## DOMESTIC TENDER ENQUIRY DOCUMENT

# FOR ESTABLISHING RATE CONTRACT & PROCUREMENT OF MEDICAL EQUIPMENT

## HITES/PCD/MP/CLINICAL/RC-02/19-20

Through



## HLL INFRA TECH SERVICES LIMITED

(Subsidiary of HLL Lifecare Ltd., a Govt. of India Enterprise)
B-14 A, Sector-62, Noida-201 307
Phone: 0120-4071500; Fax: 0120-4071513

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## **SECTION I**

#### **NOTICE INVITING TENDER (NIT)**

#### HLL INFRA TECH SERVICES LIMITED

(Subsidiary of HLL Lifecare Ltd., a Govt. of India Enterprise) B-14 A, Sector-62, Noida-201 307 Phone: 0120-4071500; Fax: 0120-4071513

**URL:** www.hllhites.com Email: pcd@hllhites.com

## Tender Enquiry No.: HITES/PCD/MP/CLINICAL/RC-02/19-20 dated 01.06.2019.

(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 Director, Medical Education, Government of Madhya Pradesh, invites tenders, from eligible and qualified tenderers for establishing Rate contracts and supply of various Medical Equipment to 06 existing & 07 upcoming Institutes in Madhya Pradesh, and any Institute/Hospital/Medical College in India, as and when required by them during the validity of Rate Contract. The Rate contract shall be valid initially for a period of Two years, extendable for

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Sch. No.	Rfx. No.	Name of the Items	EMD		Tender Processing Fee		Pre-bid Date
1	3000003990	Operation Theatre Table	Rs.	10,08,000	Rs.	2,360	12-06-2019
2	3000003991	Operation Theatre Ceiling light	Rs.	3,50,000	Rs.	2,360	12-06-2019
3	3000003992	Pedestal lights	Rs.	70,000	Rs.	2,360	12-06-2019
4	3000003993	Electro-surgical cautery unit with Vessel Sealing	Rs.	9,80,000	Rs.	2,360	12-06-2019
5	3000003994	Suction Machine	Rs.	3,70,000	Rs.	2,360	11-06-2019
6	3000003995	Pulse oximeter	Rs.	3,92,000	Rs.	2,360	11-06-2019
7	3000003996	Multi Para Monitors	Rs.	14,00,000	Rs.	2,360	11-06-2019
8	3000003997	ECG machines	Rs.	1,68,000	Rs.	2,360	11-06-2019
9	3000003998	Electro-surgical cautery unit	Rs.	7,00,000	Rs.	2,360	12-06-2019
10	3000003999	General Surgery Set	Rs.	26,50,000	Rs.	2,360	12-06-2019
11	3000004000	Pediatric surgical instrument set	Rs.	4,20,000	Rs.	2,360	12-06-2019
12	3000004001	Vascular set	Rs.	3,78,000	Rs.	2,360	12-06-2019
13	3000004002	Urology Surgical Set	Rs.	3,50,000	Rs.	2,360	12-06-2019
14	3000004003	Laparoscope for Pediatric	Rs.	7,00,000	Rs.	2,360	12-06-2019
15	3000004004	Cystoscope & Resectoscope	Rs.	1,68,000	Rs.	2,360	12-06-2019
16	3000004005	Laparoscope Set	Rs.	9,80,000	Rs.	2,360	12-06-2019
17	3000004006	Video Endoscopy System	Rs.	19,60,000	Rs.	2,360	12-06-2019
18	3000004007	Flibre Optic Video Bronchoscope	Rs.	3,84,000	Rs.	2,360	11-06-2019
19	3000004008	C-arm with ERCP	Rs.	7,00,000	Rs.	2,360	12-06-2019
20	3000004009	Harmonic Scalpel	Rs.	2,70,000	Rs.	2,360	12-06-2019
21	3000004010	Anesthesia Work Station	Rs.	21,00,000	Rs.	2,360	11-06-2019
22	3000004011	ICU monitor	Rs.	30,00,000	Rs.	2,360	11-06-2019
23	3000004012	Defibrillator	Rs.	1,26,000	Rs.	2,360	11-06-2019
24	3000004013	Defibrillator with CPR Monitoring and TC Pacing	Rs.	1,40,000	Rs.	2,360	11-06-2019
25	3000004014	ICU Ventilator	Rs.	63,00,000	Rs.	2,360	11-06-2019
26	3000004015	PNS (Desirable)	Rs.	28,000	Rs.	2,360	11-06-2019
27	3000004016	ABG machine	Rs.	2,88,000	Rs.	2,360	11-06-2019
28	3000004017	Patients controlled analgesia system (portable)	Rs.	28,000	Rs.	2,360	11-06-2019
29	3000004018	Volumetric Infusion pumps	Rs.	3,50,000	Rs.	2,360	11-06-2019
30	3000004019	Syringe Infusion pumps	Rs.	11,20,000	Rs.	2,360	11-06-2019
31	3000004020	DVT Pump	Rs.	2,10,000	Rs.	2,360	11-06-2019
32	3000004021	Patient Warming system	Rs.	84,000	Rs.	2,360	11-06-2019
33	3000004022	Blood and fluid Warmer	Rs.	1,05,000	Rs.	2,360	11-06-2019

Tender Enquiry No.: HITES/PCD/MP/CLINICAL/RC-02/19-20 dated 01.06.2019

Sch. No.	Rfx. No.	Name of the Items		EMD	_	ender essing Fee	Pre-bid Date
34	3000004023	CPAP/ BIPAP machine	Rs.	42,000	Rs.	2,360	11-06-2019
35	3000004024	General instrumentation set for fracture reduction	Rs.	16,40,000	Rs.	2,360	12-06-2019
36	3000004025	Set for Hip Replacement	Rs.	28,000	Rs.	2,360	12-06-2019
37	3000004026	Set for knee replacement	Rs.	28,000	Rs.	2,360	12-06-2019
38	3000004027	Interlock nailing sets	Rs.	2,80,000	Rs.	2,360	12-06-2019
39	3000004028	Fracture reduction OT tables	Rs.	14,00,000	Rs.	2,360	12-06-2019
40	3000004029	Simple OT tables	Rs.	84,000	Rs.	2,360	12-06-2019
41	3000004030	Pneumatic drill and reamer	Rs.	1,40,000	Rs.	2,360	12-06-2019
42	3000004031	Electrical drill and reamer set	Rs.	5,60,000	Rs.	2,360	12-06-2019
43	3000004032	Mobile C-Arm	Rs.	5,60,000	Rs.	2,360	12-06-2019
44	3000004033	Arthroscope	Rs.	9,10,000	Rs.	2,360	12-06-2019
45	3000004034	AED	Rs.	33,600	Rs.	2,360	12-06-2019
46	3000004035	Automatic Tourniquet	Rs.	2,80,000	Rs.	2,360	12-06-2019
47	3000004036	Digital Mammography	Rs.	7,20,000	Rs.	2,360	12-06-2019

#### Note:

1. Tender processing Fee is inclusive of GST @18% (Our GSTIN: 09AADCH4882R1ZP)

## (2) Tender timeline:

Sl. No.	Description	Schedule
a.	Last date for receipt of Pre-bid queries	10.06.2019, 10.00 hrs
b.	Pre-bid meeting date, time	Date: As mentioned in Table above, Time: 11:00 hrs Conference Hall, GMC Vidsha NH-86, In-front of Khel Parisar, Sanchi Road, Vidisha- 464001- MP.
c.	Closing date & time for submission of online bids	26.06.2019, 13:00 hrs
d.	Closing date & time for submission of <b>tender processing fee and EMD in physical form*</b>	26.06.2019, 14:00 hrs
e.	Time and date of opening of online bids	26.06.2019, 14:30 hrs
f.	<ul> <li>Venue for :-</li> <li>Submission of tender processing fee, EMD in physical form.</li> <li>Tender Opening-Tech Bid</li> </ul>	HLL Infra Tech Services Limited, Procurement & Consultancy Services Division, B-14 A, Sector-62, Noida-201307

<sup>\*</sup>Bidders have to submit Original Bank Instruments for tender processing fee and EMD or proof of EMD exemption as per GIT clause 19.2 (if applicable) within the above mentioned date and time.

