

# **TENDER ENQUIRY DOCUMENT**

FOR PURCHASE OF  
MEDICAL EQUIPMENT  
FOR INSTITUTIONS GETTING UPGRADED  
UNDER PMSSY PHASE III

On behalf of  
**GOVT. OF INDIA**

**MINISTRY OF HEALTH & FAMILY WELFARE**  
**HITES/PCD/PMSSY-III/38/Mix/18-19**

*Through*



## **HLL INFRA TECH SERVICES LIMITED**

(Subsidiary of HLL Lifecare Ltd., a Govt. of India Enterprise)

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**SECTION I****NOTICE INVITING TENDER (NIT)****Tender Enquiry No.: HITES/PCD/PMSSY-III/38/Mix/18-19****Dated: 01.03.2019**

- (1) Procurement & Consultancy Services Division of **HLL Infra Tech Services Limited (HITES)**, a fully owned subsidiary of HLL Lifecare Ltd. (HLL), for and on behalf of Govt. of India, Ministry of Health & Family Welfare, invites sealed tenders, from eligible and qualified tenderers for supply of Medical Equipment for various departments of Medical Colleges/ Institutes mentioned in this Tender Enquiry Document which are getting upgraded to super-specialities under Pradhan Mantri Swasthya Suraksha Yojna (PMSSY) Phase III:

Sch. No.	Event Number	Name of the item	Tendered Department	Qty.	Tender Fee in Rs.	EMD in Rs.	Pre-bid Meeting
1	3000003872	Blood & Fluid Warmer	Anaesthesia	152	3,000.00	3,64,800.00	12-03-2019
2	3000003873	Peripheral Nerve Stimulator		79	2,000.00	1,58,000.00	12-03-2019
3	3000003874	Fibre optic Bronchoscope		25	3,000.00	6,00,000.00	12-03-2019
4	3000003875	General plastic surgical instruments (Burns & Plastic)	Burns and Plastic Surgery	24	3,000.00	7,20,000.00	12-03-2019
5	3000003876	LED head lights		10	500.00	20,000.00	12-03-2019
6	3000003877	Nerve stimulator (intra operative)		10	1,000.00	60,000.00	12-03-2019
7	3000003878	Powered Liposuction Set		10	3,000.00	5,00,000.00	12-03-2019
8	3000003879	High End Echocardiography system (4 D ECHO)	Cardiology	10	5,000.00	20,00,000.00	12-03-2019
9	3000003880	Portable Echocardiography System		2	3,000.00	2,20,000.00	12-03-2019
10	3000003881	Surgical Loupes	CTVS	38	2,000.00	1,52,000.00	12-03-2019
11	3000003882	Cell Saver		19	5,000.00	11,40,000.00	12-03-2019
12	3000003883	Electric operated sternum system		19	1,000.00	76,000.00	12-03-2019
13	3000003885	Argon Plasma Coagulation System	Gastroenterology	10	2,000.00	1,80,000.00	13-03-2019
14	3000003886	Ultrasonic Surgical aspirator		3	3,000.00	2,10,000.00	13-03-2019
15	3000003887	High Resolution Manometry System		5	3,000.00	3,00,000.00	13-03-2019
16	3000003888	Balloon Enteroscopy system		5	3,000.00	4,00,000.00	13-03-2019
17	3000003889	Video Endoscopy System		21	5,000.00	29,40,000.00	13-03-2019
18	3000003890	Endoscopic washer and disinfectant system		10	3,000.00	4,00,000.00	13-03-2019
19	3000003891	Transport Incubator with ventilator		13	3,000.00	6,50,000.00	13-03-2019
20	3000003892	Endovision camera System	Paediatric Surgery	12	3,000.00	6,00,000.00	13-03-2019
21	3000003893	Paediatric neuroendoscope		4	2,000.00	1,60,000.00	13-03-2019
22	3000003894	Paediatric Open Surgical Instruments		18	3,000.00	7,20,000.00	13-03-2019
23	3000003895	Resuscitation Equipment		9	500.00	9,000.00	13-03-2019
24	3000003896	Paediatric Rigid Bronchoscope & Oesophagoscope		10	2,000.00	1,80,000.00	13-03-2019

Sch. No.	Event Number	Name of the item	Tendered Department	Qty.	Tender Fee in Rs.	EMD in Rs.	Pre-bid Meeting
25	3000003897	8 Channel EMG -NCS-EP system	Neurology	23	5,000.00	16,10,000.00	14-03-2019
26	3000003898	EMG-NCV-EP MACHINE 4 channel		32	5,000.00	11,52,000.00	14-03-2019
27	3000003899	Autonomic Function Testing Lab with Comprehensive Software		3	3,000.00	6,00,000.00	14-03-2019
28	3000003900	Portable EEG 32 Channel		25	3,000.00	4,00,000.00	14-03-2019
29	3000003901	Video Polysomnography with 1 Camera		32	5,000.00	22,40,000.00	14-03-2019
30	3000003902	ICP Monitor		Neurosurgery	38	3,000.00	6,08,000.00
31	3000003903	Ultrasonic surgical aspirator	10		3,000.00	6,00,000.00	14-03-2019
32	3000003904	Computed Radiography Unit	Radiology	10	3,000.00	3,40,000.00	15-03-2019
33	3000003905	Portable - Colour Doppler		10	2,000.00	1,44,000.00	15-03-2019
34	3000003906	800mA Digital X-Ray unit with Single Detector (Floor Mounted)		10	5,000.00	24,00,000.00	15-03-2019
35	3000003907	Mobile X-ray Machine		12	1,000.00	72,000.00	15-03-2019
36	3000003908	Colour Doppler 4D		14	3,000.00	6,44,000.00	15-03-2019
37	3000003909	Urodynamic System		18	5,000.00	18,00,000.00	15-03-2019
38	3000003910	OT Table - Urology	Urology	19	5,000.00	11,40,000.00	15-03-2019
39	3000003911	Mobile C-arm Image Intensifier		10	3,000.00	4,00,000.00	15-03-2019
40	3000003912	Flexible Cysto-Nephroscope		10	2,000.00	1,02,000.00	15-03-2019
41	3000003913	General Surgery Instrument Set		10	3,000.00	4,60,000.00	15-03-2019
42	3000003914	Turp, Cystoscope & Optical Urethrotome		10	3,000.00	2,80,000.00	15-03-2019

**Note:\* Tender processing Fee is inclusive of GST (Our GSTIN: 09AADCH4882R1ZP)**

(2) Tender timeline:

Sl. No.	Description	Schedule
a.	Last date for receipt of Pre-bid queries	08.03.2019, 06:00 PM
b.	Pre-bid meeting date, time	As tabulated above
d.	Closing date & time for submission of online bids	16.04.2019, 01:00 PM
c.	Closing date & time for submission of <b>tender processing fee and EMD in physical form*</b>	16.04.2019, 02:00 PM
e.	Time and date of opening of online bids	16.04.2019, 02:30 PM
f.	Venue for :- • Submission of tender processing fee, EMD in physical form. • Tender Opening-Tech Bid	HLL Infra Tech Services Limited, Procurement & Consultancy Services Division, B-14 A, Sector-62, Noida-201307

\* Bidders have to submit Original Bank Instruments for tender processing fee and EMD/ documentary proof for EMD exemption within the above mentioned date and time

**SPECIFIC Instructions for e-Tender Participation:-**

3. Bidders should have valid Class 3-B Digital Signature Certificate with encryption.

4. Bidders are requested to read the bidders help document on e-tender web site link before proceeding for bidding.
5. The prospective bidders have to register with the E-procurement system of HLL at <https://etender.lifecarehll.com/irj/portal>. On completion of the registration process, the bidders will be provided user ID and password within 48 hours (excluding non-working days). In order to submit the bids electronically, bidders are required to have a valid Class 3-B Digital Signature Certificate (signing and encryption/ decryption certificates).
6. Post receipt of User ID & Password, Bidders can log on for downloading & uploading tender document.
7. The tenderers shall submit Tender Processing Fee and EMD in physical form at the scheduled time and venue.
8. Tenderer may download the tender enquiry documents from the web site [www.hllhites.com](http://www.hllhites.com) or [www.lifecarehll.com](http://www.lifecarehll.com) or [www.eprocure.gov.in/cppp](http://www.eprocure.gov.in/cppp) or <https://etender.lifecarehll.com/irj/portal>.
9. The bidders shall submit the required Tender Processing Fee (in form of Demand Draft or Banker's Cheque) and EMD (as per GIT clause no. 19.3) in physical form in favour of 'HLL Infra Tech Services Limited' at the scheduled time and venue. **Tender processing Fee is required from all the bidders irrespective of their registration with NSIC or any other Govt. Organisation.**
10. All the tender related documents to be scanned in .pdf format with lower resolution and 100% readability and submitted online. The bidders shall not submit any other documents in physical form other than the documents mentioned at point no 9 above.
11. Prospective bidders may send their queries 02 (two) days before the pre-bid meeting so that they can be studied and addressed during pre-bid meeting. Query can also be raised during pre-bid meeting. No queries/ representations will be entertained after pre-bid meeting
12. All prospective tenderers may attend the Pre Tender meeting. The venue, date and time indicated above.
13. Bidders shall ensure that their bids complete in all respects, are submitted **online through HLL's e-portal (as described above) ONLY. No DEVIATION is acceptable.**
14. Bidders may simulate bid submission (technical & financial) at least one week in advance of the bid submission deadline. No clarifications/troubleshooting regarding any problems being faced during online bid submission shall be entertained in the last week of bid submission

**IMPORTANT NOTE:-**

**Tender Processing Fee and EMD** (as applicable) should be deposited within the scheduled date & time in the Tender Box located at:

**HLL Infra Tech Services Limited,  
Procurement and Consultancy Division,  
B-14 A, Sector-62, Noida-201307, Uttar Pradesh**

**CEO  
HLL Infra Tech Services Limited**

**SECTION - II**

**GENERAL INSTRUCTIONS TO TENDERERS (GIT)****CONTENTS**

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## A. PREAMBLE

### 1. Definitions and Abbreviations

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

#### 1.2. Definitions:

- (i) **“Purchaser”** means Ministry of Health & Family Welfare Govt. of India.
- (ii) **“e-Tender”** means Bids / Quotation / Tender received from a Firm / Tenderer / Bidder online.
- (iii) **“Tenderer”** means Bidder/the Individual or Firm submitting Bids/Quotation/e-Tenders.
- (iv) **“Supplier”** means the individual or the firm supplying the goods and services as incorporated in the contract.
- (v) **“Goods”** means the articles, material, commodities, livestock, furniture, fixtures, raw material, spares, instruments, machinery, equipment, medical equipment, industrial plant etc. which the supplier is required to supply to the purchaser under the contract.
- (vi) **“Services”** means services allied and incidental to the supply of goods, such as transportation, installation, commissioning, provision of technical assistance, training, after sales service, maintenance service and other such obligations of the supplier covered under the contract.
- (vii) **“Earnest Money Deposit” (EMD)** means Bid Security/ monetary or financial guarantee to be furnished by a tenderer along with its tender.
- (viii) **“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.
- (ix) **“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.
- (x) **“Consignee”** means the Hospital/Institute/Medical College/ person to whom the goods are required to be delivered as specified in the Contract. If the goods are required to be delivered to a person as an interim consignee for the purpose of despatch to another person as provided in the Contract then that “another” person is the consignee, also known as ultimate consignee.
- (xi) **“Specification”** means the document/standard that prescribes the requirement with which goods or service has to conform.
- (xii) **“Inspection”** means activities such as measuring, examining, testing, gauging one or more characteristics of the product or service and comparing the same with the specified requirement to determine conformity.
- (xiii) **“Day”** means calendar day.
- (xiv) **“Local supplier”** means a supplier or service provider whose product or service offered for procurement meets the minimum local content as prescribed under this Order or by the competent Ministries/ Departments in pursuance of this order.
- (xv) **“Local content”** means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value in percent.
- (xvi) **Margin of purchase preference’** means the maximum extent to which the price quoted by a local supplier may be above the L1 for the purpose of purchase preference.

#### 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) "CD" means Custom Duty
- (xvii) "RR" means Railway Receipt
- (xviii) "BL" means Bill of Lading
- (xix) "FOB" means Free on Board
- (xx) "FCA" means Free Carrier
- (xxi) "FOR" means Free On Rail
- (xxii) "CIF" means Cost, Insurance and Freight
- (xxiii) "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.
- (xxiv) "DDP" means Delivery Duty Paid named place of destination (consignee site)
- (xxv) "INCOTERMS" means International Commercial Terms as on the date of Tender Opening
- (xxvi) "MOH&FW" means Ministry of Health & Family Welfare, Government of India
- (xxvii) "Dte. GHS" means Directorate General and Health Services, MOH&FW.
- (xxviii) "CMC" means Comprehensive maintenance Contract (labour, spare and preventive maintenance)
- (xxix) "RT" means Re-Tender.
- (xxx) "GST" means Goods and Services Tax

## 2. Introduction

- 2.1 The Purchaser has issued these TE documents for purchase of goods and related services on behalf of MoHFW, Govt of India as mentioned in Section – VI – "List of Requirements", which also indicates, *inter alia*, the required delivery schedule, terms and place of delivery.
- 2.2 This section (Section II - "General Instruction Tenderers") provides the relevant information as well as instructions to assist the prospective bidders in preparation and submission of bids. 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, 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. e-TENDER ENQUIRY DOCUMENTS****8. Content of Tender Enquiry Documents**

- 8.1 In addition to Section I – “Notice inviting e-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 – Consignee List
- Appendix A – DIPP – Public Procurement (Preference to Make in India), Order 2017**
- Appendix B – Integrity pact**

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

## 9. Amendments to TE documents

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

9.2 Such an amendment will be notified in writing by registered/speed post or by fax/telex/e-mail, to all prospective tenderers, who have received the TE documents and will be binding on them.

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

## 10. Clarification of TE documents

10.1 A tenderer requiring any clarification or elucidation on any issue of the TE documents may take up the same with the purchaser in writing on their letter head duly signed and scanned through email to [pcd@hllhites.com](mailto:pcd@hllhites.com) and [bmenoida@hllhites.com](mailto:bmenoida@hllhites.com). The purchaser will respond to such request provided the same is received by the purchaser **within the due date mentioned in the NIT. Any queries/ representations received later shall not be taken into cognizance.**

## C. PREPARATION OF e-TENDERS

### 11. Documents comprising the e-Tender

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

- (i) Technical Bid (Consisting of Techno-Commercial bids in excel format provided with the tender enquiry along with the supporting documents i.e. scanned copies of Tender Processing Fee, EMD, Eligibility Criteria & Technical Specifications viz. Product Specification Sheets/ Brochures, OEM Certificate, etc.) has to be attached in the C-folder of e-tendering module. Bidders have to ensure that the documents uploaded in pdf format are legible.
- (ii) Price Bid has to be submitted in the prescribed excel format provided with the tender enquiry.

Note:

- (i) The Tender Processing Fee and EMD, in favor of HLL Infra Tech Services Ltd, are to be submitted in physical form as per Section - I, Notice Inviting Tender, of this tender enquiry.
- (ii) The bidders have to follow the steps listed in *Bidding Manual – Attachment Mode* available in the *Bidder Help Documents* of e-tender portal login screen for uploading the Techno-Commercial Bid.

### A) Details of Technical Tender (Un priced Tender)

**Bidders shall furnish the following information along with technical tender:.**

- i) Techno-Commercial Bid in excel format provided with the tender enquiry
- ii) Earnest money Deposit (EMD) 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.

- iii) Tender Form as per Section X (without indicating any prices).
- iv) 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.
- v) Tenderer/Agent who quotes for goods manufactured by other manufacturer shall furnish Manufacturer's Authorization **strictly as per the prescribed format (Section - XIV).**
- vi) Power of Attorney issued by Competent Authority in favour of the person **who is digitally signing/ uploading the tender(s).**
- vii) 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.
- viii) Performance Statement as per section IX along with relevant copies of orders and end users' satisfaction certificate.
- ix) Price Schedule(s) as per Section XI filled up with all the details including Make, Model etc. of the goods offered with prices blank (without indicating any prices).
- x) Certificate of Incorporation.
- xi) Self-Attested copies of GST registration certificate and PAN Card.
- xii) Non conviction /no pending conviction certification issued by Notary on judicial stamp paper for preceding three years.
- xiii) Self-Attested copies of quality certificates i.e. US FDA /CE/ BIS Certificate issued by competent authority, if applicable.
- xiv) Documentary evidence stating the status of bidder.
- xv) List of procurement agencies of repute to which the tendered product have been supplied during last 12 months.
- xvi) Self-attested copies of annual report, audited balance sheet and profit & loss account for preceding three years from the date of tender opening.
- xvii) Notarized affidavit that tenderer does not have any relation with the person authorized to evaluate technically or involve in finalizing the tender or will decide the use of tendered items.
- xviii) A self-declaration on Rs. 10/- non-judicial Stamp Paper that the rates quoted in the tender are the lowest and not quoted less than this to any Government Institution (State/Central/ other Institute in India).
- xix) Copies of original product catalogues/ data sheet must be enclosed of all quoted items.
- xx) A self-declaration on Rs. 100/- non-judicial Stamp Paper that the goods offered in the tender are new and unused
- xxi) ***The Integrity pact (At Appendix-B) shall be a part and parcel of this document and has to be signed by bidder(s) at the pre-tendering stage itself, as a pre-bid obligation and should be submitted along with the Techno-Commercial Bids. All bidders are bound to comply with the integrity pact clauses. Bids submitted without signing the integrity pact will be ab initio rejected without assigning any reason.***

## **B) Price Bid:**

Prices are to be quoted in the prescribed Price Bid format in excel provided along with the tender enquiry in the e-tender portal. The price should be quoted for the accounting unit indicated in the e-tender document.

### **Note:**

- (i) **The bidder has to be diligent while filling up the Techno-Commercial Bid and Price Bid provided in excel formats and must not tamper with the contents of the sheets.**
- (ii) It is the responsibility of bidder to go through the TE document to ensure furnishing all required documents in addition to above, if any.

(iii) The bidders have to follow the steps listed in *Bidding Manual – Attachment Mode* available in the *Bidder Help Documents* of e-tender portal login screen for uploading the Price Bid.

- 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 bid, which does not fulfill any of the above requirements and/ or give evasive information/reply against any such requirement, shall be liable to be ignored.
- 11.4 Tender sent by fax/telex/cable shall be ignored.

## 12. Tender currencies

- 12.1 The tenderer supplying indigenous goods or already imported goods shall quote only in Indian Rupees (INR).
- 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 Japanese Yen. As regards price(s) for allied services, if any required with the goods, the same shall be quoted in Indian Rupees only (INR), if such services are to be performed /undertaken in India. Commission for Indian Agent, if any and if payable shall be indicated in the space provided for in the price schedule and will be payable in Indian Rupees only.
- 12.3 **Tenders, where prices are quoted in any other currency may not be accepted and are liable to be ignored.**
- 12.4 A tenderer quoting imported goods located within India shall produce documentary evidence of the goods having been imported and already located within India (i.e. Bills of Entry for the quoted items and a self-declaration confirming that the quoted items were imported for the purpose of storage in bidder warehouse and for further sale), along with their techno-commercial bid.

## 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.
- 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. However, while quoting for a schedule, the tenderer shall quote for the complete requirement of goods and services as specified in that particular schedule.
- 13.3 The quoted prices for goods offered from within India and that for goods offered from abroad are to be indicated separately in the applicable Price Schedules attached under Section XI.
- 13.4 While filling up the columns of the Price Schedule, the following aspects should be noted for compliance:
- 13.4.1 For domestic goods or goods of foreign origin located within India, the prices in the corresponding price schedule shall be entered separately in the following manner:
- a) The price of the goods, quoted ex-factory/ ex-showroom/ ex-warehouse/ off-the-shelf, as applicable, including all taxes and duties like, Custom Duty and/or GST already paid or payable on the components and raw material used in the manufacture or assembly of the goods quoted ex-factory etc. or on the previously imported goods of foreign origin quoted ex-showroom etc;

- b) Any taxes and duties including Custom duty and/or GST, 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), Loading & Unloading etc. 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 Site Modification Work (if any), as mentioned in List of Requirements, Technical Specification and Price Schedule.
- 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) 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), custom clearance, forwarding and handling 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. 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 charges for Incidental Services, as in the List of Requirements and Price Schedule;
- e) The prices of Site Modification Work ( 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.

### 13.5 **Additional information and instruction on Duties and Taxes:**

13.5.1 If the Tenderer desires to ask for GST or any other taxes 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 taxes and no claim for the same will be entertained later.

#### 13.5.2 **Local Duties & Taxes, if any applicable:**

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

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

**13.5.3 Customs Duty:**

The Purchaser will pay the Customs duty wherever applicable upon actual production of documentary evidence.

**13.5.4 Goods and Services Tax (GST):**

- a. If a tenderer asks for Goods and Services Tax to be paid extra, the rate and nature of Goods and Services Tax applicable should be shown separately. The Goods and Services Tax will be paid as per the rate at which it is liable to be assessed or has actually been assessed provided the transaction is legally liable to Goods and Services 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.
  - b. In case within the delivery period stipulated in the contract, there is an increase in the statutory taxes like GST, Custom Duty, or fresh imposition of taxes which may be levied in respect of the goods and services specified in the contract, reimbursement of these statutory variation shall be allowed to the extent of actual quantum of taxes paid by the supplier. This benefit, however, cannot be availed by the supplier in case the period of delivery is extended due to unexcused delay by the supplier.
  - 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 and/or GST or any other duty or tax or levy or on account of any other grounds. In case of downward revision in taxes/duties, the actual quantum of reduction of excise duty must 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.
- 13.6 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) As per the Compulsory Enlistment Scheme of the Department of Expenditure, Ministry of Finance, it is compulsory for Indian agents, who desire to quote directly on behalf of their foreign principals, to get themselves enlisted with the Central Purchase Organization (eg. DGS&D).
  - b) The complete name and address of the Indian Agent and its permanent income tax account number as allotted by the Indian Income Tax authority.
  - c) The details of the services to be rendered by the agent for the subject requirement.
  - d) Details of Service outlets in India, nearest to the consignee(s), to render services during Warranty and CMC period.
  - e) A copy of agreement between the Agent & their principal detailing the terms & conditions as well as services and after sales services as above to be rendered by the

agent and the precise relationship between them and their mutual interest in the business as laid out in section VII (Technical specifications).

- f) Principal's/Manufacturer's original Proforma Invoice with the price bid

## 15. Firm Price

- 15.1 Unless otherwise specified in the SIT, prices quoted by the tenderer shall remain firm and fixed during the currency of the contract and not subject to variation on any account. Bidders are requested to quote BOQ wise unit price (**uniform unit prices must be quoted for same BOQ items across India**) and total price. If a firm quotes NIL Charges/ consideration, the bid shall be treated as unresponsive and will not be considered

## 16. Alternative Tenders

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

## 17 Documents Establishing Tenderer's Eligibility and Qualifications

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

## 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 A (i) the tenderer shall furnish along with its tender, earnest money for amount as shown in the List of Requirements. The earnest money is required to protect the purchaser against the risk of the tenderer's unwarranted conduct as amplified under sub-clause 19.7 below.

19.2 The tenderers who are currently registered and, also, will continue to remain registered during the tender validity period as Micro and Small Enterprises (MSEs) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) or with National Small Industries Corporation, New Delhi shall be eligible for exemption from EMD. In case the tenderer falls in this category, it should furnish copy of its valid registration details (with MSME or NSIC, as the case may be).

a) The MSE's Bidder to note and ensure that nature of services and goods/items manufactured mentioned in MSE's certificate matches with the nature of the services and goods /items to be supplied as per Tender.

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

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

i) Account Payee Demand Draft

ii) Fixed Deposit Receipt

iii) Banker's cheque and

iv) Bank Guarantee

19.4 The demand draft or banker's cheque or Fixed Deposit Receipt shall be drawn on any scheduled commercial bank in India or country of the tenderer, in favour of the "**HLL Infra Tech Services Limited**" payable at New Delhi. In case of bank guarantee, the same is to be provided from any scheduled commercial bank in India or country of the tenderer as per the format specified under Section XIII in these documents.

19.5 The earnest money shall be valid for a period of forty-five (45) days beyond the validity period of the tender. As validity period of Tender as per Clause 20 of GIT is 120 days, the EMD shall be valid for 165 days from Techno – Commercial Tender opening date.

19.6 Unsuccessful tenderers' earnest money will be returned to them without any interest, after expiry of the tender validity period, but not later than thirty days after conclusion of the resultant contract. Successful tenderer's earnest money will be returned without any interest, after receipt of performance security from that tenderer.

19.7 Earnest Money is required to protect the purchaser against the risk of the Tenderer's conduct, which would warrant the forfeiture of the EMD. Earnest money of a tenderer will be forfeited, if the tenderer withdraws or amends its tender or impairs or derogates from the tender in any respect within the period of validity of its tender or if it comes to notice that the information/documents furnished in its tender is incorrect, false, misleading or forged without prejudice to other rights of the purchaser. The successful tenderer's earnest money will be forfeited without prejudice to other rights of Purchaser if it fails to furnish the required performance security within the specified period.

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

## 20. Tender Validity

20.1 If not mentioned otherwise in the SIT, the tenders shall remain valid for acceptance for a period of 120 days (One hundred and twenty days) after the date of tender opening prescribed

in the TE document. Any tender valid for a shorter period shall be treated as unresponsive and rejected.

- 20.2 In exceptional cases, the tenderers may be requested by the purchaser to extend the validity of their tenders up to a specified period. Such request(s) and responses thereto shall be conveyed by surface mail or by fax/ telex/cable followed by surface mail. The tenderers, who agree to extend the tender validity, are to extend the same without any change or modification of their original tender and they are also to extend the validity period of the EMD accordingly. A tenderer, who may not agree to extend its tender validity after the expiry of the original validity period the EMD furnished by them shall not be forfeited.
- 20.3 In case the day up to which the tenders are to remain valid falls on/ subsequently declared a holiday or closed day for the purchaser, the tender validity shall automatically be extended up to the next working day.

## **21. Digital Signing of Tender**

- 21.1 The tenderers shall submit their tenders as per the instructions contained in GIT Clause 11. Tenders shall be uploaded with all relevant tender documents in the prescribed format. The relevant tender documents should be uploaded by an authorised person having Class 3 digital signature certificate.

## **D. SUBMISSION OF TENDERS**

### **22. Submission of e-Tenders**

- 22.1 The tender shall be submitted online only.

#### **(i) Pre-qualification and Technical compliance along with the Techno-Commercial Bid in excel format:**

- a) Scanned copies of tender processing fee and EMD
- b) 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).
- c) Tender Form as per Section X.
- d) Compliance of all terms and conditions of TED like- warranty, CMC, delivery period, delivery terms, payment terms, Liquidated Damages Clause, Arbitration clause, etc
- e) Declaration regarding Fall Clause and Deregistration, debarment from any Govt Dept/ Agencies
- f) Copy of PAN.
- g) Certificate of Incorporation/ or a Declaration in case the firm is being a proprietary firm.
- h) Abridged Annual report of last 03 years (Balance sheet and Profit & Loss Account) completed till December 2017, in pdf format.
- i) Name, address and details of account with respect to bidder and/or beneficiary of L/C.
- j) Quality Control Requirements as per Section VIII
- k) Performance statement along with required PO copies and its corresponding end user's satisfactory performance certificate as per section IX.
- l) Technical Bid along with clause-by-clause technical compliance statement for the quoted goods vis-à-vis the Technical specifications along with product catalogue and data sheet in the tender enquiry.
- m) The bidder should submit blank proforma invoice from the foreign manufacturer along with his technical bid, duly mentioning the specifications and code number of the parts quoted.
- n) The original proforma invoices from the foreign principal will be applicable in case of 100% subsidiary companies incorporated in India also.

- o) In case the bidder quotes an equipment of a foreign manufacturer and submits the documents as per Clause 22.1 (i) l & m from the subsidiary company of the foreign Original Equipment Manufacturer in India, the bidder must submit the Power of Attorney given to the subsidiary company by the foreign Original Equipment Manufacturer, authorizing it to do business and perform all obligations for and on behalf of the foreign manufacturer company, in India.
- p) A self-declaration on Rs. 100/- non-judicial Stamp Paper that the goods offered in the tender are new and unused.
- q) ***The Integrity pact (At Appendix-B) shall be a part and parcel of this document and has to be signed by bidder(s) at the pre-tendering stage itself, as a pre-bid obligation and should be submitted along with the Techno-Commercial Bids. All bidders are bound to comply with the integrity pact clauses. Bids submitted without signing the integrity pact will be ab initio rejected without assigning any reason.***

**(ii) PRICE BID (ONLY ONLINE):**

- a) The tenderers must ensure that they submit the Price Bid in prescribed format uploaded along with the tender enquiry. It is the responsibility of the bidder to ensure that the contents of the format are not tampered.
- b) The tenderers must ensure that they submit the on-line tenders not later than the closing time and date specified for submission of tenders.
- c) Along with price bid recent purchase order copies for the same model and technical configuration issued by institute of National importance and/or reputed central/state government hospitals should be uploaded in pdf form for reasonability of the offered price.
- d) The bidder should submit the copy of original proforma invoice from the foreign manufacturer along with the price bid.
- e) The supplier shall justify the present quotes based on previous purchase orders for similar project executed either in India or Globally. If they quote any new model or upgraded version of earlier model, they may mention the same in their tender.

22.2 The tenderers must ensure that they submit the on-line tenders within the scheduled closing date & time. They shall also ensure to submit the original Tender Processing Fee and EMD within its scheduled date & time.

**23. Late Tender:**

23.1 There is NO PROVISION of uploading late tender beyond stipulated date & time in the e-tendering system. However, if the necessary Tender Processing Fee and EMD in original are not submitted within the scheduled time, the tender shall be declared as late tender and online tender shall not be opened and shall be ignored.

**24. Alteration and Withdrawal of Tender**

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

**E. TENDER OPENING**

**25. Opening of Tenders**

25.1 The purchaser will open the e-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 This being a Two - Tender system, 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.

## **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 and, whether the documents uploaded are in legible form.
- 27.2 The Purchaser's determination of a Tender's responsiveness is to be based on the contents of the tender itself without recourse to extrinsic evidence
- 27.3 Deleted
- 27.4 The tenders will be scrutinized to determine whether they are complete and meet the essential and important requirements, conditions etc. as prescribed in the TE document. The tenders, which do not meet the basic requirements, are liable to be treated as non-responsive and will be summarily ignored.
- 27.5 The following are some of the important aspects, for which a tender shall be declared non-responsive during the evaluation and will be ignored;
- (i) Tender validity is shorter than the required period.
  - (ii) Required EMD or its exemption documents have not been provided.
  - (iii) 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.
  - (iv) Poor/ unsatisfactory past performance.
  - (v) Tenderers who stand deregistered/banned/blacklisted by any Govt. Authorities.
  - (vi) Tenderer is not eligible as per GIT Clauses 5.1 & 17.1.
  - (vii) Tenderer has not quoted for the entire quantity as specified in the List of Requirements/ BOQ for the quoted schedule.
  - (viii) Tenderer has not agreed to other essential condition(s) specially incorporated in the tender enquiry, like delivery terms, delivery schedule, terms of payment, liquidated damages clause, warranty clause, dispute resolution mechanism applicable law.
  - (ix) A tenderer quoting imported goods located within India shall produce documentary evidence of the goods having been imported and already located within India (i.e. Bills of Entry for the quoted items and a self-declaration confirming that the quoted items were imported for the purpose of storage in bidder warehouse and for further sale), along with their techno-commercial bid.

**28. Minor Informality/Irregularity/Non-Conformity**

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

**29 Discrepancies in Prices**

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

**30. Discrepancy between original and copies of Tender**

Not applicable being e-Tender.

**31. Qualification Criteria**

- 31.1 Bids which do not meet the required Qualification Criteria prescribed in Section IX, will be treated as non - responsive and will not be considered further.
- 31.2 The Purchaser reserves the right to relax the Norms on Prior Experience for Start-ups and Micro & Small Enterprises in Public Procurement.

The Start-ups are defined in Annexure-A of the "Action Plan for Start-ups in India". The same is available on the website of Department of Industrial policy and Promotion (DIPP), Ministry of Commerce & Industry.

**The Notification is available in the below link:**

[http://www.finmin.nic.in/the\\_ministry/dept\\_expenditure/ppcell/RelaxNorms\\_StartupMedEnterprise25072016.pdf](http://www.finmin.nic.in/the_ministry/dept_expenditure/ppcell/RelaxNorms_StartupMedEnterprise25072016.pdf)

**The FAQs are available in the below link:**

[http://dipp.nic.in/English/Investor/startupindia/FAQs\\_StartupIndia\\_30March2016.pdf](http://dipp.nic.in/English/Investor/startupindia/FAQs_StartupIndia_30March2016.pdf)

**Note:- Definition of Startup (only for the purpose of Government schemes)**

(Ref: Ministry of Finance Office Memorandum No. F.20/2/2014-PPD(Pt.) dated 25<sup>th</sup> July 2016.)

**32. Conversion of tender currencies to Indian Rupees**

32.1 In case the TE document permits the tenderers to quote their prices in different currencies, all such quoted prices of the responsive tenderers will be converted to a single currency viz., Indian Rupees for the purpose of equitable comparison and evaluation, as per the exchange rates established by the Reserve Bank of India for similar transactions, as on the date of 'Price Tender' opening.

**33. Schedule-wise Evaluation**

33.1 In case the List of Requirements contains more than one schedule, the responsive tenders will be evaluated and compared separately for each schedule. The tender for a schedule will not be considered if the complete requirements prescribed in that schedule are not included in the tender.

**34. Comparison of Tenders**

34.1 Unless mentioned otherwise in Section – III – Special Instructions to Tenderers and Section – VI – List of Requirements, the comparison of the responsive tenders shall be carried out on Delivery Duty Paid (DDP) consignee site basis. The quoted Site Modification Work prices and Comprehensive Annual Maintenance charges (CMC) prices will also be added for comparison/ ranking purpose for evaluation. **“Net Present value (NPV) of the actual CMC price quoted for the required CMC period after the warranty period shall be considered for bid comparison and the NPV will be calculated after discounting the quoted CMC price by a discounting factor of 10% per annum.”**

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

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

- i) In the case of goods manufactured in India or goods of foreign origin already located in India, GST or any other taxes which will be contractually payable (to the tenderer), on the goods if a contract is awarded on the tenderer; and
- ii) in the case of goods of foreign origin offered from abroad, customs duty and other similar import duties/taxes, which will be contractually payable (to the tenderer) on the goods if the contract is awarded on the tenderer.

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

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

- i. In exercise of powers conferred in Section 11 of the Micro, Small and Medium Enterprises Development (MSMED) Act 2006, the Government has notified a new Public Procurement Policy for Micro & Small Enterprises effective from 1<sup>st</sup> April 2012. The policy mandates that 25% 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 25% quantity.
- ii. In accordance with the above said notification, the participating Micro and Small Enterprises (MSEs) in a tender, quoting price within the band of L 1+15% would also be allowed to supply a portion of the requirement by bringing down their price to the L 1 price, in a situation where L 1 price is from someone other than an MSE. Such MSEs would be allowed to supply up to 25% of the total tendered value. In case there are more than one such eligible MSE, the 25% supply will be shared equally. Out of 25% of the quantity earmarked for supply from MSEs, 4% quantity is earmarked for procurement from MSEs owned by SC/ST entrepreneurs. However, in the event of failure of such MSEs to participate in the tender

process or meet the tender requirements and the L 1 price, the 4% quantity earmarked for MSEs owned by SC/ST entrepreneurs will be met from other participating MSEs.

- iii. The MSEs fulfilling the prescribed eligibility criteria and participating in the tender shall enclose with their tender a copy of their valid registration certificate with District Industries Centres or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or any other body specified by Ministry of Micro and Small enterprises in support of their being an MSE, failing which their tender will be liable to be ignored.
- iv. Special provision for Micro and Small Enterprise owned by women. Out of the total annual procurement from Micro and Small Enterprises, 3 per cent from within the 25 per cent target shall be earmarked for procurement from Micro and Small Enterprises owned by women.

**Note: “If the bidder is a MSME, it shall declare in the bid document the UdyogAadhar Memorandum Number issued to it under the MSMED Act, 2006. If a MSME bidder do not furnish the UAM Number along with bid documents, such MSME unit will not be eligible for the benefits available under Public Procurement Policy for MSEs Order 2012.”**

- 35.4 **Preference to Make in India:** As per the order issued by Department of Industrial Policy and Promotion (DIPP) vide No. P- As per the order issued by Department of Industrial Policy and Promotion (DIPP) vide No. P-45021/2/2017-BE-II dated 15.06.2017 and the subsequent orders thereof; the purchaser reserves the right to give preference to the local supplier. A copy of this order is enclosed at **Appendix-A** which will form a part of this TED for evaluation and ranking of bids.

### **36. Tenderer’s capability to perform the contract**

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

### **37. Contacting the Purchaser**

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

## **G. AWARD OF CONTRACT**

### **38. Purchaser’s Right to accept any tender and to reject any or all tenders**

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

**39. Award Criteria**

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

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

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

40.2 If the quantity has not been increased to the maximum of 25% of the tendered quantity at the time of awarding the contract, the purchaser reserves the right to increase the quantity further by up to the balance available twenty five (25) per cent of the tendered quantity of goods and services (rounded off to next whole number) without any change in the unit price and other terms & conditions mentioned in the contract during the currency of the contract.

**41. Notification of Award**

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

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

**42. Issue of Contract**

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

42.2 Within twenty one days from the date of the contract, the successful tenderer shall return the original copy of the contract, duly signed and dated, to the Purchaser/Consignee by registered/speed post. The successful tenderer should also submit Proforma Invoice from the foreign principal (if applicable as per contractual price) within 21 days from the date of NOA.

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

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

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

**44. Return of EMD**

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	
B	8 to 10	TE documents	No Change	
C	11 to 21	Preparation of Tenders	No Change	
D	22 to 24	Submission of Tenders	Extra information	17
E	25	Tender Opening	No Change	
F	26 to 37	Scrutiny and Evaluation of Tenders	No Change	
G	38 to 45	Award of Contract	Extra Information	24

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 e-TENDERS**

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

**AWARD OF CONTRACT**

- (i) **The quantities in this tender (including additional quantities against the clause “Variation of Quantities at the Time of Award/ Currency of Contract”) can be used by both HLL Infra Tech Services as well as its parent company HLL Lifecare Limited.**

**SECTION - IV**  
**GENERAL CONDITIONS OF CONTRACT (GCC)**

**TABLE OF CLAUSES**

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**1. Application**

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

**2. Use of contract documents and information**

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

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

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

**3. Patent Rights**

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

**4. Country of Origin**

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

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

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

**5. Performance Security**

5.1 Within twenty one (21) 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, which is initially valid for a period of minimum six months plus number of months under warranty from the date of Notification of Award

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

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

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

## **6. Technical Specifications and Standards**

- 6.1 The Goods & Services to be provided by the supplier under this contract shall conform to the technical specifications and quality control parameters mentioned in 'Technical Specification' and 'Quality Control Requirements' under Sections VII and VIII of this document.

