope small, Wide Angle Straight Forward Telescope 6°, angled eyepiece, outer diameter 3.6 mm, length 18 cm, working channel diameter 1.6 mm, with suction and irrigation channel diameter 0.8 mm, autoclavable, with irrigation adapter, fiber optic light transmission incorporated, for use with : small operating sheath. | 1 |
| 2. | Forward Oblique- Telescope 0°, enlarged view, diameter 2 mm, length 26 cm, autoclavable, fiber optic light transmission incorporated. | 1 |
| 3. | Obturator, for use with operating sheath. | 1 |
| 4. | Obturator, for use with operating sheath and optic | 1 |
| 5. | Operating Sheath, small, outer diameter 4.5 mm, working length 13.3 cm. | 1 |
| | Hand Instruments | |
| 6. | Biopsy Forceps, double action jaws, diameter 1.3 mm, working length 30 cm | 1 |
| 7. | Scissors, single-action jaws, semi-rigid, diameter 1.3 mm, working length 30 cm | 1 |
| 8. | Unipolar Coagulating electrode, semi-rigid, diameter 1.3 mm, working length 30 cm | 1 |
| 9. | Bipolar Coagulation Electrode, diameter 1.3 mm, working length 30 cm | 1 |
| 10. | Grasping Forceps, double-action jaws, semi-rigid, diameter 1.3 mm, working length 30 cm | 1 |
| 11. | Forceps, for ventriculostomy, flexible, double action jaws, diameter 1 mm, working length 30 cm | 1 |
| | Monopolar, Bipolar & cords | |
| 12. | Bipolar Coagulation Electrode, semi-rigid, O.D. 1.3 mm. | 1 |
| 13. | Spatula Electrode, unipolar, flexible, diameter 1mm, working length 45 cm | 1 |
| 14. | Unipolar High Frequency Cord, with 4 mm plug, length 300 cm. | 1 |
| 15. | Bipolar High Frequency Cord, with 2 x 4 mm banana-plug, length 300 cm | 1 |
| 16. | Bipolar High Frequency Cord, Length 300cm. | 1 |
| | Accessories to perform Cranial endoscopy | |
| 17. | Articulated Stand, reinforced version, only, L-shaped, with one mechanical central clamp for all five joint functions, height 48 cm, operating range 52 cm, with fastener. | 1 |
| 18. | Socket to clamp on the operating table, for use with European and United States standard rails, also suited for rails from 25x10 up to 35x8 mm, with lateral clamping element for height adjustment of the articulated stand. | 1 |
| 19. | Clamping Jaw, metal, for use with instrument and telescope sheaths, clamping range 4.8 up to 12.5 mm, with fastener. | 1 |
| 20. | Adaptor autoclavable, permits telescope changing under sterile conditions | 1 |
| | Container for Sterilization | |
| 21. | Plastic Container for Sterilizing and Storage, perforated, with transparent lid, with insert for two angled rigid telescopes, external dimensions (w x d x h) 515 x 240 x 84 mm | 1 |
| 22. | Plastic Container for Sterilizing and Storage, perforated, with lid, for | 1 |

| | | |
|----|---|---|
| | two-level storage, for use with 30 cm and 36 cm Click Line-instruments, external dimensions (w x d x h) 600 mm x 145 mm x 260 mm | |
| | Neuro Fibro Scope – For the optical inspection of ventricles, Aqueductoplasty, inspection of subdural and sub archnoid regions & for assisted micro neuro surgery in narrow spaces. | |
| | Scope | |
| 1. | Video Neuro-Endoscope, steerable, direction of view 0°, angle of view 90°, working channel 3.6 Fr., sheath size 8.5 Fr., working length 70 cm. Following accessories are included : Case, Pressure compensation Cap, Leakage Tester, Cleaning Brush, Adaptor, with seal | 1 |
| | Hand Instruments | |
| 2. | Biopsy Forceps, double action jaws, flexible, 1.0mm, length 110 cm | 1 |
| 3. | Grasping Forceps, double actions jaws, flexible, 1.0mm, length 110 cm | 1 |
| | Monopolar & cords | |
| 4. | Coagulating Electrode, unipolar, flexible 1.0 mm, length 73 cm | 1 |
| 5. | Unipolar High Frequency Cord, with 4 mm plug, length 300 cm | 1 |
| | Containers for Sterilization | |
| 6. | Plastic Container for flexible endoscopes, suitable for gas and hydrogen peroxide sterilization as well as storage, external dimensions (w x d x h): 550 x 260 x 90 mm, for use with one flexible endoscope | 1 |

| | | |
|----|---|---|
| | Shunt Scope – For the Optical Placement of shunt for the treatment of Hydrocephalous | |
| | Scope | |
| 1. | Shunt- Scope : Miniature Straight Forward Telescope 0°, diameter 1 mm, length 16 cm, semi-rigid, with remote eyepiece and light connection, LUER-Lock adaptor, fiber optic light transmission incorporated | 1 |
| 2. | Examination Sheath, O.D. 1.3 mm, working length 16 cm, with blunt obturator, 1 LUER-lock adaptor, for use with miniature endoscope. | 1 |
| | Containers for Sterilization | |
| 3. | Metal Tray, for sterilization and storage of Miniature Straight Forward Telescope, perforated, lid with silicone bridges, external dimensions (w x d x h): 373 x 178 x 35 mm. | 1 |
| | Endoscopic management of CSF rhinorea, Optic Nerve decompression, pituitary macro and micro adenomas, transclival cordomas and for extended approaches for all lesions from Ciste gliae to CVJ junction using transclival, transplanum transcribriform & transspenoidal approach | |
| | Telescope & Sheath | |
| 1. | Straight Forward Telescope 0°, enlarged view, diameter 4 mm, length 18 cm, autoclavable. Fiber optic light transmission incorporated. | 1 |
| 2. | Suction and Irrigation Sheath 0° for endoscopic diagnosis and surgery of the paranasal sinuses and anterior skull base, vertical oval, diameter 4.8 mm x 6 mm, with separate channel for suction and irrigation, for use with Irrigation and Suction Handles | 1 |
| 3. | Forward-Oblique Telescope 45°, enlarged view, diameter 4 mm, length 18 cm, autoclavable, Fiber optic light transmission incorporated. | 1 |
| 4. | Suction and Irrigation Sheath 45°, for endoscopic diagnosis and surgery of the paranasal sinuses and skull base, oval, O.D. 4.8 mm x 6 mm, with separate channel for suction and irrigation, for use with handles. | 1 |
| 5. | Straight Forward Telescope 0°, enlarged view, diameter 4mm, length 30 | 1 |

| | | |
|-----|---|---|
| | cm, autoclavable, Fiber optic light transmission incorporated. | |
| 6. | Suction and Irrigation Sheath 0°, for endoscopic diagnosis and surgery of the paranasal sinuses and anterior skull base, vertical oval, diameter 4.8 mm x 6 mm, with separate channel for suction and irrigation, for use with irrigation and Suction handles 28161 TD/TT/JD/JT, 723630, Cleaning Accessories 28160 TK – TLL and HOPKINS® II Telescope 28164 AA | 1 |
| 7. | Forward-Oblique Telescope 30°, enlarged view, diameter 4 mm, length 30 cm, autoclavable, Fiber optic light, transmission incorporated. | 1 |
| 8. | Suction and Irrigation Sheath 30°, for endoscopic diagnosis and surgery of the paranasal sinuses and anterior skull base, vertical oval, diameter 4.8 mm x 6 mm, with separate channel for suction and irrigation, for use with Irrigation and Suction handle. | 1 |
| 9. | Irrigation and Suction handle, with push button valve consisting of : handle, with ergonomic ring handle and finger grip plate, for use with Irrigation and Suction Sheaths | 1 |
| | Hand Instrument | |
| 10. | Cleaning adaptor for irrigation channel of suction and irrigation sheath, length 3.5 cm | 1 |
| 11. | Cleaning tube for suction/telescope channel of suction and irrigation sheath, length 23 cm | 1 |
| 12. | Nasal Scissors, medium, (standard model), working length 9.5 cm | 1 |
| 13. | Nucleus Cutting Forceps single action jaws, movable jaw opening upwards, diameter 3.5 mm, working length 20 cm | 1 |
| 14. | WILDE Nasal Forceps 45°, upturned, size 1, working length 11 cm | 1 |
| 15. | Nasal Forceps, straight, size 1, working length 11 cm | 1 |
| | Round Knife | |
| 16. | Round Knife 0°, width 1 mm, working length 10 cm, total length 20 cm | 1 |
| 17. | Round Knife 0°, width 1 mm, working length 13 cm, total length 23 cm | 1 |
| 18. | Round Knife 45°, width 1 mm, working length 10 cm, total length 20 cm | 1 |
| 19. | Round Knife 45°, width 1 mm, working length 13 cm, total length 23 cm | 1 |
| 20. | Round Knife 90°, width 1 mm, working length 10 cm, total length 20 cm | 1 |
| 21. | Round Knife 90°, width 1 mm, working length 13 cm, total length 23 cm | 1 |
| 22. | Round Knife 0°, width 2 mm, working length 10 cm, total length 20 cm | 1 |
| 23. | Round Knife 0°, width 2 mm, working length 13 cm, total length 23 cm | 1 |
| 24. | Round Knife 5°, width 2 mm, working length 10 cm, total length 20 cm | 1 |
| 25. | Round Knife 45°, width 2 mm, working length 13 cm, total length 23 cm | 1 |
| 26. | Round Knife 90°, width 2 mm, working length 10 cm, total length 20 cm | 1 |
| 27. | Round Knife 90°, width 2 mm, working length 13 cm, total length 23 cm | 1 |
| | Dissector | |
| 28. | Dissector, tip 45°, width 1 mm, working length 13 cm, total length 23 cm | 1 |
| 29. | Dissector, tip 90°, width 1 mm, working length 10 cm, total length 20 cm | 1 |
| 30. | Dissector, sharp, round spatula, tip angled 45°, size 2 mm, with round handle, length 25 cm | 1 |
| 31. | Dissector, sharp, round spatula, tip angled 45°, size 3 mm, with round handle, length 25 cm | 1 |
| 32. | Elevator, sharp, slightly curved spatula, straight, size 3 mm, with round handle, length 25 cm | 1 |
| 33. | Hook, 90°, blunt, length 25 cm, with round handle | 1 |
| 34. | Seeker, 90°, with ball end, diameter 1 mm, length 25 cm | 1 |
| 35. | Micro Raspajtory, single curved to right, width 2 mm, length 25 cm | 1 |
| 36. | Elevator, sharp, flat long spatula, tip angled 15° downwards, size | 1 |