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

- (1) Bidders should have valid Class 3-B Digital Signature Certificate with encryption.
- (2) Bidders are requested to read the bidders help document on e-tender web site link before proceeding for bidding.
- (3) The prospective bidders have to register with the E-procurement system of HLL at <a href="https://etender.lifecarehll.com/irj/portal">https://etender.lifecarehll.com/irj/portal</a>. 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).
- (4) Post receipt of User ID & Password, Bidders can log on for downloading & uploading tender document.
- (5) The tenderers shall submit Tender Processing Fee and EMD in physical form at the scheduled time and venue.

- (6) Tenderer may download the tender enquiry documents from the web site www.hllhites.com or www.lifecarehll.com or www.eprocure.gov.in/cppp or https://etender.lifecarehll.com/irj/portal.
- (7) 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**.
- (8) 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.
- (9) 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
- (10) All prospective tenderers may attend the Pre Tender meeting. The venue, date and time indicated above.
- (11) 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.
- (12) 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)

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## GENERAL INSTRUCTIONS TO TENDERERS (GIT)

#### A. PREAMBLE

#### 1. Definitions and Abbreviations

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

#### 1.2 **Definitions**:

- i. "Purchaser" means the organization purchasing goods and services.
- ii. "eTender" means Bids / Quotation / Tender received from a Firm / Tender / Bidder.
- iii. "Tenderer" means Bidder / the Individual or Firm submitting Bids / Quotation / Tender.
- 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 bidder.
- viii. "Contract" means the written agreement entered into between the purchaser and/or consignees and the supplier, together with all the documents mentioned therein and including all attachments, annexure etc. therein.
- ix. "Rate Contract" means contracts for the supply of stores at specified rates ordered during the period covered by the contract. No fixed quantities are mentioned in the contract, and the contractor is bound to execute any order from the HITES at the rates specified in the contract provided the supply order is placed within the rate contract period.
- x. "Supply Order" means an order on a contractor to supply against Rate Contract. The term "Requisition" will not be used.
- xi. "**Performance Security**" means monetary or financial guarantee to be furnished by the successful bidder for due performance of the contract placed on it. Performance Security is also known as Security Deposit.
- xii. "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 the ultimate consignee.
- xiii. "**Specification**" means the document/standard that prescribes the requirement with which goods or service has to conform.
- xiv. "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.
- xv. "Day" means calendar day.
- xvi. "HITES" means HLL Infra Tech Services Limited, a fully owned subsidiary of HLL Lifecare Limited.
- xvii. "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.
- xviii. "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.
- xix. **"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. "T E 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. "NSIC" means National Small Industries Corporation
- viii. "PSU" means Public Sector Undertaking
- ix. "CPSU" means Central Public Sector Undertaking
- x. "LSI" means Large Scale Industries
- xi. "MSEs" means Micro & Small Enterprises
- xii. "LC" means Letter of Credit
- xiii. "DP" means Deliver Period
- xiv. "BG" means Bank Guarantee
- xv. "GST" means Goods and Service Tax
- xvi. "CD" means Custom Duty
- xvii. "RR" means Railway Receipt
- xviii. "BL" means Bill of Lading
- xix. "EXW" means Ex-Works
- xx. "FOB" means Free on Board
- xxi. "FCA" means Free Carrier
- xxii. "FOR" means Free on Rail
- xxiii. "CIF" means Cost, Insurance and Freight
- xxiv. "CIP (Destinations)" means Carriage and Insurance Paid up to named port of destination. Additional the Insurance (local transportation and storage) would be extended and borne by the Supplier from warehouse to the consignee site for a period including 3 months beyond date of delivery.
- xxv. "DDP" means Delivery Duty Paid named place of destination (consignee site)
- xxvi. "INCONTERMS" means International Commercial Terms as on the date of Tender Opening
- xxvii. "MoHFW" means Ministry of Health & Family Welfare, Government of India
- xxviii. "CMC" means Comprehensive maintenance Contract (labour, spare and preventive maintenance)
- xxix. "RT" means Re-Tender
- xxx. "RC" means Rate Contract
- xxxi. "SO" means Supply Order.

#### 2. Introduction

- 2.1 The Purchaser has issued these TE documents for purchase of Furniture/goods/equipment and related services as mentioned in Section VI "List of Requirements", which also indicates, *interalia*, the delivery schedule offered, terms and place of delivery.
- 2.2 This section (Section II "General Instructions to Tenderers") provides the relevant information as well as instructions to assist the prospective bidders in preparation and submission of tenders. It also includes the mode and procedure to be adopted by the purchaser for receipt and opening as well security and evaluation of tenders and subsequent placement of contract.
- 2.3 The bidders 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 bidder should read and examine all the terms, conditions, instructions, checklist etc. contained in the TE documents. Failing to provide and/or comply with the required information, instructions, etc. incorporated in these TE documents may result in rejection of its tender.
- 2.5 The Rate Contract to be awarded pursuant to this tender enquiry and supply orders placed against the rate contract so awarded will be governed by the terms and conditions as contained in the following sections:

- a. General Instructions to Tenderers Section II
- b. Special Instructions to Tenderers Section III
- c. General Conditions of Contract Section IV
- d. Special Conditions of Contract Section V
- e. List of Requirements Section VI

#### 3. Rate Contract / Parallel Rate Contract

3.1 Purchaser reserves the rights for placement of Rate Contract/conclusion of parallel Rate contracts. The Purchaser(s) also reserve(s) right (1) to enter into parallel Rate Contract(s) simultaneously or at any time during the period of the rate contract with one or more bidder(s) as he/they may think fit and (2) to place ad-hoc contract or contracts simultaneously or at any time during the period of this contract with one or more supplier(s) / bidder(s) for such quantity of such item or items as the Purchaser (whose decision shall be final) may determine.

All other contents of the Tender Enquiry Document as mentioned in clause 8.1

- 3.2 Purchaser also reserves the right to arrive at reasonable eligible L-1 price and make counter offers to higher quoting eligible firms for awarding Parallel Rate Contracts.
- 3.3 The successful bidders shall note that a supply order may be placed up to the last day of the currency of the Rate Contract.

### 4. Language of Tender

f.

- 4.1 The tender submitted by the bidder and all subsequent correspondences and documents relating to the tender exchanged between the bidder 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 bidder in connection with its tender may be written in any other language provided the same is accompanied by an English translation and, for the purpose of interpretation of the tender, the English translation shall prevail.
- 4.2 The tender submitted by the bidder and all subsequent correspondences and documents relating to the tender exchanged between the bidder and the purchaser, may also be written in the Hindi language, provided that the same are accompanied by English translation, in which case, for the purpose of interpretation of the tender etc., the English translations shall prevail.

#### 5. Eligible Bidders

This invitation for tenders is open to all suppliers who fulfil the eligibility criteria specified in these documents.

#### 6. Eligible Goods and Services

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

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

## **B. TENDER ENQUIRY DOCUMETNS**

The tender document should be read in conjunction with the Notice Inviting Tender (NIT) a copy of which is enclosed with this document. All clauses should be read in conjunction with any other instructions given elsewhere in this document on the same subject matter of the clause.

## 8. Content of Tender Enquiry Documents

8.1 In addition to Section I – "Notice Inviting Tender" (NIT), the TE document include:

Section II
 Section III
 Section IV
 Section IV
 General Instructions to Tenderers (SIT)
 General Conditions of Contract (GCC)
 Section V
 Special Conditions of Contract (SCC)

➢ Section VI - List of Requirements
 ➢ Section VII - Technical Specification
 ➢ Section VIII - Quality Control Requirement

Section IX - Qualification Criteria

➤ Section X
 ➤ Section XI
 ➤ Section XII
 - Tender Form
 - Price Schedules
 - 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 (Rate Contract and Supply Order)

➤ Section XVII -Proforma of Consignee Receipt Certificate

Section XVIII - Proforma of Final Acceptance Certificate by the consignee

Section XIX
 Section XX
 Section XXI
 Check List for Bidders
 Form for Integrity Pact
 Notice-cum-cancellation letter

➤ Section XXII - Revocation-cum-cancellation letter

8.2 The relevant details of the required goods/equipment 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 bidders are expected to examine all such details etc. to proceed further.