## **7. Packing and Marking**

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

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

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

## **8. Inspection, Testing and Quality Control**

- 8.1 The purchaser and/or its nominated representative(s) will, without any extra cost to the purchaser, inspect and/or test the ordered goods and the related services to confirm their conformity to the contract specifications and other quality control details incorporated in the contract. The purchaser shall inform the supplier in advance, in writing, the purchaser's programme for such inspection and, also the identity of the officials to be deputed for this purpose. "The cost towards the transportation, boarding and lodging will be borne by the purchaser and/or its nominated representative(s) for the first visit. In case the goods are rejected in the first instance and the supplier requests for re-inspection, and if same is accepted by purchaser/consignee/PSA/PA, all subsequent inspections shall be at the cost of the supplier. The expense will be to and fro Economy Airfare, Local Conveyance, Boarding and Lodging of the inspection team for the inspection period."
- 8.2 The Technical Specification and Quality Control Requirements incorporated in the contract shall specify what inspections and tests are to be carried out and, also, where and how they are to be conducted. If such inspections and tests are conducted in the premises of the supplier or its subcontractor(s), all reasonable facilities and assistance, including access to relevant drawings, design details and production data, shall be furnished by the supplier to the purchaser's inspector at no charge to the purchaser.
- 8.3 If during such inspections and tests the contracted goods fail to conform to the required specifications and standards, the purchaser's inspector may reject them and the supplier shall either replace the rejected goods or make all alterations necessary to meet the specifications and standards, as required, free of cost to the purchaser and resubmit the same to the purchaser's inspector for conducting the inspections and tests again.
- 8.4 In case the contract stipulates pre-despatch inspection of the ordered goods at supplier's premises, the supplier shall put up the goods for such inspection to the purchaser's inspector well ahead of the contractual delivery period, so that the purchaser's inspector is able to complete the inspection within the contractual delivery period.
- 8.5 If the supplier tenders the goods to the purchaser's inspector for inspection at the last moment without providing reasonable time to the inspector for completing the inspection within the contractual delivery period, the inspector may carry out the inspection and complete the formality beyond the contractual delivery period at the risk and expense of the supplier. The fact that the goods have been inspected after the contractual delivery period will not have the effect of keeping the contract alive and this will be without any prejudice to the legal rights and remedies available to the purchaser under the terms & conditions of the contract.
- 8.6 The purchaser's/consignee's contractual right to inspect, test and, if necessary, reject the goods after the goods' arrival at the final destination shall have no bearing of the fact that the goods have previously been inspected and cleared by purchaser's inspector during pre-despatch inspection mentioned above.  
"On rejection, the supplier shall remove such stores within 14 days of the date of intimation of such rejection from the consignee's premises. If such goods are not removed by the supplier within the period mentioned above, the purchaser/consignee may remove the rejected stores and either return the same to the supplier at his risk and cost by such mode of transport as purchaser/consignee may decide or dispose of such goods at the suppliers risk to recover any expense incurred in connection with such disposals and also the cost of the rejected stores if already paid for."
- 8.7 Goods accepted by the purchaser/consignee and/or its inspector at initial inspection and in final inspection in terms of the contract shall in no way dilute purchaser's/consignee's right to reject the same later, if found deficient in terms of the warranty clause of the contract, as incorporated under GCC Clause 15.
- 8.8 Principal/ Foreign supplier shall also have the equipment inspected by recognised/ reputed agency like SGS, Lloyd, Bureau Veritas, TUV prior to despatch at the supplier's cost and furnish necessary certificate from the said agency in support of their claim.

**9. Terms of Delivery**

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

**10. Transportation of Goods**

10.1 Instructions for transportation of imported goods offered from abroad:

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

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

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

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

**11. Insurance:**

11.1 Unless otherwise instructed in the SCC, the supplier shall make arrangements for insuring the goods in favour of HLL Infratech services Limited or as directed by HITES 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 or its Indian Subsidiary/Indian agent from the port of entry to the consignee site for a period including 3 months beyond date of delivery for an amount equal to 110% of the overall expenditure to be incurred by the purchaser from ware house to ware house (consignee site) on all risk basis.

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

**12. Spare parts**

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



- a) The spare parts as selected by the Purchaser/Consignee to be purchased from the supplier, subject to the condition that such purchase of the spare parts shall not relieve the supplier of any contractual obligation including warranty obligations; and
- b) In case the production of the spare parts is discontinued:
  - i) Sufficient advance notice to the Purchaser/Consignee before such discontinuation to provide adequate time to the purchaser to purchase the required spare parts etc., and
  - ii) The supplier shall be responsible for undertaking the supply of any such spare part for the proper up keeping of equipment for a period of 10 years including the warranty and CMC periods.

12.2 Supplier shall carry sufficient inventories to assure ex-stock supply of consumables and spares for the goods so that the same are used during warranty and CMC period.

### **13. Incidental services**

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

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

### **14. Distribution of dispatch documents for clearance/receipt of goods**

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

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

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

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

- (i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
- (ii) Two copies of packing list identifying contents of each package;
- (iii) Certificate of origin for goods of foreign origin;
- (iv) Insurance Certificate as per GCC Clause 11.
- (v) Manufacturers/Supplier's warranty certificate & In-house inspection certificate.

B) For goods imported from abroad

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

the non-availability of technical support/ clarifications /documents from the supplier shall be borne by the supplier:

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

Note:

1. In case of sea shipment minimum 14 days demurrage free period to be allotted and instructed to the shipping lines by the supplier/beneficiary.
2. Necessary instruction to be given by the beneficiary/ supplier to the Shipping line / airline/ agent / Console to file the IGM in the name of M/s. HLL Infratech Services Limited only.
3. In case of air shipments soft copy of Airway bill, Invoice and Packing list with catalogue of shipment has to be submitted to HITES prior to landing of shipment.

## 15. Warranty:

- 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.
- The warranty shall remain valid for 60 months from the date of installation & commissioning with a regular updates of newer technology as and when evolved followed by a CMC for a period of 5 (Five) Years for all the equipment 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.
- No conditional warranty will be acceptable.
- Warranty as well as Comprehensive Maintenance contract will be inclusive of all accessories and Site Modification work and it will also cover the following wherever applicable:-
  - Any kind of motor.
  - Plastic & Glass Parts against any manufacturing defects.
  - All kind of sensors.
  - All kind of coils, probes and transducers.
  - Printers and imagers including laser and thermal printers with all parts.

- UPS including the replacement of batteries.
  - Air-conditioners
  - Replacement and repair will be under taken for the defective goods.
  - All kinds of painting, civil, HVAC and electrical work
  - Proper marking has to be made for all spares for identification like printing of installation and repair dates.
- 15.3 In case of any claim arising out of this warranty, the Purchaser/Consignee shall promptly notify the same in writing to the supplier. The period of the warranty will be as per G.C.C clause number 15.2 above irrespective of any other period mentioned elsewhere in the bidding documents.
- 15.4 Upon receipt of such notice, the supplier shall, within 8 hours on a 24(hrs) X 7 (days) X 365 (days) basis respond to take action to repair or replace the defective goods or parts thereof, free of cost, at the ultimate destination. The supplier shall take over the replaced parts/goods after providing their replacements and no claim, whatsoever shall lie on the purchaser for such replaced parts/goods thereafter. The penalty clause for non-rectification will be applicable as per tender conditions
- 15.5 In the event of any rectification of a defect or replacement of any defective goods during the warranty period, the warranty for the rectified/replaced goods shall be extended till the completion of the original warranty period of the main equipment.
- 15.6 If the supplier, having been notified, fails to respond to take action to repair or replace the defect(s) within 8 hours on a 24(hrs) X 7 (days) X 365 (days) basis, the purchaser may proceed to take such remedial action(s) as deemed fit by the purchaser, at the risk and expense of the supplier and without prejudice to other contractual rights and remedies, which the purchaser may have against the supplier.
- 15.7 During Warranty period, the supplier is required to visit at each consignee's site at least once in 6 months commencing from the date of the installation for preventive maintenance of the goods
- 15.8 The Purchaser/Consignee reserve the rights to enter into Annual Comprehensive Maintenance Contract between Consignee and the Supplier for the period as mentioned in Section VII, Technical Specifications after the completion of warranty period.
- 15.9 The supplier along with its Indian Agent and the CMC provider shall ensure continued supply of the spare parts for the machines and equipment supplied by them to the purchaser for 10 years from the date of installation and handing over.
- 15.10 The Supplier along with its Indian Agent and the CMC Provider shall always accord most favoured client status to the Purchaser vis-à-vis its other Clients/Purchasers of its equipment/ machines/ goods etc. and shall always give the most competitive price for its machines/ equipment supplied to the Purchaser/Consignee.
- 16. Assignment**
- 16.1 The Supplier shall not assign, either in whole or in part, its contractual duties, responsibilities and obligations to perform the contract, except with the Purchaser's prior written permission.
- 17. Sub Contracts**
- 17.1 The Supplier shall notify the Purchaser in writing of all sub contracts awarded under the contract if not already specified in its tender. Such notification, in its original tender or later, shall not relieve the Supplier from any of its liability or obligation under the terms and conditions of the contract.
- 17.2 Sub contract shall be only for bought out items and sub-assemblies.
- 17.3 Sub contracts shall also comply with the provisions of GCC Clause 4 ("Country of Origin").

**18. Modification of Contract**

18.1 If necessary, the purchaser may, by a written order given to the supplier at any time during the currency of the contract, amend the contract by making alterations and modifications within the general scope of contract in any one or more of the following:

- a) Specifications, drawings, designs etc. where goods to be supplied under the contract are to be specially manufactured for the purchaser,
- b) Mode of packing,
- c) Incidental services to be provided by the supplier
- d) Mode of despatch,
- e) Place of delivery, and
- f) Any other area(s) of the contract, as felt necessary by the purchaser depending on the merits of the case.

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

**19. Prices**

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

**20. Taxes and Duties**

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

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

**21. Terms and mode of payment****21.1 Payment Terms**

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

**TERMS AND MODE OF PAYMENT****A) Payment for Domestic Goods Or Foreign Origin Located Within India.**

Payment shall be made in Indian Rupees as specified in the contract in the following manner:

**a) On delivery:**

Seventy Five percent (75%) payment of the contract price shall be paid on receipt of goods in good condition and upon the submission of the following documents subject to recovery of LD, if any:

- (i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount
- (ii) Two copies of packing list identifying contents of each package
- (iii) Inspection certificate issued by the nominated Inspection agency, if any

- (iv) Insurance Certificate as per GCC Clause 11
- (v) Certificate of origin for imported goods
- (vi) Consignee Receipt Certificate as per Section XVII in original issued by the authorized representative of the consignee

**b) On Acceptance:**

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

**B) Payment For Imported Goods:**

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

**a) On Shipment:**

Seventy Five percent (75%) of the net CIP price (CIP price less Indian Agency commission) of the goods shipped shall be paid through irrevocable, non-transferable Letter of Credit (LC) opened in favour of the supplier in a bank in his country and upon submission of documents specified hereunder:

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

**b) On Acceptance:**

Balance payment of Twenty Five percent (25%) of net CIP price of goods would be made against 'Final Acceptance Certificate' as per Section XVIII to be issued by the consignees through irrevocable, non-transferable Letter of Credit (LC) opened in favour of the Foreign Principal in a bank in his country, subject to recoveries, if any. FAC need to be issued by the designated consignee after installation, commissioning, testing and one to two weeks of successful trail run of the equipment.

**c) Payment of 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. This is payable against submission of a certificate from the principal supplier that they have realised full and final settlement against their supply.

**C) Payment of Site Modification Work, if any:**

Site Modification Work payment will be made to the bidder/ manufacturer's agent of its Indian Office in Indian rupees as indicated in the relevant Price Schedule (as per prevailing rate of exchange ruling on the date of Contract) and shall not be subject to further escalation / exchange variation. This will be paid on proof of final installation, commission and acceptance of equipment by the consignee

**D) Payment for Annual Comprehensive Maintenance Contract Charges:**

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

- 21.2 The supplier shall not claim any interest on payments under the contract.
- 21.3 Where there is a statutory requirement for tax deduction at source, such deduction towards income tax and other tax as applicable will be made from the bills payable to the Supplier at rates as notified from time to time.
- 21.4 Irrevocable & non – transferable LC shall be opened by the Purchaser. However, if the supplier requests specifically to open confirmed LC, the extra charges would be borne by the supplier. If LC is required to be extended and/or amended for reasons not attributable to the purchaser/consignee, the charges thereof shall be borne by the supplier.
- 21.5 The payment shall be made in the currency / currencies authorised in the contract.
- 21.6 The supplier shall send its claim for payment in writing, when contractually due, along with relevant documents etc., duly signed with date, to respective consignees.
- 21.7 While claiming payment, the supplier is also to certify in the bill that the payment being claimed is strictly in terms of the contract and all the obligations on the part of the supplier for claiming that payment has been fulfilled as required under the contract.
- 21.8 While claiming reimbursement of duties, taxes etc. (like custom duty and/or GST or any other taxes) 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**

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

- 22.6.1 Passing of Property:
- 22.6.2 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.
- 22.6.3 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.
- 22.6.4 Unless otherwise agreed, the goods remain at the supplier's risk until the property therein is transferred to the purchaser.

### **23. Liquidated damages**

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

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

### **24. Termination for default**

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

### **25. Termination for insolvency**

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

### **26. Force Majeure**

- 26.1 Notwithstanding the provisions contained in GCC clauses 22, 23 and 24, the supplier shall not be liable for imposition of any such sanction so long the delay and/or failure of the supplier in fulfilling its obligations under the contract is the result of an event of Force Majeure.
- 26.2 For purposes of this clause, Force Majeure means an event beyond the control of the supplier and not involving the supplier's fault or negligence and which is not foreseeable and not



brought about at the instance of , the party claiming to be affected by such event and which has caused the non – performance or delay in performance. Such events may include, but are not restricted to, wars or revolutions, hostility, acts of public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes excluding by its employees , lockouts excluding by its management, and freight embargoes.

- 26.3 If a Force Majeure situation arises, the supplier shall promptly notify the Purchaser/Consignee in writing of such conditions and the cause thereof within twenty one days of occurrence of such event. Unless otherwise directed by the Purchaser/Consignee in writing, the supplier shall continue to perform its obligations under the contract as far as reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
- 26.4 If the performance in whole or in part or any obligation under this contract is prevented or delayed by any reason of Force Majeure for a period exceeding sixty days, either party may at its option terminate the contract without any financial repercussion on either side.
- 26.5 In case due to a Force Majeure event the Purchaser/Consignee is unable to fulfil its contractual commitment and responsibility, the Purchaser/Consignee will notify the supplier accordingly and subsequent actions taken on similar lines described in above sub-paragraphs.

## **27. Termination for convenience**

- 27.1 The Purchaser/Consignee reserves the right to terminate the contract, in whole or in part for its (Purchaser's/Consignee 's) convenience, by serving written notice on the supplier at any time during the currency of the contract. The notice shall specify that the termination is for the convenience of the Purchaser/Consignee. The notice shall also indicate inter alia, 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 by speed post/ Regd. Post or by email. 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 or amendments thereof. 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 arbitrator appointed by CEO (HITES). 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/NCR, 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.
- 33.8 If any provisions of this tender enquiry or a contract formed on the basis of this tender enquiry are invalid or void under any of the existing provisions of Indian law, then such provisions will not affect other provisions of this tender enquiry/ contract.

**SECTION – V**

**SPECIAL CONDITIONS OF CONTRACT (SCC)**

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

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

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

## SECTION - VI

## LIST OF REQUIREMENTS

## Part I

Sch. No.	Event Number	Name of the item	Qty.	Warranty in Years	CMC in Years
1	3000003872	Blood & Fluid Warmer	152	5	5
2	3000003873	Peripheral Nerve Stimulator	79	5	5
3	3000003874	Fibre optic Bronchoscope	25	5	5
4	3000003875	General plastic surgical instruments (Burns & Plastic)	24	5	5
5	3000003876	LED head lights	10	5	5
6	3000003877	Nerve stimulator (intra operative)	10	5	5
7	3000003878	Powered Liposuction Set	10	5	5
8	3000003879	High End Echocardiography system (4 D ECHO)	10	5	5
9	3000003880	Portable Echocardiography System	2	5	5
10	3000003881	Surgical Loupes	38	5	5
11	3000003882	Cell Saver	19	5	5
12	3000003883	Electric operated sternum system	19	5	5
13	3000003885	Argon Plasma Coagulation System	10	5	5
14	3000003886	Ultrasonic Surgical aspirator	3	5	5
15	3000003887	High Resolution Manometry System	5	5	5
16	3000003888	Balloon Enteroscopy system	5	5	5
17	3000003889	Video Endoscopy System	21	5	5
18	3000003890	Endoscopic washer and disinfector system	10	5	5
19	3000003891	Transport Incubator with ventilator	13	5	5
20	3000003892	Endovision camera System	12	5	5
21	3000003893	Paediatric neuroendoscope	4	5	5
22	3000003894	Pediatric Open Surgical Instruments	18	5	5
23	3000003895	Resuscitation Equipment	9	5	5
24	3000003896	Paediatric Rigid Bronchoscope & Oesophagoscope	10	5	5
25	3000003897	8 Channel EMG -NCS-EP system	23	5	5
26	3000003898	EMG-NCV-EP MACHINE 4 channel	32	5	5
27	3000003899	Autonomic Function Testing Lab with Comprehensive Software	3	5	5
28	3000003900	Portable EEG 32 Channel	25	5	5
29	3000003901	Video Polysomnography with 1 Camera	32	5	5
30	3000003902	ICP Monitor	38	5	5
31	3000003903	Ultrasonic surgical aspirator	10	5	5
32	3000003904	Computed Radiography Unit	10	5	5
33	3000003905	Portable - Colour Doppler	10	5	5
34	3000003906	800mA Digital X-Ray unit with Single Detector (Floor Mounted)	10	5	5
35	3000003907	Mobile X-ray Machine	12	5	5
36	3000003908	Colour Doppler 4D	14	5	5
37	3000003909	Urodynamic System	18	5	5
38	3000003910	OT Table - Urology	19	5	5
39	3000003911	Mobile C-arm Image Intensifier	10	5	5
40	3000003912	Flexible Cysto-Nephroscope	10	5	5
41	3000003913	General Surgery Instrument Set	10	5	5
42	3000003914	Turp, Cystoscope & Optical Urethrotome	10	5	5

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

75 days from date of Notification of Award to delivery at consignee site or 30 days from the date of site handover, whichever is later. The date of delivery will be the date of delivery at consignee site. Tenderers may quote earliest delivery period.

Installation and commissioning shall be done within 45 days of receipt of the stores/ goods at site.

**b) For Imported goods directly from foreign:**

90 days from the date of opening of L/C to deliver at port of destination or 30 days from handing over the site, whichever is later. The date of delivery will be the date on which the consignment reaches the Port of Destination. (Tenderers may quote the earliest delivery period).

Installation and commissioning shall be done within 45 days of receipt of the stores/ goods at site.

If the delivery gets delayed due to site related issues, the supplier must get the revised tentative delivery date duly vetted by the consignee.

(The supplier has to ensure the site readiness from the Director/MS of respective consignee/Executing agency before dispatching the equipment. Any delay attributable to site readiness of individual institutes shall be communicated to M/s. HLL Infra Tech Services Limited in writing, for extension of delivery period, with proof from respective Institutes).

Layout drawing for approval, valid Performance Security and Proforma Invoice (in case of LC opening) are to be submitted within 30 days from the date of release of NOA.

Site Readiness means that the site is ready in all aspects for successful delivery, installation and commissioning.

**Note:**

- i) Supplier has to submit clear documents for opening of LC to HITES within 30 days of placement of order. Any delay will be treated as non-performance and Liquidated Damages shall be levied.
- ii) In case of multiple LC are opened in favour of multiple manufacturers, the delivery period for all the items under the contract shall be counted from the date of opening of the first LC only.
- iii) 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.
- iv) Since the supplier is not responsible for custom clearing and forwarding the goods to consignee site, the time taken for the same shall not be counted for computation of LD. However, time taken by the supplier to rectify the short comings of any document for custom clearing the goods to be counted in the above delivery period.

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: Site Modification Work (if any) as per details in Technical Specification.**

**Part V: Warranty period as per details in general technical specification and as specified in Part I above. Warranty period will be 60 months from the date of installation, commissioning and acceptance.**

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

**Part VI:**

**Required Terms of Delivery and Destination:**

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

At Consignee Site(s)

**b) For Imported goods directly from abroad:**

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

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

**Destination/Consignee details:**

A list of Consignee is given in Section XXI. The goods mentioned at Part-I in this section are intended to be supplied to the following hospitals/medical institutes. However, order may be placed for any hospital/institute across India.

**SECTION – VII**  
**TECHNICAL SPECIFICATIONS**

**Item Sl. No. 01**  
**Blood & Fluid Warmer**

SN	Technical Specification		
1	Should be able to warm fluid /blood at a temperature range of 37-41 deg C.		
2	Should be able to maintain or warm the fluid/blood when at a flow rate of 2L/hr.		
3	Should have digital temperature display of fluid.		
4	Disposable tubing set for Fluid/Blood-500 Nos for fluid amd 100 nos for blood.(price to be quoted separately)		
5	Should have over temp alarm		
6	<b>Should have US FDA orBIS or European CE with four digit notified body number certificate for the quoted model and certificate to be submitted</b>		
7	Should have Clamp for mounting on the IV stand		
	<b>BOQ</b>	<b>Qty</b>	<b>UOM</b>
1	Blood & Fluid Warmer with standard accessories	1	No
2	<b>Disposable tubing set for Fluid/Blood (price to be quoted separately)</b>	<b>500 (for fluid) 100 (for blood)</b>	<b>Nos</b>

**Item Sl. No. 02**  
**Peripheral Nerve Stimulator**

1	Should be suitable to identify peripheral nerves and giving percutaneous stimulation in neuron muscular block.
2	Should have a percutaneous monopolar/ bipolar stimulating handle for localization of nerves without puncturing the nerve which should be autoclavable/ETO sterilizable
3	Stimulation current:1-5 mA
4	Stimulation voltage: 95 V max
5	Stimulation frequency: 1 Hz / 2 Hz
6	Impedance measuring range: 1 k $\Omega$ – 90 k $\Omega$ for target stimulation current > 0.5 mA
7	Stimulus duration: 0.05 ms – 0.10 ms – 0.30 ms – 0.50 ms – 1.00 ms $\pm$ 1%
8	Weight: 300gm or less
9	Should continuously measure & display actual current passing through the patient and selected current.
10	Deleted
11	Should automatically switch off with a acoustic warning if not operated more than 10 minutes .
12	Should have LCD display for stimulation current/voltage.
13	<b>Equipment should be European CE with four digit notified body number or US FDA or BIS approved for the quoted model and certificate to be submitted.</b>



	Should be supplied complete with		
	Plexus Cannula with Thin polymer insulation coating (Teflon coating not desirable) of Length 50mm, 100mm and 150mm – 10 nos. each		
	<b>BOQ</b>	<b>Qty</b>	<b>UOM</b>
1	Nerve Stimulator as per specification	1	No
2	Plexus Cannula with Thin polymer insulation coating (Teflon coating not desirable) of Length 50mm	10	No
3	Plexus Cannula with Thin polymer insulation coating (Teflon coating not desirable) of Length 100mm	10	No
4	Plexus Cannula with Thin polymer insulation coating (Teflon coating not desirable) of Length 150mm	10	No
5	Needles for continuous plexus block of different sizes (total 10 nos.)	1	set

**Item Sl. No. 03**  
**Fibre optic Bronchoscope**

	<b>Fiber Optic Bronchoscope</b>		
	The flexible Fiberoptic Bronchoscope should be supplied complete with light source and trolley and minimum 15" LCD Monitor		
	<b>Adult Scope:</b>		
1	Field of View should be 120 degree or more		
2	Depth of field should be 3 – 50 mm or better		
3	Distal end diameter should be 5.2 mm or less		
4	Insertion tube diameter should be 5.2 mm or less		
5	Channel diameter should be 2.0 mm or more		
6	Working length should be 600 mm or more		
7	Total length should be 850 mm or more		
8	UP and DOWN Angulations should be 140 degree and 130 degree or more.		
9	Can be fully immersed in disinfectant solution and water		
10	Should be European CE with 4 digit notified body number/US FDA approved.		
	<b>Paediatric Scope:</b>		
1	Field of View should be 90 degree or more		
2	Depth of field should be 3 – 50 mm or better		
3	Distal end diameter should be 2.8 mm or less		
4	Insertion tube diameter should be 2.8 mm or less		
5	Channel diameter should be 1.2 mm or more		
6	Should be light weight and easy to use		
7	Working length should be 600 mm or more		
8	Total length should be 850 mm or more		
9	Deleted		
10	Can be fully immersed in disinfectant solution and water		
11	Should be European CE with 4 digit notified body number/US FDA approved.		
	<b>Video Processor &amp; Light source</b>		
1	<b>Outputs - suitable video output</b>		
2	Deleted		
3	Deleted		
4	Unit should be compact and light weight.		
5	<b>Light source - Combined or separate LED/150W Xenon</b>		

	(covered under warranty)		
6	Deleted		
7	Lamp can be turned on/off without turning off the equipment.		
8	<b>Electronic magnification up to 1.5X by a touch of scope remote switches/adapters/coupler</b>		
9	Deleted		
10	<b>Should be European CE with 4 digit notified body number/US FDA /BIS approved for the quoted model</b>		
	<b>Monitor</b>		
	15 inches or more LCD/LED HD Monitor of Medical Grade. It should be mountable on trolley.		
	<b>Computer with Software</b>		
	Should be supplied with suitable computer system with facility for recording images and video.		
	<b>Trolley</b>		
	Suitable Trolley to mount monitor, scopes, light source and all accessories.		
<b>Sl NO</b>	<b>BOQ</b>	<b>Qty</b>	<b>UOM</b>
1	Flexible Fiberoptic Bronchoscope Adult	1	No
2	Flexible Fiberoptic Bronchoscope Paediatric	1	No
3	Monitor HD	1	No
4	Video Processing System with Computer	1	No
5	Light Source, LED	1	No
6	Trolley	1	No
7	Reusable and autoclavable biopsy forceps	2	No
8	Cleaning/maintenance kit including container for diinfectant solution	1	Set
9	Brush Biopsy (Protected)	10	pieces
10	Foreign body forceps basket type (Optional)	2	No

**Item Sl. No. 04**

**General plastic surgical instruments (Burns & Plastic)**

<b>1</b>	<b>BARD PARKER HANDLE</b>	
	No.3 Overall length 124 mm, 5.0 inches	10
	No.4 Overall length 134 mm, 5.4 inches	10
	No.7 Overall length 165 mm, 6.6 inches	10
<b>2</b>	<b>STRAIGHT DRESSING FORCEPS</b>	
	<b>Delicate</b>	<b>5</b>
	11mm tip	
	Overall length 100 mm, 3.9 inches	
	<b>Heavy</b>	<b>5</b>
	12mm tip	
	Overall length 103 mm, 4.1inches	
<b>3</b>	<b>LUCAE NASAL DRESSING FORCEPS</b>	
	<b>Delicate</b>	<b>5</b>
	2mmx 17mm tip	
	83mm working length	
	Overall length 160 mm, 6.3 inches	
	<b>Standard pattern</b>	<b>5</b>
	2.5mmx 19mm tip	
	83mm working length	

	Overall length 160 mm, 6.3 inches	
<b>4</b>	<b>ADSON DRESSING FORCEPS</b>	
	<b>Extra long tip</b>	5
	- 1 mm x 13mm tip	
	- Overall length 122 mm, 4.8 inches	
	<b>- Delicate</b>	<b>5</b>
	- 1mm x 14mm tip	
	- Overall length 126 mm, 5.9 inches	
<b>5</b>	<b>HARTMAN HEMOSTATIC MOSQUITO FORCEPS</b>	
	<b>- Straight</b>	
	- Overall length 99 mm, 3.9 inches	15
	<b>- Curved</b>	
	- Overall length 99 mm, 3.9 inches	15
<b>6</b>	<b>HALSTEAD HEMOSTATIC MOSQUITO FORCEPS</b>	
	<b>- Straight</b>	15
	- Overall length 120 mm, 4.7 inches	
	<b>- Curved</b>	15
	- Overall length 120 mm, 4.7 inches	
<b>7</b>	<b>DINGMAN BONE CLAMP</b>	5
	-Interjaw gap	
	- Serrated	
	- Straight 37mm open jaws	
	- Angled handle shafts	
	- Overall length 185 mm, 7.3 inches	
<b>8</b>	<b>STRAIGHT TISSUE FORCEPS</b>	
	<b>Delicate 1x 2 teeth</b>	5
	- Overall length 100 mm, 3.9 inches	
	<b>Heavy 1x 2 teeth</b>	5
	- Overall length 86 mm, 3.4 inches	
<b>9</b>	<b>ADSON TISSUE FORCEPS</b>	
	<b>Extra delicate</b>	5
	- 1x2, 0.5mm teeth	
	- Overall length 122 mm, 4.8 inches	
	<b>Delicate</b>	5
	- 1 x2, 1.5 mm teeth	
	- Overall length 122 mm, 4.8 inches	
	<b>- Delicate</b>	5
	- 1 x2 teeth	
	- Overall length 150 mm, 5.9 inches	
<b>10</b>	<b>ALLIS FORCEPS</b>	15
	- 4x5 teeth, 3mm width	
	- Lightweight	
	- Overall length 141 mm, 5.6 inches	
<b>11</b>	<b>BACKHAUS TOWEL FORCEPS</b>	20
	- Overall length 89 mm, 3.5 inches	
<b>12</b>	<b>NERVE HOOK</b>	5
	- 2mm	
	- Angled 70 degrees	
	- Overall length 220 mm, 8.7 inches	
<b>13</b>	<b>SINGLE SKIN HOOK</b>	5
	- Fine	

	- Short working end	
	- Overall length 125 mm, 4.9 inches	
<b>14</b>	<b>JOSEPH DOUBLE HOOK</b>	
	- 2mm wide	5
	- Overall length 156 mm, 6.1 inches	
	- 5mm wide	5
	- Overall length 158 mm, 6.2 inches	
<b>15</b>	<b>KILNER ALAE RETRACTOR</b>	5
	- Doble hook 5mm + 10mm wide	
	- Length 8 to 4"	
<b>16</b>	<b>DERF NEEDLE HOLDER</b>	5
	<b>Straight (Catching end should be of tungston carbide inserts)</b>	
	Heavy 13mm, serrated with lengthwise grooves	
	Ring handle with ratchet lock	
	Overall length 130 mm, 5.1 inches	
<b>17</b>	<b>BROWN NEEDLE HOLDER</b>	5
	<b>Straight (Catching end should be of tungston carbide inserts)</b>	
	Heavy 13mm special hard serrated jaws	
	Ring handle with ratchet lock	
	Overall length 134 mm, 5.2 inches	
<b>18</b>	<b>ASHLEY BROWN NEEDLE HOLDER</b>	5
	<b>Straight (Catching end should be of tungston carbide inserts)</b>	
	Medium 17mm vertically serrated jaws	
	Large finger rings on handle with ratchet lock	
	Overall length 146 mm, 5.7 inches	
<b>19</b>	<b>BAYONET NEEDLE HOLDER</b>	5
	- <b>Straight</b>	
	- Ring handle with racket lock	
	- Fine 14mm jaws	
	- Overall length 162 mm, 6.2 inches	
<b>20</b>	<b>CONVERSE NEEDLE HOLDER</b>	
	- <b>Straight Fine</b>	5
	- 12mm vertically serrated jaws	
	Ring handle with extra large rings and ratchet lock	
	- Overall length 108 mm, 4.3 inches	
	- <b>Straight Medium</b>	5
	- 15mm vertically serrated jaws	
	- Ring handle with large rings and ratchet lock	
	- Overall length 121 mm, 4.8 inches	
<b>21</b>	<b>METZENBAUM NEEDLE HOLDER</b>	
	- <b>Straight</b>	5
	- Fenestrated	
	- Heavy 13mm serrated jaws	
	- Ring handle with ratchet lock	
	- Overall length 153 mm, 6.0 inches	
<b>22</b>	<b>STORZ NEEDLE HOLDER</b>	10
	- <b>Straight</b>	
	- Delicate 15mm narrow jaws	
	- Ring handle with ratchet lock	
	- Overall length 178 mm, 7.0 inches	
<b>23</b>	<b>TESSIER TYPE OSTEOTOME</b>	10
	<b>Curved</b>	

	- 15mm	
	- Round striking knob	
	- Overall length 200 mm, 7.8 inches	
<b>24</b>	<b>SPLIT CRANIAL BONE OSTEOTOME</b>	<b>10</b>
	- <b>Curved</b>	
	- 15mm	
	- Slightly flared tip	
	- Overall length 202 mm, 7.9 inches	
<b>25</b>	<b>WEITLANER MASTOID RETRACTOR</b>	<b>5</b>
	- <b>Self retaining</b>	
	- 3x4 blunt prongs	
	- 14mm long prongs	
	- 45mm inside spread	
	- Overall length 140mm 5.5 inches	
<b>26</b>	<b>WEITLANER MASTOID RETRACTOR</b>	<b>5</b>
	- <b>Self retaining</b>	
	- 3x4 blunt prongs	
	- 14mm long prongs	
	- 80 mm inside spread	
	- Overall length 162mm 6.4 inches	
<b>27</b>	<b>WEITLANER BABY RETRACTOR</b>	<b>5</b>
	- <b>Self retaining</b>	
	- 3x3 blunt prongs	
	- 12mm long prongs	
	- 35 mm inside spread	
	- Overall length 105mm 4.1 inches	
<b>28</b>	<b>LEMPERT RONGEUR</b>	<b>5</b>
	- <b>Straight handle</b>	
	- Straight jaws	
	- 2.5mm x 10 mm cup	
	- Overall length 166mm, 6.5 inches	
<b>29</b>	<b>JUERS- LEMPERT RONGEUR</b>	<b>5</b>
	- <b>Curved handle</b>	
	- Straight jaws	
	- 3mm x 13mm cup	
	- Overall length 200 mm, 7.9 inches	
<b>30</b>	<b>BEYER RONGEUR</b>	<b>5</b>
	- <b>Straight handle</b>	
	- Lightly curved jaws	
	- 3mmx 17mm cup	
	- Overall length 178 mm, 7.0 inches	
<b>31</b>	<b>ROWLAND RONGEUR</b>	<b>5</b>
	- <b>Straight handle</b>	
	- Straight 25mm jaws	
	- Double action	
	- Overall length 186 mm, 7.3 inches	
<b>32</b>	<b>BEYER RONGEUR</b>	<b>5</b>
	- <b>Straight handle</b>	
	- Lightly curved jaws	
	- 4mm x 15mm bite	
	- Double action	
	- Overall length 180 mm, 7.1 inches	

<b>33</b>	<b>STILLE-LUER RONGEUR</b>	5
	- <b>Angular</b>	
	- 5m bite	
	- Double action	
	- Overall length 195 mm, 7.7 inches	
<b>34</b>	<b>LAHEY SCISSORS</b> -cutting edge should be of tungsten carbide inserts	15
	<b>Curved</b>	
	- Blunt tips	
	- 41mm mid screw to tip	
	- Overall length 145 mm, 5.7 inches	
<b>35</b>	<b>STORZ STRAIGHT IRIS SCISSORS</b>	10
	<b>Straight</b>	
	- Pointed lips	
	- 28mm mid screw to tip	
	- Overall length 100 mm, 3.4 inches	
<b>36</b>	<b>STORZ CURVED IRIS SCISSORS</b>	10
	<b>Curved</b>	
	- Pointed tips	
	- 26mm mid screw to tip	
	- Overall length 100 mm, 3.4 inches	
<b>37</b>	<b>MAYO SCISSORS</b>	15
	<b>Straight</b>	
	- 52mm mid screw to tip	
	- Overall length 153 mm, 6.0 inches	
<b>38</b>	<b>MAYO SCISSORS</b>	15
	<b>Curved</b>	
	- 52mm mid screw to tip	
	- Overall length 153 mm, 6.0 inches	
<b>39</b>	<b>METZENBAUM SCISSORS</b>	
	<b>Curved</b>	15
	- Delicate	
	- 35mm mid screw to tip	
	- Overall length 136 mm, 5.4 inches	
<b>40</b>	<b>METZENBAUM SCISSORS</b>	15
	<b>Curved</b>	
	- Light model	
	- 38mm mid screw to tip	
	- Overall length 178 mm, 7.0 inches	
<b>41</b>	<b>COTTLE DORSAL SCISSORS</b>	5
	- <b>Heavy</b>	
	- Ang led handle	
	- 52mm mid screw to tip	
	- Overall length 160 mm, 6.3 inches	
<b>42</b>	<b>STORZ PLASTIC SCISSORS</b>	10
	- <b>Straight</b>	
	- Pointed	
	- 38mm mid screw to tip	
	- Overall length 120 mm 4.7 inches	
<b>43</b>	<b>STORZ PLASTIC SCISSORS</b>	10
	- <b>Curved</b>	
	- Pointed	
	- 38mm mid screw to tip	

	- Overall length 120 mm 4.7 inches	
<b>44</b>	<b>GORNEY PLASTIC SURGERY SCISSORS</b>	10
	- <b>Straight</b>	
	- Blunt tips	
	- 48mm mid screw to tip	
	- Overall length 190 mm 7.5 inches	
<b>45</b>	<b>GORNEY PLASTIC SURGERY SCISSORS</b>	
	- <b>Curved</b>	10
	- Narrow Blade	
	- 48mm mid screw to tip	
	- Overall length 190 mm 7.5 inches	
<b>46</b>	<b>DOUBLE ACTION PLATE CUTTER</b>	10
	- <b>Double action</b>	
	- Taugsten- carbide inserts	
	- 10 mm cutting edge	
	- Overall length 175mm 6.9 inches	
<b>47</b>	<b>FREEMAN RHYTIDECTOMY SCISSORS</b>	10
	- <b>Curved</b>	
	- Blunt with flattened tips	
	Shafts spread so finger rings are extended outward with blades closed	
	- 38 mm mid screw to tip	
	- Overall length 175 mm 6.9 inches	
<b>48</b>	<b>STEVENS TENOTOMY SCISSORS</b>	15
	- <b>Straight</b>	
	- Heavy model	
	- Blunt tips	
	- 19mm mid screw to tip	
	- Storz ribbon handle style	
	- Overall length 99 mm 3.9 inches	
<b>49</b>	<b>STEVENS TENOTOMY SCISSORS</b>	15
	- <b>Curved</b>	
	- Heavy model	
	- Blunt tips	
	- 19mm mid screw to tip	
	- Storz ribbon handle style	
	- Overall length 98 mm 3.8 inches	
<b>50</b>	<b>STEVENS TENOTOMY SCISSORS</b>	10
	- <b>Straight</b>	
	- 34 mm mid screw to tip	
	- Overall length 143 mm 5.6 inches	
<b>51</b>	<b>STEVENS TENOTOMY SCISSORS</b>	10
	- <b>Curved</b>	
	- 33 mm mid screw to tip	
	- Overall length 143 mm 5.6 inches	
<b>52</b>	<b>COTTLE SEPTUM SPECULUM</b>	10
	- 50mm to 70mm thin modified blades	
	- Overall length 141 mm 5.6 inches	
<b>53</b>	<b>FERGUSON FRAZIER SUCTION TUBE</b>	6 × 5 = 30
	- <b>Angled</b>	(10 each)
	- With flat thumb plate and cut off (bypass hole)	
	- 200 mm working length	

	- Overall length 260mm, 10.2 inches	
	- Size 6FR, 8FR, 10FR	
<b>54</b>	<b>MIXTER BABY HEMOSTATIC FORECEPS</b>	
	- <b>14mm 5.6 INCHES</b>	15
	- 19mm 7.6 inches	15
<b>55</b>	<b>LAHEY ARTERY AND GALL DUCT FOR CEPS</b>	15
	- Jaws with lateral seriations	
	- Wide curve 19cm 7.6 inches	
<b>56</b>	<b>SENN MILLER RETRACTOR</b>	20
	- Double ended	
	- 16mm (6-1/4 inches)	
	- Blunt prongs	
<b>57</b>	<b>LANGEN BARK RETRACTOR</b>	10
	- 17MM 6-3/4 INCHES	
	- 8MM X 25MM Duct	
<b>58</b>	<b>KELLAY HEMOSTATIC FORCEPS</b>	15
	- - Curved	
	- - Overall length 143 mm, 5.6 inches	
<b>59</b>	<b>CAIRNS (DANDY) HEMOSTATIC FORCEPS</b>	20
	- - Curved on side	
	- - Serrated jaws	
	- - Overall length 140 mm, 5.5 inches	
<b>60</b>	<b>CORWIN WIRE TWISTER</b>	10
	- - Heavy 10mm serrated jaw	
	- - Twisted ratchet handle for twisting wires	
	- - Overall length 155 mm, 6.1 inches	
<b>61</b>	<b>INSTRUMENT TRAY COVERED</b>	10
	- 30.5 cm x 19 cm x 6 cm 12 1/8" x 7 1/2" x 2 1/2"	
<b>62</b>	<b>ALEXANDER GOUGE</b>	5
	- 6 mm wide	
	- Overall length 172 mm, 6.8 inches	
<b>63</b>	<b>FURGUOSEN MOUTH GAG</b>	5
	- Self- retaining blades serrated tip 4mm wide	
	- maximum length 6.2 inches	
<b>64</b>	<b>DEAVER RETRACHOR SIZE</b>	
	- Size - 3,38 mm x 30 cm 1 1/2 " x 12"	20
	- Size - 4, 50 mm x 30 cm 2" x 12"	20
<b>65</b>	<b>BRAND TENDON PULLING FORCEPS</b>	
	- Curved length 20 cm 8"	10
	- Straight length 20 cm 8"	10
<b>66</b>	<b>EMESIS BASIN (KIDNEYTRAY)</b>	15
	- size 20 cm 8 1/8"	
<b>67</b>	<b>SPONGE BOWL</b>	
	- 400 16.5 x 7.5 cm	20
	- 320 15.5 x 7.5 cm	20
<b>68</b>	<b>KELLY HAEMOSTATIC FORCEPS</b>	20
	- - Carved overall length 143 mm, 5.6 inch	
<b>69</b>	<b>SMITH. RAMUS SEPARATOR</b>	5
	- 2 x 1 month	
	- Length 16cm	
<b>70</b>	<b>CLASSIC SPONGE HOLDING FORCEPS</b>	20
	- - Straight 9 1/2 ,229mm	