| | | |
|-----|---|---|
| | 1.5mm, with round handle, length 25 cm | |
| 37. | Dissector, bayonet-shaped, sharp, curved to left, length 24 cm | 1 |
| 38. | Dissector, bayonet-shaped, sharp, curved to right, length 24 cm | 1 |
| | Scissor | |
| 39. | Scissors, straight, with small handle, with cleaning connector, working length 18 cm | 1 |
| 40. | Scissors, curved to right, with small handle, with cleaning connector, working length 18 cm | 1 |
| 41. | Scissors, curved to left, with small handle, with cleaning connector, working length 18 cm | 1 |
| 42. | Scissors, curved upwards, with small handle, with cleaning connector, working length 18 cm | 1 |
| 43. | Scissors, upturned 45°, delicate, sheath 360° rotatable, with cleaning connector, working length 18 cm | 1 |
| | Forceps | |
| 44. | Forceps, round cupped jaws, diameter 0.6mm, extra delicate, straight, working length 18 cm | 1 |
| 45. | Forceps, oval cupped jaws, 0.6 mm, extra delicate, curved to right, working length 18 cm | 1 |
| 46. | Spoon Forceps, spoon size 3 x10 mm, single action jaws, working length 17 cm | 1 |
| 47. | Miniature Grasping Forceps, serrated, straight, working length 18 cm | 1 |
| 48. | Miniature Forceps, through-cutting, with fine flat jaws, bite 1 mm, curved up, working length 18 cm | 1 |
| 49. | Nasal forceps, with extra line flat jaws, through-cutting, tissue sparing, width of cut 1.5 mm, straight sheath, jaws angled upwards 45°, with cleaning connector, working length 18 cm | 1 |
| | Curette | |
| 50. | Curette, round spoon, tip slightly angled, size 2 mm, with round handle, length 25 cm | 1 |
| 51. | Curette, round spoon, tip angled, size 2 mm with round handle, length 25 cm | 1 |
| 52. | Curette, round wire, ID 3 mm, tip angled 45°, with round handle, length 25 cm | 1 |
| 53. | Ring-curette, round wire, ductile, ID 3 mm, tip angled 45°, with round handle, length 25 cm | 1 |
| 54. | Curette, round wire, ID 3 mm, distally curved shaft, with round handle, length 25 cm | 1 |
| 55. | Curette, stirrup-shape, blunt, with round handle, length 25 cm | 1 |
| | Monopolar, Bipolar & Cord | |
| 56. | Take-apart Bipolar Forceps, width 1mm delicate jaws, distally angled 45°, horizontal closing, outer diameter 3.4 mm, working length 20 cm, consisting of: handle, Outer Tube, Inner Tube, Bipolar Insert. | 1 |
| 57. | Bipolar Insert | 1 |
| 58. | Bipolar high Frequency Cord with 2 x 4 mm banana-plug to, length 300 cm | 1 |
| | Suction Tube | |
| 59. | Suction Tube, with cut-off hole, drop-shaped, with distance markings, LUER, conical distal end, 6 Fr., working length 15 cm | 1 |
| 60. | Suction Tube, with cut-off hole, drop-shaped, with distance markings, LUER, conical distal end, 8 Fr., working length 15 cm | 1 |
| 61. | Suction Tube, with cut-off hole, drop-shaped, with distance markings, LUER, conical distal end, tip curved upwards, ball end, 2.4 mm, working length 15 cm | 1 |

| | | |
|--------------|--|---|
| 62. | Suction Tube, with cut-off hole, drop-shaped, with distance markings, LUER, conical distal end, malleable, 6 Fr., working length 15 cm | 1 |
| 63. | Suction Tube, with cut-off hole, drop-shaped, with distance markings, LUER, conical distal end, malleable, 8 Fr., working length 15 cm | 1 |
| 64. | Insulated Cannula for suction and coagulation, O.D :3mm, 90° curved, working length 16 cm | 1 |
| Punch | | |
| 65. | Bone Punch, detachable, rigid, upbiting 60° forward, size 1 mm, working length 17 cm | 1 |
| 66. | Bone Punch, detachable, rigid, upbiting 60° forward, size 2 mm, working length 17 cm | 1 |
| 67. | Bone Punch, detachable, rigid, downbiting 60° forward, size 1 mm, working length 17 cm | 1 |
| 68. | Bone Punch, detachable, rigid, downbiting 60° forward, size 2 mm, working length 17 cm | 1 |

| | | |
|---------------------------------------|---|---|
| Micro Neuro Surgery Instrumnts | | |
| Needle Holder | | |
| 1. | Micro Needle Holder, bayonet-shaped, straight jaws, 2 x 6 mm, working length 10 cm | 1 |
| 2. | Micro Needle Holder, bayonet-shaped, jaws curved to left, 1 x 6 mm, working length 10 cm | 1 |
| Forceps | | |
| 3. | Micro Grasping Forceps, bayonet-shaped, straight jaws, smooth, 0.5 mm, working length 10 cm | 1 |
| 4. | Forceps, bayonet-shaped, spoon, 2 mm, working length 10 cm | 1 |
| 5. | Micro Grasping forceps, bayonet-shaped, straight jaws, serrated, 3 mm, working length 10 cm | 1 |
| 6. | Micro Grasping forceps, bayonet-shaped, jaws curved to left, 0.75 mm, working length 10 cm | 1 |
| 7. | Forceps, bayonet shaped, 4 mm, spoon, working length 10 cm | 1 |
| 8. | Forceps, bayonet shaped, 6 mm, spoon, working length 10 cm | 1 |
| 9. | Forceps, bayonet shaped, 2 mm, spoon horizontal, working length 10 cm | 1 |
| 10. | Forceps, bayonet shaped, 4 mm, spoon horizontal, working length 10 cm | 1 |
| 11. | Forceps, bayonet shaped, 6 mm, spoon horizontal, working length 10 cm | 1 |
| 12. | Micro Scissors, bayonet-shaped, sharp/sharp, cutting edges straight, working length 10 cm | 1 |
| 13. | Micro Applying Forceps, Yasargil-Clips, working length 10 cm | 1 |
| 14. | Micro Applying Forceps, Yasargil-Mini Clips, working length 10 cm | 1 |
| 15. | Micro Grasping Forceps, straight jaws, smooth, diameter 1 mm, working length 11 cm | 1 |
| 16. | Micro Grasping Forceps, jaws curved upwards 45°, smooth, diameter 1 mm, working length 11 cm | 1 |
| 17. | Micro Grasping Forceps, straight jaws, serrated, diameter 1 mm, working length 11 cm | 1 |
| 18. | Micro Grasping Forceps, straight with smooth jaws, diameter 2.2 mm, working length 11 cm | 1 |
| 19. | Micro Grasping Forceps, 45° angled, with smooth jaws, diameter 2.2 mm, working length 11 cm | 1 |
| 20. | Micro Grasping Forceps, straight, with serrated jaws, diameter 2.2 mm | 1 |
| Scissor | | |
| 21. | Micro Scissors, bayonet-shaped, sharp/sharp, cutting edges curved to left, working length 10 cm | 1 |

| | | |
|-----|--|---|
| 22. | Micro Scissors, bayonet-shaped, blunt/blunt, cutting edges straight, working length 10 cm | 1 |
| 23. | Micro Scissors, bayonet-shaped, sharp/sharp, cutting edges curled to right, working length 10 cm | 1 |
| 24. | Micro scissors, bayonet-shaped, sharp/sharp, cutting edges horizontal, working length 10 cm | 1 |
| 25. | Micro Scissors, cutting edges straight, diameter 1 mm, working length 11 cm | 1 |
| 26. | Micro Scissors, cutting edges angled 30°, diameter 1 mm, working length 11 cm | 1 |
| 27. | Micro Scissors, cutting edges angled 60°, diameter 1 mm, working length 11 cm | 1 |
| 28. | Micro Scissors, straight, diameter 2.2 mm, working length 11 cm | 1 |
| 29. | Micro Scissors, 30° angled, diameter 2.2 mm, working length 11 cm | 1 |
| 30. | Micro Scissors, 60° angled, diameter 2.2 mm, working length 11 cm | 1 |

| Endoscopy assisted micro Neuro Surgery Instruments | | |
|---|---|---|
| Telescope & Sheath | | |
| 1. | Straight Forward Telescope 0°, diameter 2.7 mm, length 15 cm, autoclavable, proximally angled eyepiece and light connection, fiber optic light transmission incorporated. | 1 |
| 2. | Forward-Oblique Telescope 30°, diameter 2.7mm, working length 15 cm, with viewing direction 6 o'clock, autoclavable, proximally angled eyepiece, fiber optic light transmission incorporated. | 1 |
| 3. | Forward-Oblique Telescope 30°, diameter 2.7 mm, working length 15 cm, with viewing direction 12 o'clock, autoclavable, proximally angled eyepiece, fiber optic light transmission incorporated. | 1 |
| 4. | Clearvision sheath 0°, 3.5 x 4.7 mm, working length 12 cm, for use with Hopkins optic | 1 |
| 5. | Clearvision sheath 30°, 3.5 x 4.7 mm, working length 12 cm, for use with Hopkins optic | 1 |
| 6. | Clearvision sheath 30°, 3.5 x 4.7 mm, working length 12 cm, for use with Hopkins optic | 1 |
| Hand Instruments | | |
| 7. | Dissector, bajonet-shaped, curved downwards, working length 13.5 cm | 1 |
| 8. | Dissector, bajonet-shaped, curved downwards, working length 11.5 cm | 1 |
| 9. | Dissector, bajonet-shaped, curved upwards, working length 13.5 cm | 1 |
| 10. | Dissector, bajonet-shaped, curved upwards, working length 11.5 cm | 1 |
| 11. | Micro Hook, bajonet-shaped, smooth, working length 11.5 cm | 1 |
| 12. | Micro Hook, bajonet-shaped, smooth, working length 13.5 cm | 1 |
| 13. | Suction Tube, with grip plate, elongated out-off hole, LUER, with distal lateral holes, O.D. 3 mm, length 15 cm | 1 |
| 14. | Suction Tube, with grip plate, elongated out-off hole, LUER, with distal lateral holes, O.D. 1.7 mm, length 15 cm | 1 |
| 15. | Suction Tube, with grip plate, elongated out-off hole, LUER, with distal lateral holes, O.D. 2.5 mm, length 15 cm | 1 |
| Bipolar & Cord | | |
| 16. | Bipolar Forceps, insulated, bayonet shape, blunt, tips 0.7 mm, working length 12 cm, total length 23 cm | 1 |
| 17. | Bipolar Forceps, insulated, bayonet shape, blunt, tips 0.7 mm, working length 14 cm, total length 25 cm | 1 |
| 18. | Bipolar Forceps, insulated, bayonet shape, blunt, tips 0.3 mm, working length 12 cm, total length 23 cm | 1 |
| Holding System | | |