## 9. Amendments to TE document

- 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. The amendments, if any shall be posted only in the websites mentioned in NIT (Section-I).
- 9.2 In order to provide reasonable time to the prospective bidders 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 document

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 <a href="mailto:pcd@hllhites.com">pcd@hllhites.com</a> and <a href="mailto:bmenoida@hllhites.com">bmenoida@hllhites.com</a>. 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 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. ISO/ US FDA /CE /BIS Certificates 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.
- 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) The Integrity pact (At Section XIX) 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 tender, 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

The price to be quoted only in Indian Rupees. Tenders, where prices are quoted in any other way shall be treated as non-responsive and rejected.

#### 13. Tender Prices

- 13.1 The Bidder 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 a firm quotes NIL charges/consideration, the bid shall be treated as unresponsive and will not be considered.
- The price quoted by the bidder for the goods shall not be higher than the lowest price charged for the goods of the same nature, class or description to an individual/ firm/ organisation or department of Government of India or any state Governments. If it is found that the goods have been supplied at a lower price during the currency of Rate Contract, then such lower price will be applicable to the goods to be supplied or already supplied.
- While filling up the columns of the Price Schedule, the following aspects should be noted for compliance:
  - a) The price of the goods, quoted ex-factory/ex-showroom/ex-warehouse/off-the-shelf, as applicable, including all taxes and duties i.e. GST. already paid or payable or on the previously imported goods of foreign origin quoted ex-showroom etc.
  - b) Charges towards Packing & Forwarding, Inland Transportation, Insurance (local transportation and storage) would be borne by the Supplier from warehouse to the consignee site, Loading/Unloading

- and other local costs incidental to deliver of the goods to their final destination all over India (consignee details shall be indicated in the Supply Order).
- c) The prices of annual CMC, if applicable, as mentioned in List of Requirements and Price Schedules.

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

13.5.1 If the Bidder desires to ask for any duties or 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 duties and taxes and no claim for the same will be entertained later.

## 13.5.2 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 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.
- 13.5.3 For insurance of goods to be supplied, relevant instructions as provided under GCC Clause 11 shall be followed.
- The need for indication of all such price components by the bidders, 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 bidder on any of the terms offered.

## 14. Indian Agent - Deleted

#### 15. Firm Price

- Unless otherwise specified in the SIT, prices quoted by the bidder shall remain firm and fixed during the currency of the contract and not subject to variation on any account.
- However, as regards taxes and duties, if any, chargeable on the goods and payable, the conditions stipulated in GIT clause 13 will apply.

## 16. Delivery Period

The delivery period of the goods will be as mentioned in Section VI- List of requirement.

Bidder should however mention quote guaranteed monthly rate of supply and lead time required for commencement of supply after placement of supply order in Section VIII- Quality Control Requirements.

## 17. Documents Establishing Bidder's Eligibility and Qualifications

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

### 18. Documents establishing Goods' Conformity to TE document.

- The bidder shall provide in its tender the required as well as the relevant documents like technical data, literature, drawing 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 bidder shall also provide a clause-by-clause commentary of 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 bidder, the bidder shall list out the same in a chart form without ambiguity and provide the same along with its tender.
- 18.3 If a bidder furnishes wrong and/or misguiding data, statement(s) etc. about technical acceptability of the goods and services offered by it, its tender will be liable to be ignored and rejected in addition to other remedies available to the purchaser in this regard.

## 19. Earnest Money Deposit (EMD)

- 19.1 Pursuant to GIT clauses 8.1 and 11.1 the bidder shall furnish along with its tender, earnest money for amount as indicated in the NIT and List of Requirements. The earnest money is required to protect the purchaser against the risk of the bidder's unwarranted conduct as amplified under sub-clause 19.7 below.
- 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 as per GIT clause 12.1. The earnest money shall be furnished in one of the following forms:
  - i. Account Payee Demand Draft
  - ii. Banker's cheque
  - iii. Bank Guarantee
  - iv. Fixed Deposit Receipt.
- The demand draft or banker's cheque shall be drawn on any scheduled commercial bank in India, in favour of the "HLL Infra Tech Services Limited" payable at New Delhi. Fixed Deposit Receipt should also in favour of "HLL Infra Tech Services Limited (A/c: *Name of Bidder*)" from any scheduled commercial bank in India, payable at New Delhi. In case of bank guarantee, the same is to be provided from any scheduled commercial bank in India as per the format specified under Section XIII in these documents.
- 19.5 The earnest money if submitted in the form of Bank Guarantee or Fixed Deposit Receipt 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 a minimum period of 165 days from Techno-Commercial Tender opening date.
- 19.6 Unsuccessful bidders' 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 bidder's earnest money will be converted as a security towards performance and operation of Rate Contract and shall be retained /made valid till two months beyond the validity of Rate Contract.
- 19.7 Earnest Money is required to protect the purchaser against the risk of the Bidder's conduct, which would warrant the forfeiture of the EMD. Earnest money of a tender will be forfeited, if the bidder 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 bidder'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.

## 20. A. Tender validity

- a 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.
- b In exceptional cases, the bidders 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 fax/email followed by surface mail. The bidders, 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 bidder, however, may not agree to extend its tender validity without forfeiting its EMD.
- c. 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.

#### 20. B. Alternative Tenders

Alternative Tenders are not permitted.

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

For schedules requiring Manufacturer's Authorization, only one bidder is permitted to quote for a particular manufacturer irrespective of models.

## 21. Digital Signing of e-Tender

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

#### D. SUBMISSION OF TENDERS

#### 22. Submission of 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 as per Section XIV 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 on letter head.
    - e) Declaration regarding Fall Clause and Deregistration, debarment from any Govt Dept/ Agencies
    - f) Copy of PAN & GST Registration Certificate.
    - 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 March 2017, in pdf format.
    - i) Name, address and details of account with respect to bidder.
    - j) Quality Control Requirements as per Section VIII clearly indicating the production capacity.
    - k) Performance statement along with required PO copies and its corresponding end user's satisfactory performance certificate as per section IX.
    - 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) In case the bidder quotes an equipment of a foreign manufacturer and submits the documents as per 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.
    - n) The Integrity pact (At Section XX) 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.

#### (ii) PRICE BID

- 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 bidders must ensure that they submit the on-line tenders not later than the closing time and date specified for submission of tenders. They shall also ensure to submit the original Tender Processing Fee and EMD within its scheduled date & time.

#### 23. Late Tender

There is NO PROVISION of uploading late tender beyond stipulated date & time in the e-tendering system.

## 24. Alteration and Withdrawal of Tender

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

#### E. Opening of e-Tenders

## 25. Opening of e-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.
- Authorized representatives of the bidders, who have submitted tenders on time may attend the tender opening provided they bring with them letters of authority from the corresponding bidders. 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 bidders" names and addresses.
- 25.3 Two-bid system as mentioned in Para 21.6 above will be as follows:

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

Commercial tender. The prices, special discount if any of the goods offered etc., as deemed fit by tender opening official(s) will be read out.

#### F. SCRUTINY AND EVALUATION OF TENDERS

## 26. Basic Principle

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 bidders in their tenders. No new condition will be brought in while scrutinizing and evaluating the tenders.

#### 27. Preliminary Scrutiny of Tenders

- 27.1 The Purchaser will examine the Tenders to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished 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 The tenders will be scrutinized to determine whether they are complete and meet the essential and important requirements, conditions etc. as prescribed in the TE document. The tenders, which do not meet the basic requirements, are liable to be treated as non-responsive and will be summarily ignored.
- 27.4 The following are some of the important aspects, for which a tender shall be declared non-responsive 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 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.

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

- 28.1 If during the preliminary examinations, 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 bidders. Wherever necessary, the purchaser will convey its observation on such 'minor' issues to the bidder in writing asking the bidder to respond by a specific date. If the bidder 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.
- The purchaser may seek clarifications of historical nature from the bidders which has no bearings on prices.

## 29 Discrepancies in Prices

29.1 If, in the price structure quoted by a bidder, 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 bidder 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 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 bidder. If the bidder does not agree to the observation of the purchaser, the tender is liable to be ignored.