<b>71</b>	<b>MIXTER FORCEPS DELICATE</b>	10
	- Length 9 ½” inches, 241mm	
<b>72</b>	<b>CRILE WOOD NEEDLE HOLDER TC INSERT</b>	10
	- Length 6” , 152mm	
<b>73</b>	<b>LUCAE BAYONET DRESSING FORCEPS SERRATED END</b>	10
	- Length 5 ¾” inches, 146mm	
<b>74</b>	<b>BAB COCK CLASSIC TISSUE FORCEPS</b>	10
	- Length 6 ¼” inches, 159mm	
<b>75</b>	<b>HEPARIN NEEDLE MEDIUM TIP 2-3.5mm</b>	10
	- Length 2 1/8” inches, 55mm	
<b>76</b>	<b>RIBBON MALLEABLE RETRACTOR DOUBLE ENDED</b>	20
	- Length 203mm 8” , 13mm	
<b>77</b>	<b>LISTERS BANDAGE SCISSORS STANDARD FINGER RING</b>	10
	- Length 5 ½” inches, 140mm	
<b>78</b>	<b>DOUBLE ACTION WIRE CUTTER SIDE CUTTER STRAIGHT SERRATED JAW</b>	5
	- Length 9” inches, 229mm	
<b>79</b>	<b>MALLET</b>	5
	- Length 7 ¼” inches, 184mm, weight 350-500gm	
<b>80</b>	<b>DESMARRES EYE LID RETRACTOR</b>	10
	- Blade 16m wide	
<b>81</b>	<b>WATSONS MODIFIED HUMBY SKIN GRAFTING HANDLE STANDARD WITH WHOLE METAL S.S BODY</b>	10
<b>82</b>	<b>Weeder Tongue depressor</b>	
	· <i>Child size</i>	10
	-Wide serrated end, 28mm to 15 mm	
	-Overall length 130mm 5 inches to 5 ½ inches	
	· <i>Adult size</i>	10
	-Wide serrated end, 35mm to 15 mm	
	-Overall length 140mm, 5 ½ inches to 6 inches	
<b>83</b>	<b>Penfield dissector</b>	
	<b>No. 1</b>	20
	Double ended	
	Broad curved 7 mm dissector, sharp 8mm diameter spoon	
	Overall length 221 mm, 8.7 inches	
	<b>No.2</b>	20
	Double ended	
	Full curved 7 mm dissector, one end, wax packer other end	
	Overall length 221 mm, 8.7 inches	
	<b>No.3</b>	20
	Double ended	
	Full curved 7.5mm dissector one end, wax packer other end	
	Overall length 221mm, 8.7 inches	
	<b>No.4</b>	20
	Slight curved 3 mm dissector	
	Overall length 221 mm, 8.7 inches	
<b>84</b>	<b>. Freer septum elevator</b>	10
	Double ended	
	Sharp and blunt 4.5 mm tips	
	Overall length 190 mm, 7.5 inches	
<b>85</b>	<b>Cleft palate elevator</b>	5
	4mm x9mm tip, 90 degree bend	

	Overall length 160 mm, 6.2 inches	
<b>86</b>	<b>Blair palate hook</b>	10
	Overall length 201mm, 7.9 inches	
<b>87</b>	<b>Mandible hook</b>	10
	- Overall length 222 mm, 8.7 inches	
<b>88</b>	<b>Slider Jensen Mouth gag</b>	
	<b>Child size</b>	5
	<b>-40mm inside spread</b>	
	-Curve lies flat against side of the face	
	-Overall length 98mm, 3.9 inches	
	<b>- Adult size</b>	5
	-50mm inside spread	
	-Overall length 125mm, 5.0 inches	
<b>89</b>	<b>Tenzel double ended periosteal elevator</b>	10
	<b>- Double ended</b>	
	-4mmx 6mm dissector end with shaft marked at 10mm, 20mm, 30mm from tip	
	-6 mm wide curved elevator	
	-Round knurled handle	
	-Overall length 195 mm, 7.7 inches	
<b>90</b>	<b>Drill guide</b>	10
	- 34 mm long guide length	
	- Overall length 120mm, 4.7 inches including handle.	
<b>91</b>	<b>Eccentric drill guide</b>	10
	- Dial to position drill hole away from fracture site	
	- Overall length 115 mm, 4.5 inches	
<b>92</b>	<b>Maxillary left disimpaction forceps</b>	5
	- (Dingman-Pollock)	
	- Overall length 275 mm, 10.8 inches	
<b>93</b>	<b>Maxillary right disimpaction forceps</b>	5
	- (Dingman Pollock)	
	- Overall length 275mm, 10.8 inches	
<b>94</b>	<b>Bone clamp (Dingman)</b>	10
	- Interjaw gap	
	- serrated	
	- Straight 37mm open jaws	
	- Angled handle shafts	
	- Overall length 185mm, 7.3 inches	
<b>95</b>	<b>Cottle osteotome</b>	
	- Straight, <b>9mm</b>	5
	- Both corners rounded	
	- Overall length 184 mm, 7.2 inches	
	- Straight, <b>12 mm</b>	5
	- Both corners rounded	
	- Overall length 184 mm, 7.2 inches	
<b>96</b>	<b>Cheek Retractor (Johnson)</b>	10
	<b>- Right angled</b>	
	-14mmx39mm blade tempered to 8mm x 14mm	
	- Overall length 197 mm, 7.1 inches	
<b>97</b>	<b>Ramus Retractor (Obwegeser)</b>	10
	- Bifurcated blade 11x70mm x22 mm long (8-3/4") serving	
	- As tissue retractor during intra-oral ramus operations	
<b>98</b>	<b>Channel Retractor (Obwegeser)</b>	10

	- Malleable 16 cm long (6 ¼")	
<b>99</b>	<b>Obwegeser Periosteal Elevator</b>	10
	- sharp fully curved tip 20 cm long (8"), 7mm wide	
<b>100</b>	<b>Obwegeser Osteotome delicate pattern</b>	
	- 15 cm long (6") for the separation of the alveolar process.	
	- <b>2.5mm</b> wide	5
	- <b>4.0mm</b> wide	5
<b>101</b>	<b>Obwegeser splitting Osteotome</b>	
	- 21.5 cm long (8 ½") for the sagittal splitting of the mandibular ramus and the decortication of the mandible	
	- <b>7mm</b> wide	5
	- <b>10 mm</b> wide	5
<b>102</b>	<b>. Walsham Forceps 23 cms long</b>	
	- <b>Right</b>	5
	- <b>Left</b>	5
<b>103</b>	<b>Ash Septum Forceps 23 cms long</b>	5
<b>A</b>	Each instrument should be carrying catalogue no. inscribed on it.	
<b>B</b>	The " <b>Hinges</b> " should be rustproof and guaranteed working for a minimum of 2 years.	
<b>C</b>	These should be guaranteed against metal fatigue and rust.	
<b>D</b>	All instruments should be made from surgical grade stainless steel.	
<b>E</b>	<b>The instruments should carry European CE with four digit notified body no. /US FDA/BIS certification.</b>	
<b>F</b>	They should be of Mat Furnish.	
<b>G</b>	No AMC/CMC required.	
<b>H</b>	Price of each item should be quoted separately	
<b>I</b>	<b>Deleted</b>	
<b>J</b>	All the instruments in one set must be quoted	
<b>k</b>	<b>variation in size upto 10% is acceptable</b>	

**Item Sl. No. 05**  
**LED Head Light**

<b>1</b>	Integrated battery/battery light source that allows more freedom of movement.		
<b>2</b>	No separate light source required		
<b>3</b>	No separate light cable required		
<b>4</b>	No mains supply required		
<b>5</b>	Low energy consumption		
<b>6</b>	No need to change the lamp (At least 25,000 hours of service life)		
<b>7</b>	Available with rechargeable battery		
<b>8</b>	white light		
<b>9</b>	Light intensity at least 25000Lux at 250mm		
<b>10</b>	Soft flexible headband		
<b>11</b>	Ergonomic fit		
<b>12</b>	Easy vertical and horizontal adjustment to the shape of head		
<b>13</b>	Extension cable for attaching the rechargeable battery and battery box to the clothing		
<b>14</b>	<b>Added para: European CE with 4 digit notified body/US FDA /BIS approved</b>		
	<b>BOQ</b>	<b>Qty</b>	<b>Uom</b>
<b>1</b>	LED Head Light Band	<b>1</b>	<b>Nos</b>

2	rechargeable battery	3	Nos
3	Battery charger	2	Nos
4	Box for head light band and spares	1	Nos

**Item Sl. No. 06**  
**Nerve stimulator**

1	It should be convenient, portable, easy to handle unit.
2	Mains Voltage: 100-240 volts
3	Accumulator : 6 volts/150 mA
4	Re-chargeable battery backup
5	Frequency : 2.5 Hz
6	Programmable pulse width and frequency.
7	It should have a resolution of 0.01 mA.
8	It should have a short stimulus pulse duration of 0.1 ms.
9	Equipment is to be supplied with standard accessories like
10	Electrical Mains cord for charging the accumulator
11	Bipolar stimulator cable for connecting stimulator forceps - 2
12	Bipolar stimulator forcep 145 mm, 0.3 mm tip - 2
13	All accessories should be regular steam and flash autoclavable
14	All fixtures, fuses, spares and reusables and accessories should be supplied along with the equipment. The supplier should also provide the list of spares, fixtures and installation diagrams with the quote.
15	Should be US FDA or European CE with 4 digit notified body no or BIS approved for the quoted model

**Item Sl. No. 07**  
**Power Assisted Liposuction Set**

<b>A</b>	<b>Aspiration Unit : 1</b>
1	Should be able to develop vacuum of $- 675 \pm 25$ mm Hg.
2	Flow rate $50 \pm 5$ lit/min.
3	Implosion proof high impact canisters with twin bottle capacity of 3 liters or more.
4	Heavy duty motor working of 220 volt AC mains.
5	Manometer with vacuum regulator.
6	Rust proof body mounted on lockable castor wheels.
7	Non-collapsible tubing.
8	European CE with 4 digit notified body/US FDA /BIS approved
<b>B</b>	<b>Infiltration Unit : 1</b>
1	Ability to develop flow rate of $600 \pm 50$ ml/min.
2	Digital display of flow rate with ability to regulate flow rate.
3	Working on 220 volts AC mains.
4	European CE with 4 digit notified body/US FDA /BIS approved
<b>C</b>	<b>Power Assisted Lipoplasty Hand Piece : 4</b>
1	Reciprocating movement of 2 mm or more at frequency of 600 cycles/minute or more.
2	Autoclavable hand piece and connecting cables/tubings.
3	Both hand & foot controls.
4	Ability of connect to different size aspiration cannulae.
5	European CE with 4 digit notified body/US FDA /BIS approved
<b>D</b>	<b>Aspiration Cannulae</b>
1	Autoclavable stainless steel construction.
2	Should match power assisted lipoplasty hand piece.

<b>3</b>	Dimensions as follows:			
	<b>Type</b>	<b>Size</b>	<b>Usable length</b>	<b>Number</b>
<b>a</b>	Single Port	2 mm-2.4 mm	18-25 cm	2
<b>b</b>	Single Port	3 mm	18-25 cm	2
<b>c</b>	Triport	4 mm	20-30 cm	3
<b>d</b>	Mercedes	5 mm	20-30 cm	3
<b>e</b>	Mirrored Triport	5 mm	20-30 cm	3
<b>E</b>	<b>Micro-injection System</b>			
<b>1</b>	<b>Centrifuge:</b>			
<b>a</b>	Ability to centrifuge at least six 10 cc syringes simultaneously.			
<b>b</b>	Autoclavable rotor and tubes.			
<b>c</b>	Ability to centrifuge at 2000-3500 RPM.			
<b>2</b>	<b>Aspiration Cannulae</b>			
<b>a</b>	Stainless steel construction			
<b>b</b>	Should fit 10 cc, 20 cc & 50 cc leur lock syringe			
	<b>Type</b>	<b>Size</b>	<b>Usable length</b>	<b>Number</b>
<b>c</b>	Blunt tip, single port	2 mm	18-25 cm	2
<b>d</b>	Blunt tip, single port	3 mm	18-25 cm	2
<b>e</b>	Blunt tip, single port	5 mm	20-30 cm	2
<b>3</b>	<b>Syringe locks: 6 (2 each for 10cc, 20 cc and 50 cc syringes)</b>			
<b>a</b>	Stainless Construction			
<b>4</b>	<b>One Way infiltration adapter</b>			
<b>a</b>	Stainless steel, autoclavable			
<b>b</b>	Should fit the infiltration cannula & leur lock syringe			
<b>5</b>	<b>Syringe rack :</b>			
<b>a</b>	Stainless steel, autoclavable			
<b>b</b>	Should be able to hold 20 or more 10 cc syringes simultaneously			
<b>6</b>	<b>Infiltration Cannulae :</b>			
<b>a</b>	Stainless Steel construction			
<b>b</b>	Should fit 10 cc, 20 cc & 50 cc leur lock syringe			
	<b>Type</b>	<b>Size</b>	<b>Length</b>	<b>Number</b>
<b>c</b>	Blunt tip, single port straight	2mm	10-20 cm	3
<b>d</b>	Blunt tip, single port, convex	2mm	08-15 cm	2
<b>e</b>	Blunt tip, single port, concave	2mm	08-15 cm	2

**Item Sl. No. 08****High End Echocardiography system (4D ECHO)**

<b>1</b>	<b>The system must be latest generation (not last prior to 2-3 years), highest</b>		
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	<b>&amp; technologically advanced digital 4D (Live 3D) echocardiography system. Any other model other than the highest end and latest version is liable for rejection</b>		
2	System must be offered with a minimum of 800000 digital processed channels. Original technical data sheet should be enclosed in technical bid to support the number of channels on the systems. If not mentioned, Please attach a letter from manufacturer along with the technical bid clearly stating the digital processed channels of the offered system		
3	<b>System must have adult cardiology transducer with either single crystal technology or pure wave technology or matrix or equivalent for excellent greyscale image quality on difficult to image patients. Please mention the technology used in the transducer. Original technical data sheet should be enclosed in technical bid to support the crystal technology.</b>		
4	System must be offered with a minimum 21 inch high resolution flat panel medical grade display monitor with infinite position adjustments. Company should provide wider monitor if available		
5	System should have at-least four Imaging universal active probe ports with electronic switching facility from key board without probe adapter.		
6	<b>System should be capable of supporting second generation 4D(Live 3D) matrix transthoracic transducer capable of supporting a minimum of 2000 elements for exceptional 4D (live 3D) Echo,4D(Live 3D) zoom, triggered full volume and triggered 3D colour volume with electro cautery suppression.</b>		
7	System should support board band probes spanning a frequency of 1-15 MHz.		
8	<b>Image storage facility on in build hard disc or MOD/CD/DVD-RW facility should be available.Inbuilt hard disk with capacity of 500 GB. System should have extensive image capability including thumb nail review, Cine loop editing etc.management. System must be supplied with 5TB external hard disk</b>		
9	System must be offered with speckle reduction Imaging: Image processing technique to remove speckles and clutter artifacts.		
10	System should have 4D (Live 3D) Echocardiography capability with colour flow imaging with single beat		
11	System should be capable of scanning depth of 30cm.Scanning Depth should be clearly mentioned in the technical quoted If not mentioned Please attach a letter from manufacturer along with the technical bid clearly stating the scanning depth of 30 cm in the offered system.		
12	Should be able to perform advanced quantification measurements like strain & Strain rate quantification. Should measure the myocardial velocity and derives the strain rate and strain along user-defined M-lines, Capable of drawing up to 3 M-lines at a time, Capable of sub-dividing each M-line into 8 sub-regions or according to user-defined sub-region sizes, Point of interest tool obtains values from any point on the M- mode display. In addition to the tissue Doppler based strain system should have 2D based strain like VVI, AFT and TMQ should be offered. These should be offered both on the system and on a licensed workstation. OFF-CART workstation (both licensed hardware and licensed software) should be quoted and highlighted in the technical bid.		
13	2D speckle tracking.		
14	System must be offered with user friendly high resolution user interface touch panel of minimum size of 12.0 inch or intuitive keyboard. User friendliness will be given preference.		
15	Should be able to perform MPR views for quantification from 3D Imaging on volume measurements like LV volumes, Ejection fraction from 3D Image, etc.		

	Also should offer synchronicity indicates to measure and compare timing of maximum contraction of LV volumes to determine those patients who will best benefit from CRT system. Should display global LV volume and should provide simultaneous display of 17 regional volume waveform. This should be offered both on the system and on a licensed work station (both licensed hardware and licensed software) should be offered and highlighted in the technical bid.		
16	The system should have the facility of displaying the three planes of the 3D data set.		
17	Contrast Harmonic Imaging should be offered as standard on the system, with optimization for LOW and HI MI applications. Should also have facility of LOW MI with triggered replenishment Imaging.		
18	Integrated stress Echo facility to perform Stress Echo exams.		
19	Should have the state of the art Transmit real time compound Imaging Technology with Multiple transmitted lines of sight, wherein multiple coplanar Images from different viewing angles are obtained and combined into a single compound Image at real-time frame rates for improved visualisation. Should demonstrate and show multiple transmitted line of sight in linear probes.		
20	Latest PC (off-cart workstation) with permanent licence software for analysing and quantification of 2D and 3D data sets like Strain and Strain rate imaging, Tissue Motion Annular Displacement, Mitral valve 3D data sets, 2D Speckel tracking. CD/DVD writer with Image management software and colour laser Printer. PC should be offered with a flat panel 17" display monitor. (hardware essential for OFF cart quantification)		
	<b>Following Transducers ( Frequency tolerance +/-2MHz) should be supplied with the system</b>		
1	4D (Live 3D) Echo matrix transducer for adult 4D (Live 3D) with frequency ranging from 1-5±1 MHz. This probe must support a minimum of 2000 elements for exceptional 4D (Live 3D) image quality on the matrix array transducer to simultaneous display of two real-time live high-quality image planes. This transducer should have either single crystal technology or pure wave technology for excellent Image quality on difficult to image patient. Please mention the crystal technology used in the transducer. Systems offered with normal transducers for adult echo are liable for rejection.		
2	1-5±1 MHz Broadband adult echo transducer for adult cardiology imaging. Must have Tissue harmonic Imaging, must have either single crystal technology or pure wave or matrix technology for excellent Image quality on difficult to image patients. Must attach original technical data sheet of transducer to specify the above technology used in the transducer. This adult probe must be of the smallest foot print.		
3	3-8 MHz Broadband pediatric echo transducer for pediatric and small adult cardiology imaging.		
4	5-12 MHz broadband pediatric echo transducer for neonatal and large pediatric cardiology imaging.		
5	4D (3D) Echo matrix TEE transducer for Adult 4D (3D) with frequency ranging from 2-7 MHz. Please quote prices of all probes separately also.		
6	System should be supplied with the 2KVA online UPS		
7	<b>Added Para: Paediatric 2D TEE probe 1 no</b>		
	<b>Guarantee &amp; warranty:</b>		
	<b>Guarantee:</b> Comprehensive Guarantee for five years for parts and labour. All software updates a period of 5 to be provided free of cost. CMC should be unconditional and include all accessories including third party items.		

	Comprehensive Guarantee for parts and labour from year 6 to 10 will also need to be quoted in the price separately and will be taken into account(added in the price bid) while calculating the Final price.		
Sl No	BOQ	Qty	UOM
1	System as specified	1	Nos.
2	4D (Live 3D) Echo matrix transducer for adult 4D (Live 3D) with frequency ranging from 1-5±1 MHz.	1	Nos.
3	1-5±1 MHz Broadband adult echo transducer for adult cardiology imaging.	1	Nos.
4	3-8 MHz Broadband pediatric echo transducer for pediatric and small adult cardiology imaging.	1	Nos.
5	5-12 MHz broadband pediatric echo transducer for neonatal and large pediatric cardiology imaging.	1	Nos.
6	4D (3D) Echo matrix TEE transducer for Adult 4D (3D) with frequency ranging from 2-7 MHz. Please quote prices of all probes separately also.	1	Nos.
7	Paediatric 2D TEE probe	1	Nos.
8	Stand alone PC (Windows based) with suitable DICOM viewer,	1	Nos.
9	Suitable Laser Colour Printer	1	Nos.
10	2KVA online UPS	1	Nos.

**Item Sl. No. 09**  
**Portable Echocardiography System**

	<b>Technical specifications</b>		
1	<b>It should be max 8 kg ,Portable machine with proper bag and storage facility</b>		
2	The portable machine should come with an OEM cart with three universal imaging transducer port, mobile on four wheels (trolley) for easy movement, with facility to detach the machine from the cart easily for transportation.		
3	System should have extremely high resolution 2D imaging, color flow imaging, M-mode,PW Doppler, CW Doppler , and Duplex modes.		
4	Should have advanced image processing algorithms to analyze between targets and artifacts so as to sharpen target anatomy and reduce speckle and artifacts for excellent image quality.		
5	<b>Should have flat panel high resolution display monitor minimum 15 inch LED/LCD monitor</b>		
6	Should have a dynamic range of <b>165 DB</b> minimum		
7	Should have extended field of viewing of structures, by continuously scanning and moving the probe over the area of interest.		
8	Should have maximum color Doppler frame rate of <b>750fps</b> .Should have an on-board workstation for storage and review of all exams i.e. 2D Doppler, Loops etc.		
9	Should have DICOM support to be able to connect to hospital network, laser cameras etc		
10	<b>Should have a large hard disk capacity at least 500GB to store patient data into the hard drive and 5TB External hard disk to be provided</b>		
11	Should be able to transfer images and clips to CD and DVD media.		
12	The quoted echo machine should be compatible with use of Intracardiac catheter for ultrasound (ICE).		
13	<b>Should be offered with the following transducers without need for frequency selection (Transducers frequency tolerance :±2MHz)</b>		
14	Adult transducer with frequency from 1-5 MHz: transducer technology for		



	adult probes should be clearly mentioned in technical bid.		
15	Pediatric echo transducer with frequency from 3-8 MHz		
16	Transducer for abdominal ultrasound with 1-5 MHz		
17	Vascular probe with frequency form 4-12 MHz		
18	TEE probe for adult and pediatric echocardiography (should be quoted as standard)		
19	The system should be capable of performing Stress, Strain and Contrast Echo		
20	Battery backup of minimum 30 min.		
<b>Sl No</b>	<b>BOQ</b>	<b>QTY</b>	<b>UOM</b>
1	System as specified above	1	Nos.
1	Adult transducer with frequency from 1-5 MHz	1	Nos.
2	Pediatric echo transducer with frequency from 3-8 MHz	1	Nos.
3	Transducer for abdominal ultrasound with 1-5 MHz	1	Nos.
4	Vascular probe with frequency form 4-12 MHz	1	Nos.
5	TEE probe for adult and pediatric echocardiography	1	Nos. each
6	Mobile cart and suitable carry bag for machine	1	Nos.

**Item Sl. No. 10**  
**Surgical Loupes**

<b>1</b>	The telescope should be adjustable to meet the inter pupillary distance of surgeons according to their working distance and pupil height and vertex distance.
<b>2</b>	Should have reduced weight and increased field size
<b>3</b>	Magnification of 3.5-4.5X with field of view and depth should be around 100mm calibrated at individual working distance of surgeon
<b>4</b>	<b>Light weight frame not more than 90 gms</b>
<b>5</b>	Telescope should be light and small with clear and Bright Vision.
<b>6</b>	Telescope to be of Keplerian Type with a prism contained internally in the magnifier offering high resolution
<b>7</b>	The telescope manufacturer to have the facility to modify operating parameters as and when required by the surgeons.
<b>8</b>	Supplied with accessories like side splash protectors, cloth for cleaning, screw with keychain, box for loupe.

**Item Sl. No. 11**  
**Cell Saver**

<b>1</b>	System should be capable of processing blood collected from a surgical site to produce washed red blood cell to return to patient later on
<b>2</b>	System should work on centrifuge principle and should operate on 0- 6000 rpm with variable speed wash.
<b>3</b>	System should have a smaller foot print with big lockable castor wheel and weight should be less than 100 Kg (inclusive of accessories and cart) for ease of mobility
<b>4</b>	System should be fully automated with single button operation with self start capability and absolutely minimal user intervention.
<b>5</b>	The system has an in-built and regulated vacuum suction
<b>6</b>	Centrifugal bowl/chamber capacity should be 125-150ml with two stage filling cycle
<b>7</b>	The system has variable speed pulse wash cycle.
<b>8</b>	System should be approved by US FDA/European CE/BIS certified for autologous blood transfusion.

9	Three Suction options, on board 1. volume based , 2.regulated on board suction, 3.and post-op suction.		
10	Should be able to continue the procedure and maintain data even in case of power failure.		
11	A built in barcode reader to record disposable set, solutions and operator / patients information		
12	The ability to download data using a USB flash drive.		
13	A color touch/Soft key screen display.		
14	The noise level of the device should be < 70 db.		
15	Device should have effluent line sensor, reservoir level sensor and automatic bowl/Chamber identification program.		
16	RBC recovery should be more than 90%.		
17	The device should have post-operative mode to work even after surgery by collecting the blood from the disposable tubing placed in the wound.		
18	Completely automated postoperative operation.		
19	The device generates the suction in the reservoir.		
20	The device begins the processing cycles when an appropriate amount of blood solution collects in the reservoir		
21	<b>System specification:</b>		
i	Electrical Specification: Class I, type B, Ordinary, Continuous operation		
ii	Power-		
a	Should be able continue the procedure and able to maintain data in case of power failure.		
b	Voltage: 110/120 or 220/240 V.		
c	Cycles : 50-60 Hz.		
d	Phase- Single		
e	Current- 11.6/0.8 amps ( depending upon voltage selection)		
f	Fuses- 4AT/240V		
g	Power cord: 2 wire ground (earth) connection, 3 prong hospital grade .		
iii	Speed and flow rate specifications-		
a	Centrifuge- 0-10,000 rpm.		
b	Pump- 0-600 ml/min (+/-5%)		
iv	Vacuum- 200-280 mbar		
v	Temperature Limit		
a	Operational: 10-300		
b	Storage: 5-300		
vi	Humidity Range		
a	Operational 10-95% non-condensing		
b	Storage 10-95% non condensing		
22	Should be supplied with 10 sets of consumable accessories in addition to the offered disposable accessories by Supplier along with the one pack of machine.		
23	Offered, all inclusive accessories in one pack of machine should be specified and highlighted.		
24	Rates of consumable items should be quoted separately and the company would undertake to supply at the same price for two years, the same would be included in calculation of financial bid.		
	<b>BOQ</b>		
	<b>Qty</b>		
	<b>Uom</b>		
1	System as specified	1	Nos
2	Consumable accessories	10	sets

**Item Sl. No. 12**  
**Electric operated sternum system**

1	<b>Driving Unit</b> Completely enclosed Motor 220V / 5 amp AC/DC with MCB Supported on a Mobile Folding Stand (Stainless Steel tubes & M.S. square bars, with castors). Should include a Foot Control,
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	(Stainless Steel Body) with step-less speed control & ON / OFF switch with fuse.		
<b>2</b>	<b>Reciprocating Saw Pistol Grip Hand piece (Autoclavable)</b>		
<b>a</b>	Reciprocating Type Blades		
<b>b</b>	Weight 850 gms. Approx.		
<b>c</b>	Set of 30 blades (hardened & tempered high quality stainless steel)		
<b>3</b>	<b>Resternotomy Saw Hand Piece (RD)(Autoclavable)</b>		
<b>A</b>	Oscillating blade type		
<b>B</b>	Sector type blade.		
<b>C</b>	Weight approx. 750 gms.		
<b>D</b>	Should be supplied 20 blades		
<b>4</b>	<b>Flexible Shaft (Autoclavable).</b>		
<b>A</b>	Length 2 mtrs.		
<b>B</b>	Weight approx. 1000 gms.		
<b>C</b>	Push-Pull type ends.		
<b>D</b>	Spring loaded.		
<b>5</b>	Company should be ISO 9001, 13485		
<b>6</b>	Product should be CE or USFDA or BIS Approved		
<b>S. No.</b>	<b>BOQ</b>	<b>Qty</b>	<b>UOM</b>
1	Driving Unit	1	Nos.
2	Reciprocating Saw Pistol Grip Hand piece (Autoclavable)	1	Nos.
3	Resternotomy Saw Hand Piece (RD)(Autoclavable)	1	Nos.
4	Flexible Shaft (Autoclavable).	2	Nos.
5	Re-Do saw blade	20	Nos.
6	Reciprocating Type Blades	30	Nos.
7	Autoclaving Box for hand pieces and shaft	2	Nos.

### Item Sl. No. 13

#### Argon Plasma Coagulation System

<b>1</b>	<b>General/ Compatible electrosurgical unit</b>
<b>1.1</b>	All components of system should be mountable on single trolley
<b>1.2</b>	Modes of operation: Foot switch and handswitch
<b>1.3</b>	<b>Should have automatic flow setting</b>
<b>1.4</b>	<b>Electrosurgical unit should have both monopolar and bipolar mode</b>
<b>1.5</b>	Coagulation mode should have option of variable coagulation like soft coagulation, forced coagulation, spray coagulation
<b>1.6</b>	Should ensure effective, even surface coagulation for uniform haemostasis and tissue coagulation
<b>1.8</b>	Should have option for pure cutting, pure coagulation, and blended currents
<b>1.9</b>	Should have the facility to automatically adjust the current according to tissue resistance
<b>1.10</b>	Bipolar coagulation probe –, 01 in number
<b>1.11</b>	Electrosurgical unit should have two or more HF connecting sockets
<b>1.12</b>	<b>HF power limitations: 120 Watt or more for cut, 120W or more for coagulation with option of change in steps</b>
<b>1.13</b>	Option of activating cutting/coagulation mode by pedal
<b>1.14</b>	<b>Automatic monitoring of the electrical connection between the neutral electrode and active electrode</b>
<b>1.15</b>	Automatic monitoring of the electrical connection between the neutral electrode and patient

1.16	Automatic monitoring of the HF currents in a monopolar applied part		
1.17	Should work on AC supply 220 volts, 50 Hz		
2	<b>APC Unit</b>		
2.1	<b>Provision for connection of cylinder of gas of 2 – 5 L</b>		
2.2	Type of gas: Argon		
2.3	Power output: Around 200 watts Maximum cut output: upto 120 watts		
2.4	<b>Adjustable gas flow 0.5 -8 litres/ min or more depending adjustable in steps of 0.1 litre</b>		
2.5	<b>Should have Pulse, Forced and Precise/Smart modes of APC or equivalent modes</b>		
2.6	<b>Deleted</b>		
2.7	Gas gauge		
2.8	<b>Pressure gauge manometer/Level Indicator on the gas tank</b>		
2.9	Option of controlling the depth of coagulation by choosing different coagulation mode		
2.10	<b>Argon gas cylinders-2 Nos. 2- 5 Litre capacity should be supplied</b>		
3	<b>APC probes</b>		
3.1	<b>APC probe should be supplied minimum 4 Nos</b>		
3.2	APC instrument should automatically recognize by integrated automatic instrument recognition		
3.3	Should be compatible with endoscope channel diameter of 2.8 mm or more		
3.4	Different catheters : Length 1.5 meters to 2.5 meters ( Straight beam) – 2 Length 1.5 meters to 2.5 meters ( Side conical) – 2		
3.5	<b>Deleted</b>		
4	<b>Patient plate with compatible cords</b>		
4.1	<b>Patient plate with compatible cords – reusable(2Nos) and Disposable with cable (5Nos.)</b>		
5	<b>Trolley</b>		
5.1	<b>compatible trolley from OEM for mounting all components of APC unit</b>		
6	<b>Deleted</b>		
6.1	<b>Deleted</b>		
6.2	<b>Deleted</b>		
6.3	<b>Deleted</b>		
6.4	<b>Deleted</b>		
7	Complete system should be European CE (with 4 digit notified body no.) OR US FDA OR BIS for the quoted model (except trolley)		
<b>SN</b>	<b>BOQ</b>	<b>Qty</b>	<b>UOM</b>
1	ESU Unit as specified	1	Nos
2	APC unit as specified	1	Nos
3	APC probes	4	Nos
4	Patient plate with compatible cords – reusable(2Nos) and Disposable with cable (5Nos.)	1	set
5	Trolley	1	Nos
6	<b>Deleted</b>		
7	Foot switch	1	Nos

**Item Sl. No. 14**  
**Ultrasonic Surgical aspirator**

1	<b>Description of Function</b>
1.1	Ultrasonic aspirators use mechanical ultrasonic vibration and an irrigation/suction system to fragment and remove soft tissue and high-water-content growths from various parts of the body with integrated electro cautery
2	<b>Operational Requirements</b>
2.1	The system should be quoted with different sizes of hand pieces /Tips
3	<b>Technical Specifications</b>
3.1	Surgical aspirator should be based on magneto-restriction or piezoelectric technology.

3.2	The hand piece must be cooled if required to prevent overheating by flow of water.		
3.3	The hand piece should be autoclavable and can be dismantled completely for cleaning with no inaccessible channels to trap tissue		
3.4	The vacuum pump should provide preferable the suction of > 500mm of Hg.		
3.5	It should have safety features like optical signal for failed hand pieces and signal for failed unit.		
3.6	It should have on and off button		
3.7	It should have integral suction with vacuum pressure of -20 to -90 Kpa. in continuous low noise and digital display.		
3.8	It should preferably have 1.5 -2.5 liter capacity container of unbreakable material with level sensor and anti-overflow system.		
3.9	Compatible Hand piece should be light, preferable 20-40 KHz		
3.10	<b>Standard (straight &amp; angled), Micro (straight &amp; angled) and Laproscopic (Straight) handpieces - 1 each or Two Universal handpiece with all mentioned tips as standard and must be supplied with ESU compatibilty attachements as standard.</b>		
3.11	<b>Assorted tips for bone sculpting 01 nos. should be supplied</b>		
3.12	The irrigation pump should be inbuilt in the unit, the irrigation output 0-25cc/min or more.		
3.13	All hand pieces/ instruments should be detachable.		
3.14	<b>Added Para:</b> Compatible ESU should be offered and the ESU energy must be delivered at tip of the all hanpieses offered with Ultrasonic Surgical Aspirator. The ESU Should be FDA/European CE/ BIS approved and warraty responsibilty of quoted ESU will be of bidder.		
3.15	<b>Added para:</b> The bidder must provide the details of Compatibility of their System with ESU Makes (Atleast three make should be mentioned)		
4	<b>System Configuration Acessories,Spares and Consumables</b>		
4.1	ACCESSORIES:		
1	<b>Trolley (from OEM )</b>		
2	Assembly kit for aspirator- 1		
3	Infusion bottle holder-1		
4	Foot switch- 1 nos		
5	Cleaning brush for instrument lumen-2		
6	<b>Instrument connection cables - 2 nos (Should be covered under warranty &amp; CMC)</b>		
7	Suction / irrigation tubing (5meter each), silicon twin tube-20		
8	Autoclavable compatible instrument tray - 2 nos.		
9	<b>Deleted</b>		
5	<b>Standards,Safety &amp; Training</b>		
5.1	Manufactures/Supplier should have ISO or equivalent certificate to Quality Standard.		
5.2	Should be US FDA or European CE with 4 digit notified body no or BIS approved product.		
5.3	Comprehensive training for 2 surgeon and 2 assistant services till familiarity with the supplied system at site		
6	<b>Documentation</b>		
6.1	User/Technical/Maintenance manuals to be supplied in English.		
6.2	Compliance report to be submitted in a tabulated and point wise manner clearly mentioning the page/ para number of original catalogue/ data sheet. Any point if not substantiated with authenticated catalogue/ manual, will not be considered.		
SN	<b>BOQ</b>	<b>Qty</b>	<b>UOM</b>
1	System as specified para 1 to 3.13 (without assorted tips for bone sculpting)	1	Nos.
2	<b>OEM Trolley</b>	1	Nos.
3	Assembly kit for aspirator	1	Nos.
4	Infusion bottle holder	1	Nos.
5	Foot switch	1	Nos.
6	Cleaning brush for instrument lumen	2	Nos.
7	Suction / irrigation tubing (5meter each), silicon twin tube	20	Nos.

8	Autoclavable compatible instrument tray	2	Nos.
9	Assorted tips for bone sculpting	1	Nos.
10	<b>Compatible ESU -01No</b>	1	Nos.