| | | |
|-----|--|---|
| 19. | Articulated Stand, reinforced version, only, L-shaped, with one mechanical central clamp for all five joint functions, height 48cm, operating range 52 cm, with fastener | 1 |
| 20. | Rotation Socket to clamp on the operating table with one already mounted butterfly nut, for use with European and United States standard rails, with lateral clamping element for height and angle adjustment of the articulated stand | 1 |
| 21. | Clamping jaw, metal, for use with instrument and telescope sheaths, clamping range 4.8 up to 12.5 mm, with fastener. | 1 |

| | | |
|---|--|---|
| Telescope with multiple angles of view | | |
| 1. | Telescope, diameter 4 mm, length 18 cm, autoclavable, variable direction of view from 15° – 90°, adjustment knob for selecting the desired direction of view, fiber optic light transmission incorporated. | 1 |

| Sr. No. | Specification | Quantity |
|---|--|----------|
| Motor System | | |
| 1. | Motor system with color display, touch screen, two motor outputs, integrated irrigation pump and integrated SCB module, 100-240 VAC, 50/60 Hz consisting of: Mains Cord, Irrigator rod, Two-Pedal Footswitch, two-stage, with proportional function Silicone tubing Set, for irrigation, sterilizable, Clip Set, for use with Tubing Set , Connecting Cable, length 100 cm, Single Use tubing Set, sterile | 1 |
| 2. | High-speed Micro-Motor, max. speed 60,000 rpm, including connecting cable. | 1 |
| Perforator | | |
| 3. | Perforator Handpiece, max. speed 1200 rpm, without perforator blade, Hudson connector, for use with High-Speed Micro-Motor | 1 |
| Craniotome | | |
| 4. | Craniotome Handpiece, maximum speed 60,000 rpm, including medium dura protector for use with High-Speed Micro-Motor as well as 3.17 mm Craniotome Burrs and Dura Protector | 1 |
| 5. | Pediatric Dura Protector, for use with Craniotome Handpiece | 1 |
| 6. | High-Speed Craniotome Burr, pediatric, shaft diameter 3.17 mm, for single use, sterile, package of 5, for use with 60,000 rpm Craniotome Handpiece and Pediatric Dura Protector | 1 |
| 7. | Medium Dura Protector, for use with Craniotome Handpiece | 1 |
| 8. | High-Speed Craniotome Burr, medium, shaft diameter 3.17 mm, for single use, sterile, package of 5, for use with 60,000 rpm Craniotome Handpiece and Medium Dura Protector | 1 |
| 9. | Long Dura Protector, for use with Craniotome Handpiece | 1 |
| 10. | High-Speed Craniotome Burr, long, shaft diameter 3.17 mm, sterile, package of 5 for use with 60,000 rpm Craniotome Handpiece and Long Dura Protector | 1 |
| Shaver Handpiece & Suction burr | | |
| 11. | Spine Handpiece | 1 |
| 12. | Shaver Handpiece | 1 |
| 13. | Handle for Shaver Handpiece | 1 |
| 14. | Suction Burr, with integrated irrigation, straight, sterilizable, cylindrical cutter head with lateral and distal protection, shaft diameter 3.5 mm, length 30 cm for use with Drill | 1 |
| High Speed Handpiece – 100000rpm & Burrs | | |

| | | |
|-----|--|---|
| 15. | High-Speed Handpiece, long, angled 100,000 rpm, for sue with High – Speed Micro-Motor. | 1 |
| 16. | High-Speed Standard Burr, long, diameter 3 mm, shaft diameter 3.17mm, package of 5, for use with 100,000 rpm High-Speed Handpiece | 1 |
| 17. | High- Speed Diamond Burr, long, diameter 3mm, shaft diameter 3.17mm, sterile, package of 5, for use with 100,000 rpm High-Speed Handpiece | 1 |
| 18. | High- Speed Coarse Diamond Burr, long, diameter 3mm, shaft diameter 3.17mm, sterile, package of 5, for use with 100,000 rpm High-Speed Handpiece | 1 |
| 19. | High-Speed Handpiece, medium, angled, 100,000 rpm, for use with High-Speed Micro-Motor | 1 |
| 20. | High- Speed Acom, medium, diameter 7.5 mm, shaft diameter 3.17mm, sterile, package of 5, for use with 100,000 rpm High-Speed Handpiece | 1 |
| 21. | High- Speed Barrel Burr, medium, diameter 6 mm, shaft diameter 3.17mm, sterile, package of 5, for use with 100,000 rpm High-Speed Handpiece | 1 |
| 22. | High- Speed Neuro Fluted Burr, medium, diameter 1.8 mm, shaft diameter 3.17mm, sterile, package of 5, for use with 100,000 rpm High-Speed Handpiece | |
| | High Speed Straight & Angled Handpiece – 60000 rpm & Burrs | |
| 23. | High-Speed Handpiece, medium, angled, 60,000 rpm, for use with High-Speed Micro-Motor. | 1 |
| 24. | High-Speed Handpiece, medium, straight, 60,000 rpm, for use with High-Speed Micro-Motor. | 1 |
| 25. | High-Speed Standard Burr, medium, diameter 2 mm, shaft diameter 2.35 mm, sterile, package of 5, for use with 60,000 rpm High-Speed Handpiece. | 1 |
| 26. | High-Speed Diamond Burr, medium, diameter 3 mm, shaft diameter 2.35 mm, sterile, package of 5, for use with 60,000 rpm High-Speed Handpiece. | 1 |
| 27. | High-Speed Coarse Diamond Burr, medium, diameter 3 mm, shaft diameter 2.35 mm, sterile, package of 5, for use with 60,000 rpm High-Speed Handpiece. | 1 |
| | High Speed Malleable Handpiece & Burr | |
| 28. | High-Speed Handpiece, super long, malleable, slim, angled, 60,000 rpm, for use with High-Speed Micro-Motor. | 1 |
| 29. | High-Speed Diamond Burr, super long, diameter 3 mm, shaft diameter 1 mm, sterile, package of 5, for use with 60,000 rpm High-Speed Handpiece. | 1 |
| 30. | High-Speed Coarse Diamond Burr, super long, diameter 3 mm, shaft diameter 1 mm, sterile, package of 5, for use with 60,000 rpm High-Speed Handpiece. | |

| | | |
|----|---|---|
| | Pneumatic Holding Arm | |
| 1. | Pneumatic holding arm set, consisting of : Arm , Table Adaptor, Adaptor, for clamping jaws, Clamping Jaw large, clamping Jaw small, Clamping Jaw for fiberscopes, Pressure Regulator, Drape. | 1 |
| 2. | Air Compressor, power supply 230 VAC, 50/60 Hz, Dimensions (w x d x h): ca. 500 x 320 x 340 mm, weight appr. 22 kg, consisting of: Air compressor, Fabric Reinforced tube for connecting, Connecting Tube, length 600 cm, for use with holding system, required pressure setting min. 6 to max. 8 bar | 1 |

11. Dual Head Gamma Camera with integrated Multislice CT (SPECT/CT) for Nuclear Medicine Department, Super Specialty Block, Safdarjung Hospital, New Delhi

| | |
|-----------|---|
| 1. | General Features: |
| | <p>Latest model of Dual Head Gamma Camera with Multi slice CT for CT attenuation and CT scan Fusion capability, Spect Imaging Capability with high resolution possible Whole Body Imaging Capability</p> <ol style="list-style-type: none"> i. The system should have capability for simultaneous data acquisition, processing, image reconstruction & analysis and fusion of SPECT with CT images. The acquisition & processing software should be of latest version. ii. The system should operate on 220 (\pm 10) V A/C, 50HZ or 440V (\pm 20) A/C 50HZ iii. Type approval certificate/NOC from AERB, Mumbai for the quoted model must be attached with the technical bid or else the bid will be summarily rejected. iv. For acceptance of the equipment and to fulfill the AERB requirements, all the QA tests as per NEMA guidelines will be done and demonstrated by the company engineer(s) and all the required phantoms will need to be arranged by the vendor and submit a detailed report in stipulated time frame. The company will also arrange such phantoms during periodical QA tests. v. All the Application, Operating and Service manuals in English language in duplicates should be provided by the vendor at the time of handing over the machine. vi. Any options or added facilities not indicated in the specifications may also be given. Any improved modifications or updated versions of the system can be included in the quotations |
| 2 | Detector |
| 2.1 | Dimension: Rectangular , Large FOV (UFOV 50 x 38cm or more) for adequate patient breadth coverage |
| 2.2 | Detector Crystal Thickness 3/8 “ (9.5mm) |
| 2.3 | Detector Type : True Digital (1 ADC per PMT) |
| 2.4 | Number of PMTs : 50 or more with 3/8” |
| 2.5 | Detector performance parameters as per NEMA standard : |
| 2.6 | Intrinsic Energy Resolution (FWHM) < 10% (for Tc-99m at 20 kcps) |
| 2.7 | Intrinsic Spatial Resolution CFOV : FWHM 4.0mm UFOV : FWHM < 4.5 mm |
| 2.8 | Intrinsic Flood Field Uniformity: CFOV Differential <2.5%, Integral <3.5% UFOV Differential < 3.0%, Integral < 4.0% |
| 2.9 | Intrinsic Count Rate Performance Maximum > or =300Kcps (For Tc - 99m at 20% window) |