## 30 Qualification Criteria

- Tenders of the bidders, who do not meet the required Qualification Criteria prescribed in Section IX will be treated as non-responsive and will not be considered further.
- 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\_StarupMedEnterprise 25072016.pdf

The FAQs are available in the below link:

http://dipp.nic.in/English/Investor/startupindia/FAQs StartupIndia 30March2016.pdf

## 31 Deleted

#### 32 Schedule-wise Evaluation

32.1 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.

#### 33 Comparison of Tenders

Unless mentioned otherwise in Section – III – Special Instructions to Tenderers and Section – VI – List of Requirements, the comparison of the responsive tenders shall be carried out on Delivery Duty Paid (DDP) consignee site basis. The quoted 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."

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

- 34.1 Further to GIT Clause 34 above, the purchaser's evaluation of a tender will include and take into account the following:
  - i) In the case of goods manufactured in India or goods of foreign origin already located in India, 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)Deleted.

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

- 34.3 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 Udyog Aadhar 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."

#### 34.4 **Preference to Make in India**: As per the order issued by

- i) Department of Industrial Policy and Promotion (DIPP) vide No. P-45021/2/2017-BE-II dated 15.06.2017 &
- ii) Department of Pharmaceuticals vide No. F- 31026/36/2016-MD dated 18.05.2018 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.

## 35 Bidder's capability to perform the contract

35.1 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.

- 35.2 The above mentioned determination will, interalia, take into account the bidder'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 bidder in its tender as well as such other allied information as deemed appropriate by the purchaser.
- Purchaser reserves the right to assess/verify the credentials and capability/capacity of the bidders/manufacturers before awarding the Rate Contracts.

#### **36** Contacting the Purchaser

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

#### G. AWARD OF RATE CONTRACT

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

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 rate contract, without incurring any liability, whatsoever to the affected bidder or bidders.

#### 38 Award Criteria

- 38.1 Subject to GIT clause 37 above, the Rate Contract will be awarded to the lowest evaluated responsive bidder decided by the purchaser in terms of GIT Clause 35.
- 38.2 Provisions for Parallel Rate Contract:

HITES reserves the right to arrive at the reasonable L1 price and to conclude parallel Rate Contracts. In case, where price of L-1 is considered acceptable, Rate Contract will be concluded with the firm and its price will be counter offered to all other higher eligible quoting firms. Those who accept the counter offered prices or below may be awarded parallel rate contracts.

#### 39 Letter of Award

- 39.1 Before expiry of the tender validity period, the purchaser will notify the successful bidder(s) in writing, by registered/speed post or by fax/email that its tender for goods & services, which have been selected by the purchaser, has been accepted for conclusion of Rate Contract, also briefly indicating therein the essential details like description, specification and delivery of the goods & services and corresponding prices accepted.
- 39.2 The successful bidder must furnish to the purchaser the required performance security as indicated in the Supply Orders placed against the Rate Contract within thirty days from the date of issue/dispatch of Supply Order. Relevant details about the performance security have been provided under GCC Clause 5 under Section IV.
- 39.3 The Supply Orders placed against the Rate Contract constitute the conclusion of the contract.

## 40 Issue of Rate Contract

40.1 Promptly after notification of Rate Contract, the Purchaser will place the Rate Contract form (as per Section XVI) duly completed and signed, in duplicate, to the successful bidder/bidders.

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

## 41 Non-receipt of Performance Security and contract by the Purchaser/Consignee

Failure of the successful bidder in providing performance security and/or returning contract copy duly signed in terms of GIT clauses 39 and 40 above shall make the bidder liable for forfeiture of its EMD and, also, for further actions by the Purchaser against it as per the clause 24 of GCC – Termination of default.

#### 42 Return of EMD

The earnest money of the unsuccessful bidders will be returned to them without any interest, whatsoever, in terms of GIT clause 19.6

#### 43 Publication of Tender Result

The name and address of the successful bidder(s) receiving the Rate Contract(s) will be mentioned in the notice board/bulletin/website of the purchaser.

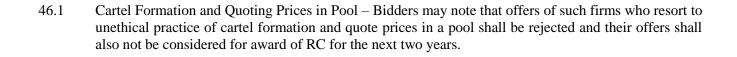
#### 44 Book examination clause

- 44.1 The contractor shall whenever called upon and requiring to produce or cause to be produced for examination by the Purchaser, any cost or other account, book of account voucher, receipt, letter, memorandum, paper or writing or any copy of or extract from such document and also furnish information any wise relating to such transaction and produce before the duly authorised representative of the Purchaser returns verified in such manner as may be required relating, in any way to the execution of this contract or relevant for verifying or ascertaining the cost of execution of this contract (the decision of Purchaser on the question of relevancy of any document, information or return being final and binding on the parties). The obligation imposed by this clause is without prejudice to the obligations of the contractor under any statue, rules or orders and shall be binding on the contractor.
- The contractor shall, if the Purchaser so requires (whether before or after the prices have been finally fixed), afford facilities to the Purchaser to visit the contractor's works for the purpose of examining the cost or production of the articles. If any portion of the work be entrusted or carried out by a subcontractor or any of its subsidiary or allied firm or company, the authorised representative of Purchaser shall have the power to examine all the relevant book of such sub-contract or any subsidiary of allied firm or company shall be open to his inspection as mentioned in clause 44.1.
- 44.3 If on such examination, it is established that the contracted price is in excess of the actual cost plus reasonable margin of profit, the Purchaser shall have the right to reduce the price and determine the amount to a reasonable level.
- Where a contract provides for book examination clause, to contractor or its agency bound to allow examination of its books within a period of 60 days from the date the notice is received by the contractor, or its agencies calling for the production of documents as under clause 44.1 above. In the event of contractor's or his agencies failure to do so, the contract price would be reduced and determined according to the best judgement of the purchaser which would be final and binding on the contractor and his agencies.

## 45 Integrity Pact

45.1 The Bidders/bidders may note that it is prescribed to use, practice and observe all the best, clean, ethical, honest and legal means & behaviour maintaining complete transparency and fairness in all activities concerning Bidding, Contracting/Rate Contracting and performance thereto for which the "Integrity Pact" shall be executed between Firm and Purchaser as per the format provided as Section-XX to be attached with the bid duly signed.

#### 46 Cartel Formation



#### **SECTION - III**

# SPECIAL INSTRUCTIONS TO TENDERERS (SIT)

Sl. No.	GIT Clause No.	Topic	SIT Provision	Page No.
A	1 to 7	Preamble	No Change	
В	8 to 10	TE documents	No Change	
C	11 to 21	Preparation of Tenders	Change	
D	22 to24	Submission of Tenders	Change	
Е	25	Tender Opening	No Change	
F	26 to 37	Scrutiny and Evaluation of Tenders	No Change	
G	38 to 45	Award of Contract	No Change	

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) 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.
  - ii) 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.
  - iii) The file name of price bid should match the file of the price bid format uploaded by the purchaser in the portal. This can be downloaded from the **Notes & Attachment** under **Details** of item when the event is in **Display Mode**.