**Item Sl. No. 15**  
**High Resolution Manometry System**

1	Manometry system and computer for high resolution manometry with impedance
2	The system should include all components for performing high resolution manometric study of pharynx to stomach (including upper esophageal sphincter, esophageal body and lower esophageal sphincter) and anorectal region.
3	The system should be upgradable optionally for the Sphincter of Oddi manometry. Colonic manometry and Antrodudenal Manometry.
4	The system should have 22 or more Pressure Channels for HRM Recordings and additional 12 or more channels for simultaneous impedance recording.
5	The system should include high quality silent water perfusion pump with 22 or more channels of perfusion with same/correspondingly appropriate number of pressure transducers, capillary tubes and resistors.
6	The system must be based on latest windows software (Windows 7 or newer and should include a computer with minimal following configuration)
a	Processor-core i5 or better and with processor speed of 3 GHz or higher
b	Internal Hard disk-500 GB or more
c	Additional portable external hard disk-500 GB or more
10	RAM-4GB or more
d	Monitor-19 or larger, LCD
e	DVD with read and rewritable capabilities, keyboard, Mouse
f	Color Laser Printer with facility of scanning and copying
g	Licensed software-Windows 7 or newer
h	The system should include an UPS with power back up for 30 minutes or more
7	The entire system should be mounted on a compatible sturdy transport trolley
8	System should have an additional large display unit for demonstrations-LED/Plasma display unit 40 inches or larger.
9	Manometry software: The manometry software should include /have option of following:
a	Automatic markings of upper and lower esophageal sphincter resting and residual pressure
b	Automatic marking of the contraction
c	Automatic calculation of result including various pressures, wave velocity etc
d	Instantly switching between clouse contour plot and graph
e	Sphincter locations should be easily recognized in the clouse contour plot
f	Multiple isobar indication during study
g	The software should automatically generate the report, markers like west swallow, RAIR, squeeze and ballon
h	Search option of patient/previous studies on the basis of date of birth, gender, patient group archive status, investigation date, investigation type etc
i	The software should be upgradable optionally for sphincter of oddi manometry, colonic manometry and antodudenal manometry
10	Patient trolley: Height adjustable patient trolley with cushion and side rails
	<b>Consumable/Accessories:</b>
11	The following consumables/accessories to be supplied along with the equipment
a	Reusable high resolution manometry catheter with 22 or more channels for study of entire length esophagus - 3 nos

<b>b</b>	Reusable combined high resolution manometry and impedance catheter with 22 or more channels for high resolution manometry and or more channels for impedance - 2 nos
<b>c</b>	Reusable high resolution anorectal manometry catheter - 2nos
<b>d</b>	Pressure transducer - twice the number of pressure channels system
<b>e</b>	Capillary tubes - Twice the number of pressure channels in the system

**Item Sl. No. 16**  
**Balloon Enteroscopy System**

<b>1</b>	<b>Description of Function</b>
<b>1.1</b>	Endoscopy System allows ease of insertion and makes not only diagnosis but also treatment of the entire small intestine a reality.
<b>2</b>	<b>Operational Requirements</b>
<b>2.1</b>	Enteroscope should be compatible with the commonly used light sources.
<b>3</b>	<b>Technical Specifications</b>
<b>3.1</b>	a) Direction of View: Forward
	b) Observation Range app: 6~100mm
	c) Field of View min 140 Degrees
	<b>e) Distal End Diameter app: 9.5 mm or less</b>
	f) Flexible Portion Diameter app: 9.2 mm
	g) Bending Capability (Up/Down) 180 Degrees / 180 Degrees
	h) Bending Capability (Left/Right) at least 160 Degrees / 160 Degrees
	<b>i) Forceps Channel Diameter 2.8mm or more</b>
	j) Working Length not less than 2,000mm
	k) Video output to be compatible with the video processor specified.
	l) Should have digital chromo endoscope such as NBI/SPIES/I Scan/ FICE or equivalent
<b>3.2</b>	Video processor , light source & Monitor
	1. Power supply 200-240 V A/C
	2. PAL type video signal.
	3. Controls for color adjustment, to enhancement and balance settings.
	4. Controls to freeze images, enhance a portion of frozen image (zoom & post-processing).
	5. Patient and physician data input key board.
	6. Operates on 300W Xenon lamp with back up lamp
	7. Should have Automatic Brightness Control for the light source
	8. Should be compatible with enteroscope and process the digital chromoendoscopic images
	<b>9. 24" or more LCD colour monitor with HD resolution</b>
<b>3.3</b>	CCD Camera
	1. Should be High definition digital circuitry 3 chip camera
	2. Should have electronic zooming
	3. Should have Small and ergonomic camera head for superior control.
	4. Should have Four button camera head design – control of six functions from the camera head.
<b>3.4</b>	Over-tube Specifications :
	a) Outer Diameter app:13.2mm
	<b>b) Deleted</b>
	c) Distal End Diameter app: 9.8mm
	<b>d)Outer Diameter (Balloon) : 35mm or more</b>
	<b>e)Working Length app:1320mm-1350mm</b>
<b>3.5</b>	a. Balloon Pump Controller with Remote Switch Specifications
	b. Set Pressure of Balloon app : 5.5kpa+/-2kpa
	c. Maximum Flow Rate of Pump :app: 170ml/10sec
<b>4</b>	<b>System Configuration Accessories, spares and consumables</b>

4.1	System as specified		
4.2	Should supply all the necessary accessories for the complete system		
4.3	Comaptaible biopsy forceps - 5 nos		
4.4	<b>Deleted</b>		
4.5	Compatible injection needles 21 swg - 5 nos		
4.6	Should supplied with a suitable trolley		
5	<b>Power Supply</b>		
5.1	Power input to be 220-240VAC, 50Hz		
6	<b>Standards, Safety and Training</b>		
6.1	Munufacurer should have ISO certification		
6.2	The complete system should be US FDA/European CE ith 4 digit notified body number/BIS approved for the quoted model		
<b>SN</b>	<b>BOQ</b>	<b>Qty</b>	<b>UOM</b>
1	Enteroscope as per specification	1	No
2	Camera & Video processor	1	set
3	Light Source	1	No
4	<b>24" or more LCD colour monitor</b>	1	No
5	Comaptaible biopsy forceps	5	Nos
6	<b>Deleted</b>		
7	Compatible injection needles 21 swg	5	Nos
8	Should supplied with a suitable trolley	1	No

**Item Sl. No. 17**  
**Video Endoscopy System**

1	Gastro Video Scope: - 1 Nos		
1.1	Build in HDTV compatible CCD		
1.2	<b>Should have digital chromo endoscope such as NBI/S/I Scan/ FICE or equivalent or better technology</b>		
1.3	Fully immiscible in disinfection solution		
1.4	In build scope identification memory chip for monitor display of scope's model no serial no, white balancing memory, no. of connections/cumulative uses etc.		
1.5	Should have forward/Auxiliary water jet for mucosal cleaning.		
a	Insertion Tube outer Diameter: 9.9mm or less for diagnostic		
b	Field of View/ Angle of view: Normal/Near Focus 140 Deg or more		
c	Direction of View: Forward viewing		
d	<b>Depth of Field: Normal 2-100mm or better</b>		
e	Distal End outer diameter: 9.9mm or less		
f	Angulation of Tip:		
	A) Upwards-210 Deg or more		
	B) Downwards-90 Deg or more		
	C) Right- 100 Deg or more		
	D) Left-100 Deg or more		
g	Instrument Channel $\geq$ 2.8mm		
h	Working Length : 1030mm or more		
i	Total Length : 1030mm or more		
j	Minimum Visible Distance of instrument used through channel		
	Accessories: (Price to be quoted separately and it should be valid for warranty period)		
	a) Hot Biopsy forceps with alligator cups with and without needle- 3each		
	b) Retrievable basket -2 Nos		



	c) Electrosurgical snare-2 each		
	d) Bipolar Probes-10 Each		
	e) Cleaning Brushes and channel opening brush- 5 each		
	f) Washing Pipe /Spray Cathetar-20 each with each scope		
	g) Injection Needle 21G/23G-10 with each scope		
	<b>h) Deleted</b>		
	i) Reusable Rotable Clip fixing Device short and long- 5 each with one hundred single use clip.		
	j) Hemoclips compatible with rotatable clip fixing device- 40 Each		
	k) Extra Suction and air water Buttons 5 each		
	l) Biopsy Channel Valves- 2 Packs of 100 each		
	m) Bougie Esophageal Dilators- 1 Box		
	n) Extra Xenon Bulbs- 2		
	o) Injection Needle 21G- 10 with each scope		
	p) Grasping Forceps Rat Tooth, Rubber Tip -5 Each		
<b>2</b>	Ultrathin Endoscope: 1 nos		
<b>a</b>	<b>Outer Diameter- 5.4-6mm</b>		
<b>b</b>	Field of View- 100Deg-140 Deg		
<b>c</b>	Direction- Forward		
<b>d</b>	Working length- 1-1.2 Mtr		
<b>e</b>	Depth of Field- 4-100mm		
<b>f</b>	Angulation of Tip		
	A) Upwards - 180 Deg to 210 Deg		
	B) Downward 70-90 deg		
	C) Right 90-100deg		
	D) Left 90-100deg		
<b>g</b>	Instrument Channel 2.0-2.2mm		
<b>h</b>	Automatic Scope Identification system with compatible video Processor		
<b>i</b>	System must be suitable for High Resolution., High Magnification images of the GI Tract with the facility to provide images with optical chromoendoscopy.		
<b>j</b>	Standard Accessories (Compatible with ultrathin probe) - (Price to be quoted separately and it should be valid for warranty period)		
	i. Cleaning Brush and Channel opening Brush- 10 Nos		
	ii. Biopsy Forceps- 5 nos		
	iii. Suction and Air water valves - 1 nos		
<b>3</b>	Colonovideoscope- 1Nos.		
3.1	Build in HDTV compatible CCD		
3.2	<b>Should have chromo endoscopy such as NBI/S/I Scan/ FICE or equivalent or better technology</b>		
3.3	Inbuilt Feature like Variable/Graduated stiffness, High force transmission & Passive Bending for ease of Insertion.		
3.4	Fully Immiscible in disinfectant memory Chip for monitor display of scope's model no. serial no., no. of connections/cumulative uses etc.		
3.5	Inbuilt scope identification memory chip for monitor display of scope's model no. serial no, white balance memory, NO.OF CONNECTIONS/CUMMULATIVE USES ETC.		
3.6	Auxiliary water Jet for mucosal cleaning		
3.7	The scope should be the latest available in world market.		
<b>a</b>	Insertion Tube outer dia :13.2mm or less		
<b>b</b>	Field of view : 140 Deg or more		
<b>c</b>	<b>Depth of field : 3 -100 mm or better</b>		

<b>d</b>	Distal End outer Diameter : 13.2 mm or less		
<b>e</b>	Angulation of Tip:		
	A) Upwards: 180 Deg or more		
	B) Downwards: 180 Deg or more		
	C) Right : 160 Deg or more		
	D) Left : 160 Deg or more		
<b>f</b>	Instrument Channel -3.2 -3.8mm		
<b>g</b>	Working Length- 1600mm or more		
<b>h</b>	Total Length 2000mm or more		
<b>i</b>	Accessories: (Price to be quoted separately and it should be valid for warranty period)		
	1) Biopsy Forceps with or without needle-10 nos compatible with the channel		
	2) Polypectomy snare hexagonal and oval rotatable (2 Pack or 10 each)		
	3) Hot Biopsy Forceps reusable- 2 nos		
	4) Electrosurgical snare- 2 nos		
	<b>5) Multiple Sample Biopsy forceps- 5 nos</b>		
	6) Cleaning brushes and channel opening brush - 5 nos each		
	7) Washing pipe/ spray Cathether-20 nos		
	8) Injection needle 21G -10 nos		
	9) Reusable Rotable Clip fixing device - 1 no with 20 single use clip.		
	10) Extra Suction and air water buttons 5 nos Each		
	11) Biopsy channel valves- 1packs of 100 each.		
<b>4</b>	Duodenovideoscope (Therapeutic): - 1 Nos		
<b>4.1</b>	<b>Should have chromo endoscopy such as NBI/S/I Scan/ FICE or equivalent or better technology</b>		
<b>4.2</b>	Fully Immerssible in Disinfectant solution		
<b>4.3</b>	In build Scope identification memory chip for monitor display of scope's model No. serial non, no of connections/Cumulative uses etc.		
<b>4.4</b>	Scope should be the latest available in the world Market.		
<b>a</b>	Field of view : 90-110 deg or more		
<b>b</b>	Direction of View: 5 Deg/10 Deg, backward oblique viewing		
<b>c</b>	Depth of Field: 4/5 to 60mm or better		
<b>d</b>	Distal End outer diameter: 11-14 mm or less		
<b>e</b>	Insertion Tube Outer Diameter : 11-14 mm or less		
<b>f</b>	Angulation of Tip:		
	A) Upwards : 120 Deg or more		
	B) Downwards: 90 Deg or more		
	C) Right: 100 -110 deg or more		
	D) Left: 90 deg or more		
<b>g</b>	Working Length : 1.2-1.4 mtr		
<b>h</b>	Channel Inner Diameter: 4.2 mm or more		
<b>i</b>	Minimum Visible Distance : 10 mm or closer from Distal end		
<b>j</b>	The bidder has to specify the technology for appropriate manual clensing of the scope and provide the same (Price should be quoted separately)		
<b>k</b>	Accessories: (Price to be quoted separately and it should be valid for warranty period)		
	ERCP Accessories-		
	1) Single use standard ERCP cannula-10 nos		
	2) Single use ERCP guide-wire 0.025" with high stiffness, 450cm working length and hydrophilic tip - 5 nos with straight tip & 5 nos with angled tip		
	3) Single use triple lumen sphincterotome.-10 nos		

	4) single use triple lumen needle knives-10 nos		
	5) single use stone extraction balloons-10 nos		
	6) single use stone extraction basket-10 nos		
	7) Reusable hard type dormia basket-10 nos		
	8) reusable Emergency Lithotripter-5 nos		
	9) Biliary Cytology Brush : Double Lumen with radio opaque marker : 5		
	10) Biliary Balloon Dilators with Inflation device : Double Lumen with radio opaque marker (6mm, 8mm & 10mm) - 1 set		
	11) Reusable stent removal forceps-10 nos		
	Guidewires		
	12) Wire with Hydraulic tip at both end along with radio opaque marker over the tip (0.035", 450 cm ) - 10 nos		
	13) Compatible cleaning brushes for the elevators and suction channels - 1 nos.		
<b>5</b>	<b>VIDEO PROCESSOR- 1 Nos</b>		
5.1	Should be compatible with Analog, HD-SDI AND DVI Output for HDTV monitor should be available		
5.2	Equipped with High resolution HDTV Imaging capacity		
5.3	Compact and ergonomically designed		
5.4	<b>Should be compatible HD plus video scopes with chrome endoscopy such as NBI/S/I Scan/ FICE or equivalent or better technology</b>		
5.5	Should be having Inbuilt/ Separate light source.		
5.6	Recording of both still/ moving images equipped with one touch connection of scopes.		
5.7	Portable memory & USB slot for still image.		
5.8	Automatic IRIS Control & automatic white balance		
5.9	<b>Should have in built light source or separate light source with NBI/S/I Scan/ FICE or equivalent or better technology</b>		
5.10	<b>Image capability/HD Plus video high Intensity Xenon light Source (100-300Watt) with 500 hours life, preferably with emergency halogen light/LED for backup. Two spare xenon lamp to be provided as standard</b>		
5.11	Backlit Front panel indicator. Equipped with automatic light adjustment forced air-cooling, regulated air feeding pump and fan with low noise.		
5.12	<b>Deleted</b>		
5.13	<b>Deleted</b>		
5.14	The endoscope system must be suitable for high resolution, high magnification images of GI tract with ability to detect early cancers and pre- neoplastic lesions by optical enhancement of images.		
5.15	The system must have the facility to provide images with optical chromoendoscopy.		
5.16	<b>Video Endoscopy workstation/trolley with space for accommodation of a LED/LCD HD monitor (26" or more in size) , HD video processor and light source, with scope</b>		
5.17	Two water bottles compatible with the processor		
5.18	One high pressure suction machine (>1KPA) should be supplied		
<b>6</b>	<b>HIGH DEFINITION MONITOR</b>		
	High definition LED/LCD 26" or more medical grade monitor – 1 no. with high resolution 1920X1080p Lower Power consumption		
	Aspect ratio 16: 9/16:10 with resolution of 1080p. Color system should be PAL/NTSC		

	Should have Picture-in -Picture and Picture -out-Picture for viewing side by side split screen images.		
	Should be supplied with 40 " LCD TV for extension of Images for teaching purposes.		
7	Suitable computer, Printer, Trolley, Suction machine (1 Nos) and endoscopic software to be supplied along with the unit.		
8	Complete system should be European CE with 4 digit notified body no or USFDA or BIS approved except suction machine, UPS, computer, printer, trolley and endoscopic software		
<b>SN</b>	<b>BOQ</b>	<b>Qty</b>	<b>UOM</b>
1	Gastro Video Scope:	1	NO
2	Accessories: (Price to be quoted separately and it should be valid for warranty period) - For Gastroscope		
	a) Hot Biopsy forceps with alligator cups with and without needle	3	Nos each
	b) Retrievable basket	2	Nos
	c) Electrosurgical snare	2	Nos
	d) Bipolar Probes	10	Nos
	e) Cleaning Brushes and channel opening brush	5	Nos
	f) Washing Pipe /Spray Cathetar	20	Nos
	g) Injection Needle 21G/23G	10	Nos
	<b>h) Deleted</b>		
	i) Reusable Rotable Clip fixing Device short and long- 5 each with one hundred single use clip.	5	Nos each
	j) Hemoclips compatible with rotatable clip fixing device	40	Nos
	k) Extra Suction and air water Buttons	5	Nos
	l) Biopsy Channel Valves- 2 Packs of 100 each	2	sets
	m) Bougie Esophageal Dilators	1	box
	n) Extra Xenon Bulbs	2	nos
	o) Injection Needle 21G	10	Nos
3	Ultrathin Endoscope	1	No
4	Standard Accessories (Compatible with ultrathin probe) - (Price to be quoted separately and it should be valid for warranty period)		
	i. Cleaning Brush and Channel opening Brush	10	Nos
	ii. Biopsy Forceps	5	Nos
	iii. Suction and Air water valves	1	No
5	Colonovideoscope	1	No
6	Accessories: (Price to be quoted separately and it should be valid for warranty period) - for Colonoscope		
	1) Biopsy Forceps with or without needle-10 nos compatible with the channel	10	Nos
	2) Polypectomy snare hexagonal and oval rotatable (2 Pack or 10 each)	1	sets
	3) Hot Biopsy Forceps reusable	2	Nos
	4) Electrosurgical snare	2	Nos
	<b>5) Multiple Sample Biopsy forceps</b>	5	Nos
	6) Cleaning brushes and channel opening brush	5	Nos
	7) Washing pipe/ spray Cathether	20	Nos
	8) Injection needle 21G	10	Nos
	9) Reusable Rotable Clip fixing device - 1 no with 20 single use clip.	1	sets
	10) Extra Suction and air water buttons	5	Nos
	11) Biopsy channel valves- 1packs of 100 each.	1	sets
7	Duodenovideoscope (Therapeutic)	1	No
8	ERCP Accessories- (Price to be quoted separately and it should be valid		

	for warranty period)		
	1) Single use standard ERCP cannula	10	Nos
	2) Single use ERCP guide-wire 0.025" with high stiffness, 450cm working length and hydrophilic tip - 5 nos with straight tip & 5 nos with angled tip	5	Nos each
	3) Single use triple lumen sphincterotome.	10	Nos
	4) single use triple lumen needle knives	10	Nos
	5) single use stone extraction balloons	10	Nos
	6) single use stone extraction basket	10	Nos
	7) Reusable hard type dormia basket	10	Nos
	8) reusable Emergency Lithotripter	5	Nos
	9) Biliary Cytology Brush : Double Lumen with radio opaque marker	5	Nos
	10) Biliary Balloon Dilators with Inflation device : Double Lumen with radio opaque marker (6mm, 8mm & 10mm)	1	sets
	11) Reusable stent removal forceps	10	Nos
	Guidewires		
	12) Wire with Hydraulic tip at both end along with radio opaque marker over the tip (0.035", 450 cm )	10	Nos
	13) Compatible cleaning brushes for the elevators and suction channels	1	No
<b>9</b>	<b>VIDEO PROCESSOR</b>	1	No
<b>10</b>	Xenon light source	1	No
<b>11</b>	Spare xenon lamp	1	No
<b>12</b>	<b>High definition LED/LCD 26"or more monitor</b>	1	No
<b>13</b>	40 " LCD monitor	1	No
<b>14</b>	High pressure suction machine	1	No
<b>15</b>	Trolley	1	No

**Item Sl. No. 18**  
**Endoscopic washer and disinfector system**

<b>A</b>	Automated Endoscope cleaning & Disinfector (RE-PROCESSOR).
<b>1</b>	Fully automatic microprocessor based endoscope re- processor. Should have facility of Re-processing of at least one endoscope per cycle.
<b>2</b>	Should be with single door with front/top loading system with glass window and light inside the chamber.
<b>3</b>	The system should able to re-process all type of Flexible endoscopes, Gastrosopes, Colonoscopies, Duodenoscopes, Rigid endoscopes, Enteroscopes etc per cycle.
<b>4</b>	<b>Should have control panel with LCD display remaining cycle time to cycle completion</b>
<b>5</b>	Should have integrated sterile air filter (0.2µm) for channel purging and drying.
<b>6</b>	Should be with integrated endoscope channel monitoring system with 2 independent sensors.
<b>7</b>	Should have leak test at the beginning of the cycle and also should have continuous monitoring during all the phases with automatic cycle stop in case of emergency.
<b>8</b>	Should have conductivity sensor and two chemical dosing pumps and also should have option for 3rd dosing pump.
<b>9</b>	Should be compatible and tested with Peracetic acid (Cold disinfection) and Glutaraldehyde (thermo- chemical disinfection).
<b>10</b>	Should have process documentation through external printer or USB interface.
<b>11</b>	<b>Should be supplied with washing cart for Flexible endoscope, rigid scopes and should also supply manufacturer specific adaptors and/or connectors(Any three types as per user requirement as standard and bidder may offer saperate price for extra Adaptors) for the different endoscopes re-processing. Also undertaking from Manufacturer shloud be submitted along with bid that "Endoscopic washer and disinfector will be compatible for all type endoscopes available worldwide"</b>

<b>B</b>	Specification for Drying cabinet for Flexible endoscopes.
<b>1</b>	Microprocessor based automatic Drying and Storage cabinet for endoscopes with capacity of storage of at least 5 flexible endoscopes
<b>2</b>	The frame and panel of the drying and storage cabinet should be made of high quality medical grade Stainless steel with Single door made in Medical grade Tempered glass.
<b>3</b>	The storage and drying cabinet should be supplied as standard version cassettes and endoscope fast connections.
<b>4</b>	Should have option for BARCODE or RFID for instruments/ operator recognition.
<b>5</b>	Should have fully expendable drawers & vertical storage position as well.
<b>6</b>	The storage cabinet should have high level HEPA class 14 air filtering and indirect UV air treatment.
<b>7</b>	Equipment should be US-FDA/ European CE certification with 4 digit notified body number/BIS approved for the quoted model
<b>8</b>	Should provide all consumables for 200 cycles.
<b>9</b>	The prices of all consumables and accessories should be quoted separately which will be fixed for a period of 5 years

**Item Sl. No. 19**  
**Transport Incubator with ventilator**

	SPECIFICATION:		
1	Double wall transparent canopy with mattress, mount on collapsible trolley of OEM (same make) with lockable castors		
2	Front and head access door, slide-out mattress tray With baby restraining straps		
3	Should have 2 iris port holes for ventilator tubing, SPO2 probes etc		
4	Warm air circulation system		
5	Bacterial filter to remove air born particles		
6	Incubator air temperature monitoring and servo control : 25 to 38 deg C , increments 0.1deg C, Humidity control.		
7	Digital displays outside shows air and skin temperature		
8	Ventilator (OEM) – basic ventilator with at least CPAP and IMV modes with controls for CPAP/PEEP. PIP, rate. Ti and FiO2		
9	<b>Two 10L integrated oxygen cylinders, regulator and flow meter with compatible connectors for refilling</b>		
10	Audiovisual alarms: high /low air temperature, temperature sensor failure , power failure and low battery		
11	Portable SpO2 monitors with reusable neonatal probes (wrap type) - 10 nos should be quoted		
12	Construction allows frequent washing and disinfection of the incubator		
13	Battery and AC supported.		
14	Should have facility for IV stand.		
15	Power requirements : 220-240V / 50 Hz and internal re-chargeable batteries (autonomy 4-6 hrs)		
16	The battery should be capable of recharging from mains as well as the ambulance power source		
17	It should be able to run the following equipment when disconnected from the power source: heater, suction machine, ventilator		
18	It should be US FDA or European CE approved product		
	Supplied with:		
	5 x spare skin temperature probe		
	1 x spare rechargeable battery.		
	2 x empty 10 L oxygen cylinders.		

	2 x spare set of fuses.		
	Slot for X-Ray cassette for taking X-rays without removing babies		
<b>SN</b>	<b>BOQ</b>	<b>QTY</b>	<b>UOM</b>
1	System as specified	1	Nos
2	Skin temperature probe	5	Nos
3	Rechargeable battery.	2	Nos
4	10 L oxygen cylinders.	2	Nos
5	set of fuses.	3	set

**Item Sl. No. 20**  
**Endovision Camera System**

	Should comprise of following components		
<b>A</b>	Medical grade video camera		
<b>B</b>	Light source		
<b>C</b>	Monitor		
<b>D</b>	Recording system with PC based station <b>OR</b> medical grade HD recorder capable of directly recording full HD quality photos(1920x1080p)and full HD quality videos(1920x1080p) with internal memory of 300GB or more /external hard drive of 300 GB or more must be supplied.		
<b>E</b>	<b>Associated software incase of PC based recording system</b>		
<b>F</b>	Cart for entire set up		
<b>G</b>	UPS / CV Transformer		
<b>A</b>	<b>Medical grade video camera</b>		
<b>1</b>	Digital Three Chip HIGH DEFINITION Endovision Camera: one (compatible with contemporary telescopes of Bronchoscope, Oesophagoscope, and Cystoscope)		
<b>2</b>	High Definition (HD) format with a compatible HD controller.		
<b>3</b>	Color system PAL/NTSC, power supply: 220-240 V, AC 50/60 Hz, automatic white balance with control .		
<b>4</b>	The HD controller should have multiple standard video output of <b>1 x HD-DVI (1920x1080)</b> , one composite out for optimized display on LCD monitors.		
<b>5</b>	<b>Integrated/optical zoom lens</b> with manual and automatic control.		
<b>6</b>	<b>Instrument coupling for all rigid endoscopes</b>		
<b>7</b>	Should be immersible and gas sterilisable.		
<b>8</b>	Peripherals should be consisting of: Mains cord, with zoom lens, camera control unit (CCU), BNC connecting cable, length 180 cms, 2 connecting cables for connecting video printer or recorders, DVI cable, length 300 cm, <b>keyboard/Touch screen</b> , US English character generator.		
<b>9</b>	Should have 16:9 format during image acquisition which enlarges the field of view.		
<b>10</b>	Resolution 1920x1080		
<b>B</b>	<b>Light Source</b>		
<b>1</b>	Xenon light source 300 watts with adjustable light intensity from 0-100%.		
<b>2</b>	It should have two spare Xenon Lamp supplied with the unit.		
<b>3</b>	Light cable qty = 2		
<b>C</b>	<b>Color Monitor (flat panel) : two</b>		
<b>1</b>	<b>One 24-29 inches Medical grade LCD/LED, Resolution: full HD.</b>		
<b>2</b>	<b>One 24-29 inches Medical grade LCD/LED, Resolution: full HD.</b>		
<b>3</b>	Power Supply : 240 V ~ (a.c.), 50/60 Hz		
<b>4</b>	One of the screens should be mountable on cart arm with inclusion of mount accessories.		

<b>D</b>	<b>Recording System (Medical Image System)</b>		
1	The concept should be of professional documentation and archiving of recorded data		
2	The software should be able to store single images and video sequences		
3	Should be capable of integration into LAN networks.		
4	Back up of data should be into Picture archiving and communication system, portable storage media as flash drives and write on DVD.		
5	Software switching between various video input signals		
6	Export of Image and video data in standard formats for use during lectures presentations and doctrine.		
7	Viewing and editing software to be included.		
8	Creation of reports and letters including selected images from data base		
9	Printer connection should be present		
10	Image acquisition / recording		
11	Live display of endoscopic camera image		
12	Easy switch between multiple video sources		
13	Comfortable control from within the sterile field by means of camera head, buttons or foot switch		
14	Transfer/export into standard formats like JPEG, TIFF, AVI, MPEG4		
<b>E</b>	<b>Viewing Software</b>		
1	Display of images / film sequences with extensive functions viz. Zoom, Cineloop, single stem display		
2	Measurement functions like distance angle, area, various filter functions, text integration and editing		
3	<b>Deleted</b>		
4	Report Creation (by the doctor): MS word document format or individual reports for professional findings		
<b>F</b>	<b>Deleted</b>		
1	<b>Deleted</b>		
2	<b>Deleted</b>		
3	<b>Deleted</b>		
<b>G</b>	<b>Communication</b>		
1	<b>Deleted</b>		
<b>H</b>	<b>Image Station</b>		
1	Standard Control PC should include genuine compatible windows OS, DVD writer, DVD +/- RW, core 2 duo processor or above, min 4gb RAM, Min 1gb graphics card for optimal video viewing and editing. Min 320 Gb hard disk, Keyboard, mouse and accessories.		
2	The PC should also include DV input compatible Graphic CARD, ethernet Card 10/100/1000M bit, standard interface for KIS, RIS, Modem 56kBit, software package for image and Video acquisition in DICOM format+, archive management/ processing, software package for remote support, software package for MS word report		
3	TFT or LCD for the PC 19" size		
4	Laser black and white Printer with min memory 8mb + 12-18 pages per minute or higher : one		
<b>I</b>	<b>Mobile Unit Trolley</b>		
1	Mobile Universal Video Trolley Including min 4 Shelves		
2	<b>Should comfortably accommodate all the components of the camera system including monitors</b>		
<b>J</b>	<b>UPS</b>		
	<b>Compatible online UPS for supporting entire system.</b>		



SN	BOQ	Qty	UOM
1	Medical grade video camera	1	Nos
2	Light source	1	Nos
3	Monitor	2	Nos
4	Recording system with PC based station	1	Nos
5	<b>Associated software if any</b>	1	set
6	Cart for entire set up	1	Nos
7	UPS	1	Nos

**Item Sl. No. 21**  
**Paediatric Neuroendoscope**

1	Straight-Forward-Tele- scope 6 °, enlarged view, auto- clavable, with angled eyepiece, with instrument channel diameter 3 mm, fiber optic light transmission incorporated, diameter 4 mm
2	Straight-Forward-Tele- scope 0 °, enlarged view, auto- clavable, with angled eyepiece, with instrument channel diameter 3 mm, fiber optic light transmission incorporated, diameter 4 mm
3	Wide Angle Forward- Oblique Telescope 30°, enlarged view, diameter 4 mm, length 18 cm, autoclavable. Fiber optic light transmission incorporated.
4	Holding System, autoclavable, consisting of: Socket to clamp on the operating table, for use with standard rails, also suited for rails from 25x10 up to 35x8 mm, with lateral clamping element for height adjustment of the articulated stand. Articulated Stand, reinforced version, L-shaped, with one mechanical central clamp for all five joint functions, height 48 cm, operating range 52 cm Clamping Jaw, metal, with axial intake, for use with instrument and telescope sheaths, clamping range 4.8 up to 12.5 mm
5	Operating Sheath, O.D.: 6.5 mm, with graduated scale, with lateral stopcock and Inlet for catheter, with obturator for stereo-tactic positioning.
6	Ventriculostomy Forceps, diameter 1.7 mm, working length 30 cm
7	<b>Deleted</b>
8	Grasping Forceps with teeth
9	Biopsy Forceps
10	Scissors, pointed, lightly curved jaws, double action jaws, diameter 1,7 mm, length 30 cm
11	Injection Needle, flexible, diameter 2.5 mm, working length 45 cm, disposable
12	Puncture Needle
13	Coagulating Electrode, bipolar, 5 Fr.
14	Coagulating Electrode, unipolar, semi flexible, working length 28 cm, Diameter 5 Fr.
15	Irrigation Tube, autoclavable, with LUER-Lock connection
16	Sheath insert for use of 30°, 70°, 120° diagnostic telescope through operating sheath
17	Sheath insert for use of 0° diagnostic telescope through operating sheath
18	Adaptor, autoclavable, for facilitating changing of telescopes in sterile conditions
19	Container for keeping and sterilising instruments and Silicon oil 10 uniits
	Price of all the above items should be freezed for 7 years.

**Item Sl. No. 22**  
**Pediatric Open Surgical Instruments**

	<b>1)Pediatric Retractor System-1 No.</b>
	a. Flexible Table mounted retraction system for Pediatric Patients of all sizes 01
	b. Adjustable for smaller operative fields
	c. Should have small, indepedentally-adjustable and removelble frame arms to follow the contours of any pediatric operative field
	d. Should allow for multi-plane, multi-position hands-free retraction
	e. Should allow for fast and accurate set up

f. Should be US FDA/European CE Approved
g. Should be supplied with following components -
I. Sterile Field Post – attachable to the operating table – 1
II. Support Arm – 1
III. Small Curved (wishbone) frame arm – 2
IV. Snap on Clamps for attaching retractors – 6
V. Rake Retractor (2.2x1.3 cms) – 1
VI. Rake Retractor – 2.2x 2.5 cms) – 1
VII. Mayo Swivel Retractors (5cms x 5cms)- 2
VIII. Mayo Swivel Retractors (7 cms x 5 cms) – 2
IX. Mayo Swivel Retractor (2.5 cms x 2.5 cms) – 1
X. Mayo swivel retractor (5 cms x 3.8 cms)- 2
XI. Malleable Swivel Retractor – (2.5 cms x 2.5 cms) – 1
XII. Malleable Swivel Retractor – (1.3cms x 2.5 cms) – 1
XIII. Malleable Swivel Retractor (1.9x5 cms) – 1
XIV. Malleable Swivel Retractor (1.9x7.6cms) - 1
XV. Malleable Swivel Retractor (2.5x10.2cms) – 1
XVI. Malleable Swivel Retractor (2.5x12.7 cms) – 1
XVII. Malleable Swivel Retractor (2.5 x 15.2 cms) – 1
XVIII. Malleable Swivel Retractor (3.8x7.6cms) – 1
XIX. Malleable Swivel Retractor (3.8x12.7cms) – 1
XX. Malleable Swivel Retractor (3.8x15.2 cms) – 1
XXI. Splanchnic Swivel Retractor (3.8x8.9cms) – 2
<b>2)Pediatric Open Surgical Instruments( Non reflective)</b>
<b>A. Finochietto Chest Retractor – Neonatal - 01</b>
1. Blades Size – 10mm x 30 mm
2. Retractor Spread – 75 mm
3. Arm Length – 50 mm
4. Rust Proof Stainless Steel
5. US FDA/European CE certification
<b>B. Finochietto Chest Retractor – Neonatal - 2</b>
1. Blades Size – 10mm x 15 mm
2. Retractor Spread – 50 mm
3. Arm Length – 50 mm
4. Rust Proof Stainless Steel
5. US FDA/European CE certification
<b>C. Finochietto Chest Retractor – Infant – 2</b>
1. Blades Size – 12mm x 40 mm
2. Retractor Spread – 90 mm
3. Arm Length – 75 mm
4. Rust Proof Stainless Steel
5. US FDA/European CE certification
<b>D. Finochietto Chest Retractor – Small Infant – 2</b>
1. Blades Size – 12mm x 34 mm
2. Retractor Spread – 90 mm
3. Arm Length – 75 mm
4. Rust Proof Stainless Steel
5. US FDA/European CE certification
<b>3. Shunt related instrument</b>
<b>A. Skull trephin for Neonate &amp; Paediatric - 2 each</b>
<b>B. Hoffman Shunt Passer - 2</b>
1. Stainless Steel

	2. Resuable
	3 . Suitable for subcutaneous tunneling for VP Shunt
	4 . Tube – 3.2 mm Internal diameter, 4.2 mm Outer diameter
	5. Size - 35 – 42cms
	6. US FDA/European CE certification
	<b>C. Hoffman Shunt Passer - 2</b>
	1. Stainless Steel
	2. Resuable
	3. Suitable for subcutaneous tunneling for VP Shunt
	4. Tube – 3.2 mm Internal diameter, 4.2 mm Outer diameter
	5. Size - 60 - 65 cms
	6. US FDA/European CE certification
	<b>D. Ventricular Cannula – 2</b>
	1. For Hydrocephalus
	2. Reusable
	3. Stainless steel
	4. Closed end with three side holes
	5. Graduated
	6. Size – 5 Fr
	7. Length – 10 cms
	8. US FDA/European CE certification
	<b>E. Ventricular Cannula – 2</b>
	1. For Hydrocephalus
	2. Reusable
	3. Stainless steel
	4. Closed end with three side holes
	5. Graduated
	6. Size – 7 Fr
	7. Length – 10 cms
	8. US FDA/European CE certification
	<b>F. Ventricular Cannula – 2</b>
	1. For Hydrocephalus
	2 . Reusable
	3. Stainless steel
	4. Closed end with three side holes
	5. Graduated
	6. Size – 9 Fr
	7. Length – 10 cms
	8. US FDA/European CE certification
	<b>4. Scissor</b>
	<b>A. Mayo Dissecting Scissors – 15</b>
	1. Stainless steel
	2. Length – 4 Inch
	3. Curved
	4. Blunt Tip
	5. US FDA/European CE certification
	<b>B. Mayo Dissecting Scissors – 15</b>
	1. Stainless steel
	2. Length – 6 Inch
	3. Curved
	4. Blunt Tip
	5. Ring Handle

6. US FDA/European CE certification
<b>5. Malleable Retractor</b>
<b>A. Ribbon Type Malleable Retractor – 5</b>
1. Size 1 1/2 inch width, Length – 13 inches
2. Malleable
3. Ribbon type
4. US FDA/European CE certification
<b>B. Ribbon Type Malleable Retractor – 5</b>
1. Size 1 inch width, Length – 13"
2. Malleable
3. Ribbon type
4. US FDA/European CE certification
<b>C. Ribbon Type Malleable Retractor – 5</b>
1. Size 1/2 inch width, Length – 7 inches
2. Malleable
3. Ribbon type
4. US FDA/European CE certification
<b>D. Ribbon Type Malleable Retractor – 5</b>
1. Size 10mm width, Length – 5 inches
2. Malleable
3. Ribbon type
4. US FDA/European CE certification
<b>6. Abdominal Retractor</b>
<b>A. Denis Browne Abdominal Retractor – Child Size – 1</b>
1. Ring/Frame Only
2. Size – 18x14 cms
3. Stainless Steel
4. Oval Sproket Frame
5. US FDA/European CE Certification
<b>B. Denis Browne Abdominal Retractor – Adult Size – 1</b>
1. Ring /Frame Only
2. Size – 25x18 cms
3. Stainless Steel
4. Oval Sproket Frame
5. US FDA/European CE
<b>C. Valve Allien Retractor Blades for Denis Browne Abdominal Retractors – 2</b>
1. 40x40 mm bades
2. US FDA/European CE
<b>D. Valve Allien Retractor Blades for Denis Browne Abdominal Retractors – 2</b>
1. 30x40 mm bades
2. US FDA/European CE
<b>E. Valve Allien Retractor Blades for Denis Browne Abdominal Retractors – 2</b>
1. 50x40 mm bades
2. US FDA/European CE
* It should be supplied with two sterilization case from the same manufacturer.
* The company must quote all items.
<b>7 Instrument cases and trays</b>
<b>A. Instrument Sterlization Case/tray – 10</b>

	1. Anodized Aluminum Case
	2. Hinged top
	3. Size 8"X14"X1" Inches with Cover
	4. Full Silicone Finger Mat Below and silicone cushion above
	5. Should be good quality and durable.
	<b>B. Full Size Double Decker Laproscopic Instrument Tray – 5</b>
	1. Should be suitable for holding full sized Laparoscopy Instruments
	2. Should have holders for 3mm, 5mm and 10 mm Instruments
	3. Should have silicone mat to protect the instruments
	4. Size – 23inch x 11 inch x 8 inch
	5. Should accommodate minimum 12 instruments
	6. Should be made from High grade anodized aluminium
	7. Should be good quality and durable.
	<b>C. Clear Top Telescope Trays – 10</b>
	1. Should be suitable for securely holding Laparoscopic/cystoscopic telescopes
	2. Length – 15 inches, Width – 2.5 inches, Height – 1.5 inch
	3. Should be suitable for telescopes from 1mm to 10 mm
	4. Should be able to accommodate two telescopes
	5. Should have soft silicone base to prevent damage to instruments
	6. Should have a robust locking mechanism to prevent inadvertent opening
	7. Should be good quality and durable.
	<b>D. Instrument trays – 10</b>
	1. Stainless steel
	2. Size 20inch x 12 inch x 2.5 inches
	3. With Cover
	4. Should be good quality and durable.
	<b>E. Wire Baskets for Storage and Sterilization – 10</b>
	1. Stainless steel
	2. Size – 19 inch x 10 inch x 2 inches
	3. Should be provided with compatible wire mesh cover
	4. Should be good quality and durable.
	<b>F. Wire Baskets for Storage and Sterilization – 10</b>
	1. Stainless steel
	2. Size – 10 inch x 10 inch x 2 inches
	3. Should be provided with compatible wire mesh cover
	4. Should be good quality and durable.
	<b>Bidder should quote all the instruments and 80% of Instruments should be from the same manufacturer. If any firm does not quote any instruments in particular set, that firm will be disqualified. This is for the sake of uniformity in price comparison.</b>
	<b>Added Para</b>
	<b>±10 % variation in dimension of the instrument is acceptable provided that it is suitable for paediatric surgery.</b>

**Item Sl. No. 23**  
**Resuscitation Equipment**

<b>A</b>	<b><u>Self inflating Bags 250 ml</u></b>		
	Technical Specifications		
<b>1</b>	Self inflating bag		
<b>2</b>	Silicone made		
<b>3</b>	Provided with open ended reservoir		