| | |
|-----------|--|
| 3. | Gantry |
| 3.1 | Wide open gantry design for non- Claustrophobic Imaging gamma camera for both CW and CCW rotation with preferable unlimited rotation angle Gantry orientations. |
| 3.2 | Should have a gantry display unit which shows the current positions of the gantry's moving parts and positions of the patient table |
| 4. | Data Acquisition System |
| 4.1 | It should have data acquisition system with features for data acquisition, system control and quality control check and automatic image fusion capabilities. Separate processing system if required should be quoted. |
| 4.2 | On the Fly digital uniformity & isotope decay and COR Corrections |
| 4.3 | The acquisition console should have hard Disk drive of 500GB or more, RAM 1GB or more and should be latest processor . |
| 4.4 | Predefined and user configurable protocols for standard studies for rapid recall and image. |
| 4.5 | Ability to pause and resume all types of acquisitions |
| 4.6 | Zoom and rotate features |
| 4.7 | Cinematic display of dynamic, MUGA & all multi frame studies |
| 4.8 | Live display of acquired data and imaging parameters during acquisition. |
| 4.9 | Console should have at least 19" flat display Color Monitor |
| 4.10 | Dual or Multiple Isotope /Multiple Energies simultaneous acquisition facilities should be available. |
| 4.11 | Should be able to network to both local as well as wide area networks via DICOM 3.0 / INTERFILE 3.3 TCP/IP based protocols |
| 5. | Acquisition Software |
| 5.1 | Should be able to acquire data in the following modes: Static, Dynamic, List mode, Multigated, Whole Body Scanning, SPECT, Gated SPECT, and preferable Whole Body Spect & Dynamic SPECT. |
| 5.2 | Should be able to acquire data from 64x64 or less to 512x512 matrix size and 256x1024 for whole body imaging |
| 5.3 | For MUGA, there should be ECG display during acquisition and R-TO-R Histogram display |
| 5.4 | Real time irregular beat rejection for GATED planar and SPECT Studies. |
| 5.5 | At least 8,16,24 & 32 frames per R-R interval |
| 5.6 | Auto-start by predefined count rate setting |
| 5.7 | Multitasking even during acquisition |
| 5.8 | Acquisition software should include camera quality control activities including: Center of rotation (COR) correction, Uniformity correction maps, Energy Sensitivity and Linearity maps, Daily / Weekly QC including Gantry calibration, Energy spectrum histogram (PHA) display, |

| | |
|-----------|--|
| | QC for Whole Body Acquisition, QC for balancing sensitivity of both Detector heads. |
| 6. | Imaging Table |
| 6.1 | Single table for all type of studies i.e. Planar, Whole Body, and Cardiac & Tomography applications |
| 6.2 | Should have table top composed of least attenuation material (less than 10% for 140 KeV) |
| 6.3 | Should have load capacity of at least 180 Kg |
| 6.4 | Tabletop should have motorized translation for whole body scans |
| 6.5 | Preferable table should be movable to permit imaging of Stretcher patient. |
| 7. | Multimodality (Processing) workstation. (This is in addition to the acquisition system) (for processing of SPECT /and CT images, automatic image fusion capabilities) . Two Multimodality (Processing) workstations are to be provided (Both should have licensed copies of all the softwares). One will be installed in the console room and second in another room of the department. Both will be in network. |
| 7.1 | Should have latest processor with 4GB or more RAM , at least 1 GB graphic card, Hard Disk at least 1TB. CD/DVD-RW and DVD drive preferably writing capability. |
| 7.2 | Operating System: Latest. |
| 7.3 | Large Flat panel colour monitor (at least 19") |
| 7.4 | There should be provision for data transfer to external storage device (CD/DVD/ External Hard Disk) for mass data storage and achieving. |
| 7.5 | Both processed data (reports etc) as well as raw (acquired images) should be amenable to such data transfer and storage. |
| 7.6 | One additional image viewing station with BARCO or equivalent monitor should be provided. |
| 7.7 | Communications - Ethernnet with TCP/IP protocols and DICOM-3 or latest networking of all possible equipments in the facility with their peripherals and PACS available in the department |
| 8. | Processing Software |
| 8.1 | All standard planar and SPECT clinical software including gated studies, cardiac first pass, renogram (Including GFR& ERPF), cerebral blood flow processing, Myocardial perfusion analysis (Including QGS & QPS) |
| 8.1.1 | Cardiac first pass studies. |
| 8.1.2 | Gated Cardiac Studies (Automated / manual) |
| 8.1.3 | Quantitative Gated tomography |
| 8.1.4 | Cardiac SPECT studies |
| 8.1.5 | Ventilation / perfusion studies |
| 8.1.6 | Clinical cerebral studies including HMPAO-SPECT. Quantitative Brain SPECT evaluation. |
| 8.1.7 | Renal Q F Analysis and MAG-3 protocol, DTPA protocol |
| 8.1.8 | Cardiac shunt studies |
| 8.1.9 | 3D interactive display function |
| 8.1.10 | Bull's eye GFP analysis |
| 8.1.11 | Liver / Abdominal studies including gall bladder ejection fraction. |
| 8.1.12 | Whole body studies – dual intensity |
| 8.1.13 | Dedicated licensed latest version of Emory Cardiac Toolbox including optional software (3.05 suite / latest version) & 4DM cardiac quantitative SPECT package |
| 8.1.14 | Motion correction |
| 8.1.15 | Transmission / Emission attenuation correction |
| 8.2 | Time activity Curves, Histogram analysis and ROI Statistical analysis |
| 8.3 | Back projection, Iterative Reconstruction & Volume rendering Software for SPECT studies |
| 8.4 | Software for Scatter correction with different scatter correction algorithms and filters |

| | |
|------------|--|
| 8.5 | CT based attenuation correction |
| 8.6 | Patient motion correction preferable for SPECT |
| 8.7 | Connectivity solutions: Include Dicom 3.0 / Interfile 3.3 Supports |
| 8.8 | Clinical software programming as per user requirement |
| 8.9 | User setup of image size for hard copy (depending on paper size used) |
| 8.10 | Automatic image fusion capabilities between CT and SPECT. |
| 9. | MULTISLICE CT AND CT DATA ACQUISITION SYSTEM |
| 9.1 | Complete x-ray system with detector for acquiring at least 16 slices / images of diagnostic quality simultaneously. X-ray system should have an x-ray tube of high performance and Anode storage capacity of 5MHU or more with Generator power of 40kW or more. |
| 9.2 | Hardware and software for ECG gating should be provided with SPECT & CT. |
| 10. | COLLIMATORS |
| | The following collimators with carts should be included: a) Low Energy high Resolution (LEHR) - One pair b) High Energy General Purpose (HEGP-364keV) - One pair c) Pin hole - One no. |
| 11. | Accessories |
| 11.1 | Uninterrupted power supply (UPS) of reputed firm for the whole system (SPECT and CT), with maintenance free batteries of reputed make, having at least 30minutes back-up time. One extra set of batteries of reputed make (for the UPS) to be supplied after 2-3 years. |
| 11.2 | One SS trolley in injection room with a provision to mount L-bench for PET radionuclides and placing dose calibrator in it |
| 11.3 | High resolution color laser printer for color hardcopy on paper with 5 sets of all cartridges. |
| 11.4 | Low attenuation Adjustable head holder for brain scans. |
| 11.5 | Butterfly arms support for optimized cardiac SPECT studies. |
| 11.6 | A complete computerized treadmill system (GE CASE Cardiac assessment system for exercise testing with T2100 treadmill or equivalent) with non-invasive BP monitoring. 100 rolls of ECG paper with boxes. |
| 11.7 | Resuscitation trolley with defibrillator & vital signs monitor. |
| 11.8 | Automatic syringe infusion pump (with facility for 20ml, 50ml and 60ml syringes) with stand. |
| 12 | Hot Lab & Monitoring Equipments |
| 12.1 | Dose Calibrators (Atomlab 400 Dose Calibrator / Capintec CRC 25 R) including radioactive reference/ quality control sources and Dose calibrator shielding rings (2.25" thick lead) |
| 12.2 | Two digital $\mu\text{Sv/hr}$ range GM based survey-cum-contamination monitors |
| 12.3 | Lead syringe shield for 2ml and 5ml syringes- 2 each. |
| 12.4 | Shielded syringe carrier (lead shielding 3mm or more) - Two |
| 12.5 | Table top L-bench for safe dispensing of radioactive material (standard size). |
| 12.6 | Co-57 rectangular flood source of 10mCi strength (Date of source strength should be specified after the possible date of installation). |
| 12.7 | Fume hood (standard size) with sliding lead shield with lead window for radio pharmacy room. |

| | |
|------------|---|
| | Interlocking lead bricks(with at least 2” lead thickness) 12”h x 48”w |
| 12.8 | Interlocking lead bricks (for making 3 walled cave of 15”w x 17”d x 15”h or more with at least 2” lead thickness). |
| 12.9 | Three SS foot operated lead lined waste bins with minimum 4mm lead on all sides. |
| 12.10 | Two Lead lined decay drums with minimum 6mm lead on all sides. |
| 12.11 | One decontamination kit. |
| 13. | The supplier shall be required to undertake all the interior work in the SPECT/CT room and HOTLAB area. |
| 14 | Training The company shall organize on-site operator training post-installation by trained engineers and application specialists for acquisition and processing software application, QC etc for a period of two weeks once immediately after installation (one week) and second (one week) after 2-3months of commissioning. |
| 15 | Maintenance & Reliability |
| | On site remote service diagnostic facility. The guaranteed up-time of the system with in a normal working week, excluding any planned preventive maintenance, provided the system is on a maintenance contract should be > 95% or 346 days (24x7) per year. The performance parameters at the time of acceptance testing should be with in $\pm 5\%$ of the specified values in the tender. Beyond 5% and with in 10% the company will be asked to rectify. Beyond $\pm 10\%$ will not accepted. If the specified uptime mentioned above is not achieved, the warranty period will be extended by double the number of days for which guaranteed up-time period criteria was not met/ penalty may be levied as per discretion of the hospital. |
| 16. | Warranty & CMC |
| | Five years comprehensive warranty for the whole system with spares including SPECT gamma camera (including crystal), multislice CT (including detectors and x-ray tube), computer systems (including monitors and CPU), UPS (including batteries), printers, accessories (with spares). The comprehensive warranty will include regular preventive maintenance of the equipment (SPECT/CT). The company should quote Comprehensive Maintenance Contract (CMC) price including equipment (SPECT-CT), accessories with spares. The above mentioned CMC price will be taken into consideration for arriving at L-I. The company must ensure spares of the whole system for a period of 10years from the date of installation. |

Regarding the Turnkey Works:

Details of Various Makes for Executing Turnkey Activities for Installation, Testing & Commissioning Medical Equipment viz. CT Scan, MRI, Biplane/Flat Panel DSA, Digital Radiography, Digital Radiofluoroscopy, Cath Lab., PET/CT, Gamma Camera, Gamma Knife, Brain Suite/Intraoperative MRI, Mobile CT Scan, Heamodialysis Machines, RO Plant etc., any Lab. Equipment or any other Medical Equipment requiring such activities at Safderjung Hospital Project.