# SECTION - IV GENERAL CONDITIONS OF CONTRACT (GCC)

## **TABLE OF CLAUSES**

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#### GENERAL CONDITIONS OF CONTRACT (GCC)

## 1. Application

- 1.1 The General Conditions of Contract incorporated in this section shall be applicable for this purchase to the extent the same are not superseded by the Special Conditions of Contract prescribed under Section V, List of requirements under Section VI and Technical Specification under Section VII of this document.
- 1.2 The parties to the contract, which shall be deemed to be "Rate Contract" and which is intended for the supply of stores of the descriptions set forth in the Tender during the period therein specified shall be the contractor on the one part and the Purchaser(s) named in the Schedule to Tender.
- 1.3 Subject as hereinafter mentioned, no guarantee can be given as to the number or quantity of the stores which will be ordered during the period of the rate contract which is only in the nature of standing offer from the Contractor but the purchaser(s) undertakes(s) to order from the contractor all stores as detailed in the schedule of stores and prices which he/they require(s) to purchase except that he/they reserve(s) the right (1) of submitting to competition any supply of articles included in the contract the total value of which exceeds such amount as the Purchaser (whose decision shall be final), may determine upon consideration of the tenders, (2) of placing this contract simultaneously at any time during its period with one or more contractors as he/they may think fit, and (3) of obtaining from any source any stores referred to in the contract to meet an emergency, if the Purchaser (whose decision will be final) is satisfied that the contractor is not in a position to supply specific quantities or numbers within the period in which supplies are required

#### 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 <u>fifteen (15) days</u> from date of the placement of supply order against Rate Contract by the Purchaser, the supplier, shall furnish performance security to the Purchaser for an amount equal to ten percent (10%) of the total value of the supply order placed against Rate Contract, valid up to sixty (60) days after the date of completion of all contractual obligations by the supplier, including the warranty obligations.
- 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/purchaser 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/purchaser.
- 5.4 In the event of any amendment issued to the contract, the supplier shall, within twenty-one (21) days of issue of the amendment, furnish the corresponding amendment to the Performance Security (as necessary), rendering the same valid in all respects in terms of the contract, as amended.
- 5.5 The supplier shall enter into Annual Comprehensive Maintenance Contract as per the 'Contract Form B' in Section XVI with respective consignees, 3 (three) months prior to the completion of Warranty Period. The <u>AMC</u> will commence from the date of expiry of the Warranty Period.
- 5.6 Subject to GCC sub clause 5.3 above, the Purchaser/Consignee will release the Performance Security without any interest to the supplier on completion of the supplier's all contractual obligations including the warranty obligations & after receipt of Consignee wise bank guarantee for CMC security in favour of Head of the Institute 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 to their final destination as indicated in the contract), rough handling, extreme weather conditions etc. so that there is no 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 in SCC. 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 in SCC, 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 Contractor should satisfy himself that the Stores are in accordance with terms of the Contract and fully conform to the required specification by carrying out a thorough pre-inspection of each lot of the stores before actually tendering the same for inspection to the Inspection Agency nominated under the terms of contract. Such precaution on the part of the Contractor minimises the chances of rejection and the consequences thereof.
- 8.2 The purchaser and/or its nominated representative(s) will /shall be at consignee site, without any extra cost to the purchaser, inspect and/or test the ordered goods and the related services to confirm their conformity to the contract specifications and other quality control details incorporated in the contract. The purchaser shall inform the supplier in advance, in writing, the purchaser's programme for such inspection and, also the identity of the officials to be deputed for this purpose. The cost towards the transportation, boarding & lodging will be borne by the purchaser and/or its nominated representative(s).
- 8.3 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.
- 8.4 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.
- 8.5 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. The goods, should, on no account be dispatched /delivered without getting the same inspected and passed by the inspecting officer stipulated in the contract.
- 8.6 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.

- 8.7 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 consignee's premises. If such goods are not removed by the supplier within the period aforementioned, 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 supplier's risk to recover any expense incurred in connection with such disposals and also the cost of the rejected stores if already paid for.
- 8.8 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.

## 9. Terms of Delivery

Goods shall be delivered by the supplier in accordance with the terms of delivery as specified in the list of requirement. Please note that the time shall be the essence of the contract.

## 10. Transportation of Goods

Instructions for transportation of domestic goods including goods already imported by the supplier.

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. The supplier shall be responsible for all loss, destructions, damage or deterioration of or to the goods from any cause whatsoever while the goods after approval by the inspector are awaiting despatch or delivery.

## 11. Insurance:

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

In case of supply of 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 "warehouse to warehouse" (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.

If the equipment is not commissioned and handed over to the consignee within 3 months, the insurance will be extended by the supplier at their cost till the successful installation, testing, commissioning and handing over of the goods to the consignee is completed. 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 actual will be reimbursed.

#### 12. Spare parts

- 1.1 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 including their prices:
  - a) Spare Parts list and prices of parts, consumables should be mentioned clearly and quoted. Bidder should also mention regarding the availably of spares for at least ten years.

- b) 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
- c) In case the production of the spare parts is discontinued:
  - i. Sufficient advance notice to the Purchaser/Consignee before such discontinuation to provide adequate time to the purchaser to purchase the required spare parts etc., and
  - ii. Immediately following such discontinuation, providing the Purchaser/Consignee, free of cost, the designs, drawings, layouts and specifications of the spare parts, as and if requested by the Purchaser/Consignee.
- 12.2 Supplier shall carry sufficient inventories to assure ex-stock supply of consumables and spares for the goods so that the same are used during warranty and CMC period.

#### 13. Incidental services

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

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

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

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

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

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:

- (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) Certificate of origin (in case goods are of foreign origin);
- (v) Insurance Certificate as per GCC Clause 11.
- (vi) Manufacturers/Supplier's warranty certificate & In-house inspection certificate.

## 15. Warranty

- 15.1 The supplier warrants comprehensively that the goods supplied under the contract is new, unused and incorporate all recent improvements in design and materials unless prescribed otherwise by the purchaser in the contract. The supplier further warrants that the goods supplied under the contract shall have no defect arising from design, materials (except when the design adopted and/or the material used are as per the Purchaser's/Consignee's specifications) or workmanship or from any act or omission of the supplier, that may develop under normal use of the supplied goods under the conditions prevailing in India.
- 15.2 This warranty shall remain valid for the period as mentioned in the SCC Section-V/ List of Requirement Section VI, 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.

- i. No conditional warranty will be acceptable.
- ii. 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:
  - a) Any kind of motor.
  - b) Plastic & Glass Parts against any manufacturing defects.
  - c) All kind of sensors.
  - d) All kind of coils, probes and transducers.
  - e) Printers and imagers including laser and thermal printers with all parts.
  - f) UPS including the replacement of batteries.
  - g) Air-conditioners
- iii. Replacement and repair will be under taken for the defective goods.
  - a) All kinds of painting, civil, HVAC and electrical work
- iv. Proper marking has to be made for all spares for identification like printing of installation and repair dates.
- 15.3 In case of any claim arising out of this warranty, the Purchaser/Consignee shall promptly notify the same in writing to the supplier. The period of the warranty will be as per G.C.C clause number 15.2 above irrespective of any other period mentioned elsewhere in the bidding documents.
- Upon receipt of such notice, the supplier shall, within 24 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 case the supplier is not able to rectify the defects to the full satisfaction of the purchaser the goods shall have to be replaced with a new one. The decision of the purchaser in this respect shall be final and binding on the supplier.
- 15.6 If the supplier, having been notified, fails to respond to take action to repair or replace the defect(s) within 24 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.

#### 16. Assignment

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
- 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

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

#### 20. Taxes and Duties

- 20.1 For goods manufactured outside the Purchaser's Country, the Supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the Purchaser's Country.
- For goods Manufactured within the Purchaser's country, the Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods to the Purchaser.
- 20.3 If any tax exemptions, reductions, allowances or privileges may be available to the Supplier in the Purchaser's Country, the Purchaser shall use its best efforts to enable the Supplier to benefit from any such tax savings to the maximum allowable extent.

## 21. Terms and Mode of Payment

#### 21.1 Payment Terms

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

### A) On delivery:

Eighty percent (80%) 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) Consignee Receipt Certificate as per Section XVII in original issued by the authorized representative of the consignee;
- (iii) Two copies of packing list identifying contents of each package;
- (iv) Inspection certificate issued by the nominated Inspection agency, if any.
- (v) Insurance Certificate as per GCC Clause 11
- (vi) Certificate of origin (in case the goods are of foreign origin).

### **B)** On Acceptance:

Balance Twenty percent (20%)payment would be made against 'Final Acceptance Certificate' as per Section XVIII of goods to be issued by the consignees subject to recoveries, if any, either on account of non-rectification of defects/deficiencies not attended by the Supplier or otherwise. 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.

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

Site Modification Work payment will be made to the bidder/ manufacturer's agent or 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, if applicable:

The consignee may enter into CMC with the supplier at the rates as stipulated in the Rate 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 Deleted
- 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.
- While claiming reimbursement of duties, taxes etc. (like sales tax, excise duty, custom duty) from the Purchaser/Consignee, as and if permitted under the contract, the supplier shall also certify that, in case it gets any refund out of such taxes and duties from the concerned authorities at a later date, it (the supplier) shall refund to the Purchaser/Consignee forthwith.
- 21.9 In case where the supplier is not in a position to submit its bill for the balance payment for want of receipted copies of Inspection Note from the consignee and the consignee has not complained about the non-receipt, shortage, or defects in the supplies made, balance amount will be paid by the paying authority without consignee's receipt certificate after three months from the date of the preceding part payment for the goods in question, subject to the following conditions:

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

"I/We,	certify that I/We have not received back the Final Acceptance certificate from 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 dat	e of receipt of this balance payment.