4	Patient valves pliable, well sealed, have minimum dead space and no forward or backward leaks		
5	The bag should have an oxygen inlet which fits into the standard oxygen tubing both from a cylinder and central supply		
6	Round shaped, cushioned face masks should be transparent, fit the patient outlet easily and have minimum dead space.		
7	The system should withstand washing, scrubbing and autoclaving procedures		
8	Face masks : sizes i.e. 00,0: 3 set with each bag.		
9	European CE/ US FDA Certification should be provided		
<b>B</b>	<b><u>Self inflating Bags 500 ml</u></b>		
	Technical Specifications		
1	Self inflating bag		
2	Silicone made		
3	Provided with open ended reservoir		
4	Patient valves pliable, well sealed, have minimum dead space and no forward or backward leaks		
5	The bag should have an oxygen inlet which fits into the standard oxygen tubing both from a cylinder and central supply		
6	Round shaped, cushioned face masks should be transparent, fit the patient outlet easily and have minimum dead space.		
7	The system should withstand washing, scrubbing and autoclaving procedures		
8	Face masks : sizes i.e 0, 1: 3 set with each bag.		
9	European CE/ US FDA Certification should be provided		
<b>C</b>	<b><u>Self inflating Bag 750ml</u></b>		
	Technical Specifications		
1	Self inflating bag		
2	Silicone made		
3	Provided with open ended reservoir		
4	Patient valves pliable, well sealed, have minimum dead space and no forward or backward leaks		
5	The bag should have an oxygen inlet which fits into the standard oxygen tubing both from a cylinder and central supply		
6	Round shaped, cushioned face masks should be transparent, fit the patient outlet easily and have minimum dead space.		
7	The system should withstand washing, scrubbing and autoclaving procedures		
8	Face masks : sizes i.e 1,2: 3 set with each bag.		
9	European CE/ US FDA Certification should be provided		
<b>D</b>	<b><u>Laryngoscope with different size blades</u></b>		
	Technical Specifications		
1	High quality corrosion resistant stainless steel blades(straight-miller) and body		
2	LED Light source firmly fixed with blade		
3	Blades size 00,0 and 1,2 (3 sets with each)		
5	Should withstand chemical sterilization and autoclaving		
8	Battery should hold charge for more than 2 Hr.		
9	Should be CE/FDA/BIS approve product		
<b>SN</b>	<b>BOQ</b>	<b>QTY</b>	<b>UOM</b>
1	Self inflating Bags 250 ml	1	Set
2	Self inflating Bags 500 ml	1	Set
3	Self inflating Bag 750ml	1	Set
4	Laryngoscope with different size blades	1	Set

**Item Sl. No. 24**  
**Paediatric Rigid Bronchoscope & Oesophagoscope**

1	Adjustable proximal prismatic light deflector
2	Maximum lumen and small external diameter
3	No loss of lumen through light carrier
4	Pediatric bronchoscope –extended length
5	<b>Consisting of: Bronchoscope sheaths of size 2.5 mm(18-19cm),3 mm (18.5cm &amp; 26cm),3.5 mm(26 and 30cm), 4 mm (30cm ) and 5 mm (30cm) of standard length</b>
6	<b>Esophagoscope Tube size- 5 – 1No</b>
7	<b>Esophagoscope Tube size 4 – 1No</b>
8	Prismatic light deflector with connection for fibre optic light cable.
9	Glass window plug
10	Rubber telescope guide
11	FLUVOG adapter with sliding glass window plug, sealing cap, notched lens and Keyhole opening, movable.
12	Injection cannula , O.D 3.5mm,
13	For positive pressure assisted ventilation system, for use with bronchoscopes
14	Instrument guide for aspiration catheter.
15	Adapter to respirator
16	Sealing plug for respiration connector.
17	Adjustable magnifier, swing –away type
18	<b>ACCESSORIES:</b>
a	Straight Forward Telescope 0 degree, <b>2.9 - 3.4</b> mm diameter, length <b>36 - 38</b> cm, autoclavable, fiber optic light transmission incorporated – 1No
b	Straight Forward Telescope 0 degree, <b>2.7 - 2.9</b> mm diameter, length 30-31cm, autoclavable, fiber optic light transmission incorporated – 1No
c	Straight Forward Telescope 0 degree, <b>2-2.1</b> mm diameter, length 18 -30 cm, autoclavable, fiber optic light transmission incorporated – 1No
d	Pediatric Optical forceps for peanuts and soft foreign bodies, for use with mentioned telescopes(36cm and 26cm)
e	Pediatric Optical alligator forceps, for use with telescopes (36cm and 26cm)
f	Telescopic Bridge for a fixed position between telescope and bronchoscope.
g	Telescope bridge for fixed position between 36cm telescope and 30 cm & 26cm sheath
h	Cup Grasping Forceps, 1.5 mm shaft diameter,compatible with 36cm telescope

**Item Sl. No. 25**  
**8 Channel EMG -NCS-EP Systems**

	EMG-EP-NCS system should have following specifications.		
1	Should have Nerve Conduction Studies MCS, NCS, F wave, H reflex, Collision, Blink reflex, RNST, Inching studies & CCV with temperature probe.		
2	Main Unit should be connected to the Computer through the latest and powerful USB/Ethernet Interface		
3	Must have <b>minimum 16 bit</b> A/D conversion for high fidelity waveforms		
4	Must have Compact operation panel for easy management of waveforms and latency marking.		
5	<b>Minimum 8 channels</b> system with with user configurable channels.		
6	Two channel monophasic/biphasic constant Current/Voltage electrical stimulator.		
7	Input impedance: above 100 M ohms differential mode, > 1000Mohm in		

	common mode		
8	Sensitivity 1 micro volt per division to 10 milli volt per division		
9	Noise < 0.7 micro volt RMS		
10	Common mode rejection ratio: above 110 dB		
11	Low filter settings: <b>0.2 Hz</b> to 3 KHz and high filter settings: <b>30 Hz</b> to 10 KHz with AC interference notch filter 50 Hz		
12	<b>Deleted</b>		
13	<b>Deleted</b>		
14	8 Channel External input and External Output and Line I/O		
15	Should have configurable protocols in NCV/EMG/EP		
16	Should have option of connecting stimulation pods with multiple output ports.		
17	Should have compact stimulating electrode with convenient dials for stimulation intensity adjustment and delivery of electric stimulation with user configurable switches.		
18	System should have at least 1 triggers input / output		
19	Must have trigger EMG, Single Fiber EMG (jitter analysis), Stimulated SFEMG, and QEMG with the system with their accessories (Including needle holders, reusable needles-1Nos/10 disposable, etc - 1set for each)		
20	User should be able to open mutiple test protocols simultaneously.		
21	Programmable measurement conditions / examination conditions of live EMG for minimum 10 minutes for mutiple sites.		
22	Should have EMG (Free run needle EMG, Real time MUAP analysis including recruitment, Interference pattern, Auto MUP detection and classification, and real time turn amplitude analysis) with continuous storage		
23	EMG play back with waveform and sound for minimum 10 minutes should be possible in any PC.		
24	Should have Brain stem auditory evoked potentials with click, burst & tone pip stimulation (ABR, MLR, SVR & EcochG). Sutable accessories must be offered as standard.		
25	<b>Deleted</b>		
26	<b>Should have Visual Evoked Potentials with Pattern, flash and goggles (LED) protocols ( EOG PRVEP &amp; LEDVEP)</b>		
27	<b>Should have Somatosensory Evoked potentials (SEP, SSEP and ESCP) simultaneous SSEP and SEP measurement with accessories</b>		
28	Must have user friendly Data base management software and study schedule program for easy data management.		
29	On-screen examination guide and supplied with Measuring reel and marker pen and medical tape- 2 each		
30	Should have option of P-300, MRCP		
31	<b>Deleted</b>		
32	Should have autonomic Nervous System testing with SSR, RR interval & Microneurography.		
33	<b>Workstation Should be with latest i5 processor, 4 GB RAM, 1 TB Hard Disk or better, 4 USB ports or better, DVD-RW, Latest Operating System, minimum 22inch LED Monitor, Color Laser Printer, Speaker, Key Board, Mouse, Suitable UPS with 15min Backup, MS office , and Matellic Trolley with complete mounting provision"</b>		
34	Should be supplied with review & Reporting Station along with main work station/ console system of EMG machine with loaded all necessary software for reviewing the EMG-NCS-EP data for same PC specification		
35	<b>Should be supplied with following accessories</b>		
a)	Shielded/ <b>Twisted</b> EP electrodes – 10 sets		



b)	Ground electrodes disc type - 2 sets		
c)	Ground electrodes strap type(Adult-2 & Pead-1)		
d)	Recording electrodes cup - 10 sets		
e)	Ring electrodes & BAR stimulating electrodes- (Adult-2 & Pead-1 each)		
f)	<b>Conductive paste (3 Jars of 225 gms or more) - 5 sets</b>		
g)	Skin preparation gel (Set of 2 tubes) - 3 sets		
h)	EMG disposables needles (Box of 25) - 1 boxes (Pead size)		
i)	EMG disposables needles (Box of 25) - 3 boxes (adult size)		
j)	Single fibre EMG needle - 2 Nos. (Reusable)		
k)	Temperature probe - 2 No.		
l)	Acoustically shielded Head Phones - 1 No.		
m)	Insert Ear Phones - 1 No. with (disposable buds Adult-1 pack & Pead-1pack)		
n)	17" VEP Monitor - 1 No.		
o)	LED Goggles - 1 No.		
p)	<b>Metlalic Trolley ( with mounting provision for accessories with Main machine and suitable space for printer &amp; UPS for review station)- 2 Nos (One for main machine and 2nd for review station)</b>		
36	system should have following Safety Standard		
a)	Manufacturer should have ISO certification for quality standards.		
b)	Should be USFDA or European CE or BIS approved product.		
37	Should be HL7 compliant systeem		
38	Prices for required consumables and accessories to be quoted.		
<b>SN</b>	<b>BOQ</b>	<b>Qty</b>	<b>UOM</b>
1	8 channel EMG system with Workstation & Review Station and Softwares as per spec	1	Nos
2	Shielded/ <b>Twisted</b> EP electrodes - 10 Sets	10	Sets
3	Ground electrodes disc type	2	Nos
4	Ground electrodes strap type(Adult-2 & Pead-1)	1	set
5	Recording electrodes cup	10	set
6	Ring electrodes & BAR stimulating electrodes- (Adult-2 & Pead-1 each)	1	set
7	Conductive paste (3 <b>Jars of 225 gms</b> or more) - 5 sets	5	set
8	Skin preparation gel (Set of 2 tubes)	3	set
9	EMG disposables needles (Box of 25) - (Pead size)	1	Box
10	EMG disposables needles (Box of 25) -(adult size)	3	Boxes
11	Single fibre EMG needle -(Reusable)	2	Nos
12	Temperature probe - 2 No.	2	Nos
13	Acoustically shielded Head Phones - 1 No.	1	Nos
14	Insert Ear Phones - 1 No. with (disposable buds Adult-1 pack & Pead-1pack)	1	Set
15	17" VEP Monitor - 1 No.	1	Nos
16	LED Goggles - 1 No.	1	Nos
17	<b>Metlalic Trolley - 02 Nos.(One for main machine and 2nd for review station)</b>	2	Nos

**Item Sl. No. 26**  
**EMG-NCV-EP MACHINE 4 Channel**

	<b>EMG-EP-NCV system should have following specifications.</b>		
1	Should have Nerve Conduction Studies MCS, NCS, F wave, H reflex, Blink reflex, Etc.		
2	Main Unit should be connected to the Computer through the latest and powerful USB Interface/Ethernet		
3	Must have minimum 16 bit A/D conversion for high fidelity waveforms.		
4	<b>Should have Monophasic/ biphasic constant current /Votage electrical</b>		

	<b>stimulator</b>		
5	Input impedance: above 100 M ohms differential mode, > 1000Mohm in common mode		
6	Sensitivity 1 micro volt per division to 10 milli volt per division		
7	<b>Noise &lt; 1 micro volt RMS</b>		
8	Common mode rejection ratio: above 110 dB isolation mode		
9	Low filter settings: 0.05 Hz to <b>2 KHz</b> and high filter settings: 10 Hz to 10 KHz with AC interference notch filter 50 Hz		
10	Averager: 16 bits, number of averaging 9,999		
11	System should have at least 1 triggers input / output		
12	Must have trigger EMG, Single Fiber EMG(jitter analysis) with the system <b>as standard</b>		
13	User should be able to open mutiple test protocols simultaneously.		
14	Should have EMG (Free run needle EMG, Real time MUAP analysis including recruitment, Interference pattern, Auto MUP detection and classification, and real time turn amplitude analysis) with continuous storage		
15	EMG play back with waveform and sound for minimum 10 minutes should be possible in any PC.		
16	Should have Brain stem auditory evoked potentials with click, burst & tone pip stimulation with accessories		
17	Should have Visual Evoked Potentials with Pattern, flash and goggles (LED) protocols with accessories		
18	<b>Should have Somatosensory Evoked potentials(SEP, SSEP and ESCP) simultaneous SSEP and SEP measurement with accessories</b>		
19	On-screen examination guide and supplied with Measuring reel and marker pen and medical tape- 2 each		
20	Should have P-300, MRCP		
21	<b>Branded Work Station with Necessary Softwares with minimum as below -</b>		
a)	PC Should be with latest i5 processor, 4 GB RAM, 1 TBHard Disk or better, 4 USB ports or better with MS office		
b)	Built in DVD Super Multi Drive		
c)	<b>With minimum 22" color LED display"</b>		
d)	Suitable latest Windows operating system compatible with EMG software		
e)	Supplied with Coloured Laser Printer		
f)	Supplied with online UPS with min 15 minutes back up		
22	<b>Should be supplied with following accessories</b>		
a)	<b>Shielded/Twisted EP electrodes – 10 sets</b>		
b)	Ground electrodes disc type - 2 sets		
c)	Ground electrodes strap type(Adult-2 & Pead-1)		
d)	Recording electrodes cup - 25 sets		
e)	Ring electrodes & BAR stimulating electrodes- (Adult-2 & Pead-1 each)		
f)	<b>Conductive paste (3 Jars of 225 gms or more) - 5 sets</b>		
g)	Skin preparation gel (Set of 2 tubes) - 3 sets		
h)	EMG disposables needles (Box of 25) - 1 boxes (Pead size)		
i)	EMG disposables needles (Box of 25) - 3 boxes (adult size)		
j)	Single fibre EMG needle - 2 Nos. (Reusable)		
k)	Temperature probe - 1 No.		
l)	Acoustically shielded Head Phones - 1 No.		
m)	Insert Ear Phones - 1 No. (With Disposable Buds Adult and Pead -100 each)		
n)	17" VEP Monitor - 1 No.		
o)	LED Goggles - 1 No.		
p)	<b>Matellic Trolley with complete mounting provision- 1 No</b>		

23	system should have following Safety Standard		
a)	Manufacturer should have ISO certification for quality standards.		
b)	Should be USFDA or European CE or BIS approved product.		
c)	Should be HL7 compliant system		
24	Prices for required consumables and accessories to be quoted.		
<b>SN</b>	<b>BOQ</b>	<b>Qty</b>	<b>UOM</b>
1	4 channel EMG system with workstations and softwares as per spec	1	Nos
2	Shielded/ <b>Twisted</b> EP electrodes - 10 Sets	10	set
3	Ground electrodes disc type	2	set
4	Ground electrodes strap type(Adult-2 & Pead-1)	1	set
5	Recording electrodes ( cup )	25	set
6	Ring electrodes & BAR stimulating electrodes- (Adult-2 & Pead-1 each)	1	set
7	Conductive paste (3 <b>Jars of 225 gms</b> or more) - 5 sets	5	set
8	Skin preparation gel (Set of 2 tubes)	3	set
9	EMG disposables needles (Box of 25) (Pead size)	1	Box
10	EMG disposables needles (Box of 25) (adult size)	3	Box
11	Single fibre EMG needle (Resusable)	2	Nos
12	Temperature probe	1	Nos
13	Acoustically shielded Head Phones	1	Nos
14	Insert Ear Phones with Buds	1	Nos
15	17" VEP Monitor	1	Nos
16	LED Goggles	1	Nos
17	Metlalic Trolley	1	Nos

**Item Sl. No. 27**

**Autonomic Function Testing Lab with Comprehensive Software**

1	Meant for providing quantitative assessments of Autonomic nervous system Cardiovagal (parasympathetic function, Adrenergic (sympathetic) function, Sudomotor function) and Olfactory function and Quantitative Thermal and vibration senses.		
2	<b>Should be capable of Performing Heart Rate variability (ECG), Beat-to Beat Blood Pressure measurement,Heart Rate Response to Deep Breathing (HRDB),Valsalva Maneuver,30:15 Ratio,E:1 ratio, Head-up tilt analysis,Baroreflex Sensitivity, Olfactory quantitative evaluation</b>		
3	Good Quality Latest Model PC (atleast 21" LED monitor, i7 processor, 2 Terabyte hard disk space 4GB RAM, licensed softwares with compatible latest windows operating system) with Good Quality Printer with 1200dpi color laser printer.		
4	<b>Licensed software (Two Licences with free upgrade upto warranty and CMC period)</b>		
5	Precise hardware and Windows based software with upgrade capability and proven and validated algorithms		
6	<b>Matellic Trolley for both workstations</b>		
7	Equipment to be supplied and installed with all accessories modifications of the area if required, earthing of the lab area/equipment, UPS with required load for at least 30 minutes back up.		
8	Patient instruction cards for standardized and simple instruction		
9	One portable data management system with following specification-branded atleast 15.6" display, i7 processor, 4GB RAM, 1TB SATA hard disc, Licensed latest Windows OS, latest MS Office with 1200dpi laser printer.		
10	Should include required patient interface devices such as Manometer/valsalva		

	hub,Chest expansion bellows, Patient Response Device, Calibration Verification Device, Sniff Magnitude Device, pulse oximeter		
11	Should supply complete system with all accessories Vibration Stimulator, Thermal Stimulator, Patient cue device, Patient Response device, Calibration Verification device		
12	<u>Quantitative Sweat Measurement System:-</u>		
a	<b>Deleted</b>		
b	<b>Deleted</b>		
c	<b>Deleted</b>		
d	<b>Deleted</b>		
14	<u>Sniff Magnitude Device</u>		
a	<b>Deleted</b>		
b	<b>Deleted</b>		
i	<b>Deleted</b>		
ii	<b>Deleted</b>		
iii	<b>Deleted</b>		
15	Quantitative Sensory/SSR Testing		
a	Systems should include stimulators for thermal (cooling, warming, and heat-as-Pain threshold detection) and vibration threshold detection		
b	Thermal Stimulator		
i	At least 25 levels of stimulation Solid state thermoelectric unit		
ii	Range-8-50 degree c with an accuracy of +2.5 degree C		
c	Vibration Stimulator		
i	At lest 25 levels of stimulation		
ii	Stimuli range minimum from 0 to 350 micrometers of displacement at 125Hz		
16	Should be HL7 compliant system		
17	Prices for required consumables and accessories to be quoted.		
	<b>Added Para</b>		
18	<b>System should be FDA/CE/BIS Certified and minimum a week training should be provided to end user at consignee site only by certified expert.</b>		
19	<b>System Should be supplied with suitable tilt table with accessories.</b>		
<b>SN</b>	<b>BOQ</b>	<b>Qty</b>	<b>UOM</b>
<b>1</b>	System with all softwares and accessories as specified in specs	1	Nos
<b>2</b>	Computer with softwares	2	Nos
<b>3</b>	Lase printer	2	Nos
<b>4</b>	canisters	4	Nos

**Item Sl. No. 28**  
**Portable EEG-EMG-NCV System**

	<b>Technical Specification:-</b>		
	· Single compact portable device that can perform EEG, NCS, needle EMG, Evoked potentials, and neurophysiological ICU monitoring. .		
	<b>A. General</b>		
	· The equipment shall confirm to international standards with certification authorities (ISO 13485 and European CE/USFDA/BIS approved).		
	· The control panel should provide remote control start and stop recordings of EMG/NCS/EEG.		
	· Report generation to be customizable and in MS word format.		
	· The test information database software which should include Information of patient database, resource scheduler and it should be customizable according to the end user. and supplied with Measuring reel and		

	marker pen and medical tape- 2 each		
	<b>B. Hardware</b>		
1	Number of channels, should be <b>minimum 20</b> referencial + <b>minimum 2</b> polygraphic /Bipolar channels with minimum 1 DC channel		
2	· Machine should able to record channels for EMG/NCV and 21 channel EEG in same machine		
3	· Speakers with software-controlled equalizer		
4	· EMG/NCS snapshots within the published reports		
5	· Adjustable electrostimulating probe should be supplied with the system.		
6	· Input impedance >400 MOhms		
7	· ADC converter : 16 bit		
8	Input noise: < <b>0.6</b> microvolt RMS		
9	· Low and high filter settings		
10	· Equipment and software for Heart rate variability analysis		
11	· Integrated acoustic and visual stimulators for all kind of EP with portable flash/LED goggles		
	<b>C. Acquisition Software</b>		
	· <b>For electroencephalography (EEG)</b>		
	· Rapid montage setup and editing on-the-fly		
	· Continuous EEG Monitoring for critical care patients		
	· Facility to controlled display sensitivity 1-500 microvolts through software.		
	· Facility to choose low and high cut filters from a user configurable list between 0.1 and 70 Hz along with facility to enter any value.		
	· On-line seizure detection option with auditory and visual notifications		
	· <b>For studies (EMG/NCS/EP etc.)</b>		
	· EMG protocols (free run and capture mode) – Buffer Playback with audio (up to 10 minutes) – Buffer Storage minimum 10mins per recording – Programmable Muscle Scoring		
	· NCV (motor, sensory, inching)		
	· F Wave / H Reflex		
	· Side-to-Side Comparisons (NCV, F, H, EP)		
	· Blink Reflex		
	· RNS		
	· SEP + SEP Interleave (upper, lower, dermatomes).		
	· Autonomic Studies – Heart Rate Variability (RR Interval) – Sympathetic Skin Response (SSR).		
	· Programmable Study Lists.		
	<b>Deleted</b>		
	· EP Analysis (add, subtract, average, grand average, invert).		
	· all data should be reviewed and should be transferable for viewing on other PC		
	<b>D. Laptop Specification</b>		
	· Latest Intel i5 processor with 4 GB RAM, 500 GB HDD, DVD Writer ,optical mouse , 14-16' TFT monitor, LAN with suitable protable/trolley bag which hold EEG-EMG machine along with Laptop.		
	<b>E. Consumables for EEG</b>		
	· Reusable electrodes -50 Nos		
	· Electrode adhesive paste Ten20 or equivalent (200grs) - 5Nos		
	· Abrasive paste for skin preparation Nu-prep/equivalent - 03 Nos.		
	· <b>For EMG/NCS/EP</b>		
	· Twisted Surface electrode – 2 Set		

	· Ring electrode (wide) with cable – 1No.		
	· Ground electrode with cable (adult) – 1No.		
	· Ground electrode with cable (pediatric) – 1No.		
	· Disposable concentric needle electrode (Box 25 pcs.) - 2 Box adult and 1 Box pead		
	· Adapter for needle electrode connection – 2 pcs.		
	· Disposable surface electrode (100 pcs.)		
	· Adapter for disposable electrodes connection with “Alligator” clip (20 cm) – 2 pcs. (red and black)		
	· Gold plated Cup electrode – 5 pcs.		
	· Stimulating bar electrode (adult & Pead) – 1No.		
Sl.No	BOQ	Qty	UOM
1	Portable EEG-EMG-NCV with Laptop, Softwares and Accessories as per specs	1	Nos
2	· Reusable EEG electrodes	50	Nos
3	· Electrode adhesive paste Ten20 or equivalent (200grs)	5	Nos
4	· Abrasive paste for skin preparation Nu-prep/equivalent(100grms)	3	Nos
5	· Twisted Surface electrode	2	Set
6	· Ring electrode with cable	1	Set
7	· Ground electrode with cable (adult)	1	Nos
8	· Ground electrode with cable (pediatric)	1	Nos
9	· Disposable concentric needle electrode (Box 25 pcs.) - 2 Box adult and 1 Box pead	1	Set
10	· Adapter for needle electrode connection	2	Nos
11	· Disposable surface electrode	100	Nos
12	· Adapter for disposable electrodes connection with “Alligator” clip (20 cm) (red and black)	2	Nos
13	· Reusable electrode for NCV/EP	5	Nos
14	· Stimulating bar electrode (adult & Pead)	1	Set

### Item Sl. No. 29

#### Video Polysomnography with 1 Camera

1	Digital EEG system with minimum 40 channels of amplifier.		
2	Must have <b>minimum 20 referential</b> EEG Channels, 6 or more differential/bipolar channels and 2 or more DC Channels		
3	Amplifier must also have built-in Oximetry(SPO2), patient event button and photic connectivity within the amplifire box		
a	Input impedance: 100 M ohms		
b	Sensitivity 1 to 500 micro volt per mm		
c	Noise < 1.5 micro volt Peak to peak		
d	Built in manual / automatic sine / square wave calibration		
e	Common mode rejection ratio: above 105 dB		
f	Low filter settings: 0.1 Hz to 30 Hz		
g	High filter settings: 15 Hz to 300 Hz		
h	Notch filter		
i	Electrode to skin impedance check: 2 to 50 K ohm		
j	Sampling rate: 100, 200, 500 Hz & 1KHz		
4	16 bits of ADC resolution for digitization of signals.		
5	Must have a bandwidth of 0.1 – 120 Hz.		
6	Amplifier must offer Ethernet /USB connectivity to acquisition PC with hi speed data transfer.		

8	Amplifier and patient electrode connection box must be two separate devices so that least damage happens to the amplifier when mishandling of the electrode connection box happens. Also the patient can carry electrode connection box while moving to washrooms.		
9	Should be supplied with an LED photic stimulator so that photic artefacts doesn't interfere EEG signals.		
11	Should have facility to configure data acquisition to start periodically in an automated fashion.		
12	Should have facility to record patient video using high resolution (HD min 720p) camera for day and night recording (IR camera), auto tracking with fully synchronized Video – 1Nos (Price should be quoted saperatly) and machine should be up-gradable to 2 camera without any		
a)	Securely wall mountable.		
b)	PAL format.		
c)	Infra red illuminator		
d)	Optical Zoom of 12 x or more and 10x digital zoom		
e)	Should have minimum 1 Mega Pixel		
f)	Should have Pan tilt facility		
g)	Exposure control: Full auto, Shutter priority, Iris priority, Manual		
h)	The video compression should be of the latest MPEG 4/equivalent format		
i)	The video frames should be user selectable up to 30 frames/sec		
j)	Should be supplied with remote for easy operations and settings		
13	The system should be European CE with four digit notified body number / US FDA approved.		
14	System and software should conform to latest guidelines of AASM (American association of Sleep Medicine)		
15	Acquisition PC should have Core i7 Processor, 8 GB RAM, 2 TB Hard Disk, DVD Writer, 21" or <b>better LED color screen</b> , Mouse, Keyboard, Set of Speakers, mic, Laser Printer, UPS -1kva, <b>Dedicated Metallic Trolley</b>		
16	<b>Should have Sleep Analysis hardware and software in order to record various physiological parameters like SaO2,Heart rate, Respiration, CPAP, Airflow, Leg movement and rapid eye movement apart from EEG,ECG and EMG</b>		
17	The Sleep staging software should have Automatic and manual scoring and Staging and also have advanced Apnea analysis, Periodic leg movement analysis, ECG Analysis, CPAP Titration, Respiratory disturbance index, Apnea/Hypopnea index.		
18	Sleep Electrode Starter Kit to consist of : 2sets(As per AASM) like - Sleep Transducers complete for Air flow-2, Snoring Sensor-2, Chest/Respiration sensors-2, Abdomen sensor-2, Body Position-2, Periodic Limb Movement-4, SPO2-2, etc.		
19	Should be supplied with review PC with networking between acqisition PC and necessary sleep/PSG software for review & reporting with minimum Core i5 Processor, <b>minimum 4 GB RAM</b> , 1 TB Hard Disk, DVD Writer, <b>minimum 21"</b> color LED Monitor, Mouse, Keyboard, Set of Speakers, mic, color Laser Printer, UPS -1kva, Dedicated Trolley		
<b>SN</b>	<b>BOQ</b>	<b>Qty</b>	<b>UOM</b>
1	PSG System with Acquisition and review system as per specification	1	Nos
2	High resolution video camera including all the accessories and softwares	1	Nos
3	High resolution video camera including all the accessories (Optional)	1	Nos
4	<b>Reusable EEG Electrode</b>	100	Nos
5	Conductivity paste	30	Nos

6	Skin prepping gel	10	Nos
7	Sleep Electrode Starter Kit(As per AASM)	2	sets

**Item Sl. No. 30**  
**ICP Monitor**

1	Measurements of Intracranial pressure at the source-subdural, parenchymal or intraventricular levels.		
2	Delivers an ICP waveform and ICP readouts.		
3	Provides continuous recording and display of ICP over the most recent 12 or 24 hour period		
4	The monitor unit should be able to be clamped on bedrail or pole mounted, and connected to hospital bedside monitoring systems.		
5	On –screen user instructions.		
6	<b>One-touch key/touch screen operation</b>		
7	Continuous display of ICP parameters.		
8	Sensors and transducers with high reliability and permitting visual display of waveforms on monitor . 20 number of skull bolt & <b>catheter</b> kits, and two reusable cables to be provided		
9	Rechargeable 1-hour battery operation or more for patient transport		
11	Audible and visual low-battery alert functions.		
12	User-programmable High ICP/means ICP alarms		
13	Integral pole clamp.		
14	The model offered should be European CE or USFDA or BIS approved for the quoted model		
<b>Sl No</b>	<b>BOQ</b>	<b>Qty</b>	<b>UOM</b>
1	ICP Monitor (para 1 to 14 excluding para 8)	1	Nos.
2	<b>skull bolt &amp; catheter kits</b>	20	Nos.
3	Transducer cable	2	Nos.

**Item Sl. No. 31**  
**Ultrasonic Aspirator**

<b>1</b>	<b>Description of Function</b>		
1.1	Ultrasonic aspirators use mechanical ultrasonic vibration and an irrigation/suction system to fragment and remove soft tissue and high-water-content growths from various parts of the body.		
<b>2</b>	<b>Operational Requirements</b>		
2.1	The system should be quoted with different sizes of hand pieces /Tips		
<b>3</b>	<b>Technical Specifications</b>		
3.1	Surgical aspirator should be based on magneto-restriction or piezoelectric technology.		
3.2	The hand piece must be cooled if required to prevent overheating by flow of water.		
3.3	The hand piece should be autoclavable and can be dismantled completely for cleaning with no inaccessible channels to trap tissue		
3.4	<b>The vacuum pump should provide preferable the suction of &gt; 500mm of Hg.</b>		
3.5	It should have safety features like optical signal for failed hand pieces and signal for failed unit.		
3.6	It should have on and off button		
3.7	It should have integral suction with vacuum pressure of -20 to -90 Kpa. in continuous low noise and digital display.		
3.8	It should preferably have 1.5 -2.5 liter capacity container of unbreakable		



	material with level sensor and anti-overflow system.		
3.9	Compatible Hand piece should be light, preferable 20-40 KHz		
3.10	<b>Standard (short &amp; long), micro (short &amp; long), precision (short &amp; long) handpieces - 1 each or Universal handpiece with all mentioned tips and bone sculpting reusable handpiece should be supplied</b>		
3.11	Assorted tips for bone sculpting 10 nos. should be supplied		
3.12	The irrigation pump should be inbuilt in the unit, the irrigation output 0-25cc/min or more.		
3.13	All hand pieces/ instruments should be detachable.		
4	<b>System Configuration Accessories, Spares and Consumables</b>		
4.1	ACCESSORIES:		
1	Trolley		
2	Assembly kit for aspirator- 1		
3	Infusion bottle holder-1		
4	<b>Foot switch- 1 nos</b>		
5	Cleaning brush for instrument lumen-2		
6	Instrument connection cables- 2		
7	Suction / irrigation tubing (5meter each), silicon twin tube-20		
8	<b>Autoclavable compatible instrument tray - 2 nos.</b>		
9	<b>Deleted</b>		
10	Power cables - 2		
5	<b>Standards, Safety &amp; Training</b>		
5.1	Manufactures/Supplier should have ISO or equivalent certificate to Quality Standard.		
5.2	Should be US FDA or European CE approved product.		
5.3	<b>Comprehensive training for 2 surgeon and 2 assistant services till familiarity with the supplied system at site</b>		
6	<b>Documentation</b>		
6.1	User/Technical/Maintenance manuals to be supplied in English.		
6.2	Compliance report to be submitted in a tabulated and point wise manner clearly mentioning the page/ para number of original catalogue/ data sheet. Any point if not substantiated with authenticated catalogue/ manual, will not be considered.		
<b>SN</b>	<b>BOQ</b>	<b>Qty</b>	<b>UOM</b>
1	System as specified para 1 to 3.13 (without assorted tips for bone sculpting)	1	Nos.
3	Trolley	1	Nos.
4	Assembly kit for aspirator	1	Nos.
5	Infusion bottle holder	1	Nos.
6	<b>Foot switch</b>	1	Nos.
7	Cleaning brush for instrument lumen	2	Nos.
8	<b>Deleted</b>		
9	Suction / irrigation tubing (5meter each), silicon twin tube	20	Nos.
10	<b>Autoclavable compatible instrument tray</b>	2	Nos.
11	<b>Deleted</b>		
12	Assorted tips for bone sculpting	10	Nos.

**Item Sl. No. 32**  
**Computed Radiography Unit with Dry Imager**

SN	Technical Specification		
	Computed Radiography must be a state of the art system manufactured by a reputed brand or manufacturer adhering to following specifications. CR		

	system should broadly comprise of following modules/ components:		
	Image recording system (cassettes & reading plates)		
	Image reading system (reader/ digitizer)		
	Identification & CR processing workstation.		
	Dry imager.		
<b>1</b>	<b>Image recording system (cassettes &amp; imaging plates).</b>		
	The following sizes of radiography cassettes along with image plates should be supported by the unit.		
	a. 35 cm X 43 cm or 14" X 17": 2 nos.		
	b. 24 cm X 30 cm or 10" X 12": 2.nos.		
	c. 18 cm X 24 cm or 8" X 10": 2 nos.		
	<b>d. Mammography cassette 18 X 24cm: 1 nos.(Optional)</b>		
	<b>e. Mammography cassette 24 X 30cm: 1 nos.(Optional)</b>		
<b>2</b>	<b>Image reader (CR reader/ digitizer)</b>		
	a. The CR reader / digitizer should be able to process 60 image plates/hr or more of the largest size cassette		
	b. CR reader / digitizer must be able to handle phosphor image plates. CR reader capable of handling latest Dual side /needle/structured/ columnar image plates will be preferred.		
	c. It should have a resolution of 6 pixels/mm (minimum) for standard resolution cassettes & 10 pixel/mm (minimum) for high resolution cassette reading.		
	d. Digitiser must have a resolution of 20 pixel/mm(minimum) for screening mammography.		
	e. It should have input -output buffer/ stacker that can load at least 4 cassettes at least.		
	f. Gray scale resolution: CR reader / digitizer should have a minimum resolution of 12bits/ pixel for images sent to CR processing station.		
<b>3</b>	<b>Identification Station &amp; processing server</b>		
	a. The main console must have 4GB or more RAM, and 1 TB Hard Drive and 19 inch clinical grade monitor. The work station should have RAID configuration Hard Disk and 19" monitor.		
	b. Processing server capable of identification of patient demographics to the acquired images will be preferred, else a separate identification station must be provided.		
	c. The server and /or ID station must be DMWL (DICOM modality worklist) compliant to access patient and study data from HIS or RIS.		
	d. It should provide display of acquired images with greater details of demographics viz. patient/ study listing for easy access		
	e. The server must provide full amount of post processing features viz. geometric corrections, window level algorithms, annotation like markers, predefined text, drawing lines and geometrical shapes, multi-scale image processing, measuring distance and angles, shuttering, histograms, zoom, grey scale reversal, edge enhancement, noise reduction, indication of gray scale saturation level, latitude reduction etc.		
	f. It should facilitate full-fledged DICOM printing and should be able to print multiple formats of patient study.		
	g. Should be able to send DICOM images to DICOM workstation or PACS without loss of information		
	h. Should be equipped with DICOM CD writer for transferring image		

	i. Should be able to store image on external device viz. CD or pen drive etc.		
	j. The system should have a facility to indicate over /under exposure in the preview screen. Kindly specify the image preview time.		
	k. The software must have dedicated paediatric and mammography image processing.		
4	<b>Dry imager</b>		
	a. The system must have a dry imager without need of any wet chemistry		
	b. It must be DICOM 3.0 compatible allowing multiple modalities to be connected at a time		
	c. The system must be able to print at least 60 films/ hr of the largest size		
	d. The system must deliver its first film within 80 seconds from the request sent		
	e. The imager must have spatial resolution of 500 dpi minimum		
	f. The system must have contrast resolution of 14 bits/ pixel or more. The system must have at least three online film sizes and should be capable of printing any of the 8" X 10", 10" X 12", 14" X 17" films.		
	g. The imager should support daylight loading of films.		
	h. 500 Nos. Of film of each size should be supplied		
5	Suitable UPS with 15 minutes backup for the whole system		
6	The unit Should have US FDA or European CE with four digit notified body number certificate and certificate to be submitted.		
	<b>BOQ</b>	<b>Qty</b>	<b>UOM</b>
1	CR UNIT, as specified	1	No
2	35 cm X 43 cm or 14" X 17"	2	No
3	24 cm X 30 cm or 10" X 12":.	2	No
4	18 cm X 24 cm or 8" X 10":	2	No
5a	<b>Mammography cassette 18 X 24 cm: 1 nos.(Optional)</b>	<b>1</b>	<b>No</b>
5b	<b>Mammography cassette 24 X 30cm: 1 nos.(Optional)</b>	<b>1</b>	<b>No</b>
6	Dry imager	1	No
7	Film 14" X 17"	500	No
8	Film 10" X 12"	500	No
9	Film 8" x 10"	500	No
10	UPS with batteries	1	LS

**Item Sl. No. 33**  
**Portable - Colour Doppler**

	The latest model portable USG Doppler unit should be quoted. This machine should be capable and will be required to function clinically as standalone systems.		
1	Fully digital portable ultrasound machine with provision for Doppler examinations.		
2	<b>The unit should be compact, lightweight and portable. Weight should not exceed 7.5kg including battery (excluding cart and accessories).</b>		
3	It should be suitable for abdominal, small parts and vascular applications in adults and paediatric patients. Multiple preloaded as well as user configurable application presets should be available.		
4	<b>Minimum grey scale resolution to be 256</b>		
5	<b>Scanning depth to be 24 cm or more.</b>		
6	The system to have a dynamic range of 165 decibels or more.		