LIST OF APPROVED MAKES : CIVIL WORKS

| S.No | Material | MANUFACTURERS |
|------|---|---|
| 1 | Doors & Windows fixtures/ Fittings | <i>Dorma, Godrej, Ozone, Austavision</i> |
| 2 | Door Closer / Floor spring | <i>Ozone, hettich, Dorma, Godrej,</i> |
| 3 | Aluminium Sections. | Hindalco, Jindal, <i>BALCO, Alom</i> |
| 4 | Clear Glass/ Clear Float Glass/ Toughened Glass | Saint Gobain(SG), Modi, <i>Asahi, Glaverbel</i> |
| 5 | Laminates | Formica, Decolam, Century, Marino, <i>Greenlam</i> |
| 6 | Synthetic Enamel Paints | Berger, Asian, ICI , Nerolac, Shalimar |
| 7 | Oil Bound Distemper | Berger, Asian, <i>ICI , Nerolac, Shalimar</i> |
| 8 | Cement Paint | Snowcem plus, Berger, Nerolac, <i>Asian, ICI</i> |
| 9 | Plastic Emulsion Paint | <i>Berger, Asian, ICI , Nerolac, Shalimar</i> |
| 10 | Other Paints/Primers | Berger, Asian, ICI , Nerolac, Shalimar |
| 11 | MS Pipe/ Sections | Jindal Hisar, Prakash-Surya, BST, Kalinga, Tata |
| 12 | Polycarbonate Sheets | <i>GE, Macrolux, Plastic, Vergola, Skyarch, Polytechno</i> |
| 14 | Wooden Fire Check Doors | Navair, Pacific Fire Control, Kutty Promat, Sukri |
| 15 | Metal Fire Check Doors | Navair, Shakti- Met, Godrej, Sukri, Pacific Fire Control |
| 16 | Ceramic Tiles | Johnson, Somany, Kajaria, Nitco, <i>Bell, Hindustan,</i> |
| 17 | Pre-Laminated Particle Board | Novopan, Greenlam, Kitlam, Marino, <i>Century, Archid ply</i> |
| 18 | Flush Door Shutters | Century, Kitply, Green Ply, <i>Duro</i> |
| 19 | Glazed Tiles | Bell, Somany, Johnson, Kajaria, <i>Nitco</i> |
| 20 | PVC Water Stops | <i>Prince/Supreme/Finolex//BASF</i> |
| 21 | White Cement | Birla White, J.K., <i>Grasim</i> |
| 22 | Dash Fasteners./Anchor bolts | Hilti, Fischer, Bosch, |
| 23 | Stainless Steel Bolts, Washers and nuts | Kundan , Puja , Atul |
| 24 | 6mm thick Reflective Glass | Glaverbel, Glavermas, Saint Gobain, <i>Asahi</i> |
| 25 | Door Locks | ACME, Godrej, <i>Dorma</i> |
| 26 | Door Seal – Woolpile Weather Strip/ Acoustic seal | Anand -Reddiplex, <i>Enviroseal, Viper</i> |

HSCC (India) Limited

| | | |
|-------|---|---|
| 27 | Aluminium Grill | Hindalco, Jindal |
| 28 | Vitrified Tiles | Naveen, Bell, Kajaria, Somani, <i>Nitco, Johnson, Euro</i> |
| 29 | Aluminium Cladding sheets | Alstrong , Alpolic, Alucobond, Alstone International, Aludecor Lamination |
| 30 | Stainless steel D-handles | D-line, Giesse, Dorma, Dorset, ozone |
| 31 | Stainless Steel Pipes/Flats | 304 Grade (as approved by Engineer) |
| 32 | Structural Steel | TATA, SAIL, RINL, JINDAL |
| 33 | Epoxy Flooring/ wall coating | Fosrock, Beck, Famaflor, <i>Araldite, STP, Sika, BASF</i> |
| 34 | Ply board | Greenply, Kitply, Century, Archid, Marino, <i>Duro</i> |
| 35 | PVC Flooring | LG, Tarkett, Responsive , <i>Armstrong, Gerflor</i> |
| 36 | SS Railing | <i>Ozone, D-Line, Jindal,</i> |
| 37 | Fire rated door closer/Mortice Lock/ Door Co-ordinator | Dorma, Becker F.S. Australian or approved equivalent |
| 38 | Gypsum Board System | Gyproc (Saint Gobain), Lafarge, Boral, <i>Hilux, Aerolite</i> |
| 39 | Adhesive for Door Work | <i>Fevicol/ Vamicol/ Dunlop/ Piditite/ Sika/ Thermoshield</i> |
| 40 | Epoxy Paint | <i>Nerolac/ Shalimar/ cico/ Fairmate/ sika/ BASF/ Berger/ Asian/ Pidilite</i> |
| 41 | Polysulphide sealant | Pidilite/ Fosroc/ Choksey/chematal rai/ cico/ sika, MC Bouchemie, BASF, STP |
| 42 | Glass Doors (Motorised) | <i>DORMA/ Hafle/ Ozone</i> |
| 43 | Calcium silicate boards | <i>Hilux/ Aerolite, Armstrong</i> |
| 44 | Calcium Silicate Tiles | <i>Hilux/ Aerolite, Armstrong</i> |
| 45 | Texture Paints | <i>Spectrum/Heritages/ICI Dulux/Asian</i> |
| 46 | Wall care putti | <i>J.K. White/Birla/Gyproc wall putty</i> |
| 47 | Frameless glass partition fixtures | <i>Dorma/Hafle/Ozone</i> |
| 48 | U-PVC Windows | <i>Fenesta, Window Magic, Aluplast</i> |
| 49 | Toilet Cubicles | <i>Greenlam, Marino or approved equivalent</i> |
| Note: | <p>If the makes given in the list are not available, other equivalent makes can be considered subject to approval by the Purchaser/HSCC based on credentials of the company and test certificates of the product, subject to price adjustment.</p> <p>Wherever makes have not been specified for certain items, the same shall be as per BIS and as per approval of Purchaser/HSCC.</p> | |

LIST OF APPROVED MAKES: PLUMBING WORKS

| Sl.No | Material | Relevant IS Code | MANUFACTURERS |
|-------|------------------------------|------------------|---|
| 1 | Vitreous China Sanitary ware | 2556 | Kohler, Roca, American Standard, Toto |
| 2 | White Glazed Fire Clay Sink | 771 | Sanfire, Cera, Neycer, Hindware. |
| 3 | Stainless Steel Sink | | Jayna, <i>Neelkanth</i> , Commander, Nirali |

HSCC (India) Limited

| | | | |
|----|---|----------------|---|
| 4 | Plastic seat cover of W.C | 2548 | Kohler, Roca, American Standard, Toto |
| 5 | Geyser | | Racold, Venus, Voltas, Usha Lexus, Jaguar, Havells |
| 6 | C.P. Fittings Mixer/Pillar taps Washers, C.P. brass accessories ,CP Angle Valve,Bibcocks,CP waste | 1795/4291/4827 | Kohler, Roca, American Standard, Toto |
| 7 | Centrifugally /Sand cast iron pipes & fittings | 3989/1729 | Neco, Hepco, SKF |
| 8 | G.I. Pipes | 1239 Part I | Jindal-Hissar, Tata, Prakash-Surya |
| 9 | G.I. Fittings | 1239 Part I | Unik, K.S., Zoloto, R |
| 10 | Stoneware pipes & Gully Traps | 651 | IS Marked pipes |
| 11 | Mirror | | Atul, Modi guard, Asahi,Saint Gobain |
| 12 | Hand drier | | Kopal, Automat, Euronics,Utech |
| 14 | Insulation of Hot water pipes | | Vidoflex insulation, Superlon, Thermaflex, Kaiflexkaimenn |
| 15 | D.I pipes | | Jindal, Tata, Electrosteel.,Kesoram |
| 16 | PVC/UPVC pipes & fittings | | Finolex , Prince, |
| 17 | Infrared Sensor operated Faucets/Urinals | | Kohler, Roca, American Standard, Toto |
| 18 | Gratings, Strainers, Cleanouts etc | | Neer Brand (Sage Metals),ACO |
| 19 | Decorative bath room fittings | | Jaquar (Florentine range), Aquabaths, Kohler |
| 20 | HDPE pipes and fittings | | Oriplast, So-Soon, Finolex, Gebreti, Nosil, |
| 21 | CPVC pipe,fittings and Solvent | | Flowguard, Astral, Prince, |
| 22 | Copper Pipe | | Raj Co., Maxflow, Mehta Tubes |
| 23 | Copper Fittings | | Viega, IBP,Yorkshire, Mehta Tubes, Rajco |
| 24 | Lab drainage | | Viega, Duraline, Rex |
| 25 | Lab Fittings | | Vijay, Viega |
| 26 | SS pipe(EN-10312) & press type fitting | | Viega, Jindal |
| 27 | Oxilyte (Mixed oxident) | | Oxybee Solutions, I2M Technologies, Faith Innovations |

Note:Wherever makes have not been specified for certain items, the same shall be as per BIS and as per approval of Purchaser/HSCC.

LIST OF APPROVED MAKES : FIRE FIGHTING WORKS

| Sl.No | Material | Relevant ISI Code | MANUFACTURERS |
|-------|--------------------------------------|-------------------|--------------------------------------|
| 1 | G.I./M.S. Heavy class pipe | 1239/3589 | Jindal-Hissar, Tata, Prakash -Surya, |
| 2 | Portable Fire Extinguisher | 2171 | Minimax, Safex, Ceasefire, Newage, |
| 3 | Sprinkler Heads | | |
| 4 | Pendent type | | Tyco, Viking,HD,Grinnel |
| 5 | Side wall type | | Tyco, Viking,HD,Grinnel |
| 6 | Sprinkler Side wall extended through | | Tyco, Viking,HD,Grinnel |

| | | | |
|----|--------------------------------------|-------------|---|
| 7 | Standby battery lead acid | | Exide, Standard, Amco |
| 8 | Cables | | As per Electrical Works |
| 9 | G.I. Fittings | 1239 Part I | Unik, K.S., Zoloto,R |
| 10 | DI pipes | | Jindal,TATA,Electrosteel,Kesoram |
| 11 | Pipe coat material (Pipe protection) | | <i>Pypkote Integrated water proofing co. Madras/ coaltek Rustech products (P) Ltd. Syndcate Enclave, Dabri/Makphall</i> |
| 12 | Fire Man's Axe | | <i>Safeguard/safex/Newage/Gunnebo</i> |

Note:Wherever makes have not been specified for certain items, the same shall be as per BIS and as per approval of Purchaser/HSCC.