## 22. Delivery Schedule

- 22.1 The supplier shall deliver the goods and perform the services under the contract within the time schedule specified in the Supply Order. The time for and the date of delivery of the goods stipulated in the schedule shall be deemed to be of the essence of 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 shall examine the situation as soon as possible and, at its discretion, may agree to extend the delivery schedule, with or without liquidated damages for completion of supplier's contractual obligations by issuing an amendment to the contract.
- When the period of delivery is extended due to unexcused delay by the supplier, the amendment letter extending the delivery period shall, interalia contain the following conditions:
  - a) The Purchaser 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 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 shall be entitled to the benefit of any decrease in price on account of reduction in or remission of 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 for extension of delivery period and obtain the same before despatch. In case the supplier dispatches the goods without obtaining an extension, it would be doing so at its own risk and no claim for payment for such supply and / or any other expense related to such supply shall lie against the purchaser.

## 22.6 Passing of Property:

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

#### 23. Liquidated damages

Subject to GCC clause 26, if the supplier fails to deliver any or all of the goods or fails to perform the services within the time frame(s) incorporated in the Supply Order, the Purchaser shall, without prejudice to other rights and remedies available to the Purchaser under the contract, deduct from the contract price, as liquidated damages, a sum equivalent to 0.5% per week of delay or part thereof on delayed supply of goods and/or services until actual delivery or performance subject to a maximum of 10% of the contract price. Once the maximum is reached Purchaser 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, without prejudice to any other contractual rights and remedies available to it (the Purchaser), 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 pursuant to GCC sub-clauses 22.3 and 22.4.
- In the event of the Purchaser terminating the contract in whole or in part, pursuant to GCC sub-clause 24.1 above, the Purchaser will forfeit the performance security and may procure goods and/or services similar to those cancelled, with such terms and conditions and in such manner as it deems fit. The supplier shall be liable to the Purchaser for the extra expenditure, if any, incurred by the Purchaser for arranging such procurement.
- 24.3 Unless otherwise instructed by the Purchaser, the supplier shall continue to perform the contract to the extent not terminated.
- 24.4 If the Supplier, in the judgement of Purchaser has engaged in fraud and corruption, as defined in GCC Clause 37, in competing or in executing the Contract.

## 25. Termination for insolvency / Convenience

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.

#### 25.2 Termination for Convenience

(a) The Purchaser, by notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.

- (b) The Goods that are complete and ready for shipment within twenty-eight (28) days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:
  - (i) To have any portion completed and delivered at the Contract terms and prices; and/or
  - (ii) To cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Related Services and for materials and parts previously procured by the Supplier.

### 26. Force Majeure

- 26.1 Notwithstanding the provisions contained in GCC clauses 22, 23 and 24, the supplier shall not be liable for imposition of any such sanction so long the delay and/or failure of the supplier in fulfilling its obligations under the contract is the result of an event of Force Majeure.
- 26.2 For purposes of this clause, Force Majeure means an event beyond the control of the supplier and not involving the supplier's fault or negligence and which is not foreseeable and not brought about at the instance of, the party claiming to be affected by such event and which has caused the non-performance or delay in performance. Such events may include, but are not restricted to, acts of the Purchaser/Consignee either in its sovereign or contractual capacity, wars or revolutions, hostility, acts of public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes executed by its employees, lockouts executed 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. Purchaser's Right to Short Close/Revocation/Cancellation of the Rate Contract

- 27.1 Since the rate contract is a standing offer and is merely a document embodying various terms of the standing offer made by the Contractor, the purchaser can legally cancel the Rate Contract at any time during the currency of the contract giving a reasonable opportunity to the contractor to represent against such cancellation. The revocation/cancellation of the Rate Contract shall take effect immediately thereafter. Any order placed by the Purchaser after the date of cancellation of the Rate Contract should not be taken up by the contractor for execution. The purchaser may, at its option negotiate with the Contractor so as to bring the R/C prices in line with the Market prices, whenever market fluctuation affects prices abnormally. If the negotiation fails, then the Rate Contract will be foreclosed and fresh Rate Contract will be concluded separately.
- 27.2 Either party namely, the R/C holder/the Purchaser can legally revoke/cancel the Rate Contract at any time during the currency of the Rate Contract giving a notice of 15 days. The revocation of the Rate Contract on the part of R/C holder shall take effect 15 days from the date of the communication of revocation is received by the Purchaser. The cancellation of the Rate Contract by the Purchaser shall take effect 15 days from the date of issue of letter notifying the short closure.

The notice-cum-cancellation of Rate Contract letter to be issued by the Purchaser given in **Section**-XXII and the R/C holder can revoke the Rate Contract by making the application in the Form given in **Section XXII**.

#### 28. Governing language

28.1 The Rate Contract shall be written in English language following the provision as contained in GIT clause 4. All correspondence and other documents pertaining to the Rate Contract, which the parties exchange, shall also be written accordingly in that language. Supply orders placed based on the Rate Contract shall also be written in English language.

#### 29. Notices

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

### 30. Resolution of disputes

- 30.1 If dispute or difference of any kind shall arise between the Purchaser/Consignee and the supplier in connection with or relating to the Rate 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. Such dispute or difference shall be referred to the sole arbitrator appointed by the Chairman & Managing Director of HLL Life care Limited. 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 Lac (Rs. 1,00,000/-).
- 30.3 Venue: The venue of arbitration shall be Delhi/New Delhi (India)/NCR.

#### 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 shallbe 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. Submission of Quarterly Drawal Report:

33.1 The offer of the firms of the next R/C will be considered only if their performance against the current and preceding R/Cs, if held by them, is satisfactory and they are otherwise eligible. For this purpose, the purchaser expects that a firm should have supplied minimum 85%/95%/100% of the stores due for supply against the current RC and preceding two years R/C respectively on or before the cut-off date as indicated in the tender enquiry.

33.2 R/C holder not obtaining any Supply Order against the current R/C prior to the period indicated above and also against immediate previous Rate Contract will be considered to have a NIL performance and will not be eligible for award of next R/C.

## 34. Limitation of Liability:

- 34.1 Except in cases of criminal negligence or wilful misconduct,
  - (a) The Supplier shall not be liable to the Purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to the Purchaser and
  - (b) The aggregate liability of the Supplier to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the supplier to indemnify the purchaser with respect to patent infringement.

#### 35. Corrupt Practices

- 35.1 It is required by all concerned namely the Consignee/Bidders/Suppliers etc to observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Purchaser: -
  - (a) defines, for the purposes of this provision, the terms set forth below as follows:
    - (i) "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and
    - (ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Purchaser, and includes collusive practice among Bidders (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 bidder 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.

#### 36. Fall Clause

- 36.1 The prices charged for the stores supplied under the Contract by the Contractor shall in no event exceed the lowest price at which the Contractor sells the Stores or offer to sell stores of identical description to any person(s)/organisation(s) including the Purchaser or any Department of Central Government or any Department of a State Government or any statutory undertaking of the Central or a State Government, as the case may be, during the period till performance of all Supply Orders placed during the currency of Rate Contract is completed.
- 36.2 It at any time during the said period, the Contractor reduces the Sale price, sells or offers to sell such stores to any person(s)/organisation(s) including the Purchaser or any Statutory Undertaking of the Central or a State Government, as the case may be, at a price lower than the price chargeable under this Contract, he shall forthwith notify such reduction or Sale or offer of Sale to the office from where this Rate Contract is issued and the price payable under the Contract for the stores supplied after the date of coming into force of such reduction or sale or offer of sale stand correspondingly reduced. The above stipulation will, however, not apply to:

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- (a) Export/deemed Export by the Contractor
- (b) Sale of Goods as Original Equipment prices lower than the price charged for normal replacement.
- (c) Sale of goods, such as drugs, which have expiry date.
- (d) Sale of goods at lower price on or after the date of completion of sale/placement of order of goods by the authority concerned, under the existing or previous Rate Contracts as also under any previous contracts entered into with the Central or the State Government Departments including new undertaking (excluding joint sector companies and or private parties) and bodies.
- 36.3 The Contractor shall furnish the following certificate to the Paying Authority along with each bill for payment for supplies made against the Rate Contract.