7	The system should support Convex , Linear probes and endocavitary probe.		
8	<b>Transducers</b> (Frequency tolerance $\pm 1$ MHz)		
	a. Convex electronic phased array transducer: 2-6 MHz for abdominal imaging.		
	b. Linear transducer: 5-12MHz MHz for vascular and small part imaging.		
	<b>c. Endocavitary probe (5-9MHz) with 120 deg FOV or more .</b>		
9	All transducers should be lightweight digital broadband type transducers		
10	The system should have a frame rate of at least 300 frames per second (fps) in B mode.		
11	The system should have an ergonomic full alphanumeric soft keys keyboard with easy access scans controls and trackball/track pad. Provision for attaching an external keyboard and mouse should be present.		
12	<b>The System must have integrated high – resolution TFT/LCD/LED of 11.5” Inches or more.</b>		
13	<b>The system should have cine loop review facility of not less than 20 sec/1000 frames.</b>		
14	<b>The system should have the facility of digital storage and retrieval of B/W and colour image data on USB and LAN transfer of data should also be present.</b>		
15	<b>Imaging modes of Real time 2D, Colour Doppler, Pulsed wave Doppler and Power (energy) Doppler, Tissue Harmonic Imaging and spatial compounding</b>		
16	Controls for 2D mode: Total gain, depth, TGC, dynamic range, acoustic power output.		
17	Controls for Colour Doppler: PRF, colour gain, position and size of ROI, steering of ROI, colour maps and colour invert.		
18	Controls for pulsed Doppler: variable sample volume size from 1 to 5mm or more, steer, PRF, baseline, gain angle correction, spectral invert, duplex on/off.		
19	Measurements for 2D mode: Multiple distances, area and volume.		
20	Measurements for Doppler modes: Stenosis quantification in area percentage, diameter, PSV, EDV, mean, PI, RI, acceleration time and index. Automatic and manual measurements and display of pulsed Doppler calculations should be possible.		
21	<b>System should have DICOM 3.0</b>		
22	The system should be able to store atleast 5000 Images.		
23	Unit should function with 200-240 V, 50 Hz AC, 5 amp power outlet.		
24	<b>In built battery backup should be at least 30 min or more.</b>		
	<b>Essential accessories:</b>		
25	B&W Thermal Printer		
26	suitable carry bag for machine ,Mobile cart with transducer holder, jelly bottle holder and space for printer.		
27	50 no.s roll of Thermal Printer Paper should be provided with the unit.		
28	The unit should be Should have US FDA or European CE with four digit notified body number certificate and certificate to be submitted.		
<b>Sl No</b>	<b>BOQ</b>	<b>Qty</b>	<b>UOM</b>
1	Portable Ultrasound Scanner, as specified	1	No
2	Convex electronic phased array transducer: 2-6 MHz for abdominal imaging.	1	No
3	Linear transducer: 5-12MHz MHz for vascular and small part imaging.	1	No
4	<b>Endocavitary probe (5-9MHz) with 120 deg FOV or more - 1 no</b>	1	No
5	B&W Thermal Printer	1	No

6	Mobile cart and suitable carry bag for machine	1	No
7	Thermal Printer Paper (Rolls)	50	No

**Item Sl. No. 34**

**800mA Digital X-Ray unit with Single Detector (Floor Mounted)**

	Unit should be high frequency digital radiography system with rotating anode X-Ray tube fitted on a versatile U/C-arm along with single flat panel detector, table generator and operator console.		
<b>1</b>	<b>High frequency Generator:</b>		
	a. Generator should be of latest technology with high frequency X-ray generator		
	b. Constant power output of 80 KW or more		
	c. X-ray : KV range should be 40 to 150KV in 1KV increments.		
	d. X-ray current: mA 800 or more.		
	e. mAs range should be 10 to 800mAs or more.		
	f. It should have automatic exposure control device.		
<b>2</b>	<b>X Ray Tube</b>		
	a. A dual focus rotating anode x-ray tube. Anode rotational speed must be 8000rpm or more. The tube rotation of 90 degree should be available.		
	b. Small focus 0.6mm Sq.		
	c. Large focus 1.2mm Sq.		
	d. Anode heat storage capacity 300KHU or more.		
	<b>e. Multileaf collimator having bright light source and auto shut-off provision of the light.</b>		
	<b>f. Collimator must be mounted on X-ray tube and collimator must have an integrated dose area product (DAP) meter. Output of DAP meter should be visible in console</b>		
	g. Display of SID and other parameters like tube angle with touch screen control.		
<b>3</b>	<b>Digital Detector</b>		
	a. The detector should be of solid state flat detector of latest technology. The material of detector should be amorphous silicon with Cesium Iodide as scintillator.		
	b. The size of detector should be 40cmx40cm or more		
	c. The pixel size should be 200 microns or less.		
	d. Active matrix should be 2k x 2k or more		
	<b>The resolution should be minimum of 2.5lp/mm up to 5lp/mm.</b>		
	f. Image depth should be 12 bit or more.		
	g. DQE at 0lp/mm or 0.5lp/mm should be at least 65%		
<b>4</b>	<b>Radiographic table</b>		
	<b>a. Mobile table with brakes.</b>		
	b. Table must be of following dimension:		
	§ Length 1800mm or more.		
	§ Width 600mm or more.		
	§ Height 650mm or more.		
	c. Locks should be available for safety purpose.		
	d. Maximum weight carrying capacity for the table should be more than 150Kg.		
	e. Table top should be of Carbon Fibre or equivalent Radiolucent material.		
<b>5</b>	<b>Automatic U/C Arm Positioner with control unit</b>		

	a. Counter balanced U/C Arm stand should be provided.		
	b. U/C arm must facilitate a rotation of at least through 120 degree or more		
	<b>c. Range of detector rotation should be 90 degree or more.</b>		
	d. U/C arm must have facility to mount a focused stationary grid.		
	e. Dosimetry kV, mA, tube angle position display should be available at X-ray tube side as well console.		
	f. Source to Image distance must be 1000mm to 1800mm to cover full range of radiographic application.		
<b>6</b>	<b>Image acquisition and Processing work station</b>		
	The system should have console for image acquisition, image processing, patient demography, and study data entry as well as for generator parameters and exposure details.		
	Microphone and speaker for communicating with patient		
	The console must provide full amount of post processing features like geometric corrections window/level, algorithm, annotations such as markers, predefined text, drawing line and Geometric shape, measurement of distance and angles, histogram, zoom, gray scale reversal.		
	It should be fully DICOM 3.0 compliant.		
	It should get DICOM work list from HIS/RIS, storage images through PACS network system and should support DICOM image print and DICOM MPPS.		
	<b>Application related software like black border/black masking should be available.</b>		
	<b>Deleted</b>		
	Image storage capacity of 10,000 images or more.		
	All software updates should be provided in warranty & CMC period.		
<b>7</b>	<b>Stand Alone Review Station :</b> Latest PC based workstation for management of images and studies. PC Specs: Processor Core i5, 8GB RAM, 2TB HDD, DVDRW, KeyBoard, Mouse, etc with 19"Medical Grade Monitor of 2MP resolution.		
	The review station must provide full amount of post processing features like geometric corrections window/level, algorithm, annotations such as markers, predefined text, drawing line and Geometric shape, measurement of distance and angles, histogram, zoom, gray scale reversal.		
	Multi format Filming function should be available with review station & console		
<b>8</b>	<b>Dry Imager (for film printing)</b>		
	a. The system must be a Dry imager		
	b. The system must be DICOM 3.0 ready.		
	c. The system must be able to process up to 75films/hour (minimum) depending on the size.		
	d. The system must deliver its first film within 80 seconds from requested.		
	e. The system should have 500 DPI and should print at least 3 sizes of films: 8x10, 14x17 , 10x12 or 11x14 inches. 200 films of each size to be supplied.		
	f. The system must have contrast resolution of 12bits/pixel or more.		
<b>9</b>	<b>Accessories</b>		
	a. Suitable Online UPS with 30minutes back up for the console , review station and Imager should be provided.		
	b. Suitable voltage stabilizer servo controlled for the entire system		
	c. Light weight zero lead radiation protection apron with hanger (4 Nos)		
	d. Footsteps for the table (01 no)		
	e. Lead glass min (1.7mm Lead Equivalent) for Console 90 x 90 cm or more		
	f. Gonadal Shield (02 Nos)		

	g. Thyroid shield (02 Nos)		
<b>10</b>	<b>Approvals:</b>		
i	The system should have USFDA or European CE with four digit notified body number certificate and certificate to be submitted.		
ii	Regular QA according to AERB norms will be responsibility of bidder during warranty and CMC period.		
iii	The system should be AERB type approved and the copy of ELORA Listing should be submitted along with bid.		
	<b>The Site Modification Work - Scope of Work – DR</b>		
	<b>Site Modification will be site specific.</b>		
	<b>1. The scope of work includes complete Civil work, Electrical, Plumbing, Furnishing, Air-conditioning and Fire fighting for the construction of DR Centre.</b>		
	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.		
	d. Patient stretcher and other furniture/ accessory to make the DR centre functional.		
	<b>3. The cost of Site modification Work for the area of 1000sq.ft and Air-conditioning of Tonnage 12 TR will be considered for Ranking / Evaluation purpose.</b>		
	<b>4. Moreover Bidders will have to quote the Unit Rates of the following components of Site Modification Work</b>		
	Civil works		
	Electrical work		
	Public health (plumbing and sanitary fittings).		
	Air Conditioning (HVAC)		
	Interior Furnishing & Furniture		
	Miscellaneous		
	Scope of work for site modification work DR system:		
	The scope of work includes complete Civil work, Electrical, Plumbing, Furnishing, Air-conditioning and Fire fighting for the construction of DR Centre.		
	The DR CENTRE shall consist of the following rooms:		
	DR Room		
	Console room & review		
	Equipment room		
	Patient preparation/change room		
	Patient waiting area		
	<b>The actual area of site modification work done will be considered for payment, based on the unit rates and site measurements</b>		
	<b>1. Civil work</b>		
	i. Civil construction work including construction of brick wall if any, plastering, flooring as per the approved plan and equipment layout plan.		
	ii. Concrete bed at DR equipment area.		
	iii. Platform for unloading and shifting the DR should be provided if necessary.		
	iv. Cable tray, trench & channel – necessary trenches, cable tray and channels at required location would be provided.		
	v. All the construction work to be done as per the final plan approved by the		

	Consignee.		
	<b>a. Flooring</b>		
	i. 600 x 600 mm vitrified tiles with 100mm tile skirting.		
	ii. 50 mm thick cement concrete flooring with Vinyl flooring in DR equipment / UPS room.		
	<b>b. Painting</b>		
	Two coats Plastic Emulsion Paint over 2 coats of wall putty including primer in patient preparation area, Lobby area, console room, DR room & Equipment room etc.		
	<b>c. False Ceiling</b>		
	Acoustical tile for ceiling with light weight insulating material of high quality supported on grid or finished seamless with support above ceiling. Finished with white paint or powder coated with white paint, if metallic. Ceiling height to suit the equipment mount and clearances.		
	<b>2. Plumbing work</b>		
	<b>deleted</b>		
	<b>3. Electrical work</b>		
	a. The supplier shall be required to specify the total load requirements for the DR centre including the load of air conditioning , room lighting and for the accessories if any.		
	b. The supply line will be provided by the Institute up to one point within the DR 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.		
	c. The electrical work shall include the following:		
	i. 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.		
	ii. Switches light and power points should be of modular type and of standard make as listed below.		
	iii. General lights – LED light fitting with 500 Lux Illumination		
	<b>4. AIR CONDITIONING:</b>		
	a. Package air conditioners units 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.		
	b. The outdoor units of AC should have grill coverings to prevent theft and damage.		
	c. Ventilation is required in toilet.		
	<b>5. Environment specifications:</b>		
	Humidity range: Relative humidity 60% and 80% in all areas except equipment room which shall be as per requirement of the equipment.		
	Temperature ranges: $22 \pm 2^{\circ}$ C in all areas except equipment room which shall be as per requirement of the equipment.		
	Air conditioning load: The heat load calculations and maintaining the desired temperature and humidity shall be the responsibility of the bidder.		
	<b>6. Furniture:</b>		
	a. Revolving chairs height adjustable, medium-back with hand-rest in the Control room, Radiologist room and viewing area. – 4 NO.S		
	b. Chairs for patient waiting area – Three seater (chrome plated). - 10		



	NO.S		
	c. Cupboard with laminate door shutters for storage of spare parts and accessories and records as per requirement. – 3 NO.S		
	d. Drug trolleys for patient preparation area. – 1 No.		
	e. Patient trolley with rubber foam mattress to be kept in the patient preparation room.		
	f. Name boards for all rooms		
	g. Tables for console & review station - 2 NO.		
	h. Changing rooms should have change lockers and dressing table.		
	i. Dustbins – 10 No's.		
	j. Any other essential furniture item as per requirement.		
	All furniture items should be of standard make as mentioned in the table below.		
	<b>7. Miscellaneous:</b>		
	a. LED X-ray Film viewer with adjustable brightness; capable of holding 3 films of 14"x17" size. – 3 no.s		
	b. Cabling of Network (LAN) connectivity for camera system, console system, workstation and computers etc.		
	c. Fire extinguisher Dry CO2 type as required for the building safety.		
	<b>LIST OF ITEMS AND SUGGESTED MANUFACTURERS.</b>		
	<b>ITEMS</b>	<b>PREFERRED MAKES</b>	
<b>A</b>	<b>FLOORING VITRIFIED TILES</b>	- Somany, Kajaria , H&R Johnson, RAK india	
<b>B</b>	<b>PAINT</b>	- Dulux, Asian Paints , Nerolac	
<b>C</b>	<b>PLUMBING</b>	- Kohler, Jaguar , Grohe , Roca	
<b>D</b>	<b>SANITARY ITEMS</b>	- CERA, Hindware, Parryware	
<b>E</b>	<b>ELECTRICAL</b>		
<b>1</b>	<b>CABLES</b>	- Finolex, Havells ,V-Guard	
<b>2</b>	<b>SWITCHES</b>	- Legrand, L&T, Crabtree , Roma	
<b>3</b>	<b>DISTRIBUTION BOX , MCB</b>	- Legrand, L&T, Siemens, Havels	
<b>4</b>	<b>LIGHT FITTINGS</b>	- Philips / Crompton / Wipro/Syska	
<b>F</b>	<b>AIR CONDINTIONING</b>	- Daikin, Hitachi, Blue Star, Voltas,	
<b>G</b>	<b>FURNITURE</b>	- Hermen Miller , Godrej,	
	Featherlite,Geeken		
	<b>BOQ</b>	<b>Qty</b>	<b>UOM</b>
<b>SI No</b>	<b>Item Description</b>		
1	800mA X-Ray unit with Single Detector as per the Tender Specification (Point 1 to 6)	1	No
2	Point 7: Dry Imager (for film printing) with 200 films of each size.	1	No
3	Stand Alone Review Station	1	No
4	Point 8: Accessories		
	a. Online UPS as per specification	1	No
	b. Suitable voltage stabilizer servo controlled for the entire system	1	No
	c. Light weight zero lead radiation protection apron with hanger.	4	No
	d. Footsteps for the table	1	No
	e. Lead glass 90 x 90 cm	1	No
	g. Gonadal Shield	2	No
	h. Thyroid shield	2	No
	<b>Site Modification Work (1000 sq ft) as per specification</b>		
1	Civil works	1000	sq ft
2	Electrical work	1000	sq ft

3	Public health (plumbing and sanitary fittings).	1000	sq ft
4	Air Conditioning	12	TR
	<b>Furniture:</b>		
1	Revolving chairs height adjustable, medium-back with hand-rest.	4	No
2	Chairs for patient waiting area – Three seater (chrome plated). -	10	No
3	Cupboard with laminate door shutters	3	No
4	Drug trolleys for patient preparation area.	1	No
5	Patient trolley with rubber foam mattress	2	No
6	Tables for console & review station	2	No
7	Changing rooms (with change lockers and dressing table).	1	set
8	Dustbins	10	No
9	Room Signage	1	LS
10	Venetian Blinds	1	LS
	<b>Miscellaneous:</b>		
1	LED X-ray Film viewer	2	No
2	Cabling of Network (LAN) connectivity for camera system, console system, workstation and computers etc	1	LS
3	Dry chemical power type fire extinguisher of 5kgs capacity	3	No

**Item Sl. No. 35**  
**Mobile X ray machine**

	High Frequency mobile X ray machine with output 100 mA or more. The mobile x ray equipment is required to perform x ray studies in emergency and trauma centre and bedside in wards and ICU. The unit should be compact, lightweight and easily transportable. It should have following specifications. The system should have been quality certified.		
	<b>The unit should be operative on mains voltage from single phase 180-240 V AC with automatic main compensation.</b>		
<b>1</b>	<b>Generator:</b>		
i	Power : 4 kW or more		
ii	kVp. Range : 40 – 100 kVp or more		
iii	<b>Deleted</b>		
iv	m A range : 10 mA to 100 mA or more		
v	<b>Exposure Time: 10 ms to 2 sec.</b>		
<b>2</b>	<b>The digital display:</b>		
	kV and mAs parameters, System ON, System OFF, status and fault messages on the kV and mAs area		
<b>3</b>	<b>X RAY Tube:</b>		
	Stationary/Rotating Anode tube with focal spot 1.8 X 1.8 mm or better.		
<b>4</b>	<b>Tube stand:</b>		
	<b>The tube stand should be fully counterbalanced/Spring Balanced with rotation in all directions.</b>		
<b>5</b>	<b>Collimator:</b>		
	<b>Collimator rotation should be +45 to -45 degrees with auto shut off lamp facility.</b>		
<b>6</b>	<b>Cassette storage box:</b>		
	The equipment should have cassette storage box for minimum of 4 cassettes.		
<b>7</b>	<b>Ergonomics:</b>		
	The unit should have small foot print. The height of the column stand should not be more than 150 cm for easy transportation in the lift etc. and		

	areas with small height doors. The equipment should be light weight, not more than 130 kg.		
<b>8</b>	<b>Certification:</b>		
i	System be AERB type approved.		
ii	The Bidder should assist the institution for e-LORA registration formalities.		
iii	Regular QA according to AERB norms will be responsibility of bidder during warranty and CMC period.		
IV	Light Weight Lead Apron -2 Nos (Equivalent to .25 mm lead)		
	<b>BOQ</b>		
<b>Sl.No</b>	<b>Item Description</b>	<b>Qty</b>	<b>UOM</b>
i	Mobile X-Ray Unit	1	No
ii	Light Weight Lead Apron	2	No

**Item Sl. No. 36**  
**Color Doppler System - (4D)**

	High End State-of-art Colour Doppler Equipment		
	The equipment must be capable of operating in B, M, Doppler, Color flow and Power Doppler modes, Contrast microbubble ultrasound & 4D Volume Scanning capabilities.		
	It should support transducers with linear, sector, convex and volume formats. Further, it must include a full array of measurement and calculation packages. The specific minimum requirements for this equipment are as follow.		
<b>1</b>	<b>User Interface &amp; Ergonomics</b>		
1.1	<b>The keyboard should have Height adjustment. The adjustment should also include Keyboard rotation</b>		
1.2	The system shall support backlight keys or provide an integrated light for ease of use in darkened work areas. The backlighting shall simplify ease of use and indicate function selected.		
1.3	The system shall include at least a 19" LCD monitor for both excellent image viewing as well as providing for workflow and productivity features.		
1.4	The LCD monitor shall be mounted on an articulating arm that moves side-to-side, forward and backward.		
1.5	The unit shall have gel warmer as attachment for the comfort of the patient.		
1.6	The system shall have minimum Four active probe Ports in a convenient, easy to access location to maximize the availability of needed probes.		
<b>2</b>	<b>Productivity</b>		
2.1	The system shall offer an extended field-of-view imaging that operates by sweeping a transducer over the anatomy of interest. This mode shall build the extended field-of-view in a real-time manner, showing the image as it builds.		
2.2	System shall have image management features that store images by patient and include the ability to review images from different exam dates.		
2.3	<b>deleted</b>		
2.4	System shall allow for live image and archive images side-by-side or quad display on a single monitor. This display shall allow any type of image – B-Mode, Colour, or power Doppler on either side.		
<b>3</b>	<b>Workflow</b>		
3.1	The system shall implement a feature, which enables to help streamlining the workflow. In particular the system should automatically invoke the correct mode and imaging parameter and advance to the next step within the examination with a one-button operation.		

4	Real-time 3D / 4D Imaging Capabilities.		
5	<b>Elastography should be available in Linear Probe</b>		
6	<b>Contrast Ultrasound Capability (CEUS)</b>		
7	Tissue Harmonic imaging and spatial compounding technique should be available.		
8	<b>Data Processing.</b>		
8.1	<b>The system shall allow following Post-Storage image manipulation</b>		
a	<b>Overall B-Mode gain and gray scale maps.</b>		
b	<b>Overall Doppler gain, sweep speed and inverted spectral waveform.</b>		
c	<b>Anatomical M-Mode</b>		
8.2	The system shall provide a display zoom function on frozen images.		
9	<b>Scanning Parameters</b>		
9.1	The system should have minimum 65,000 digital system processing channels.		
9.2	The system shall possess the ability to control speckle through the use of a speckle reduction algorithm that enhances borders, reduces speckle artifact and improves detail and contrast resolution in gray scale with compatibility in Colour mode, 3D and side-by-side display. This feature shall have operator selectable settings and be capable of displaying in side-by-side mode with non-speckle reduced image.		
9.3	<b>The system shall provide the ability to scan in the compound imaging mode with 7 lines or more on all linear and convex probes.</b>		
9.4	<b>The system shall provide scan depth of 2 - 30 cm or more</b>		
10	<b>B-Mode / M-mode Imaging</b>		
	The system shall provide the capability for coded tissue harmonic imaging on all offered transducers.		
	The system shall have an —anatomical M-Mode – allowing the M-Mode cursor to be adjustable in any plane and allow for accurate measurements.		
11	Colour flow/Power Doppler		
12	Spectral Doppler (PW)		
13	<b>Measurements and Calculations</b>		
13.1	Measurements should be possible on frozen images as well as on images recalled from the image archive.		
13.2	The system shall provide a comprehensive set of obstetrical and gynaecologic calculations and vascular calculations with summary reports.		
14	<b>Image Archive and Networking</b>		
14.1	The device should store images onto an integrated DVD-R Multi-drive and a USB port storage device.		
14.2	The system shall include at least 500 GB hard drive with minimum 20000 image storage capacity.		
14.3	The device should store images in DICOM, JPG, WMV and AVI formats for maximum flexibility.		
15	DICOM Connectivity: DICOM Connectivity should be a standard feature with the hospital network and a stand-alone PC (Windows based) with suitable DICOM viewer to be supplied & suitable Laser Colour Printer		
	Standalone PC (Windows based) with suitable DICOM viewer, suitable colour inkjet printer with refillable ink tank to be supplied.		
16	<b>Transducers (freq tolerance: <math>\pm 1</math> MHz)</b>		
a.	Convex, with biopsy attachment. Operating Frequency: 2 - 5 MHz		
b.	Linear, with biopsy attachment. Operating Frequency: 5 – 13 MHz		
	<b>c. Trans-vaginal Probe with Biopsy attachment, Operating Frequency : 4-9 MHz</b>		
	<b>d. 3D / 4D Volume Convex Probe with post processing softwares such as</b>		

	<b>MPR, SSD, Fetal cardiac evaluation etc</b>		
	<b>e. Pediatric micro convex probe for Neurosonogram 5-8MHz</b>		
	f. Sector Probe (TCD):2-5Mhz ( <b>Optional</b> )		
<b>17</b>	Suitable UPS for a 30 minute backup for whole system.		
<b>18</b>	The system should have US FDA or European CE with four digit notified body number certificate and certificate to be submitted.		
<b>Sl No</b>	<b>BOQ</b>	<b>Qty</b>	<b>UOM</b>
1	COLOUR DOPPLER SYSTEM , as specified	1	No
2	Convex, with biopsy attachment. Operating Frequency: 2 - 5 MHz	1	No
3	Linear, with biopsy attachment. Operating Frequency: 5 – 13 MHz	1	No
4	Trans-vaginal Probe with Biopsy attachment, Operating Frequency : <b>4-9 MHz</b> - 1 no.	1	No
5	3D / 4D Volume Convex Probe <b>with post processing softwares such as MPR, SSD, Fetal cardiac evaluation etc</b> - 1 no.	1	No
6	Pediatric micro convex probe for Neurosonogram ( <b>5-8MHz</b> ) - 1 no	1	No
7	Sector Probe (TCD):2-5Mhz ( <b>Optional</b> )	1	No
8	Suitable UPS for a 30 minute backup for whole system.	1	No
9	Stand alone PC (Windows based) with suitable DICOM viewer,	1	No
10	Colour inkjet printer with refillable ink tank	1	No
11	Suitable Laser Colour Printer	1	No

**Item Sl. No. 37**  
**Urodynamic Machine**

<b>1</b>	The unit should be able to perform CMG, Pressure flow, EMG ,EMG with biofeedback, Video Urodynamics, Uroflowmetry ( with one wired and one wireless uroflometer )		
<b>2</b>	Radiolucent motorised chair to be provided capable of supine and sitting position		
<b>3</b>	Equipment should have <b>5-8 channels</b>		
<b>4</b>	Should display atleast 10-16 display channel.		
<b>5</b>	Software for multiple Calibrations and multiple connections		
<b>6</b>	Transducer should be reusable with automatic zero facility, pressure range of ( <b>-40- 350cm</b> ) of H2O).		
<b>7</b>	Should be supplied with one wireless , <b>one wired weight based Uroflow Transducer</b> with flow range of 0-50 ml/sec.		
<b>8</b>	Volume range upto 1000ml. Must have auto record and auto zero facility for uroflowmeter.		
<b>9</b>	<b>Should have infusion volume upto 1000ml &amp; software based calibration control and have the ability to show infusion volume</b>		
<b>10</b>	Should have USFDA/European CE with 4 digit notified body no or BIS approved for the quoted model		
<b>11</b>	Should be supplied with integrated travel cart to fit the complete UDS along with DC.		
<b>12</b>	All in one PC computer Windows 7 or more, <b>i5 processor</b> , at least 4 GB RAM, 1 TB HDD with color laser printer, should have facility for USB port		
<b>13</b>	<b>Provision for recording live videos during the procedure of urodynamic study. The system should have ability to show static images with corresponding Urodynamic Trace at that time point</b>		
<b>14</b>	Should be supplied <b>19 inch flat</b> screen monitor for display. Monitor should have facility of RGB output so that it can be projected on screen in conferences.		

15	Leak point detector module to detect even small drops of urine leakage		
16	Should have Bluetooth data transfer facility for CMG, Pressure flow and other Urodynamic studies.		
17	Should have ICS nomogram, Siroky, Purr, Schaffter Nomograms and Paediatric Nomograms inbuilt in the software.		
18	Should have inbuilt pump for infusion with filling rate of 1 ml/min - 100 ml/min with software controlled pump calibration with filling volume of 0-1500 ml.		
19	Should be supplied with following :- (Unit price of all the accessories should be quoted separately)		
20	2 Lumen Catheter 8 Fr. - 50 pcs		
21	2 Lumen Catheter 6 Fr. - 5 pcs		
22	Rectal Catheter should be between 10-12 fr. -50 pcs.		
23	Pump Tube - 100 pcs.		
24	Surface electrodes for EMG - 500 sets		
25	Pressure transducers - 20 pcs.		
26	Connection tubings - 100 pcs.		
27	Should be compatible for Hospital Information system		
28	The comprehensive warranty will be 5 years (including all spares and labor) from the date of satisfactory installation of equipment. Also quote rates for comprehensive CMC (including all spares and labor) for 6th to 10th year, after expiry of warranty period. Cost of spares, accessories and consumables should also be quoted separately.		
29	There will be 95% 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. If non functioning period exceed 2 weeks at a stretch , a temporary standby machine of same specification should be provided		
30	Should have automatic artifact recognition and compensation on flow transducer.		
<b>BOQ (Price should be quoted separately)</b>			
<b>SN</b>	<b>Item Name</b>	<b>Qty</b>	<b>UOM</b>
1	Urodynamic System	1	No
2	2 Lumen Catheter 8 Fr.	50	pcs
3	2 Lumen Catheter 6 Fr.	5	pcs
4	Rectal Catheter should be between 10-12 fr.	50	pcs
5	Pump Tube	100	pcs
6	Surface electrodes for EMG	500	sets
7	Pressure transducers	20	pcs
8	Connection tubings	100	pcs

**Item Sl. No. 38**  
**OT Table - Urology**

	Multipurpose electro hydraulic /electromechanical / powered mobile Table with divided leg section suitable for all major surgical procedures complete with 5cm mattress and corded handset		
<b>A</b>	<b>General operating table features:</b>		
<b>1</b>	Full-length radio-translucent top.		
<b>2</b>	4 or 5 sections tabletop, which should be made of a special scratch resistant, hardwearing and easy to clean material. Base column cover to be made of 100% stainless steel alloy and stainless steel.		

3	Removable and Interchangeable head/ leg sections to suit different applications		
4	100% Kidney Bridge position should be obtained without moving the patient, through remote Control by using extension/break function.		
5	Battery powered, with facility for connection to mains electricity for immediate use. Battery Exhaustion protection and low battery warning via an audible,, beep"/display indicator should be available.		
6	Table should not have a thread/sharp edge for ensuring proper cleaning and user safety.		
7	Mattress should be of high quality that spans tabletop break for improved patient support. Its depth should be 50mm. Mattress must be Latex free.		
8	The robust handset should offer controls namely Trend. /Reverse Trend, Lateral Tilt, Flexion/ Extension ,Height functions and slide. Auto levelling should be available		
9	Brakes, 4Nos. Wheels and preferably 5th wheel for 360° rotation.		
10	Table should have a narrow base allowing optimum access and greater stability		
11	Table should have offset slim-line column, with S.S. Inverted telescopic covers, for superior imaging and access.		
12	It should have a stable construction with 4nos Wheels of the base with large twin-disk castors for easy motion and manoeuvring (base braking by locking the twin-disk castors at the head end via a central foot pedal/ Hand control)		
13	The table top should not be fitted with transverse members casting shadows on the X-ray images except for the release brackets for adjustment on either side.		
14	The Table should be operated by the following operating elements: corded hand control, Manual override panel with manual override facility or electrical override panel should be available in case of power failure.		
<b>B</b>	<b>Electrical specification:</b>		
1	Special-design, maintenance-free rechargeable batteries with capacity for about a day use in the operating room		
2	Recharging of the batteries and supply of the operating table by means of a mains cord		
3	Nominal mains voltage (selectable) 220/230-240V AC via mains cord with inbuilt stabilizer		
<b>C</b>	<b>Technical Data</b>		
1	Length : 2000-2100 mm		
2	Width : 500-600mm without side rail		
3	Minimum height (without mattress) : 600-700mm		
4	Maximum height (without mattress): Minimum of 1040 mm		
5	Maximum lateral tilt: 18 deg or more. (either side)		
6	Trendelenburg at least 25° deg or more		
7	Reverse Trendelenburg at least 20° deg or more		
8	Head section adjustment : - atleast +/-30 degree		
9	Leg section adjustment: +10 deg; to -90 deg		
10	Break (extension) position : 200-220 deg		
11	Break (flexion) position : 110-130 deg		
12	Longitudinal Slide: atleast 250 mm		
13	Maximum patient weight : 375kg or more at centered column and 220 kg or more in all articulations		
<b>D</b>	<b>Accessories</b>		
1	Arm board with clamp-04 nos.		
2	Body strap with clamp if applicable -3 nos.		
3	Anesthesia screen with clamps- 2		
4	Side supports with clamps – 4		

5	Clamp, rotary- 4 pc		
6	Clamp, circular - 4 pc		
7	Accessories stand, mobile on castors- 1 pc		
8	Arm support, perplex -2 pc		
9	Clamp for locking X Ray cassette -1		
10	Lithotomy leg holders “Geopel type” (adult and paediatric)-1set each		
11	Shoulder support- 2 nos		
12	Power lift stirrup set with side rail clamp - 1 set ( <b>price to be quoted separately</b> )		
E	Should be US-FDA or European CE with 4 digit notified body number or Declaration of conformity <b>for quoted model</b> along with ISO 13485 or BIS certified for the quoted model		
F	The IEC certificate namely IEC 60601-1(electrical safety), IEC-60601-1-2 (electromagnetic compatability), IEC 60601-2-46( Particular requirements for the safety of Operating Tables) along with full test report as per IEC guideline for the quoted model should be submitted from anyone of the labs mentioned below TUV, SGS, Intertek, UL, SAMEER, Bharat Test House, Astute Labs or from the labs in their country of origin (incase of foreign manufacturers).		
<b>Sl No</b>	<b>BOQ</b>	<b>Qty</b>	<b>UOM</b>
1	OT Table as specified	1	Nos
2	Arm board with clamp	4	Nos
3	Body strap with clamp if applicable	3	Nos
4	Anesthesia screen with clamps	2	Nos
5	Side supports with clamps	4	Nos
6	Clamp, rotary	4	Nos
7	Clamp, circular	4	Nos
8	Accessories stand, mobile on castors	1	Nos
9	Arm support, perplex	2	Nos
10	Clamp for locking X Ray cassette	1	Nos
11	Lithotomy leg holders “Geopel type” (adult and paediatric)	1	Set each
12	Shoulder support	2	Nos
13	Power lift stirrup set with side rail clamp ( <b>price to be quoted separately</b> )	1	set

**Item Sl. No. 39**  
**Mobile C-arm Image Intensifier**

	<b>C Arm Specifications</b>
A	X-RAY GENERATOR
	<b>Frequency : 30 KH or better</b>
	Power output : 2 KW or more
	KV range : 40-110 KV or better
	mA in radiography : 20mA or more
	<b>mA in fluoroscopy : 0.2 or less to 3 mA or more in normal fluoroscopy and 8 mA or more in High Level Fluro</b>
	<b>Should have facility for continuous fluoroscopy and Pulse fluoroscopy ( Pulse rate upto 8 pulse per second)</b>
	<b>Should have Digital Spot for high quality single image, 10 mA or more</b>
	<b>Housing heat capacity of minimum 400 KHU or fluroscopy time 30 min minimum</b>
B	X-Ray tube Head
	<b>Must have anode heat capacity of min 40,000 HU &amp; cooling rate of min 25,000 HU/Min</b>
	Should have dual/Single focal spots



	Collimation : motorized iris and motorized rotating blades
	Tube assembly filtration of 3.0 mm Al or higher
<b>C</b>	<b>C-Arm mechanism and control panel</b>
	Locks for stabilization at desired position
	It should have the following range of movements:
	Motorized vertical movements more than 400mm
	Horizontal travel : 200mm or more
	Orbital movement : (-) 30 deg. To (+) 90 Deg. (120 Deg. Or more)
	<b>Swing / panning movement : +/- 10 degrees or more</b>
	Source image distance : 950 mm or more
	Depth of c-arm : 650 mm or more
<b>D</b>	Control panel (Digital work station)
	It should have the following facilities :
	<b>System should have capability of Pulse Fluoroscopy option to reduce to radiation exposure with 1-10 pulse</b>
	per second, which should be easily user selectable
	Fluoroscopy and Radiography exposure on switching
	Image rotation from control panel
	Image intensification, mode selection (normal and zoom)
	Automatic brightness stabilizer
	Auto dose rate control
	Collimation for radiography .
<b>E</b>	<b>Integrated image processing, recording and memory system :</b>
a)	<b>Image intensifier tube</b>
	<b>Input diameter 9" with dual field (9/6)</b>
	Minimum central resolution ( at monitor ) : 1.4 lp/mm or better at 9" FOV
b)	<b>CCD camera</b>
	CCD camera with 1kx1k resolution for high resolution image acquisition
c)	<b>Integrated image processing, memory and recording system should have</b>
	Medical Grade Monitors ( Two Nos.)
	<b>Min 18 inch or more , black and white, flicker free, high resolution (1280x1024 pixels or better), medical grade flat screen TFT, manual control of brightness and contrast, mounted on mobile trolley with locking device</b>
f)	Digital image processor
	Provision to record multiple images on CD,DVD& USB with embedded DICOM viewer.
	Image processing at 1K * 1K Matrix
	Contrast enhancement, edge enhancement, zoom facility
	<b>Recursive filter</b>
	Last image hold
	Image rotation, vertical and horizontal reversal
	<b>Medical imaging software's with ability to store 5000DICOM Compatible images in internal storage</b>
g)	Additional features
	The equipment should work on a Power supply of 220-240 Volts, 50-60 Hz, 15 amp.
	<b>Built in/Compatible/External UPS to protect &amp; save patient data and run the machine for minimum 15 min incase of power failure</b>
	<b>Lead Aprons with all round protection (0.5mm lead equivalent approved by BARC) – 04</b>
	<b>Lead Aprons with front protection (0.5mm lead equivalent approved by BARC)- 10</b>
	<b>Thyroid shield (0.5mm lead equivalent approved by BARC) - 10</b>
h)	Regulatory / Safety Requirement
	Equipment should have AERB Type Approval Certificate for radiation safety
	<b>The offered model should be European CE with 4 digit notified body number or USFDA</b>

<b>approved. Also should be AERB type approved product</b>			
<b>SN</b>	<b>BOQ</b>	<b>Qty</b>	<b>UOM</b>
1	C arm as specified	1	Nos
2	Lead Aprons with all round protection	4	Nos
3	Lead Aprons with front protection	10	Nos
4	Thyroid shield	10	Nos
5	Lead eye glasses	2	Nos
6	UPS	1	Nos
<b>Added para under (g): Additional features</b>			
<b>Lead Eye glass 2 nos</b>			

**Item Sl. No. 40**  
**Flexible Cysto-Nephroscope**

1	<b>Technical Specifications</b>		
	<b>Field Of View: 110 degree or better</b>		
	<b>Length: 37-40 cm</b>		
1.1	<b>Direction Of View: Straight forward (zero to six degrees) angle of deflection 120-210 deg .</b>		
	<b>Working Channel: 6.0 Fr or better</b>		
	<b>Distal tip Diameter: 14.0 Fr to 16.5 Fr</b>		
1.2	Compatible Accessories		
a	Grasping forceps – 2 Nos.		
b	Biopsy forceps – 2 Nos.		
c	<b>Ball tip Fulgurating electrode 4.5 to 5 Fr – 2 Nos.</b>		
d	<b>Luer Lock Y/T connector Biopsy port - 1 no</b>		
e	<b>Soak disinfection tray (Same OEM) - 1 no</b>		
f	Cleaning brush – 2 Nos.		
g	2.2 Fr or more (compatible) nitinol stone extractor basket - 10 nos		
h	Appropriate rigid storage case - 1 no		
4	<b>System Configuration Accessories, spares and consumables</b>		
4.1	System as specified-		
4.2	All consumables required for installation and standardization of system to be given free of cost.		
6	<b>Standards, Safety and Training</b>		
6.1	Should be US-FDA or European CE approved product		
<b>SN</b>	<b>BOQ</b>	<b>Qty</b>	<b>UOM</b>
1	Complete system as specified	1	Set
<b>Technical Status</b>			
<b>Reason for Non Responsiveness if any</b>			

**Item Sl. No. 41**  
**General Surgical Instrument set for Urology**

<b>A</b>	<b>BLADDER SET (One Each)</b>		
1	MAIER POLYPUS FORCEPS, WITH RATCHET, CVD		
2	BACKHAUS TOWEL HOLDING FORCEPS, 110MM,		
3	TOWEL CLAMP, 115 MM LENGTH		
4	SCALPEL HANDLE, NO. 4		
5	SCALPEL HANDLE, NO. 3		
6	SCALPEL HANDLE NO. 4L		
7	SCALPEL HANDLE NO. 3L		
8	DISSECT.SCISS.,METZENBAUM,180,CVD.DUROTIP		
9	DUROTIP DISS.SCISS.,METZENBAUM,CVD.200MM		

10	DUROTIP DISS.SCISS.,METZENBAUM,CVD.230MM
11	DUROTIP DISS.SCISS,NELSON-METZENBAUM,260
12	DUROTIP-LIGATURE SCISSORS, 180MM LONG
13	DUROTIP-LIGATURE SCISSORS, 230MM LONG
14	DUROTIP DISS.SCISS.,MAYO-LEXER,CVD,165MM
15	POTTS-SMITH, CARDIOVASC.SCISSORS,180 MM
16	DUROTIP SCISSORS,220MM,CVD.DOWNW.,60DEGR
17	OP. SCISSORS, STR., BL/SH, 145 MM, S
18	DISSECTING FORCEPS, SLEND. PATT., 145 MM
19	TISSUE FORCEPS, AM. PATT., 1X2 T., 145MM
20	TISSUE FORCEPS, 1X2 T.,200MM MEDIUM SIZE
21	TISSUE FORCEPS, 1X2 T.,250MM MEDIUM SIZE
22	FORCEPS, STRAIGHT, 2MM JAW, ATRAUM.150MM
23	FORCEPS, STRAIGHT, 2MM JAW, ATRAUM.200MM
24	FORCEPS, STRAIGHT, 2MM JAW, ATRAUM.240MM
25	GERALD BRAIN FORCEPS, 1X2 TEETH, 175 MM
26	KOCHER FORCEPS, STR., 1X2 TEETH, 140MM
27	HALSTED MOSQUITO FORCEPS, CURVED, 125MM
28	HALSTED FORCEPS, 1X2 TEETH, STR., 185CM
29	KOCHER HYSTERECTOMY FORCEPS STR., 200 MM
30	KOCHER HYSTERECTOMY FORCEPS STR., 240 MM
31	MAIER POLYPUS, SPONGE AND DRESS.FORCEPS
32	MIKULICZ PERITONEUM FORCEPS LARGE, 205MM
33	OVERHOLT-GEISSENDOERFER, DISS. FORCEPS
34	OVERHOLT-GEISSENDOERFER, DISS. FORCEPS
35	DISSECT.FORC.,OVERHOLT-GEISSENDOERFER
36	GEMINI DISS. AND LIGATURE FORCEPS, 230MM
37	GEMINI DISS. AND LIGATURE FORCEPS, 280MM
38	DESCHAMPS NEEDLE, BL, CVD TO LE, 215 MM
39	GUIDE PROBE,4,5MM BROAD, 195 MM
40	DUROGRIP CRILE-WOOD NEEDLE HOLDER,145MM
41	DUROGRIP HEGAR NEEDLE HOLDER, 205MM
42	DUROGRIP DE BAKEY NEEDLE HOLDER, 180 MM
43	DUROGRIP DE BAKEY NEEDLE HOLDER, 230 MM
44	DUROGRIP DE BAKEY NEEDLE HOLDER, 250 MM
45	STRATTE MEEDLEHOLDER, 230MM, DUROGRIP
46	ROUX RETRACTOR, DOUBLE-ENDED, SET OF 3
47	KOCHER RETRACTOR, 60X25 MM
48	VOLKMANN RETRACTOR, SEMI-SHARP,4-PRONGED
49	FRITSCH ABDOMINAL RETRACTOR, 75 MM WIDE
50	MIKULICZ ABDOMINAL RETRACTOR
51	MIKULICZ ABDOMINAL RETRACTOR
52	KELLY RETRACTOR
53	HABERER ADOMINAL SPATULA, MALLEAB., TAP.
54	LEGUEU BLADDER RETRACTOR, 260 MM
55	VAGINAL RETRAC., TUEBINGER PATT.,95X20MM
56	SIMON VAGINAL RETRACTOR, 115 X 26 MM,
57	KRISTELLER, VAGINAL SPEC. SET, 110X30 MM
58	CASPAR EXPLORATION HOOK, 7 MM
59	CUSHING VEIN- A. WOUND RETRACTOR,10X13MM
60	EMMET FISTULA HOOK, 220 MM
61	NON-TRAUMATIC OVUM FORCEPS,STR.,250 MM