LIST OF APPROVED MAKES FOR ELCTRICAL SYSTEM

Contractor shall use the materials of approved make as indicated below unless specified in BOQ or as approved by the HSCC electrical incharge. The contractor shall ensure the correct selection of the approved make meeting the specifications and application duties. Before placing order for procurement, the sample of approved make shall be got verified for its suitability to the specification and application duty. However, HSCC electrical engineer (approving authority) reserves the right to opt for the best preferred listed make. The contractor shall quote the rate for the material and equipment as per the list of approved makes and equipment as per the list of approved makes. In the event of the contractor wants to use alternate makes other than those stipulated for any reason , the contractor can send a proposal after ensuring that what he proposes at the least meets both the quality and safety standard of the stipulated makes, and the financial benefit that will occur to the client. He shall also stand full guarantee to his alternate proposal. The alternate makes can be used only after an approval accorded by the client/HSCC., whose decision will be final in this matter. Any financial implication incurred related with inspection will be borne by contractor.

| S.No. | Item Description | Make list |
|-------|------------------------------|---|
| 1 | Timers in Distribution board | Legrand/ Hagar/ Siemens/ ABB/ GE |
| 2 | MCB distribution Boards | L &T /Hager/ MDS/Legrand/ Siemens, ABB/GE/ Schenieder (MG) |
| 3 | MCB | L &T /Hager/ MDS/Legrand/ Siemens, ABB/GE/ Schenieder (MG) |
| 4 | Rewirable porcelain wire | CPL, KEW |
| 5 | Data and Voice wire | Finolex,Delton,Skyton,Anchor,L&T,AT&T, Avaya |
| 6 | RCCB | L & T Hager/ Legrand/ Siemens , GE/Schenider (Merlin –Gerin) |
| 7 | ELCB/ELMCB | Merlin Gerin-multi 9, Legrand, Hager, Siemens |
| 8 | 11 KV LT XLPE cables | RPG/ Polycab/ NICCO/ UNIVERSAL/Rallison/KEI/Skytone/ Havells |
| 9 | Copper Control cable | Finolex/ Polycab/ NICCO/ Universal/ National/ Rallison/RR Cable |

| | | |
|----|--|---|
| 10 | Cable Joints (Heat Shrinkable) | Raychem/3M/Cabseal |
| 11 | Cable Trays | Steelways/ Bharti/ Unitech /Maheshwari/or approved by HSCC |
| 12 | Galvanized/PVC Raceways and raceways accessories | Steelways/ Bharti/ Schneider(MG)/Legrand |
| 13 | Light fitting | Philips/ GE/ Crompton Greaves |
| 14 | fancy LIGHT FITTING | Anchor(Panasonic)/ Twinkle/Decon/Ankur |
| 15 | Lamps | Philips/ Osram/ GE/Anchor (Panasonic)/Perlite |
| 16 | GI / MS conduit ISI marked | BEC/ AKG/ Steel Kraft |
| 17 | PVC conduit | BEC/ AKG |
| 18 | Steel conduit accessories (ISI as approved sample) | Sharma sales corporation, super sales corporation or equivalent. |
| 19 | Modular Metal box for switch /socket | Havells/ MK/MDS/Anchor Roma/Northwest |
| 20 | Copper conductor FRLS PVC insulated wires ISI marked | National/ Finolex / R R cable/Rallison/Skytone/lap/Bonton |
| 21 | Modular Switches & sockets Outlets | Havell's (Crabtree)/ MK- Wraparound/Hagger/Wipro Legrand (Myrius/ Anchor-Roma(Tersa, woods,viola)/ Northwest |
| 22 | Metal clad Socket outlets With boxes | L & T Hager/ Siemens/ Merlin Gerin/ ABB MDS / BCH /Havells |
| 23 | UPS system | PCI LTD/ Siemens/ Etone powerware/Emerson/APC (Schneider) |
| 24 | Electronic Ballast | Philips/ Wipro/Osram / Bajaj |
| 25 | Ceiling fans | Crompton Greaves/ Bajaj/ Orient/ Alastom/ Usha |
| 26 | Main PC with CPU monitor | HP/ Compaq/Del |
| 27 | PVC Tape | Steel Grip |

HSCC (India) Limited

| | | |
|----|---|--|
| 28 | Batton Holder, Angle holder, Ceiling Rose | Anchor |
| 29 | Exhaust Fan with Gravity Louvers | Usha Lexus/Orient/ Crompton/Industriel-Almonard/ GEC |
| 30 | TV Cable- Co axial | Finolex, airtech, bhansali |
| 31 | Chemical Earthing | Ashlok, Erico, Pioneer, Nimbus, JK Earthing |
| 32 | LCD/LED Monitor | Sony, Panasonic, Samsung |

LIST OF APPROVED MAKES AND MANUFACTURERS

The subcontractors/makes/brands of equipment listed below are approved for installation.

All items to be used in the works samples, catalogues and specifications are to be submitted by the contractor for approval of the Purchaser/HSCC. Only approved makes shall be used in the works. The approved samples shall be kept in the custody of the Purchaser/HSCC for comparison.

| S.No | Material/Item | Approved Makes |
|------|--|--|
| 1 | Precision AC units | Emerson/Blue box/Stulz/Hiross |
| 2 | Window/split AC | Carrier /Hitachi/Voltas/Bluestar/Daikin/Ogeneral |
| 3 | VRV/VRF | Carrier /Hitachi/Daikin/Ogeneral |
| | Ducting & Grilles | |
| 4 | Factory fabricated duct | Zeco/ Ductofab/Rolastar/Technofab |
| 5 | G.I. Sheet Metal Duct | Jindal /National/ Tata/Sail |
| 6 | Spiral duct | Atco/Seven Star |
| 7 | Grilles/Diffusers/Volume Controller | Ravistar/Caryaire/ Mapro/Dynacraft/Airmaster |
| 8 | Fire Dampers UL listed | Caryaire/Dynacraft / Ravistar/Ruskin |
| 9 | Sound Attenuator | Caryaire/Dynacraft/Ravistar/Trox |
| 10 | G.I. Sheets | TATA/SAIL/Jindal/Bhushan Steel |
| 11 | Aluminium Sheets | Balco/Nalco/Hindalco |
| 12 | Stick Pins | Prima Seal/Air flow |
| | Pipes | |
| 13 | G.I. | ITC/ Jindal Hissar/Tata/SAIL/HSL |
| 14 | M.S. upto 150 mm | ITC/ Jindal Hissar/Tata/SAIL/HSL |
| 15 | M.S. 200 mm and above dia factory rolled | ITC/ Jindal Hissar/Tata/SAIL/HSL |
| | Valves | |
| 16 | Butterfly Valves | Advance/Audco |
| 17 | Motorised butterfly valve(actuator) | Belimo/Honeywell/Invensys/siemens |
| 18 | Non Return Valve | Advance/Kirloskar/Audco |
| 19 | Balancing Valves | Advance/Audco/Danfoss/Honeywell |

HSCC (India) Limited

| | | |
|----|--|--|
| 20 | Gate/Globe Valves | Leader/Divine/Sant/Bankim Sarkar /Zoloto |
| 21 | GM valve upto 40mm | Leader/Divine/Sant/Bankim Sarkar /Zoloto |
| 22 | Ball Valve with Y strainer | Rapid Control/Sant/Leader/Zoloto |
| 23 | Pressure independent Balancing valve | Danfoss/Flowcon/TA |
| | Accessories | |
| 24 | Y-strainer | Emerald/Sant/Rapid cool |
| 25 | Pressure Gauge | Fiebig/Emerald/H Guru/Japsin |
| 26 | Thermometer | Fiebig/Emerald/H Guru/Japsin |
| 27 | Flow Switch | Rapid Control/Anergy |
| 28 | Automatic Air Vent | Rapid Control/Anergy |
| 29 | Suction Guide | Anergy/ Rapid Control/Flowcon |
| 30 | Filters(pre,fine Hepa) | Thermadyne/Spectrum/Kirloskar /Anfilco/Johnflower/Dynafilter |
| | Insulation | |
| 31 | Expanded Polystyrene | Beardsell Ltd./ BASF/Styrene Packing/ Indian Packaging Industries/ Lloyd |
| 32 | Glass Wool | FGP Ltd./UP Twiga/Kimmco / Owens Corning |
| 33 | Polyurethane Foam | Malanpur /Superurethane |
| 34 | Crossed linked Polyethylene Foam | Trocellene / Aeroflex/Armacell/ |
| 35 | Closed Cell Elastomeric Insulation | K-flex /Vedoflex/Armacell |
| 36 | Non woven fibre material | Mikron/ Du pont |
| 37 | Mineral wool | Rockwool India Pvt Ltd, |
| 38 | Pre-moulded PUF section for pipe & pipe supports | Malanpur/ Lloyd |
| 39 | Fibreglass rigid Board/Pipe section | FGP Ltd./UP Twiga/Kimmco / Owens Corning |
| 40 | Aluminium Tape | Johnson/Birla 3M/Garware |
| 41 | Thermostats | Honeywell/Johnson controls/Belimo/Danfoss/Siemens/Oventrop |
| 42 | Humidistat | Honeywell/Johnson control/ Belimo/Danfoss |
| | Miscellaneous | |
| 43 | V Belt | Dunlop/Fenner |
| 44 | Anchor fastners | Fischer/Hilti |
| 45 | Dash fastner | Fischer/Hilti |
| 46 | Welding rods | Advani/L&T |
| 47 | Wire Rope duct supporting arrangement | Gripple |
| 48 | Flexible pipe connection | Dunlop/Kanwal/resistoflex |
| 49 | Hessian Cloth (fire rated) | Navair/Pyrogaurd |
| 50 | Vibration isolator | Resistoflex, Dunlup, Kanwal |
| 51 | Copper Refrigerant Piping | Diamond/Star/Rajco |

It is the vendors/suppliers responsibility to do the needful for installation, testing and commissioning of Medical Equipment as per terms and conditions of the Bid Document including Turnkey Works mentioned in Section-VII of the Bid Document.

SECTION-VII

GENERAL TECHNICAL SPECIFICATIONS

GENERAL POINTS:

1. Warranty:

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

2. After Sales Service:

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

3. Training:

On Site training to Doctors/ Technicians/ staff is to be provided by Principal/ Indian Agents (if they have the requisite know-how) for operation and maintenance of the equipment to the satisfaction of the consignee.

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 X ray tubes, Helium for MRI, Batteries for UPS, other vacuumatic parts wherever applicable) and Turnkey (if any). The supplier shall visit each consignee site as recommended in the manufacturer's technical/ service /operational manual, but at least once in six months during the CMC period
- b) The cost of CMC may be quoted along with taxes applicable on the date of Tender Opening. The taxes to be paid extra, to be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such taxes and no claim for the same will be entertained later.
- c) Cost of CMC will be added for Ranking/Evaluation purpose.
- 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 Works:

The Tenderer shall examine the existing site where the equipment is to be installed to assess the site condition for Equipment placement and installation. Whether the scope of Turnkey Works is mentioned in the Technical Specifications or not, the bidder's offer should be on a "Turn Key" basis including all costs associated with the supply, installation and commissioning of the equipment.