"I/We certify that there has been no reduction in sale price of the Stores of Description identical to the Stores supplied to the Government under the contract herein and such Stores have not been offered/sold by me/us to any persons(s) organisation(s) including the purchaser or any Department of Central Government or any Department of a State Government or any statutory Undertaking of the Central or State Government as the case may be upto the date of the bill/ the date of completion of supplies against all supply order placed during the currency of the R/C at a price lower than the price charged to Government under the Contract except for quantity of Stores categorised under sub-clause (a), (b) and (c) of Para 36.2 above.

NOTE: The Contract will also inform the Purchaser as soon as supplies against all the Supply Orders placed against the Rate Contract are completed.

## 37. General/ Miscellaneous Clauses

- 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.
- 37.2 Any failure on the part of any Party to exercise right or power under this Contract shall not operate as waiver thereof.
- 37.3 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.
- 37.4 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.
- 37.5 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.
- 37.6 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.
- 37.7 All claims regarding indemnity shall survive the termination or expiry of the contract.
- 37.8 If any provisions of this tender enquiry or a contact 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 Rate Contract finalised under this tender enquiry can be operated only by HITES. Any supplier supplying against the said Rate contract to any other user, Government/Private without knowledge and permission of HITES will be considered breach of contract and HITES may initiate action as deemed appropriate including but not limited to forfeiture of their security towards performance and operation of Rate Contract, debarring, blacklisting, etc.

# SECTION - VI LIST OF REQUIREMENTS

1. Details of Requirement:

1.	Details of Req	un emen.	1	I	
Sch. No.	Rfx. No.	Name of the Items	Total Estimated Qty.	Warranty	CMC
1	3000003990	Operation Theatre Table	42	5	5
2	3000003991	Operation Theatre Ceiling light	35	5	5
3	3000003992	Pedestal lights	35	5	5
4	3000003993	Electro-surgical cautery unit with Vessel Sealing	49	5	5
5	3000003994	Suction Machine	185	5	5
6	3000003995	Pulse oximeter	280	5	5
7	3000003996	Multi Para Monitors	350	5	5
8	3000003997	ECG machines	70	5	5
9	3000003998	Electro-surgical cautery unit	70	5	5
10	3000003999	General Surgery Set	53	5	NA
11	3000004000	Pediatric surgical instrument set	14	5	NA
12	3000004001	Vascular set	7	5	NA
13	3000004002	Urology Surgical Set	7	5	NA
14	3000004003	Laparoscope for Pediatric	7	5	5
15	3000001003	Cystoscope & Resectoscope	7	5	5
16	3000004004	Laparoscope Set	7	5	5
17	3000004005	Video Endoscopy System	14	5	5
18	300004007	Flibre Optic Video Bronchoscope	16	5	5
19	3000004007	C-arm with ERCP	14	5	5
20	300004008	Harmonic Scalpel	9	5	5
21	3000004009	Anesthesia Work Station	70	5	5
22		ICU monitor	250	5	5
23	3000004011	Defibrillator	230	5	5
23	3000004012		21	3	3
24	3000004013	Defibrillator with CPR Monitoring and TC Pacing	14	5	5
25	3000004014	ICU Ventilator	210	5	5
26	3000004015	PNS (Desirable)	7	5	5
27	3000004016	ABG machine	18	5	5
28	3000004017	Patients controlled analgesia system (portable)	7	5	5
29	3000004018	Volumetric Infusion pumps	350	5	5
30	3000004019	Syringe Infusion pumps	1400	5	5
31	3000004020	DVT Pump	70	5	5
32	3000004021	Patient Warming system	35	5	5
33	3000004022	Blood and fluid Warmer	35	5	5
34	3000004023	CPAP/ BIPAP machine	14	5	5
35	3000004024	General instrumentation set for fracture reduction	41	5	NA
36	3000004025	Set for Hip Replacement	7	5	NA
37	3000004026	Set for knee replacement	7	5	NA
38	3000004027	Interlock nailing sets	28	5	NA
39	3000004027	Fracture reduction OT tables	14	5	5
40	3000004029	Simple OT tables	7	5	5
41	3000004029	Pneumatic drill and reamer	7	5	5
42	3000004030	Electrical drill and reamer set	14	5	5
43	3000004031	Mobile C-Arm	14	5	5
44	3000004032	Arthroscope	7	5	5
45	3000004033	AED	14	5	5
46	3000004034		14	5	5
		Automatic Tourniquet		5	5
47	3000004036	Digital Mammography	2	) 3	3

Note: Bidders are advised to offer their best competitive prices against this Rate Contract tender. The drawals against the Rate Contract will depend on the competitiveness of the prices, quality of equipment and timely delivery of previous supply orders as essential requirements.

#### 2. Destination/Consignee details

Stores are to be supplied in Madhya Pradesh and all over India as indicated in the Supply Orders placed against the Rate Contract.

## 3. Delivery Period:

The delivery period will 60 days from the date of placement of supply order or 30 days from the date of site readiness whichever is later.

Bidder should however mention quote guaranteed monthly rate of supply and lead time required for commencement of supply after placement of supply order in Section VIII- Quality Control Requirements..

### 4. Terms of Delivery:

Free Delivery at Consignee Site

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

## 5. Scope of Incidental Services:

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

Installation & commissioning shall be completed within 30 days, of handing over the site complete in all respect by the consignee. The date of handing over the site has to be intimated to the supplier by the consignee. The delay on the part of the supplier to install & commission of Equipment will also attract the provisions as contained in the liquidated damage clause.

### 6. Warranty:

Terms of warranty shall be as per details given in general technical specification/technical specification of the Equipment and for a period specified in the Table under 'List of Requirement' above.

Warranty period will be effective from the date of installation, commissioning and acceptance.