62	NON-TRAUM.GRASPING FORCEPS,ALLIS, 220 MM
63	NON-TRAUM.GRASPING FORCEPS,ALLIS, 255 MM
64	STOCKMANN PENIS CLAMP ,70 MM
65	CHATETER GUIDE, CURVED ,490 MM
66	NON-TRAUM.URETHRAL-FORCEPS, 240 MM
67	PROBE WITH HANDLE, 30 CMS, 2,5 MM TIP
68	PROBE, DOUBLE ENDED, 300MM, OF TIN
69	INTERIOR BOX FOR BL 930
70	NEEDLE CASE, PERFOR., 7 COMP,150X90X10MM
71	LABORATORY DISH, 0.16 L
72	LABORATORY DISH, 0.4 L
73	KIDNEY TRAY, 250 MM
74	REDON SPIKE,CHAR.12,SLIG.CVD.,TRIANG.TIP
75	REDON SPIKE,CHAR.14,SLIG.CVD.,TRIANG.TIP
<b>B</b>	<b>KIDNEY SET (TWO EACH)</b>
1	MAIER POLYPUS FORCEPS, WITH RATCHET, CVD
2	BACKHAUS TOWEL HOLDING FORCEPS, 110MM, (6 Nos)
3	TOWEL CLAMP, 115 MM LENGTH (6 Nos)
4	SCALPEL HANDLE, NO. 4
5	SCALPEL HANDLE, NO. 3
6	SCALPEL HANDLE NO. 4L
7	SCALPEL HANDLE NO. 3L
8	DISSECT.SCISS.,METZENBAUM,180,CVD.DUROTIP
9	DUROTIP DISS.SCISS.,METZENBAUM,CVD.200MM
10	DUROTIP DISS.SCISS.,METZENBAUM,CVD.230MM
11	DUROTIP DISS.SCISS,NELSON-METZENBAUM,260
12	DUROTIP-LIGATURE SCISSORS, 180MM LONG
13	DUROTIP-LIGATURE SCISSORS, 230MM LONG
14	DUROTIP DISS.SCISS.,MAYO-LEXER,CVD,165MM
15	POTTS-SMITH, CARDIOVASC.SCISSORS,180 MM
16	DUROTIP SCISSORS,220MM,CVD.DOWNW.,60DEGR
17	OP. SCISSORS, STR., BL/SH, 145 MM, S
18	DISSECTING FORCEPS, SLEND. PATT., 145 MM
19	TISSUE FORCEPS, AM. PATT., 1X2 T., 145MM
20	TISSUE FORCEPS, 1X2 T.,200MM MEDIUM SIZE
21	TISSUE FORCEPS, 1X2 T.,250MM MEDIUM SIZE
22	FORCEPS, STRAIGHT, 2MM JAW, ATRAUM.150MM
23	FORCEPS, STRAIGHT, 2MM JAW, ATRAUM.240MM
24	FORCEPS, STRAIGHT, 2MM JAW, ATRAUM.240MM
25	GERALD BRAIN FORCEPS, 1X2 TEETH, 175 MM
26	KOCHER FORCEPS, STR., 1X2 TEETH, 140MM (10 Nos)
27	HALSTED MOSQUITO FORCEPS, CURVED, 125MM (10 Nos)
28	HALSTED FORCEPS, 1X2 TEETH, STR., 185CM
29	KOCHER HYSTERECTOMY FORCEPS STR., 200 MM
30	KOCHER HYSTERECTOMY FORCEPS STR., 240 MM
31	MAIER POLYPUS, SPONGE AND DRESS.FORCEPS (4 Nos)
32	MIKULICZ PERITONEUM FORCEPS LARGE, 205MM (6 Nos)
33	OVERHOLT-GEISSENDOERFER, DISS. FORCEPS
34	OVERHOLT-GEISSENDOERFER, DISS. FORCEPS
35	MIXTER LIGATURE FORCEPS230MM
36	DISSECT.FORC.,OVERHOLT-GEISSENDOERFER
37	GEMINI DISS. AND LIGATURE FORCEPS, 230MM

38	DISSECTING FORCEPS, O'SHAUGNESSY,230 MM
39	DESCHAMPS NEEDLE, BL, CVD TO LE, 215 MM
40	GUIDE PROBE,4,5MM BROAD, 195 MM
41	DUROGRIP CRILE-WOOD NEEDLE HOLDER,145MM
42	DUROGRIP HEGAR NEEDLE HOLDER, 205MM
43	DUROGRIP DE BAKEY NEEDLE HOLDER, 180 MM
44	DUROGRIP DE BAKEY NEEDLE HOLDER, 230 MM
45	DUROGRIP DE BAKEY NEEDLE HOLDER, 250 MM
46	STRATTE MEEDLEHOLDER, 230MM, DUROGRIP
47	ROUX RETRACTOR, DOUBLE-ENDED, SET OF 3
48	VOLKMANN RETRACTOR, SEMI-SHARP,4-PRONGED
49	FRITSCH ABDOMINAL RETRACTOR, 75 MM WIDE
50	MIKULICZ ABDOMINAL RETRACTOR
51	MIKULICZ ABDOMINAL RETRACTOR
52	MIKULICZ ABDOMINAL RETRACTOR
53	HABERER ADOMINAL SPATULA, MALLEAB., TAP.
54	CASPAR EXPLORATION HOOK, 7 MM
55	CUSHING VEIN- A. WOUND RETRACTOR,10X13MM
56	NON-TRAUM.KIDNEY PED.CLAMP,GUYON, 240 MM
57	GUYON ATRAUMATA KIDNEY CLAMP, 230 MM
58	DE'BAKEY VESSEL CLAMP, JAW 38MM,220 MM
59	DE'BAKEY VESSEL CLAMP, JAW 48MM,265 MM
60	DE'BAKEY VESSEL CLAMP, JAW 54MM,270 MM
61	DE BAKEY DISS. A. LIG. FORC., ACUT. CVD.
62	NON-TRAUMATIC OVUM FORCEPS,STR.,250 MM
63	NON-TRAUM.GRASPING FORCEPS,ALLIS, 220 MM
64	NON-TRAUM.GRASPING FORCEPS,ALLIS, 255 MM
65	RANDALL KIDNEY STONE FORCEPS small
66	RANDALL KIDNEY STONE FORCEPS Medium
67	RANDALL KIDNEY STONE FORCEPS Medium
68	RANDALL KIDNEY STONE FORCEPS Large
69	PROBE WITH HANDLE, 30 CMS, 2,5 MM TIP
70	BAKES COMMON BILE DUCT DILATOR, 2 MM
71	LUER GALL STONE SCOOP, 2,8 MM, SIZE 000
72	LUER GALL STONE SCOOP, 4,3 MM, FIG 0
73	PROBE, DOUBLE ENDED, 300MM, OF TIN
74	INTERIOR BOX FOR BL 930
75	NEEDLE CASE, PERFOR., 7 COMP,150X90X10MM
76	LABORATORY DISH, 0.16 L
77	LABORATORY DISH, 0.4 L
78	KIDNEY TRAY, 250 MM
79	REDON SPIKE,CHAR.12,SLIG.CVD.,TRIANG.TIP
80	REDON SPIKE,CHAR.14,SLIG.CVD.,TRIANG.TIP
<b>C</b>	<b>INSTRUMENTS FOR RADICAL PROSTATE SURGERY 1 each</b>
1	Mc Dongal Right Angle for Right Hand
2	YU Hoffgroo Retractor
3	Prostatic Retractor- (Nante's Tech)
4	Apical Retractor-(Nante's Tech)
5	Dorsal Venous Clamp-(Nante's Tech)
6	B P handle-Long and Curved-(Nante's Tech)
7	Right Angle-fine and long-(Nante's Tech)
8	Jemmy's Scissor-(Nante's Tech)

9	Lowley's Retractor-Curved
10	Lowley's Retractor-Straight
11	Suction-steel-curved
12	Lighted suction
13	Curved needle holder single curved
14	Curved needle holder double curved
15	<b>3.5 x optical loupe</b>
16	<b>Head light with light source</b>
17	300 watt Xenon Dual port light source
18	Balfour Retractor,self retaining with three blades(63x35mm) maximum spread 180mm-4 No.
19	Baby Satinsky clamp,18 cm,straight-4 No.
20	Equipment Trolley-2 no(one for storage of equipment and one for procedure)
<b>D</b>	<b>VASCULAR - SUPPLEMENT (ONE EACH)</b>
1	DE'BAKEY VESSEL CLAMP, JAW 48MM,265 MM
2	DE'BAKEY VESSEL CLAMP, JAW 54MM,270 MM
3	DE'BAKEY VESSEL CLAMP, JAW 58MM,270 MM
4	DE'BAKEY VESSEL CLAMP, JAW 75MM, 280 MM
5	GLOVER VESSEL CLAMP, 210 MM
6	DE BAKEY-GLOVER VASC ULAR FORCEPS, 240MM
7	DE BAKEY-GLOVER VASC. FORCEPS, 240MM
8	NON-TRAUM.MOSQUITO FORC.STR.6 1/2" DULL
9	NON-TRAUMATIC MOSQUITO FORCEPS,CVD 165MM
10	NON-TRAUM.FCPS.COOLEY,BRANCHES ANG,125MM
11	NON-TRAUM.FCPS., COOLEY, ANGLED, 120 MM
12	NON-TRAUM.FORC.COOLEY,DERRA-JAWS,115 MM
13	DUROGRIP DE BAKEY NEEDLE HOLDER, 305 MM
<b>E</b>	<b>URETHRA SET (ONE EACH)</b>
1	MAIER POLYPUS FORCEPS, WITH RATCHET, CVD
2	BACKHAUS TOWEL HOLDING FORCEPS, 110MM,
3	TOWEL CLAMP, 115 MM LENGTH
4	SCALPEL HANDLE, NO. 3
5	SCALPEL HANDLE, NO. 4
6	DISSECT.SCISS.,METZENBAUM,145MM,CVD.DURO
7	KILNER DISSECTING SCISSORS, 150 MM
8	POTTS-SMITH, CARDIOVASC.SCISSORS,180 MM
9	DISSECT.SCISS.,METZENBAUM,180,CVD.DUROTIP
10	DUROTIP DISS.SCISS.,MAYO-LEXER,CVD,165MM
11	OP. SCISSORS, STR., BL/SH, 145 MM, S
12	DISSECTING FORCEPS, SLEND. PATT., 145 MM
13	TISSUE FORCEPS, AM. PATT., 1X2 T., 145MM
14	TISSUE FORCEPS, 1X2 T.,200MM MEDIUM SIZE
15	FORCEPS, STRAIGHT, 2MM JAW, ATRAUM.150MM
16	FORCEPS, STRAIGHT, 2MM JAW, ATRAUM.200MM
17	HALSTED MOSQUITO FORCEPS, CURVED, 125MM
18	KOCHER FORCEPS, STR., 1X2 TEETH, 140MM
19	BABY-MIXTER ARTERY FORCEPS,180MM
20	DUROGRIP CRILE NEEDLE HOLDER, 150 MM
21	DUROGRIP CRILE-WOOD NEEDLE HOLDER,145MM
22	DUROGRIP HEGAR-MAYO NEEDLE HOLDER, 205MM
23	RETRACTOR, FINE PATTERN, 2 SHARP PRONGS
24	DESMARRES, LID RETRACTOR, FOR CHILDREN

25	KOENIG VEIN- AND WOUND RETRACTOR, SMALL
26	KOCHER-LANGENBECK RETRACTOR, 25X6MM
27	FINE SKIN RETRACTOR GILLIES,180MM, SMALL
28	CUSHING NERVE HOOK, PROBE POINTED, SMALL
29	BABY-DERRA FORCEPS, LARGE PATTERN, 175MM
30	DITTEL URETHRAL BOUGIE, CURVED, CHAR. 10
31	DITTEL URETHRAL BOUGIE, CURVED, CHAR. 14
32	DITTEL URETHRAL BOUGIE, CURVED, CHAR. 18
33	DITTEL URETHRAL BOUGIE, CURVED, CHAR. 22
34	DITTEL URETHRAL BOUGIE, CURVED, CHAR. 26
35	NELATON DIRECTOR, CVD., 160 MM
36	PROBE, DOUBLE ENDED, 145 MM, DIAM. 1,5MM
37	BOWMAN LACHRYMAL PROBE, 0,7/0,8 MM
38	INTERIOR BOX FOR BL 930
39	LABORATORY DISH, 0.16 L
40	LABORATORY DISH, 0.4 L
41	KIDNEY TRAY, 250 MM
42	Turner Warwick Ring Retractor for urethroplasty with blades 1 set
43	Mastoid retractor Large size
44	Mastoid retractor Medium size
45	Periosteal elevator
46	Chissel and hammer
47	Bone gouge
48	Bone punch
<b>F</b>	<b>URETHRAL - MICRO - SUPPLEMENT (ONE EACH)</b>
1	SCALPEL HANDLE F.MICRO SURG.BLADES,200MM
2	MICRO SPRING SCISSORS,225MM,CVD.ON FLAT
3	MICRO FCPS.,BAJON.SHAPED,BROAD P.,220 MM
4	FORCEPSF.MICRO SURG.,BAY.SH.,1X2T.200MM
5	FORCEPS F. MICRO SURG.,SMOOTH JAWS,200MM
6	MICRO NEEDLEHOLDER CURVED 225 MM
7	JACOBSON BLOOD VESSEL PROBE, ANGL.,185MM
8	LIGATURE GUIDE,PROBE POINT.3/4 CVD,185MM
<b>G</b>	<b>GENITAL SET (TWO EACH)</b>
1	MAIER POLYPUS FORCEPS, WITH RATCHET, CVD
2	BACKHAUS TOWEL HOLDING FORCEPS, 110MM, (6 Nos)
3	TOWEL CLAMP, 115 MM LENGTH (3 Nos)
4	SCALPEL HANDLE, NO. 3
5	SCALPEL HANDLE, NO. 4
6	IRIS AND LIGATURE SCISSORS, CVD., 110 MM
7	DISSECT.SCISS.,METZENBAUM,145MM,CVD.DURO
8	DISSECT.SCISS.,METZENBAUM,180,CVD.DUROTIP
9	DUROTIP DISS.SCISS.,MAYO-LEXER,CVD,165MM
10	OP. SCISSORS, STR., BL/SH, 145 MM, S
11	DISSECTING FORCEPS, SLEND. PATT., 145 MM
12	TISSUE FORCEPS, AM. PATT., 1X2 T., 145MM
13	TISSUE FORCEPS, 1X2 T.,200MM MEDIUM SIZE
14	FORCEPS, STRAIGHT, 2MM JAW, ATRAUM.150MM
15	FORCEPS, STRAIGHT, 2MM JAW, ATRAUM.200MM
16	KOCHER FORCEPS, STR., 1X2 TEETH, 140MM (4 Nos)
17	HALSTED FORCEPS, CURVED, 1X2 TEETH,125MM (6 Nos)
18	HALSTED MOSQUITO FORCEPS, CURVED, 125MM (6 Nos)

19	KOCHER HYSTERECTOMY FORCEPS STR., 200 MM
20	MAIER POLYPUS, SPONGE AND DRESS.FORCEPS
21	MIKULICZ PERITONEUM FORCEPS LARGE, 205MM
22	BABY-MIXTER FORCEPS, 140 MM
23	BABY-MIXTER ARTERY FORCEPS,180MM
24	OVERHOLT-GEISSENDOERFER, DISS. FORCEPS
25	OVERHOLT-GEISSENDOERFER, DISS. FORCEPS
26	DUROGRIP CRILE-WOOD NEEDLE HOLDER,145MM
27	DUROGRIP HEGAR-MAYO NEEDLE HOLDER, 205MM
28	DUROGRIP DE BAKEY NEEDLE HOLDER, 180 MM
29	ROUX RETRACTOR, DOUBLE-ENDED, SET OF 3
30	VOLKMANN RETRACTOR, SEMI-SHARP,4-PRONGED
31	MIKULICZ ABDOMINAL RETRACTOR
32	VAGINAL RETRAC., TUEBINGER PATT.,95X20MM
33	ABDOMINAL SPATULA, 30 MM WIDE
34	WEITLANER RETRACTOR, LT-RATCH.,3X4 SH PR
35	NON-TRAUM.HOLDING FORC.,ALLIS,155 MM
36	NELATON DIRECTOR, CVD., 160 MM
37	PROBE, DOUBLE ENDED, 145 MM, DIAM. 1,5MM
38	PROBE, DOUBLE ENDED, 200MM, DIAM. 2,0 MM
39	INTERIOR BOX FOR BL 930
40	NEEDLE CASE, PERFOR., 7 COMP,150X90X10MM
41	LABORATORY DISH, 0.16 L
42	LABORATORY DISH, 0.4 L
43	KIDNEY TRAY, 250 MM
44	HEGAR UTERINE DILATOR, SINGLE, 4 MM
45	HEGAR UTERINE DILATOR, SINGLE, 4,5 MM
46	HEGAR UTERINE DILATOR, SINGLE, 5 MM
47	HEGAR UTERINE DILATOR, SINGLE, 5,5 MM
48	HEGAR UTERINE DILATOR, SINGLE, 6 MM
49	HEGAR UTERINE DILATOR, SINGLE, 6,5 MM
50	HEGAR UTERINE DILATOR, SINGLE, 7 MM
51	HEGAR UTERINE DILATOR, SINGLE, 7,5 MM
52	HEGAR UTERINE DILATOR, SINGLE, 8 MM
53	HEGAR UTERINE DILATOR, SINGLE, 8,5 MM
54	HEGAR UTERINE DILATOR, SINGLE, 9 MM
55	HEGAR UTERINE DILATOR, SINGLE, 9,5 MM
56	HEGAR UTERINE DILATOR, SINGLE, 10 MM
57	HEGAR UTERINE DILATOR, SINGLE, 10,5 MM
58	HEGAR UTERINE DILATOR, SINGLE, 11 MM
59	HEGAR UTERINE DILATOR, SINGLE, 11,5 MM
60	HEGAR UTERINE DILATOR, SINGLE, 12 MM
61	HEGAR UTERINE DILATOR, SINGLE, 12,5 MM
62	HEGAR UTERINE DILATOR, SINGLE, 13 MM
63	HEGAR UTERINE DILATOR, SINGLE, 13,5 MM
64	HEGAR UTERINE DILATOR, SINGLE, 14 MM
65	HEGAR UTERINE DILATOR, SINGLE, 14,5 MM
66	HEGAR UTERINE DILATOR, SINGLE, 15 MM
67	HEGAR UTERINE DILATOR, SINGLE, 15,5 MM
68	HEGAR UTERINE DILATOR, SINGLE, 16 MM
69	HEGAR UTERINE DILATOR, SINGLE, 16,5 MM
70	HEGAR UTERINE DILATOR, SINGLE, 17 MM



71	HEGAR UTERINE DILATOR, SINGLE, 17,5 MM
72	HEGAR UTERINE DILATOR, SINGLE, 18 MM
73	HEGAR UTERINE DILATOR, SINGLE, 19 MM
74	HEGAR UTERINE DILATOR, SINGLE, 20 MM
75	MALE DILATOR SET- CLUTTON
76	MALE DILATOR SET- LISTER
<b>H</b>	<b>AUTOCLAVABLE INSTRUMENT BOX FOR STORAGE : 7 nos( one for each of the above set)</b>
<b>I</b>	All above instrument should be of high medical grade.
<b>J</b>	<b>All instruments should be US-FDA or European CE approved with 4 digit notified body number (copy of certificate have to be enclosed with the bid)</b>
<b>K</b>	Company name and catalogue number engraved on each instruments
<b>L</b>	Corrosion free surgical grade stainless steel (Stainless steel alloy of 350-450 grade)
<b>M</b>	Item Code and Manufacturer name should be LASER engraved on the instrument.
<b>N</b>	Instruments supplied should be 90% or more from the same manufacturer.
	<b>Added para:</b>
	<b>Tolerance in dimension +/-10%</b>

**Item Sl. No. 42**  
**Turp, Cystoscope & Optical Urethrotome**

1	<b>Cystoscope</b>
	<b>30 degree Telescope of size: 4mm, length 28-30cm - 2 Nos</b>
	<b>0 degree Telescope of size: 4mm, length 28-30cm - 1 Nos</b>
	<b>70 degree Telescope of size: 4mm, length 28-30cm - 1 Nos</b>
	Should have very high quality of rod lens system
	Should have fiber optic light transmission incorporated.
	The Telescope should be autoclavable.
2	<b>Cystoscope Sheath</b>
	Cystoscope sheath with leur lock connection of two different size should be provided - 1 no. Each
	21-22 FR and 17-18 FR sheath one each with slot for instrument
	The sheath should be marked and graduated
3	<b>Telescope bridge</b>
	Telescope bridge with two instrument channel to fit with the cystoscope - 2 no.
4	<b>Flexible Grasping forceps</b>
	<b>Compatible Grasping forceps 33cm or more to be provided to fit the purpose - 4 nos.</b>
5	<b>Flexible cup biopsy forcep</b>
	<b>Compatible cup biopsy forceps 33cm or more to be provided to fit the purpose - 2 no.</b>
6	<b>Rigid Biopsy and Grasping Forcep</b>
	Optical Rigid Biopsy forcep compatible with Cystoscope sheath to be provided - 1 no.
	Toomey glass syringe 100 CC - 1 no.
	Toomey glass syringe of 100 cc with adaptor to fit with sheath - 1 no.
7	<b>ELLIK Evacuator</b>
	ELLIK Evacuator with 2 bulb and adaptor to be provided - 2 sets.
8	<b>Urethrotome sheath</b>
	<b>20-21 FR optical Urethrotome sheath with one channel to be provided -1 no.</b>
	Straight cold knife 5 nos.
9	<b>Resectoscope sheath</b>
	26 FR continuous irrigation resectoscope sheath (inner & outer sheath) with ceramic beak to be provided to fit the purpose with set of silicon tube. Sheath should be provided with deflecting obturator & visual obturator - 1 no. each

10	<b>Working Element set</b>
	<b>Working element set passive type compatible with offered resectoscope sheath with standard accessories like, Collins knife, HF cord, Protection tube, cutting loop to be provided -1 set comprising of following</b>
	Cutting loop single stem - 30 Nos.
	Collins knife - 5 nos.
	High Frequency cord - 5 Nos.
	<b>Added para: Protection tube 1 no</b>
11	OTIS Urethrotome parallel expanding (adjustable from 15-35 Fr)
	Compatible double edged blade - 5 nos.
12	Coagulating Electrode, 5 Fr., unipolar, length 50-55 cm -2 nos.
13	Stone Punch with Sheath size 24-26Fr or less – One
	All above mentioned equipment should be <b>European CE or USFDA</b> certified.

## GENERAL TECHNICAL SPECIFICATIONS

### GENERAL POINTS:

1. Warranty:

- a) Five years Comprehensive Warranty as per Conditions of Contract of the TE document for complete equipment (including Batteries for UPS, other vacuumatic parts wherever applicable) Warranty period will be 5 years from the date of installation, commissioning and Site Modification Work from the date of satisfactory installation, commissioning, trial run & handing over of equipment to Hospital/Institution/Medical College.
- b) 95% up time Warranty of complete equipment with extension of Warranty period by double the downtime period on 24 (hrs) X 7 (days) X 365 (days) basis.
- c) **All software updates should be provided free of cost during Warranty period.**

2. After Sales Service:

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

3. Training:

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

4. Annual Comprehensive Maintenance Contract (CMC) of subject equipment with Site Modification Work:

- a) The cost of Comprehensive Maintenance Contract (CMC) which includes preventive maintenance including testing & calibration as per technical/ service /operational manual of the manufacturer, labour and spares, after satisfactory completion of Warranty period may be quoted for next 5 years on yearly basis for complete equipment (including Batteries for UPS, other vacuumatic parts wherever applicable) and Site Modification Work (if any). The supplier shall visit each consignee site as recommended in the manufacturer's technical/ service /operational manual, but at least once in six months during the CMC period
- b) The cost of CMC may be quoted along with taxes applicable on the date of Tender Opening. The taxes to be paid extra, to be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such taxes and no claim for the same will be entertained later.
- c) Cost of CMC will be added for Ranking/Evaluation purpose. The same will be taken at Net Present Value with a 10% discounting factor each year.
- d) The payment of CMC will be made on six monthly basis after satisfactory completion of said period, duly certified by end user on receipt of bank guarantee for 2.5 % of the cost of the equipment as per Section XV valid till 2 months after expiry of entire CMC period.
- e) There will be 95% 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.

#### 5. Site Modification Work:

Site Modification Work is indicated in the technical specification of the respective items, wherever required. The Tenderer shall examine the existing site where the equipment is to be installed, in consultation with HOD of Hospital/Institution/Medical College concerned. Site Modification Work details of each Hospital/Institution/Medical College are given at the end of Technical Specification. The Tenderer to quote prices indicating break-up of prices of the Machine and Site Modification Work of each Hospital/Institution/Medical College. The Site Modification Work 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 Site Modification Work should completely comply with AERB requirement, if any.

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

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

**Note 3:** Adequate training of personnel and non-locked open software and standard interface interoperability conditions for networked equipment in hospital management information system (HMIS)

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

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

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

**Signature and seal of the Tenderer**

## SECTION – IX

### QUALIFICATION CRITERIA

1. The tenderer must be a manufacturer. In case the manufacturer does not quote directly, they may authorize an agent as per proforma of Manufacturer authorization form as given in the tender enquiry document to quote and enter into a contractual obligation.
- 2(a) The Manufacturer should have supplied and installed in last **Five** years from the date of Tender Opening, at least 25% of the quoted quantity (rounded off to next whole number) of the similar equipment meeting major parameters of technical specification which is functioning satisfactorily.
- 2(b) The Tenderers quoting as authorized representative of the manufacturer meeting the above criteria should have executed at least one contract in the last five years from the date of tender opening of medical equipment anywhere in India of the same manufacturer.
3. The bidders/ firms identifying as MSME and or start-up firms are exempted from fulfilling criteria at S. No. 2 (a) and 2(b) stated above. However, this does not exempt any bidder/ firm/ manufacturer from fulfilling the quality requirements.  
If the bidder is an MSME, it shall declare in the bid document the Udyog Aadhar Memorandum Number issued to it under the MSMED Act, 2006. If an MSME bidder do not furnish the UAM Number along with bid documents, such MSME units will not be eligible for the benefits available under Public Procurement Policy for MSEs Order 2012.

#### NOTE:

1. The tenderer shall give an affidavit as under:

**“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.”**

2. In support of 2 (a) & 2 (b), the Tenderer shall furnish Performance statement in the enclosed Proforma ‘A’.  
The manufacturer (Tenderer)/ Indian Agent shall furnish Satisfactory Performance Certificate in respect of above, duly translated in English and duly notarized in the country of origin, alongwith the tender.
3. The Tenderer shall furnish a brief write-up, packed with adequate data explaining and establishing his available capacity/capability (both technical and financial) to perform the Contract (if awarded) within the stipulated time period, after meeting all its current/present commitments. The Tenderer shall also furnish details of Equipment and Quality Control in the enclosed Section VIII.
4. Notwithstanding anything stated above, the Purchaser reserves the right to assess the Tenderer’s capability and capacity to perform the contract satisfactorily before deciding on award of Contract, should circumstances warrant such an assessment in the overall interest of the Purchaser.

- 5. The bidder should submit the manufacturer's production capacity, meeting the quantity requirement and delivery schedule requirement of this tender document.**
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.**
- \*\* The bidders are requested to submit the latest purchase order copies supplied to AIIMS, PGIMER, JIPMER, Institute of National importance for the specific model quoted along with the price bid.**



**SECTION – X**

**TENDER FORM**

Date\_\_\_\_\_

To  
CEO  
HLL Infra Tech Services Limited  
Procurement and Consultancy Division  
B-14 A, Sector -62, Noida -201307, Uttar Pradesh.

Ref. Your TE document No. \_\_\_\_\_ dated \_\_\_\_\_

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

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

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

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

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

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

(Signature with date)

(Name and designation)

Duly authorised to sign tender for and on  
behalf of

**SECTION – XI**  
**PRICE SCHEDULE**

Price to be filled in the relevant field of Price Format in Excel provided in the e-tendering portal.

**SECTION – XII**  
**QUESTIONNAIRE**

**Fill up the Techno-Commercial Compliance Sheet Bid provided in spreadsheet (Excel file) and upload in the C-Folder**

1. The tenderer should furnish specific answers to all the questions/issues mentioned in the Techno-Commercial Compliance Sheet. 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 scanned 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, their tender is liable to be ignored.

Note: *The documents like Priced Proforma Invoice (Single Proforma Invoice from Manufacturer’s indicating uniform unit rates) and List of Consumables with prices can be uploaded in the Notes & Attachment under Rfx information (Please note, in the separate Notes & Attachment provided under Rfx information and not in the C-Folder Notes & Attachments).*

**SECTION – XIII**

**BANK GUARANTEE FORM FOR EMD**

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

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

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

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

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

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

.....  
Name and designation of the officer

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

**SECTION – XIV**

**MANUFACTURER’S AUTHORISATION FORM**

CEO  
HLL Infra Tech Services Limited  
Procurement and Consultancy Division  
B-14 A, Sector -62, Noida -201307, Uttar Pradesh.

Dear Sir,

Ref: Your TE document No \_\_\_\_\_ dated \_\_\_\_\_

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

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

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

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

We also hereby confirm that we would be responsible for the satisfactory execution of contract placed on the authorised agent

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

Yours faithfully,

[*Signature with date, name, designation and Email*]  
for and on behalf of Messrs \_\_\_\_\_  
[*Name & address of the manufacturers*]

Note:

- (1) *This letter of authorisation should be on the letter head of the manufacturing firm and should be signed by a person competent and having the power of attorney to legally bind the manufacturer.*
- (2) *Original letter may be sent.*
- (3) *The purchaser reserves the right to verify this document with its signatory.*

**SECTION – XV**

**BANK GUARANTEE FORM FOR PERFORMANCE SECURITY/ CMC SECURITY**

CEO  
HLL Infra Tech Services Limited  
Procurement and Consultancy Division  
B-14 A, Sector -62, Noida -201307, Uttar Pradesh.

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

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

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

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

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

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

This guarantee shall be valid till such time to cover two months beyond the warranty period 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/Consignee  
Office issuing the contract)

Contract No \_\_\_\_\_ dated \_\_\_\_\_

**This is in continuation to this office’s Notification of Award No \_\_\_\_\_ dated \_\_\_\_\_**

1. Name & address of the Supplier: \_\_\_\_\_
2. Purchaser’s TE document No \_\_\_\_\_ dated \_\_\_\_\_ and subsequent Amendment No \_\_\_\_\_, dated \_\_\_\_\_ (if any), issued by the purchaser
3. Supplier’s Tender No \_\_\_\_\_ dated \_\_\_\_\_ and subsequent communication(s) No \_\_\_\_\_ dated \_\_\_\_\_ (if any), exchanged between the supplier and the purchaser in connection with this tender.
4. In addition to this Contract Form, the following documents etc, which are included in the documents mentioned under paragraphs 2 and 3 above, shall also be deemed to form and be read and construed as integral part of this contract:
  - (i) General Conditions of Contract;
  - (ii) Special Conditions of Contract;
  - (iii) List of Requirements;
  - (iv) Technical Specifications;
  - (v) Quality Control Requirements;
  - (vi) Tender Form furnished by the supplier;
  - (vii) Price Schedule(s) furnished by the supplier in its tender;
  - (viii) Manufacturers’ Authorisation Form (if applicable for this tender);
  - (ix) Purchaser’s Notification of Award

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

5. Some terms, conditions, stipulations etc. out of the above-referred documents are reproduced below for ready reference:
  - (i) Brief particulars of the goods and services which shall be supplied/ provided by the supplier are as under:

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

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

Total value (in figure) \_\_\_\_\_ (In words) \_\_\_\_\_

- (ii) Delivery schedule

- (iii) Details of Performance Security
- (iv) Quality Control
  - (a) Mode(s), stage(s) and place(s) of conducting inspections and tests.
  - (b) Designation and address of purchaser's inspecting officer
- (v) Destination and despatch instructions
- (vi) Consignee, including port consignee, if any

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

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

Received and accepted this contract  
(Signature, name and address of the supplier's executive  
duly authorised to sign on behalf of the supplier)  
For and on behalf of \_\_\_\_\_  
(Name and address of the supplier)  
(Seal of the supplier)

Date: \_\_\_\_\_

Place: \_\_\_\_\_



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

Annual CM Contract No. \_\_\_\_\_

dated \_\_\_\_\_

Between

(Address of Head of Hospital )

And

(Name &amp; 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

1. 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 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	
			a	b	c	d	e	

Total value (in figure) \_\_\_\_\_ (In words) \_\_\_\_\_

- 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)
- 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 Site Modification Work (if any).
- There will be 95% 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.
- 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.
- All software updates should be provided free of cost during CMC.

7. 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.
8. 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.
9. **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.
10. **Paying authority:** \_\_\_\_\_ (name of the consignee i.e. Hospitalauthorised official)

\_\_\_\_\_  
(Signature, name and address  
of Hospital 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 site hand-over to the supplier by consignee: \_\_\_\_\_
- (i) Date of commissioning and proving test: \_\_\_\_\_

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

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

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

The supplier has fulfilled its contractual obligations satisfactorily ## or

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

- a) He has not adhered to the time schedule specified in the contract in dispatching the documents/ drawings pursuant to ‘Technical Specifications’.
- b) He has not supervised the commissioning of the equipment (s)/plant(s) in time, i.e. within the period specified in the contract from date of intimation by the Purchaser/Consignee in respect of the installation of the equipment (s)/plant(s).
- c) The supplier as specified in the contract has not done training of personnel.

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

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

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

*(Signature)*

*(Name)*

*(Designation with stamp)*

**## Explanatory notes for filling up the certificate:**

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

## Section – XIX

## Consignee List

Sl. No.	Name of Hopsital and Address	Consignee Code	State	Airport	Dry Port/ Seaport
1	The Principal Siddartha Medical College NH 16 Service Road, Opp. Varun Maruthi Showroom Near Health University, Gunadala, Vijayawada Andhra Pradesh 520008 Phone: 09849903130 Email: principalsmcvja@yahoo.com	SMC- Vijayawada	Andhra Pradesh	Hyderabad	Vizag
2	Dr. M. Neeraja The Dean/ The Principal Govt. Medical College Opp. EE Roads & Buildings, Sai Nagar, Anantapur Andhra Pradesh - 515001 Phone : 08554-249115, 274568 EMail : gmc_atp@ap.nic.in; principal.gmcatp@yahoo.in	GMC- Anantapur	Andhra Pradesh	Hyderabad	Vizag
3	Dr. K. Ashok The Director Director's Quarters RIMS Campus Rajiv Gandhi Institute of Medical Sciences, Adilabad Vidya Nagar, Adilabad, Telangana 504001 Office: 08732-220521 Email: rimsadilabad@yahoo.com; directorrimsadilabad@yahoo.com	RGIMS- Adilabad	Telangana	Hyderabad	Vizag
4	Dr. Abbagani Vidyasagar The Principal Kakatiya Medical College, Waranagl Rangampet Street, Warangal, Telangana 506007 Phone: 0870-2446355, 2446888 Email: pwarangal@gmail.com; kmc_wgl@ap.nic.in	GMC- Warrangal	Telangana	Hyderabad	Vizag
5	Prof. A.K. Adhikari The Principal-cum-Chief Superintendent Gauhati Medical College Guwahati-781032 Tel: +91-2134538 / 2132751 Email: gmch-asm@nic.in	GMC- Guwahati	Assam	Kolkata	Kolkata

Sl. No.	Name of Hopsital and Address	Consignee Code	State	Airport	Dry Port/ Seaport
6	The Principal Assam Medical College, Dibrugarh Barbari, Dibrugarh, Assam - 786 002 Phone No. : (0373) 2300080, 2300352 Email: principalamch@rediffmail.com	AMC- Diburgarh	Assam	Kolkata	Kolkata
7	The Principal Srikrishna Medical College, Muzaffarpur NH 77, Uma Nagar, Rasulpur Saidpur Bazid Bihar - 842001 Phone No. : 0621-2260177 Email: info@skmedicalcollege.in	SKMC- Muzaffarpur	Bihar	Kolkata	Kolkata
8	The Principal Govt. Medical College, Darbhanga DMCH Road, Laheriasaria Darbhanga Bihar - 846001 Phone No. : 06272 233 092 Email: principaldmc202@gmail.com	GMC- Dharbhanga	Bihar	Kolkata	Kolkata
9	Dr. H. M. Mangal The Dean Govt. Medical College Civil Hospital Campus, Rajkot - 360001 Ph. No. : +91 281 2458337,2458338, 2458339 Email Address : deanrajkot@yahoo.co.in	PDUMC- Rajkot	Gujarat	Ahmedabad	Mundra / Pipavav / Kandla
10	The Principal Patliputra Medical College, Dhanbad B.C.C.L. Township, Koyla Nagar Dhanbad - 826005, Jharkhand Phone : +91-326-2230465 Email: enquiry@pmchdhanbad.com	PMCH- Dhanbad	Jharkhand	Kolkata	Kolkata
11	The Director Vijayanagar Institute of Medical Sciences Contonment, Bellary - 583104 Karnataka Phone: 08392-235201, 08392-242387 Email: directorvimsbellary@gmail.com	VIMS- Bellary	Karnataka	Bangalore	Bangalore
12	The Director Karnataka Institute of Medical Sciences,P. B Road, Vidyanagar Hubali - 580 022, Karnataka, India Phone: +91- 836- 2370057, +91- 836 - 2373447, +91 - 836 - 2373641 Email: directorkimshubli@gmail.com	KIMC- Hubbali	Karnataka	Bangalore	Bangalore

Sl. No.	Name of Hopsital and Address	Consignee Code	State	Airport	Dry Port/ Seaport
13	The Principal Government Medical College Medical College Rd, Kozhikode Kerala - 673008 Phone: 0495 235 0202 Email: principalmcc@gmail.com	GMC- Kozhikode	Kerala	Kochi	Kochi
14	Dr. N. Sridevi The Principal T. D. Medical College, Alappuzha Vandanam, Alappuzha, Kerala 688001 Phone: 0477 228 2611 Email: tdmcalappuzha@gmail.com	GTDMC- Alappuzha	Kerala	Kochi	Kochi
15	The Dean Govt. Medical College Jail Road, Near Sanjay Gandhi Hospital, Rewa Madhya Pradesh 486001 Phone: 07662-241655 Email: deanmcrewa@rediffmail.com	GMC-Rewa	Madhya Pradesh	Mumbai	Mumbai
16	The Director Netaji Subhash Ch. Bose Medical College, Jabalpur Nagpur Road, Jabalpur, Madhya Pradesh 482003 Phone: 076123 70951 Email: nscbmcjb@gmail.com	NSBMC- Jabalpur	Madhya Pradesh	Mumbai	Mumbai
17	Dr. S. N. Iyengar The Dean Gajra Raja Medical College, Gwalior Veer Savarkar Marg, Gwalior - 474009 Madhya Pradesh Phone: +91 (0751) 2403400 Email: grmc1946@yahoo.co.in	GRMC- Gwalior	Madhya Pradesh	Mumbai	Mumbai
18	The Dean Govt. Medical College, Aurangabad Panchakki Road, Aurangabad - 431001 Maharashtra Ph No. : 0240-2402028 Email: deangmca@gmail.com	GMC- Aurangabad	Maharashtra	Mumbai	Mumbai
19	The Dean Govt. Medical College, Latur Near Old Railway Station Latur (M.S.) 413512 Call us: 02382 247676 E-mail: info@gmclatur.org	GMC-Latur	Maharashtra	Mumbai	Mumbai



Sl. No.	Name of Hopsital and Address	Consignee Code	State	Airport	Dry Port/ Seaport
20	The Dean Govt. Medical College, Akola Akola - 444 001 Maharashtra Phone +91- 0724-2431960 Email : acadgmca@hotmail.com	GMC-Akola	Maharashtra	Mumbai	Mumbai
21	The Dean Shri Vasantrya Naik Govt. Medical College, Yavatmal Maharashtra - 445001 Phone: (07232) 242456,240843 Email: deanvngmc@sancharnet.in	SVNGMC- Yavatmala	Maharashtra	Mumbai	Mumbai
22	The Dean and Principal M. K. C. G. Medical College, Berhampur Berhampur, District - Ganjam Odisha. Pin: 760 004 Tel. No. (0680) 2292746 Fax: (0680) 2292809 E-mail : mkgmc.bam@gmail.com	MKCGMC- Berhampur	Orissa	Kolkata	Kolkata
23	The Dean and Principal V. S. S. Medical College, Burla Burla, Sambalpur, Odisha - 768017 Phone: +91-6632430768 Email: vssmcburlaorissa@gmail.com	VSSMC- Burla	Orissa	Kolkata	Kolkata
24	The Principal Government Medical College Sangrur Road, New Lal Bagh, Patiala, Punjab 147001 Ph: 0175 221 2018 Email: gomcoitcell@yahoo.com	GMC-Patiala	Punjab	New Delhi	New Delhi
25	The Principal S. P. Medical College, Bikaner PBM Hospital, Bikaner, Rajasthan 334001 Phone: 0151 222 6300 Email: principal_spmc@live.com	SPMC- Bikaner	Rajasthan	Jaipur	Mundra / Pipavav / Kandla
26	The Principal R. N. T. Medical College, Udaipur Near Collectorate, Hospital Rd, Court Chouraha, Udaipur, Rajasthan 313001 Phone: 0294 241 8258 Email: rnt_mcudr62@rediffmail.com; rntmedicaleducationdept@gmail.com	RNTMC- Udaipur	Rajasthan	Jaipur	Mundra / Pipavav / Kandla
27	The Principal Govt. Medical College, Kota, LIC Office, Rangbari Rd, Sector - A, Rangbari, Kota, Rajasthan 324010 Phone: 0141 222 7406 Email: principalmck@gmail.com	GMC-Kota	Rajasthan	Delhi Air Cargo	Icd, Tughlakab ad

Sl. No.	Name of Hopsital and Address	Consignee Code	State	Airport	Dry Port/ Seaport
28	The Dean Thanjavur Medical College, Thanjavur Tamil Nadu - 613 004 Phone: 04362-240851, 04362-240951 Email: thjmc_tn@yahoo.com	GMC- Thanjavur	Tamil Nadu	Chennai	Chennai
29	The Dean Tirunelveli Medical College, Tirunelveli Address: Palayamkottai Tamil Nadu 627011 Phone: 0462 257 2733 Email: dean@tvmc.ac.in	GMC- Tirunelveli	Tamil Nadu	Chennai	Chennai
30	The Principal Agartala Govt. Medical College Agartala - 799 006 Phone: 03812357130/ 2356701 Email: agmc-tr@nic.in, agmc@rediffmail.com	AMC- Tripura	Tripura	Kolkata	Kolkata
31	The Dean Govt. Medical College, Jhansi Public Relation Officer Maharani Laxmi Bai Medical College, Hospital Jhansi Phone:- 0510-2321446 Email: principalmcjhs@gmail.com,clmlmcj@gmail.com	GMC-Jhansi	Uttar Pradesh	Delhi Air Cargo	Icd, Tughlakab ad
32	The Principal B.R.D.Medical college Gorakhpur Uttar Pradesh 273013 Phone: 0551 250 1736 Email Id :brdmcgkp1969@gmail.com, info@brdmc.org	GMC- Gorakhpur	Uttar Pradesh	Delhi Air Cargo	Icd, Tughlakab ad
33	The Principal M. L. N. Medical College, Allahabad George Town, Allahabad, Uttar Pradesh 211002 Phone: 2147483647 Email: ansari@gmail.com	MLNMC- Allahabad	Uttar Pradesh	Delhi Air Cargo	Icd, Tughlakab ad
34	The Principal L. L. R. Medical College, Meerut Garh Road, Jai Bhim Nagar, Meerut Uttar Pradesh 250004 Phone: 0121-2760888 Email: medllrm@yahoo.com	LLRMMC- Meerut	Uttar Pradesh	Delhi Air Cargo	Icd, Tughlakab ad

Sl. No.	Name of Hopsital and Address	Consignee Code	State	Airport	Dry Port/ Seaport
35	The Principal B. S. Medical College, Bankura Kenduadihi, Bankura West Bengal 722101 Phone: 03242 244 700 Email: bsmc_xsa@yahoo.com, prin_bsmc@wbhealth.gov.in	BSMC- Bankura	West Bengal	Kolkata	Kolkata
36	The Principal Govt. Medical College, Malda Englishbazar, Malda, West Bengal 732101 Phone: 03512 221 087 Email: prin_mldmch@wbhealth.gov.in	GMC-Malda	West Bengal	Kolkata	Kolkata
37	The Principal Prof. Samir Chandra Ghosh Roy North Bengal Medical College, Darjeeling Thiknikata, India, Siliguri, Darjeeling West Bengal 734012 Phone: 098320 17967 Email: sgroy53@gmail.com	NBMC- Darjeeling	West Bengal	Kolkata	Kolkata

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

No. P-45021/2/2017-PP (BE-II)  
Government of India  
Ministry of Commerce and Industry  
Department of Industrial Policy and Promotion  
(Public Procurement Section)  
\*\*\*\*

Dated 28<sup>th</sup> May, 2018  
Udyog Bhawan, New Delhi

To  
All Central Ministries/Departments/CPSUs/All concerned

**ORDER**

**Subject: Public Procurement (Preference to Make in India), Order 2017 – Revision; regarding.**

**Department of Industrial Policy and Promotion, in partial modification of Order No.P-45021/2/2017-B.E.-II dated 15.6.2017, hereby issues the revised 'Public Procurement (Preference to Make in India), Order 2017' with immediate effect:-**

**Whereas** it is the policy of the Government of India to encourage 'Make in India' and promote manufacturing and production of goods and services in India with a view to enhancing income and employment, and

**Whereas** procurement by the Government is substantial in amount and can contribute towards this policy objective, and

**Whereas** local content can be increased through partnerships, cooperation with local companies, establishing production units in India or Joint Ventures (JV) with Indian suppliers, increasing the participation of local employees in services and training them,

**Now therefore the following Order is issued :**

1. This Order is issued pursuant to Rule 153 (iii) of the General Financial Rules 2017.
2. **Definitions:** For the purposes of this Order:

*'Local content'* means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.

*'Local supplier'* means a supplier or service provider whose product or service offered for procurement meets the minimum local content as prescribed under this Order or by the competent Ministries / Departments in pursuance of this order.

*'L1'* means the lowest tender or lowest bid or the lowest quotation received in a tender, bidding process or other procurement solicitation as adjudged in the evaluation process as per the tender or other procurement solicitation.

*'margin of purchase preference'* means the maximum extent to which the price quoted by a local supplier may be above the L1 for the purpose of purchase preference.

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'Nodal Ministry' means the Ministry or Department identified pursuant to this order in respect of a particular item of goods or services or works.

'Procuring entity' means a Ministry or department or attached or subordinate office of, or autonomous body controlled by, the Government of India and includes Government companies as defined in the Companies Act.

'Works' means all works as per Rule 130 of GFR- 2017, and will also include 'turnkey works'.

- 3. Requirement of Purchase Preference :** Subject to the provisions of this Order and to any specific instructions issued by the Nodal Ministry or in pursuance of this Order, purchase preference shall be given to local suppliers in all procurements undertaken by procuring entities in the manner specified hereunder"
- a. "In procurement of goods, services or works in respect of which the Nodal Ministry has communicated that there is sufficient local capacity and local competition, and where the estimated value of procurement is Rs. 50 lakhs or less, only local suppliers shall be eligible. If the estimated value of procurement of such goods or services or works is more than Rs. 50 lakhs, the provisions of sub-paragraph b or c, as the case may be, shall apply";
- b. "In the procurements of goods or works which are not covered by paragraph 3a and which are divisible in nature, the following procedure shall be followed";
- i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is from a local supplier, the contract for full quantity will be awarded to L1.
- ii. If L1 bid is not from a local supplier, 50% of the order quantity shall be awarded to L1. Thereafter, the lowest bidder among the local suppliers, will be invited to match the L1 price for the remaining 50% quantity subject to the local supplier's quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such local supplier subject to matching the L1 price. In case such lowest eligible local supplier fails to match the L1 price or accepts less than the offered quantity, the next higher local supplier within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly. In case some quantity is still left uncovered on local suppliers, then such balance quantity may also be ordered on the L1 bidder.
- c. "In procurements of goods or works not covered by sub-paragraph 3a and which are not divisible, and in procurement of services where the bid is evaluated on price alone, the following procedure shall be followed":-
- i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is from a local supplier, the contract will be awarded to L1.

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- ii. If L1 is not from a local supplier, the lowest bidder among the local suppliers, will be invited to match the L1 price subject to local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such local supplier subject to matching the L1 price.
  - iii. In case such lowest eligible local supplier fails to match the L1 price, the local supplier with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the local suppliers within the margin of purchase preference matches the L1 price, then the contract may be awarded to the L1 bidder.
4. **Exemption of small purchases:** Notwithstanding anything contained in paragraph 3, procurements where the estimated value to be procured is less than Rs. 5 lakhs shall be exempt from this Order. However, it shall be ensured by procuring entities that procurement is not split for the purpose of avoiding the provisions of this Order.
5. **Minimum local content:** The minimum local content shall ordinarily be 50%. The Nodal Ministry may prescribe a higher or lower percentage in respect of any particular item and may also prescribe the manner of calculation of local content.
6. **Margin of Purchase Preference:** The margin of purchase preference shall be 20% .
7. **Requirement for specification in advance:** The minimum local content, the margin of purchase preference and the procedure for preference to Make in India shall be specified in the notice inviting tenders or other form of procurement solicitation and shall not be varied during a particular procurement transaction.
8. **Government E-marketplace:** In respect of procurement through the Government E-marketplace (GeM) shall, as far as possible, specifically mark the items which meet the minimum local content while registering the item for display, and shall, wherever feasible, make provision for automated comparison with purchase preference and without purchase preference and for obtaining consent of the local supplier in those cases where purchase preference is to be exercised.
9. **Verification of local content:**
- a. The local supplier at the time of tender, bidding or solicitation shall be required to provide self-certification that the item offered meets the minimum local content and shall give details of the location(s) at which the local value addition is made.
  - b. In cases of procurement for a value in excess of Rs. 10 crores, the local supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.
  - c. Decisions on complaints relating to implementation of this Order shall be taken by the competent authority which is empowered to look into procurement-related complaints relating to the procuring entity.

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- d. Nodal Ministries may constitute committees with internal and external experts for independent verification of self-declarations and auditor's/ accountant's certificates on random basis and in the case of complaints.
- e. Nodal Ministries and procuring entities may prescribe fees for such complaints.
- f. False declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.
- g. A supplier who has been debarred by any procuring entity for violation of this Order shall not be eligible for preference under this Order for procurement by any other procuring entity for the duration of the debarment. The debarment for such other procuring entities shall take effect prospectively from the date on which it comes to the notice of other procurement entities, in the manner prescribed under paragraph 9h below.
- h. The Department of Expenditure shall issue suitable instructions for the effective and smooth operation of this process, so that:
  - i. The fact and duration of debarment for violation of this Order by any procuring entity are promptly brought to the notice of the Member-Convenor of the Standing Committee and the Department of Expenditure through the concerned Ministry /Department or in some other manner;
  - ii. on a periodical basis such cases are consolidated and a centralized list or decentralized lists of such suppliers with the period of debarment is maintained and displayed on website(s);
  - iii. in respect of procuring entities other than the one which has carried out the debarment, the debarment takes effect prospectively from the date of uploading on the website(s) in the such a manner that ongoing procurements are not disrupted.

**10. Specifications in Tenders and other procurement solicitations:**

- a. Every procuring entity shall ensure that the eligibility conditions in respect of previous experience fixed in any tender or solicitation do not require proof of supply in other countries or proof of exports.
- b. Procuring entities shall endeavour to see that eligibility conditions, including on matters like turnover, production capability and financial strength do not result in unreasonable exclusion of local suppliers who would otherwise be eligible, beyond what is essential for ensuring quality or creditworthiness of the supplier.
- c. Procuring entities shall, within 2 months of the issue of this Order review all existing eligibility norms and conditions with reference to sub-paragraphs 'a' and 'b' above.
- d. If a Nodal Ministry is satisfied that Indian suppliers of an item are not allowed to participate and/ or compete in procurement by any foreign government, it may, if it deems appropriate, restrict or exclude bidders from that country from eligibility for procurement of that item and/ or other items relating to that Nodal Ministry. A copy of every instruction or decision taken in this regard shall be sent to the Chairman of the Standing Committee.

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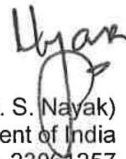
- e. For the purpose of sub-paragraph 10 d above, a supplier or bidder shall be considered to be from a country if (i) the entity is incorporated in that country, or ii) a majority of its shareholding or effective control of the entity is exercised from that country; or (iii) more than 50% of the value of the item being supplied has been added in that country. Indian suppliers shall mean those entities which meet any of these tests with respect to India.”
11. **Assessment of supply base by Nodal Ministries:** The Nodal Ministry shall keep in view the domestic manufacturing / supply base and assess the available capacity and the extent of local competition while identifying items and prescribing minimum local content or the manner of its calculation, with a view to avoiding cost increase from the operation of this Order.
12. **Increase in minimum local content:** The Nodal Ministry may annually review the local content requirements with a view to increasing them, subject to availability of sufficient local competition with adequate quality.
13. **Manufacture under license/ technology collaboration agreements with phased indigenization:** While notifying the minimum local content, Nodal Ministries may make special provisions for exempting suppliers from meeting the stipulated local content if the product is being manufactured in India under a license from a foreign manufacturer who holds intellectual property rights and where there is a technology collaboration agreement / transfer of technology agreement for indigenous manufacture of a product developed abroad with clear phasing of increase in local content.
14. **Powers to grant exemption and to reduce minimum local content:** Ministries /Departments of Government of India and the Boards of Directors of Government companies or autonomous bodies may, by written order,
- reduce the minimum local content below the prescribed level;
  - reduce the margin of purchase preference below 20% ;
  - exempt any particular item or procuring or supplying entities or class or classes of items or procuring or supplying entities from the operation of this Order or any part of the Order.
- A copy of every such order shall be marked to the Member-Convenor of the Standing Committee constituted under this Order.
15. **Directions to Government companies:** In respect of Government companies and other procuring entities not governed by the General Financial Rules, the administrative Ministry or Department shall issue policy directions requiring compliance with this Order.
16. **Standing Committee:** A standing committee is hereby constituted with the following membership:
- Secretary, Department of Industrial Policy and Promotion—Chairman
  - Secretary, Commerce—Member
  - Secretary, Ministry of Electronics and Information Technology—Member
  - Joint Secretary (Public Procurement), Department of Expenditure—Member
  - Joint Secretary (DIPP)—Member-Convenor

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The Secretary of the Department concerned with a particular item shall be a member in respect of issues relating to such item. The Chairman of the Committee may co-opt technical experts as relevant to any issue or class of issues under its consideration.

17. **Functions of the Standing Committee:** The Standing Committee shall meet as often as necessary but not less than once in six months. The Committee
- a. shall oversee the implementation of this order and issues arising therefrom, and make recommendations to Nodal Ministries and procuring entities.
  - b. shall annually assess and periodically monitor compliance with this Order
  - c. shall identify Nodal Ministries and the allocation of items among them for issue of notifications on minimum local content
  - d. may require furnishing of details or returns regarding compliance with this Order and related matters
  - e. may, during the annual review or otherwise, assess issues, if any, where it is felt that the manner of implementation of the order results in any restrictive practices, cartelization or increase in public expenditure and suggest remedial measures
  - f. may examine cases covered by paragraph 13 above relating to manufacture under license/ technology transfer agreements with a view to satisfying itself that adequate mechanisms exist for enforcement of such agreements and for attaining the underlying objective of progressive indigenization
  - g. may consider any other issue relating to this Order which may arise.
18. **Removal of difficulties:** Ministries /Departments and the Boards of Directors of Government companies may issue such clarifications and instructions as may be necessary for the removal of any difficulties arising in the implementation of this Order.
19. **Ministries having existing policies:** Where any Ministry or Department has its own policy for preference to local content approved by the Cabinet after 1<sup>st</sup> January 2015, such policies will prevail over the provisions of this Order. All other existing orders on preference to local content shall be reviewed by the Nodal Ministries and revised as needed to conform to this Order, within two months of the issue of this Order.
20. **Transitional provision:** This Order shall not apply to any tender or procurement for which notice inviting tender or other form of procurement solicitation has been issued before the issue of this Order.

  
(B. S. Nayak)

Under Secretary to Government of India  
Ph. 23061257

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**F.No.31026/36/ 2016-MD**  
**Ministry of Chemicals & Fertilizers**  
**Government of India**  
**Department of Pharmaceuticals**

Dated 18<sup>th</sup> May, 2018  
Janpath Bhawan, New Delhi

**Subject: Guidelines for implementing the provisions of Public Procurement (Preference to Make in India) Order (PPO), 2017, related to procurement of Goods & Services in Medical Devices - reg.**

**No. 31026/36/2016-MD:** Whereas Department of Industrial Policy and Promotion (DIPP), pursuant to Rule 153(iii) of the General Financial Rules 2017, has issued Public Procurement(Preference to Make in India) Order (PPO), 2017 vide no. P-4502/2/2017-B.E.-II dated 15.06.2017.

Whereas DIPP, in order to facilitate the implementation of the PPO, 2017, vide D.O. No. P-45021/2/2017-BE-II dated 14.08.2017 has identified Department of Pharmaceuticals (DoP) as the Nodal Department for implementing the provisions of the PPO 2017 relating to goods & services related to Pharmaceuticals Sector. DIPP vide Office Memorandum no. P-45021/13/2017-PP Section BE-II dated 23.03.2018 has decided that the Nodal Ministry for product category Medical Devices shall be Department of Pharmaceuticals.

Whereas Para 3 of PPO, 2017 makes it mandatory for procuring entities to give purchase preference to local suppliers, Para 5 of PPO, 2017 empowers Nodal Ministry to prescribe percentage and the manner of calculation of minimum local content in respect of any particular item relating to medical devices and Para 9 of PPO, 2017 deals with verification of local content.

Now, therefore, DoP issues the following guidelines for implementation of the provisions of PPO, 2017 with respect to public procurement of Goods & Services in Medical Devices:

- Amish*
- 1) **Percentage of Minimum Local Content:** Medical Device Industry (MDI) is a multi-product industry responsible for provisioning of wide variety of crucial medical products ranging from simple tongue depressors & glucometer strips to large radiology & electronic medical equipment. The medical devices industry can be broadly classified as consisting of (a) medical disposables and consumables; (b) medical electronics, hospital equipment, surgical instruments; (c) Implants; and (d) In-Vitro Devices/Diagnostic Reagents. Individually there are around 5000 different kinds of medical devices and it is not practical to prescribe the local content and percentage of preference in domestic procurement for each medical device.

Moreover, DoP needs accurate and reliable data regarding total capacity and production of various categories of medical devices in India, regarding the level

of competition in the market in different segment of medical devices and regarding the processes involved in the manufacture of medical devices for prescribing the percentage of minimum local content for each category of medical devices, for determining the manner of calculation of local content in the medical devices and for determining the purchase preference to be given to local suppliers in the procurement by the public agencies. The percentage of local content, the manner of calculation of the local content and the provision of supplies to be procured from local suppliers may be revised after relevant data in this regard becomes available.

However for the time being, based on the present level of understanding of the medical device market in India and discussion with various industry representatives, DoP in accordance with Para 5 of PPO, 2017 prescribes the following percentages of minimum local content for various categories of medical devices for preference in public procurement:

Category of Medical Devices	% of Minimum Local Content	% of Local Content proposed to be increased in phased manner over next three years
Medical disposables and consumables	50%	50% to 75%
Medical electronics, hospital equipment, surgical instruments	25%	25% to 45%
Implants	40%	40% to 60%
Diagnostic Reagents/IVDs	25%	25% to 45%

2) **Manner of calculation of Local Content:** DoP in accordance with Para 5 of PPO, 2017 prescribes the following manner of calculation of local content:

- i. Local content of Medical Device shall be computed on the basis of the cost of domestic components in the device/service compared to the total cost of the device/service. The total cost of product shall be the cost incurred for the production of the medical device including direct component i.e. material cost, manpower cost and overhead costs including profit but excluding taxes and duties.
- ii. The determination of local content cost shall be based on the following:
  - a) In the case of direct component (material), based on the country of origin
  - b) In the case of manpower, based on domestic manpower
- iii. The calculation of local content of the combination of several kinds of goods shall be based on the ratio of the sum of multiplication of local content of each goods with the acquisition price of each goods to the acquisition price of combination of goods.
- iv. Format of calculation of local content shall be as contained in **Enclosure-I**.


*Dhanya*

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- 3) **Requirement of Purchase Preference:** Purchase preference shall be given to local suppliers by all procuring entities as per provisions laid down in para 3 of PPO, 2017. Further, as per provisions of Para 3(a) of the PPO 2017 i.e. in procurement of goods where sufficient local capacity and local competition exists and estimated value of procurement is Rs 50 Lakhs or less, a list of goods will be issued by this Department in due course. Till the time such a list is issued, provisions of para 3(b) or para 3(c) of PPO, 2017, as applicable, shall apply for all procurements without regard to value of procurement.
- 4) **Verification of Local Content:**
- a) The local supplier at the time of tender, bidding or solicitation shall be required to furnish self-certification of local content in the format as contained in **Enclosure-II**.
  - b) In cases of procurement for a value in excess of Rs. 10 crores, the local supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.
  - c) In each tender, procuring entity shall clearly mention the details of its competent authority which is empowered to look into procurement related complaints and the fees for such complaints, relating to implementation of PPO, 2017.
  - d) In case a complaint is received by the procuring entity against the claim of a bidder regarding domestic value addition in medical device, the procuring entity shall have full rights to inspect and examine all the related documents and take a decision. In case any clarification is needed, matter may be referred to DoP to the Grievance Redressal Committee consisting of the following:
    1. Chairman - Joint Secretary (Medical Device) in DoP
    2. Member - Director / Deputy Secretary (Medical Devices) in DoP
    3. Member - Representative (not below the rank of Deputy Secretary) from M/o Health & Family Welfare / CDSO
  - e) Any complaint referred to the procuring entity shall be submitted along with all necessary documentation in support of the complaint regarding domestic value addition claimed in medical device and shall be disposed of within 4 weeks of the reference by the procuring entity.
  - f) In case, the complaint is referred to DoP by a bidder or procuring entity, the grievance redressal committee shall dispose of the complaint within 4 weeks of its reference and receipt of all documents from the bidder after taking in consideration, the view of the procuring entity. The bidder shall be required to furnish the necessary documentation in support of the local content claimed in medical devices to the grievance redressal committee under DoP within 2 weeks of the reference of the matter. If no information is furnished by the bidder, the grievance redressal committee may take further necessary action, in consultation with procuring entity to establish the bonafides of the claim.
  - g) In case of reference of any complaint by the concerned bidder, there would be a fee of Rs. 2 Lakh or 1% of the value of the medical devices being procured (subject to a maximum of Rs. 5 Lakh), whichever is higher, to be paid by way of a Demand Draft to be deposited with the procuring entity, along with the

*Okhapi*

complaints by the complainant. In case, the complaint is found to be incorrect, the complaint fee shall be forfeited. In case, the complaint is upheld and found to be substantially correct, deposited fee of the complainant would be refunded without any interest.

- 5) All other provisions of PPO, 2017 shall be applicable as such and shall be adhered to by all procuring agencies for procurement of any medical device.
- 6) These guidelines shall remain applicable for one year or until further orders from the date of its issuance.

  
(Dinesh Kapila)  
Economic Adviser  
Ph. 23381927

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**Enclosure-I****Calculation of Local Content**

Name of manufacturer	Calculation by Manufacturer (Cost per unit of product)			
	Cost Component	Cost (Domestic Component) a	Total Cost b	Percentage of Local Content $c=(a/b)*100$
I. ....				
II. ....				
III. Total Cost (Excluding tax and duties)				

Note:

- I. **Cost (Domestic Component):** Cost of domestic component may be calculated based on one of the followings depending on data available. Each of these calculations should provide consistent result.
- Sum of the costs of all inputs which go into the product (including duties and taxes levied on procurement of inputs except those for which credit/ set-off can be taken) and which have not been imported directly or through a domestic trader or an intermediary.
  - Ex-Factory Price of product minus profit after tax minus sum of imported Bill of Material used (directly or indirectly) as inputs in producing the product (including duties and taxes levied on procurement of inputs except those for which credit/ set-off can be taken) minus warranty costs.
  - Market price minus post-production freight, insurance and other handling costs minus profit after tax minus warranty costs minus sum of Imported Bill of Material used as inputs in producing the product (including duties and taxes levied on procurement of inputs except those for which credit / set-off can be taken) minus sales and marketing expenses.
- II. **Total Cost:** Total cost may be calculated based on one of the following depending on data available. Each of these calculations should provide consistent result.
- Sum of the costs of all inputs which go into the product (including duties and taxes levied on procurement of inputs except those for which credit / set-off can be taken).
  - Ex-Factory Price of product minus profit after tax, minus warranty costs.
  - Market price minus post-production freight, insurance and other handling costs minus profit after tax, minus warranty costs minus sales and marketing expenses.

*Dulagati*

**Enclosure-II****Format for Affidavit of Self Certification regarding Local Content in a Medical Device to be provided on Rs. 100/- Stamp Paper**

Date: \_\_\_\_\_

I \_\_\_\_\_ S/o,D/o,W/o \_\_\_\_\_, Resident of \_\_\_\_\_

do hereby solemnly affirm and declare as under:

That I will agree to abide by the terms and conditions of the policy of Government of India issued vide Notification No:

That the information furnished hereinafter is correct to best of my knowledge and belief and I undertake to produce relevant records before the procuring entity or any authority so nominated by the Department of Pharmaceuticals, Government of India for the purpose of assessing the local content.

That the local content for all inputs which constitute the said medical device has been verified by me and I am responsible for the correctness of the claims made therein.

That in the event of the domestic value addition of the product mentioned herein is found to be incorrect and not meeting the prescribed value-addition norms, based on the assessment of an authority so nominated by the Department of Pharmaceuticals, Government of India for the purpose of assessing the local content, action will be taken against me as per Order No. P-45021/2/2017-B.E.-II dated 15.06.2017 and Guidelines issued vide letter no. 31026/36/2016-MD dated 18.05.2018.

I agree to maintain the following information in the Company's record for a period of 8 years and shall make this available for verification to any statutory authority:

- i) Name and details of the Domestic Manufacturer (Registered Office, Manufacturing unit location, nature of legal entity)
- ii) Date on which this certificate is issued
- iii) Medical devices for which the certificate is produced
- iv) Procuring entity to whom the certificate is furnished
- v) Percentage of local content claimed
- vi) Name and contact details of the unit of the manufacturer
- vii) Sale Price of the product
- viii) Ex-Factory Price of the product
- ix) Freight, insurance and handling
- x) Total Bill of Material
- xi) List and total cost value of inputs used for manufacture of the medical device
- xii) List and total cost of inputs which are domestically sourced. Value addition certificates from suppliers, if the input is not in-house to be attached.
- xiii) List and cost of inputs which are imported, directly or indirectly


**For and on behalf of****(Name of firm/entity)**

Authorized signatory (To be duly authorized by the Board of Director)

**APPENDIX-B**  
**INTEGRITY PACT**

**PRE-CONTRACT INTEGRITY PACT**

This Pre-Contract Integrity Pact (herein after called the Integrity Pact) is made on \_\_\_ day of the month of \_\_\_ 20\_\_

**Between**

HLL Infra Tech Services Ltd. [HITES], a wholly owned subsidiary company of M/s. HLL Lifecare Ltd. a Government of India Enterprise with registered office at HLL Bhavan, Poojappura, Thiruvananthapuram 695 012, Kerala, India. (Hereinafter called “HITES”, which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns) of the First Party.

**And**

M/s. \_\_\_\_\_, with office at \_\_\_\_\_ represented by Shri \_\_\_\_\_, Chief Executive Officer (hereinafter called the “BIDDER/Seller”/Contractor which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the Second Party.

**Preamble**

[Both HITES and BIDDER referred above are jointly referred to as the Parties]

HITES intends to award, under laid down organizational procedures, Purchase orders / contract/s against Tender /Work Order /Purchase Order No.

HITES desires full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder/s and Contractor/s.

NOW, THEREFORE,

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to:-

1. Enable HITES to obtain the desired materials/ stores/equipment/ work/ project done at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement; and
2. Enable the BIDDER to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and HITES will commit to prevent corruption, in any form, by its officials by following transparent procedures.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:

**Clause.1. Commitments of HITES**

- 1.1 HITES undertakes that HITES and/or its Associates (i.e. employees, agents, consultants, advisors, etc.) will not demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the BIDDER, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.



- 1.2 HITES will, during the tender process / pre-contract stage, treat all BIDDERS with equity and reason, and will provide to all BIDDERS the same information and will not provide any such information or additional information, which is confidential in any manner, to any particular BIDDER which could afford an advantage to that particular BIDDER in comparison to other BIDDERS in relation to tendering process or during the contract execution.
- 1.3 All the officials of HITES regarding this Integrity Pact will report to IEM, any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach shall not be permitted.
- 1.4 HITES will exclude from the process all known prejudiced persons and persons who would be known to have a connection or nexus with the prospective bidder.
- 1.5 If the BIDDER reports to HITES with full and verifiable facts any misconduct on the part of HITES's Associates (i.e. employees, agents, consultants, advisors, etc.) and the same is prima facie found to be correct by HITES, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by HITES. Further, such an Associate may be debarred from further dealings related to the contract process. In such a case, while an enquiry is being conducted by HITES the proceedings under the contract would not be stalled.

## **Clause 2. Commitments of BIDDERS/ CONTRACTORS**

2. The BIDDER commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following:-
  - 2.1 The BIDDER will not offer, directly or indirectly (i.e. employees, agents, consultants, advisors, etc.) any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of HITES, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.
  - 2.2 The BIDDER further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of HITES or otherwise in procuring the contract or forbearing to do or having done any act in relation to obtaining or execution of the contract or any other contract with HITES for showing or forbearing to show favour or disfavor to any person in relation to the contract or any other contract with HITES.
  - 2.3 The BIDDER will not engage in collusion, price fixing, cartelization, etc. with other counterparty(s).
  - 2.4 The Bidder (s) will not pass to any third party any confidential information entrusted to it, unless duly authorized by HITES.
  - 2.5 The Bidder (s) will promote and observe ethical practices within its Organization and its affiliates.
  - 2.6 BIDDER shall disclose the name and address of agents and representatives and Indian BIDDERS shall disclose their foreign principals or associates.
  - 2.7 The Bidder (s) will not make any false or misleading allegations against HITES or its Associates.
  - 2.8 BIDDERS shall disclose the payments to be made by them to agents/brokers or any other intermediary, in connection with this bid/contract.
  - 2.9 The BIDDER further confirms and declares to HITES that the BIDDER is the original manufacture/integrator/authorized government sponsored export entity of the defense stores and has

not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to HITES or any of its functionaries, whether officially or unofficially to award the contract to the BIDDER, nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.

- 2.10 The BIDDER while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of HITES or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.
- 2.11 The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- 2.12 The BIDDER commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
- 2.13 If the BIDDER or any employee of the BIDDER or any person acting on behalf of the BIDDER, either directly or indirectly, is a relative of any of the officers of HITES, or alternatively, if any relative of an officer of HITES has financial interest/stake in the BIDDER's firm, the same shall be disclosed by the BIDDER at the time of filing of tender.

The term 'relative' for this purpose would be as defined in Section 2(77) of the Companies Act 2013

- 2.14 The BIDDER shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of HITES.
- 2.15 The BIDDER will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract, and will not enter into any undisclosed agreement or understanding with other Bidders, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- 2.16 The BIDDER will not commit any offence under the relevant Indian Penal Code, 1860 or Prevention of Corruption Act, 1988; further the Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the HITES as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically. The BIDDER also undertakes to exercise due and adequate care lest any such information is divulged.
- 2.17 The BIDDER will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 2.18 The Bidder(s)/Contractors(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly the Bidder(s)/Contractors(s) of Indian Nationality shall furnish the name and address of the foreign Principal(s), if any.
- 2.19 The Bidder(s) shall not approach the courts while representing the matters to IEM and the Bidder(s) will await their decision in the matter.

**Clause.3. Previous contravention and Disqualification from tender process and exclusion from future contracts**

**3.1** The BIDDER declares that no previous contravention occurred in the last three years immediately before signing of this Integrity Pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could justify BIDDER's exclusion from the tender process

**3.2** The BIDDER agrees that if it makes incorrect statement on this subject, BIDDER can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

If BIDDER before award or during execution has committed a contravention through a violation of Clause 2, above or in any other form such as to put his reliability or credibility in question, HITES is entitled to disqualify the BIDDER from the tender process.

**Clause.4. Equal treatment of all Bidders / Contractors / Subcontractors**

4.1 The Bidder(s)/ Contractor(s) undertake(s) to demand from his Subcontractors a commitment in conformity with this Integrity Pact.

4.2 HITES will enter into agreements with identical conditions as this one with all Bidders and Contractors.

4.3 HITES will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

**Clause.5. Consequences of Violation / Breach**

5.1 Any breach of the aforesaid provision by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) shall entitle HITES to take all or any one of the following action, wherever required:-

- i. To immediately call off the pre-contract negotiations without assigning any reason or giving any compensation to the BIDDER. However, the proceedings with the other BIDDER(s) would continue.
- ii. If BIDDER commits violation of Integrity Pact Policy during bidding process, he shall be liable to compensate HITES by way of liquidated damages amounting to a sum equivalent to 5% to the value of the offer or the amount equivalent to Earnest Money Deposit/Bid Security, whichever is higher.
- iii. In case of violation of the Integrity Pact after award of the contract, HITES will be entitled to terminate the contract. HITES shall also be entitled to recover from the contractor liquidated damages equivalent to 10% of the contract value or the amount equivalent to security deposit/performance guarantee, whichever is higher.
- iv. To immediately cancel the contract, if already signed, without giving any compensation to the BIDDER.
- v. To recover all sums already paid by HITES, and in case of an Indian BIDDER with interest thereon at 2% higher than the prevailing Prime Lending Rate of State Bank of India, while in case of a BIDDER from a country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to the BIDDER from HITES in connection with any other contract for any other stores, such outstanding payment could also be utilized to recover the aforesaid amount.
- vi. To encash the advance bank guarantee and performance guarantee /warranty bond, if furnished by the BIDDER, in order to recover the payments already made by HITES, along with interest.

- vii. To cancel all or any other contract with the BIDDER. The BIDDER shall be liable to pay compensation for any loss or damage to HITES resulting from such cancellation/recession and HITES shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.
- viii. To debar the BIDDER from participating in future bidding processes of HITES for a minimum period of five (5) years, which may be further extended at the discretion of HITES or until Independent External Monitors is satisfied that the Bidder (s) will not commit any future violation.
- ix. To recover all sums paid in violation of this Pact by BIDDER(s) to any middleman or agent or broker with a view to securing the contract.
- x. In cases where irrevocable Letters of credit have been received in respect of any contract signed by HITES with the BIDDER, the same shall not be opened.
- xi. Forfeiture of performance guarantee in case of a decision by HITES to forfeit the same without assigning any reason for imposing sanction for violation of the pact.

5.2 HITES will be entitled to all or any of the actions mentioned in para 5.1(i) to (x) of this pact also on the commission by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER), of an offence as defined in Chapter IX of the Indian Penal Code, 1860 or Prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption.

5.3 The decision of HITES to the effect that a breach of the provisions of this Pact has been committed by the BIDDER shall be final and conclusive on the BIDDER. However, the BIDDER can approach the Independent External Monitor(s) appointed for the purposes of this Pact.

**Clause.6. Fall Clause**

The BIDDER undertakes that it has not supplied/is not supplying similar product/systems or subsystems OR providing similar services at a price / charge lower than that offered in the present bid in respect of any other Ministry/Department of the Government of India or PSU and if it is found any stage that similar product/systems or sub systems was supplied by the BIDDER to any to the Ministry/Department of the Government of India or a PSU at a lower price, then that very price, with due allowance for elapsed time will be applicable to the present case and the difference in the cost would be refunded by the BIDDER to HITES, if the contract has already been concluded.

**Clause .7. Independent External Monitor(s)**

- 7.1 HITES has appointed Sh. A.K. Arora, EX-DG, Indian Defense Service of Engineers as Independent External Monitor(s) (hereinafter referred to as IEM(s)) for this Pact in consultation with the Central Vigilance Commission. Contact details of IEM is as below:

Sh. A.K. Arora  
Independent External Monitor (IEM)

Office: HLL Infra Tech Services Ltd  
B-14-A, sector 62, Noida 201307, U.P  
Tel: 0120 4071500

Residence: B-333, Chittaranjan Park  
New Delhi – 110019  
Tel: 011 26273406

Mobile: +91 8130588577  
Email: iem@hllhites.com

- 7.2 The responsibility of the IEM(s) shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.
- 7.3 The IEM(s) shall not be subject to instructions by the representatives of the parties and perform their functions neutrally and independently.
- 7.4 Both the parties accept that the IEM(s) have the right to access all the documents relating to the project/ procurement, including minutes of meetings.
- 7.5 As soon as the IEM(s) notices, or has reason to believe, a violation of this pact, he will so inform the CEO/CMD.
- 7.6 The BIDDER(S) accepts that the IEM(s) have the right to access without restriction to all project documentation of HITES including that provided by the BIDDER. The BIDDER will also grant the IEM(s), upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to subcontractors engaged by the BIDDER. The IEM(s) shall be under contractual obligation to treat the information and documents of the BIDDER/ Subcontractor(s) with confidentiality.
- 7.7 HITES will provide to the IEM(s) sufficient information about all meetings among the parties related to the Project provided such meeting could have an impact on the contractual relation between the parties. The parties will offer to the IEM(s) option to participate in such meetings.
- 7.8 The IEM(s) will submit a written report to the CEO/CMD of HITES within 3 to 5 weeks from the date of reference or intimation to him by HITES/BIDDER.

**Clause.8.Criminal charges against violating Bidder(s)/ Contractor(s)/ Subcontractor(s)**

If HITES obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if HITES has substantive suspicion in this regard, HITES will inform the same to the Chief Vigilance Officer, HLL

**Clause.9. Facilitation of Investigation**

In case of any allegation of violation of any provisions of this Pact or payment of commission, HITES or its agencies shall be entitled to examine all the documents, including the Books of Accounts of the BIDDER and the BIDDER shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

**Clause.10. Law and Place of Jurisdiction**

Both the Parties agree that this Pact is subject to Indian Law. The place of performance and hence this Pact shall be subject to Delhi/ NCR Jurisdiction.

**Clause.11. Other legal Actions**

The actions stipulated in the Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

**Clause.12. Validity and Duration of the Agreement**

This Pact begins when both parties have legally signed it. It expires for the Contractor/Successful bidder 12 months after the last payment under the contract or the complete execution of the contract to the satisfaction of the both HITES and the BIDDER /Seller, including warranty period, whichever is later, and for all other Bidders/unsuccessful bidders 6 months after the contract has been awarded.

If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged / determined by Chairman and Managing Director/ CEO of HITES.

**Clause. 13. Other provisions**

- 13.1 Changes and supplements as well as termination notices need to be made in writing. Both the Parties declare that no side agreements have been made to this Integrity Pact.
- 13.1 If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- 13.1 Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions

IN WITNESS THEREOF the parties have signed and executed this pact at the place and date first above mentioned in the presents of following witnesses:

**HLL Infra Tech Services Ltd.**

**Bidder**

\_\_\_\_\_

\_\_\_\_\_

Witness

Witness

1.....

1.....

2.....

2.....

\* Provisions of these clauses would be amended /deleted in line with the policy of the HITES in regard to involvement of Indian agents of foreign suppliers.