For equipment, the major Turnkey work to be carried out 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 Hospital/Institution/Medical College. The Turnkey costs to be quoted in Indian Rupee will be added for Ranking Purpose. The taxes to be paid extra, to be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such duties and taxes and no claim for the same will be entertained later. The Turnkey Work should completely comply with AERB requirement, if any.

Bidders must take into consideration in its bid, the costs to be incurred for any additional work pertaining to civil, Electrical, Plumbing, sanitary, Radiation protection as per Govt. regulation, furniture, servo stabilizers, U.P.S. etc. required for successful installation testing and commissioning of the Medical Equipment and the "All inclusive lump sum price" should include all such costs, each **Item/schedule/package** is to be considered a package in itself and suppliers to execute the order package on a "turn key basis" including all civil, electrical, air – conditioning & allied requirement for the equipment, at the site.

For X-Ray and related equipment, bidders who have Type Approval/NOC of AERB/BARC shall only be considered with documentary evidence. It shall be bidder's responsibility to get the equipment installed and commissioned as per AERB / BARC guidelines, obtain AERB/BARC approvals and install and commission equipment on "Turn Key basis". Bidders must take into consideration in its bid the costs to be incurred for any additional work viz. Electrical cabling, plugs of suitable ratings from the source, Electrical points of suitable ratings, water connection, water drainage, plumbing, air-conditioning, Radiation protection/shielding, mechanical & allied requirement for the equipment etc. required for successful installation, commissioning and running of the Equipment and the quoted "All inclusive lump sum price" should include all such costs.

Section – VIII

Quality Control Requirements

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

Tender Reference No.

Date of opening

Time

Name and address of the Tenderer:

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

01 Name of the manufacturer

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

02 Plant and machinery details

03 Manufacturing process details

04 Monthly (single shift) production capacity of goods quoted for

- a. normal
- b. maximum

05 Total annual turn-over (value in Rupees)

06 Quality control arrangement details

- a. for incoming materials and bought-out components
- b. for process control
- c. for final product evaluation

07 Test certificate held

- a . type test
- b . BIS/ISO certification
- c . any other

08 Details of staff

- a. technical
- b. b skilled
- c. c unskilled

Signature and seal of the Tenderer

Section – IX Qualification Criteria

1. The tenderer must be a manufacturer or it's authorized Indian Agent. They may authorise their agent as per proforma of Manufacturer authorization form as given in the tender enquiry document to quote and enter into a contractual obligation.

2. (a) A Tenderer quoting as Manufacturer should have supplied and installed in last Five years from the date of Tender Opening, at least 50% of the quoted quantity of the similar equipment which is functioning satisfactorily in Government Hospitals / Private Hospitals / PSU Hospital/ UN Agencies/Laboratories anywhere in India. Tenders shall submit Performance Certificate / Installation reports & Order Copies in respect of the above.

2. (b) A Tenderer quoting as authorized representative of the manufacturer should have executed at least one contract in the last five years from the date of tender opening of similar equipment which is functioning satisfactorily, in Government Hospitals/Private Hospitals/PSU Hospital/UN Agencies/Laboratories anywhere in India. Tenders shall submit Performance Certificate / Installation reports & order copies in respect of the above.

Note

2. The tenderer shall give an affidavit as per Section-XIX of the TE document.
3. In support of 2(a) & 2(b), the Tenderer shall furnish Performance statement in the enclosed Proforma 'A'.

The manufacturer/Indian Agent as Tenderer shall furnish Satisfactory Performance Certificate/Installation Reports in respect of above, duly notarized in the country of origin, along with the tender.

The Tenderer shall furnish a brief write-up, packed with adequate data explaining and establishing his available capacity/capability (both technical and financial) to perform the Contract (if awarded) within the stipulated time period, after meeting all its current/present commitments. The Tenderer shall also furnish details of Equipment and Quality Control in the enclosed Section VIII.

4. Notwithstanding anything stated above, the Purchaser reserves the right to assess the Tenderer's capability and capacity to perform the contract satisfactorily before deciding on award of Contract, should circumstances warrant such an assessment in the overall interest of the Purchaser.
5. Tender shall submit audited balance sheets for the last three years. Annual Turnover statements should be certified by chartered accountant bearing their membership No.
6. The Purchaser reserves the right to ask for a free demonstration of the quoted equipment at a pre determined place acceptable to the purchaser for technical acceptability as per the tender specifications, before the opening of the Price Tender.

PROFORMA 'A'
PROFORMA FOR PERFORMANCE STATEMENT

(For the period of last five years)

Tender Reference No. : _____

Date of opening : _____

Time : _____

Name and address of the Tenderer : _____

Name and address of the manufacturer : _____

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

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

Signature and seal of the Tenderer

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

Section - X
TENDER FORM

Date_____

To

Medical Superintendent & VMMC,
Safderjung Hospital,
New Delhi.

Ref. Your TE document No. _____ dated _____

We, the undersigned have examined the above mentioned TE document, including amendment/corrigendum No. _____, dated _____, the receipt of which is hereby confirmed.

We now offer to supply and deliver _____ (*Description of goods and services*) in conformity with your above referred document for the sum as shown in the price schedule(s), attached herewith and made part of this tender.

If our tender is accepted, we undertake to supply the goods and perform the services as mentioned above, in accordance with the delivery schedule specified in the List of Requirements. We further confirm that, if our tender is accepted, we shall provide you with a performance security of required amount in an acceptable form in terms of GCC clause 5, read with modification, if any, in Section - V - "Special Conditions of Contract", for due performance of the contract.

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

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

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

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

(Signature with date)

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

SECTION - XI PRICE SCHEDULE**A) PRICE SCHEDULE FOR DOMESTIC GOODS OR GOODS OF FOREIGN ORIGIN LOCATED WITHIN INDIA**

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

Total Tender price in Rupees: _____

In words: _____

Note: -

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

Name _____

Business Address _____

Place: _____

Signature of Tenderer _____

Date: _____

Seal of the Tenderer _____

SECTION – XI PRICE SCHEDULE
B) PRICE SCHEDULE FOR GOODS TO BE IMPORTED FROM ABROAD

| 1 Schedule | 2 Brief Description of Goods | 3 Country of Origin | 4 Quantity (Nos.) | 5 Price per unit (Currency) | | | | | 6 Total price on CIP Port of destination + Extended Insurance+ local transportation and storage at consignee site) 4X 5 (f) |
|---------------|---------------------------------|------------------------|----------------------|---|--|--|--|--|---|
| | | | | FOB/FCA price at port/ airport of Lading (a) | Carriage & Insurance (port of loading to port of destination) and other Incidental costs (b) | CIP Price (name place/port of destination in India (c) | Loading & unloading at name place/port of entry in India + local transportation and storage to the consignee site + Extended Insurance for a period including 3 months beyond date of delivery** (d) | Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training) at the Consignee's site ** (e) | |
| | | | | | | | | | |

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

Total Tender price in foreign currency: _____

In words: _____

Note: -

1. If there is a discrepancy between the unit price and total price THE UNIT PRICE shall prevail.
2. The charges for Annual CMC after warranty shall be quoted separately as per Section – XI – Price Schedule C
3. *The Tenderer will be fully responsible for the safe arrival of the goods at destination (consignee site) in good condition as per terms of DDP at Consignee's site as per INCOTERMS, if applicable*

Custom Duty @ 11.76% & Custom Clearance Charges @ 2% will be added to CIP charges to arrive at DDP Price at consignee site for evaluation purpose.

Indian Agency Commission - __% of FOB/FCA

Signature of Tenderer _____

Place: _____

Date: _____

Name _____

Business Address _____

Signature of Tenderer _____

Seal of the Tenderer _____

SECTION - XI PRICE SCHEDULE**C) PRICE SCHEDULE FOR ANNUAL COMPREHENSIVE MAINTENANCE CONTRACT AFTER WARRANTY PERIOD**

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

* After completion of Warranty period

NOTE:-

1. In case of discrepancy between unit price and total prices, THE UNIT PRICE shall prevail.
2. The cost of Comprehensive Maintenance Contract (CMC) which includes preventive maintenance including testing & calibration as per technical/ service /operational manual, labour and spares, after satisfactory completion of Warranty period may be quoted for next 5 years on yearly basis for complete equipment and Turnkey (if any).
3. The cost of CMC may be quoted along with taxes applicable on the date of Tender Opening. The taxes to be paid extra, to be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such taxes and no claim for the same will be entertained later.
4. Cost of CMC 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.

Place: _____

Date: _____

Name _____

Business Address _____

Signature of Tenderer _____

Seal of the Tenderer _____

**SECTION XI- PRICE SCHEDULE
D) PRICE SCHEDULE FOR TURNKEY**

| Schedule No. | BRIEF TURNKEY DESCRIPTION OF GOODS | CONSIGNEE | Turnkey price |
|---------------------|---|------------------|----------------------|
| | | | |
| | | | |
| | | | |
| | | | |

Note: -

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

Place: _____

Date: _____

Name _____

Business Address _____

Signature of Tenderer _____

Seal of the Tenderer _____

**SECTION - XII
QUESTIONNAIRE**

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

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

SECTION - XIII
BANK GUARANTEE FORM FOR EMD

Whereas _____ (hereinafter called the "Tenderer") has submitted its quotation dated _____ for the supply of _____ (hereinafter called the "tender") against the purchaser's tender enquiry No. _____ Know all persons by these presents that we _____ of _____ (Hereinafter called the "Bank") having our registered office at _____ are bound unto _____ (hereinafter called the "Purchaser) in the sum of _____ for which payment will and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this _____ day of ____ 20___. The conditions of this obligation are:

- (1) If the Tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
- (2) If the Tenderer having been notified of the acceptance of his tender by the Purchaser during the period of its validity:-
 - a) fails or refuses to furnish the performance security for the due performance of the contract.
 - or
 - b) fails or refuses to accept/execute the contract.
 - or
 - c) if it comes to notice that the information/documents furnished in its tender is incorrect, false, misleading or forged

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

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

(Signature of the authorised officer of the Bank)

Name and designation of the officer

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

SECTION - XIV
MANUFACTURER'S AUTHORISATION FORM

To

Medical Superintendent,
Safderjung Hospital & VMMC,
New Delhi.

Dear Sirs,

Ref. Your TE document No _____, dated _____

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

We further confirm that no supplier or firm or individual other than Messrs. _____ (*name and address of the above agent*) is authorised to submit a tender, process the same further and enter into a contract with you against your requirement as contained in the above referred TE documents for the above goods manufactured by us.

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

Yours faithfully,

[Signature with date, name and designation]
for and on behalf of Messrs _____

[Name & address of the manufacturers]

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

SECTION - XV

BANK GUARANTEE FORM FOR PERFORMANCE SECURITY/ CMC SECURITY

To
Medical Superintendemnt & VMMC,
Safderjung Hospital,
New Delhi.

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

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

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

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

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

This guarantee shall be valid up to 30/66 months from the date of Notification of Award i.e. up to ----- (indicate date)

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

.....
Name and designation of the officer

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

**SECTION - XVI
CONTRACT FORM - A**

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

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

Contract No _____ dated _____

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

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

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

Note: The words and expressions used in this contract shall have the same meanings as are respectively assigned to them in the conditions of contract referred to above. Further, the definitions and abbreviations incorporated under clause 1 of Section II – 'General Instructions to Tenderers' of the Purchaser's TE document shall also apply to this contract.

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

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

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

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

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

2. Delivery schedule

(iii) Details of Performance Security

(iv) Quality Control

(a) Mode(s), stage(s) and place(s) of conducting inspections and tests.

(b) Designation and address of purchaser's inspecting officer

(v) Destination and despatch instructions

(vi) Consignee, including port consignee, if any

3. Warranty clause

4. Payment terms

5. Paying authority

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

Received and accepted this contract

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

For and on behalf of _____

(Name and address of the supplier)

(Seal of the supplier)

Date: _____

Place: _____

SECTION - XVI
CONTRACT FORM - B
CONTRACT FORM FOR ANNUAL COMPREHENSIVE MAINTENANCE CONTRACT

Annual CM Contract No. _____ dated _____
 Between _____

(Address of Head of Hospital/Institute/Medical College)
 And _____

(Name & Address of the Supplier)

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

In continuation to the above referred contract

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

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

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

- b) The CMC commence from the date of expiry of all obligations under Warranty i.e. from _____ (date of expiry of Warranty) and will expire on _____ (date of expiry of CMC)
- c) The cost of Annual Comprehensive Maintenance Contract (CMC) which includes preventive maintenance, labour and spares, after satisfactory completion of Warranty period may be quoted for next 5 years as contained in the above referred contract on yearly basis for complete equipment (including X ray tubes, Helium for MRI, Batteries for UPS, other vacuumatic parts, ___ & ___) and Turnkey (if any).
- d) There will be 98% uptime warranty during CMC period on 24 (hrs) X 7 (days) X 365 (days) basis, with penalty, to extend CMC period by double the downtime period.
- e) During CMC period, the supplier shall visit at each consignee's site for preventive maintenance including testing and calibration as per the manufacturer's service/technical/ operational manual. The supplier shall visit each consignee site as recommended in the manufacturer's manual, but at least once in 6 months commencing from the date of the successful completion of warranty period for preventive maintenance of the goods.
- f) All software updates should be provided free of cost during CMC.

- g) The bank guarantee valid till _____ [(fill the date) 2 months after expiry of entire CMC period] for an amount of Rs. _____ [(fill amount) equivalent to 2.5 % of the cost of the equipment as per contract] shall be furnished in the prescribed format given in Section XV of the TE document, along with the signed copy of Annual CMC within a period of 21 (twenty one) days of issue of Annual CMC failing which the proceeds of Performance Security shall be payable to the Purchaser/Consignee.
- h) If there is any lapse in the performance of the CMC as per contract, the proceeds Annual CMC bank guarantee for an amount of Rs. _____ (equivalent to 2.5 % of the cost of the equipment as per contract) shall be payable to the Consignee.
- i) **Payment terms:** The payment of Annual CMC will be made against the bills raised to the consignee by the supplier on six monthly basis after satisfactory completion of said period, duly certified by the HOD concerned. The payment will be made in Indian Rupees.
- j) **Paying authority:** _____ (name of the consignee i.e. Hospital/ Institute /Medical College's authorised official)

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

Received and accepted this contract

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

For and on behalf of _____

(Name and address of the supplier)

(Seal of the supplier)

Date: _____

Place: _____

SECTION - XVII
CONSIGNEE RECEIPT CERTIFICATE
(To be given by consignee's authorized representative)

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

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

SECTION - XVIII
Proforma of Final Acceptance Certificate by the Consignee

No _____

Date _____

To

M/s _____

Subject: Certificate of commissioning of equipment/plant.

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

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

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

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

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

The supplier has fulfilled its contractual obligations satisfactorily ## or

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

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

He has not supervised the commissioning of the equipment(s)/plant(s) in time, i.e. within the

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

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

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

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

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

Signature

Name

Designation with stamp

Explanatory notes for filling up the certificate:

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
AFFIDAVIT/UNDERTAKING

I/ We have read and understood the instructions and the terms and conditions contained in the document. I/We accordingly accept all terms and conditions of the tender enquiry document including the essential conditions specially incorporated in the tender enquiry like terms of terms of payment, liquidated damages clause, warranty clause, dispute resolution mechanism applicable law. I/ We confirm that we do not stand deregistered/banned/blacklisted by any Govt. Authorities. I/ We do hereby declare that the information furnished/ uploaded is correct to the best of my/our knowledge and belief. I/We hereby certify that the prices offered by us in this tender is not higher than the prices we had offered to any other Govt. of India Organisation(s)/PSU(s) during the last one year and shall provide the justification for reasonableness of our offered price whenever asked during evaluation of our submitted bid. I/ We also hereby certify that if at any time, information furnished by us is proved to be false or incorrect; I/ We are liable for any action as deemed fit by the purchaser in addition to forfeiture of the earnest money.

Date:

(Signature of the bidder)
NAME & ADDRESS OF THE BIDDER

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

SECTION - XX
CHECKLIST

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? | | | |

| Sl No. | Activity | Yes/ No/ NA | Page No. in the TE document | Remarks |
|--------|---|-------------|-----------------------------|---------|
| 5. a. | Have you submitted satisfactory performance certificate/ Installation Reports as per the Proforma for performance statement in Sec. IX of TE document in respect of all orders? | | | |
| b. | Have you submitted copy of the order(s) and end user certificate/ Installation Reports? | | | |
| 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 and 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? | | | |

| Sl No. | Activity | Yes/ No/ NA | Page No. in the TE document | Remarks |
|--------|--|----------------|-----------------------------------|---------|
| 13. | Have you submitted the certificate of incorporation? | | | |
| 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 duly certified by chartered accountant bearing their membership no.? | | | |
| 18. | Have you enclosed the Affidavit as per Section XIX of the TE Document? | | | |

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

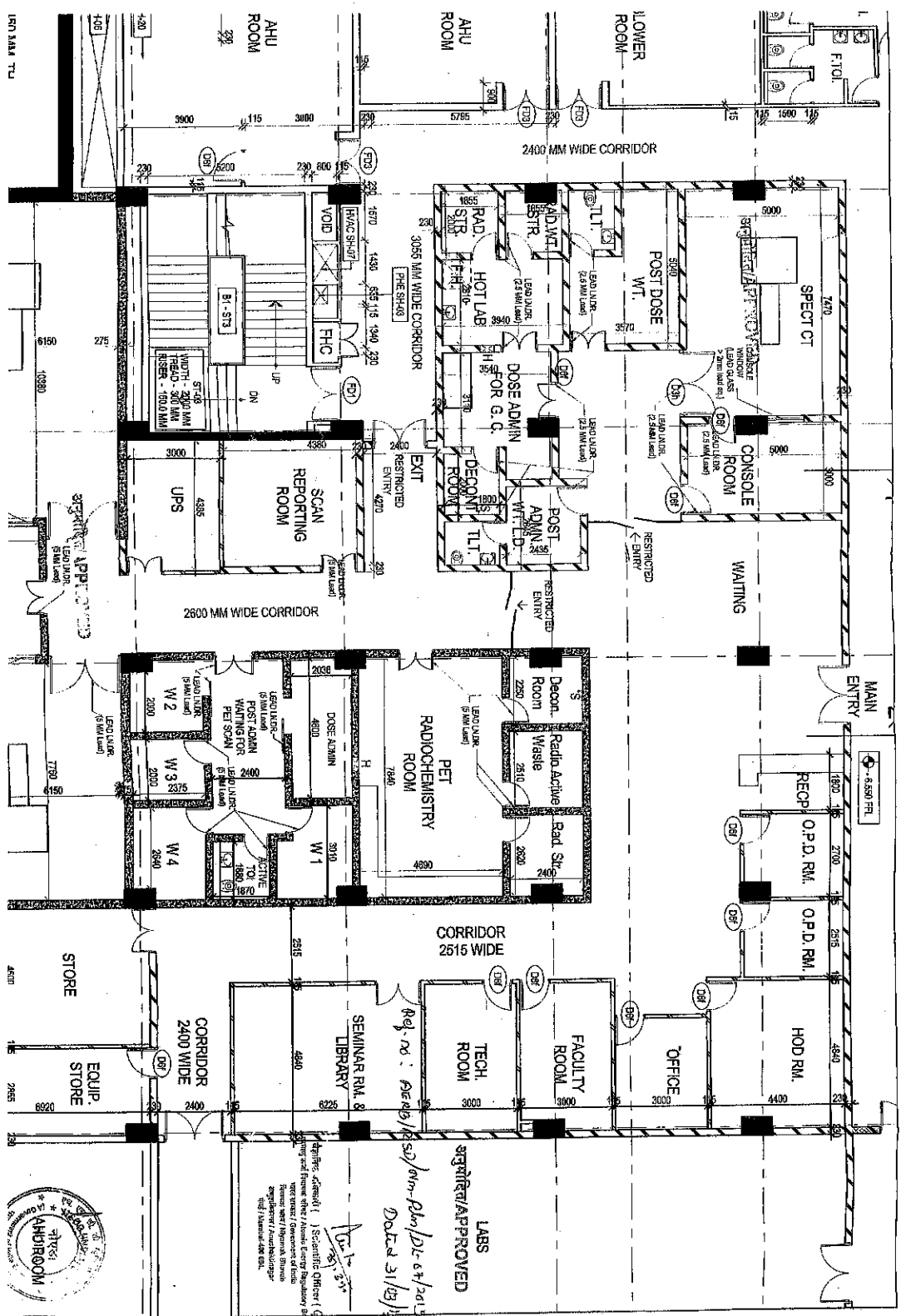
(Name, address and stamp of the tendering firm)

Section - XXI
Consignee List

| Consignee | Medical Institutions | Contact Address. |
|------------------|---|---|
| | Medical Superintendent, Safderjung Hospital & VMMC, New Delhi | Medical Superintendent, Safderjung Hospital & VMMC, New Delhi |

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

DRAWINGS



Approved by Scientific Officer (S) /
 Director, Radiation Safety Division
 Atomic Energy Regulatory Board
 Department of Atomic Energy, Government of India
 New Delhi, India.

LABS
 APPROVED
 Date: 31/03/15

PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT

PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT