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

# SECTION-VII TECHNICAL SPECIFICATIONS

~-	a		1
Sl.	Sch.1	Ì	
No	Operation Theatre Table		
1	Electro Hydraulic /Electromechanical / Powered Operating Tables are tables for	Ì	
	performing surgical procedures and it works with electrical power.		
2	Operational Requirements		
A	OT Table is required for general surgery and should have X-Ray translucent tops.		
3	Technical Specifications  Four / Five position table to a with divided foot continuo (calit lee continuo)		
A	Four / Five section table top with divided foot section (split leg section)	i	
В	Table top should permit x-ray penetration and fluoroscopy with full length X-ray cassette tunnel(for 10" X 12" film) accessible from either end. Tunnel should be	Ì	
	inbuilt in the table and seperate top for creating tunnel will not be accepted.	ı	
С	Should have a handset for various functions		
D	There should be inbuilt standby control enabling full use of table in case of handset		
"	failure with manual/electric override	ı	
E	All table positioning, i.e., height, back section adjustment, lateral tilt, <b>Cranial</b> -		
L	caudal traversing or longitudinal movement, Trendelenburg and anti-	Ì	
	Trendelenburg, should be operated through handset and standby control	ı	
F	The casings on the frame and centre supporting column should be made of hygienic		
•	stainless steel.	i	
G	Mattress should be radiolucent and of PU make and suitable for fluoroscopy. It		
	should be fire resistant and certificate for fire resistant to be submitted.	Í	
Н	Table should have mobile base with lockable castors		
I	Should have built in electronic controlled kidney position with additional manual /		
	electronic control by Kidney Bridge for better positioning if required	Ì	
J	Zero level button		
4	Measurements: (+/-5% tolerance allowed in the sizes/measurements/		
	angles/dimensions)		
Α	Height: 690-1080mm with 50 -80 mm mattress.		
В	Side tilt: minimum +/-15 degrees	<u>.                                    </u>	
C	Back section adjustment: - 30 degrees to 60 degrees or more		
D	Foot section adjustment: - 90 to 0 degree, detachable		
Е	Trendelenburg: minimum 25 degree		
F	Anti-Trendelenburg: minimum 25 degree		
G	Head section adjustment: +/- 45 degree, detachable		
Н	Width: 550 mm or more		
I	Length: 2000 mm or better		
J	Cranial and caudal traversing or longitudinal movement of minimum 200 mm		
K	Weight – 250 Kg or more in all positions		
5	System Configuration Accessories, spares and consumables		
	All the accessories should be from the same manufacturer (except gel pad) and	Í	
	same quality standards as asked for table (para 8). The price of the following	Í	
	accessories should be quoted separately and will be taken for price bid evaluation	i	
	and ranking purpose as mentioned in BOQ		
6	Environmental factors  The unit shall be concluded from stored continuously in ambient temperature of 0.		
Α	The unit shall be capable of being stored continuously in ambient temperature of 0 - 50 deg C and relative humidity of 15-90%	i	
В	The unit shall be capable of operating continuously in ambient temperature of 10 -		$\vdash$
ر ا	40deg C and relative humidity of 15-90%	Í	
7	Power Supply		
A	Power input: 220-240V/ 50 Hz AC single phase fitted with appropriate Indian plugs		
	and sockets.	Í	
В	Inbuilt battery backup for 5 hrs <b>or equivalent</b>		
8	Standards & Safety	1	
a	Should be US-FDA or European CE with 4 digit notified body number or		
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	Declaration of conformity <b>for quoted model</b> along with ISO 13485 or BIS certified		
	for the quoted model		
В	Manufacturer should be ISO certfied for quality standards		
C	Electrical safety conforms to standards for electrical safety IEC 60601-1 General		
	Requirements (or equivalent BIS Standard)		
D	Shall meet internationally recognised standard for Electro Magnetic Compatibility		
	(EMC) for electromedical equipment: IEC-60601-1-2: latest edition Or Equivalent		
	BIS or should comply with 89/366/EEC; EMC-directive as amended:		
Е	Certified to be compliant with IEC 60601-2-46: Particular requirements for the		
	safety of Operating Tables: latest edition or equivalent		
F	The IEC certificate namely IEC 60601-1, IEC-60601-1-2, IEC 60601-2-46		
	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		
0	origin.		
9	Training  Control of the state		
Α	Comprehensive training for staff of user department and support services till		
10	familiarity with the system.		
10	Documentation		
Α	Product Literature in original along with that of accessories and indigenous		
	components if any is to be provided. Photocopies/computer generated copies are not		
В	acceptable  Statement of compliance with tender specifications with clear and unambiguous		
ь	links to relevant portions of product literature/authentic document, which should be		
	highlighted. Alternatives provided for noncompliant specifications with justification		
	must be described in detail with supporting literature		
11	Demonstration should be arranged at HITES office Noida/Bhopal within 20		
11	days from the date of techno-commercial tender opening.		
	BOO	Qty	UOM
1	OT Table as per technical specification	1	No
2	Padded arm rest with straps - pair with damps	1	set
3	Anaesthesia screen with clamps	1	set
4	Side supports: pair with clamps	1	set
5	Shoulder supports: pair with clamps	1	set
6	Knee crutches: pair with damps	1	set
7	X-ray cassette tray with pushing rod	1	No
8	Gel Flat button chest roll (medium)	2	Nos
9	Gel prone positioner (feet)	1	No
10	Gel prone head rest (large)	1	No
11	Anti-Trendelenburg restraint strap	3	Nos

Sl.	Sch.2			
No	Operation Theatre Ceiling light			
	Operating Room Surgical Lighting System should provide an ideal combination of			
	brightness, maneuverability, and shadow resolution without sacrificing color accuracy			
	through a consistent LED technology.			
	Such Lighting System should have the following technical specifications:			
A	Number of Light heads: Two per suspension			
В	Color Temperature range: 3800k-5000 (±10 %)- Variable color temperature.			
C	Field Size Diameter: 20 to 28cm (+/- 10%)			
D	Working Range: 750 to 1100mm (+/- 10%)			
E	Illumination Level: 160000Lux Major Dome & Minor dome 120000 Lux			
F	Controls : Control Panel (wall and on dome)			
G	Rotation: 360-330 degrees			
H	Sterilizable Handle: 02Nos.			

I	Mounting Type: Ceiling
J	Supply Voltage: 230 VAC 50 Hz
K	Bulb Type : LED
L	Dimming Range : 50% - 100%
M	Operating/Storage Humidity: 10 – 95%
N	Deleted
0	Should be provision to mount the camera in one dome.
P	Surgical Light System Should be compliant with relevant European CE /US FDA/BIS
r	standards

Sl.	Sch.3
No	Pedestal lights
1	Technical Specification
1.1	To provide cool, intense, focused light of 20000 lux or more.
1.2	Should be LED bulb.
1.3	Should have bulb retainer to prevent accidental unplugging and fall.
1.4	Should have protective shade with holds on top to dissipate heat.
1.5	5 spokes stand mounted on caster of 5cm diameter.
1.6	Maximum height – 170 cms
1.7	Tubing of MS, pretreated and epoxy powder coated.
1.8	Cable length – 2m
2	Standards, Safety and Training
2.1	Manufacturer should have ISO certification

	Sch.4		
	Electro-surgical cautery unit with Vessel Sealing		
	Technical Specification	<u> </u>	
_	Should have following features and Accessories:	<u> </u>	
1	Technical Specification	ļ	
1.1	ESUs are used for surgical cutting and for controlling bleeding by		
	causing coagulation (hemostasis) at the surgical site. They deliver	1	
	high-frequency electrical current through an active electrode tip,	1	
	causing desiccation, vaporization, or charring by resistive heating in	ı	
	the target tissue.		
2	Operational Requirements	<del>                                     </del>	
2.1	Microprocessor/Microcontroller technology	<del>                                     </del>	
3	Technical Specifications	<b> </b>	
3.1	Integrated touch screen/touch button system with 300-400W output	ı	
	generator for monopolar cut, <b>100 - 120Watt or more</b> for monopolar	1	
	coagulation, bipolar cut <b>90 Watt or more</b> and Bipolar coagulation	ı	
	90Watt or more and vessel sealing system for open and laparoscopic	ı	
	surgery with under water cutting current.	<del>                                     </del>	
3.2	Should provide monopolar output for cut, coagulation (fulguration &	ı	
2.2	spray) & blend in multiple levels	<del>                                     </del>	
3.3	Should have bipolar cut and coagulation in multiple levels with	1	
2.4	automatic bipolar coagulation.	<del>                                     </del>	
3.4	Activation by foot switch and hand switch for all the modes.	<del>                                     </del>	
3.5	Activation of bipolar by foot switch	<del>                                     </del>	
3.6	Capable of sealing vessels of minimum 7 mm diameter	<b> </b>	
3.7	Auto diagnosis on switching on and during working to continuously	ı	
• 0	monitor all parameters	<u> </u>	
3.8	Automatic stoppage of output in case of malfunction with acoustic		
• •	and visual signal with display of error code.		
3.9	Output powers adjustable automatically or manually from the control		
	panel.		
3.10	Programmable memory for output settings/recall last setting	<u> </u>	

2 11	Ch		1
3.11	Should be usable with laparoscopic monopolar and bipolar		
2.12	instruments, for which accessories must be available		
3.12	System for neutral plate safety by continuous monitoring of contact quality and connection		
3.13	System for monitoring and control of leakage current		
3.14	Frequency Leakage on the patient should be less than 10 micro Amp.		
4	System Configuration Accessories, spares and consumables		
4.1	System configuration Accessories, spares and consumables  System as specified		
4.2	The accessories should include: <b>All the Accessories mentioned in</b>		
7.2	BOQ and rate of each accessories should be quoted seperately		
	which should be valid for the entire warranty period.		
4.3	The codes and rates of all possible individual accessories should be		
1.0	quoted separately with clear mention of period of validity of rates		
5	Environmental factors		
5.1	The unit shall be capable of being stored continuously in ambient		
	temperature of 0 -50 deg C and relative humidity of 15-90%		
5.2	The unit shall be capable of operating continuously in ambient		
	temperature of 10 -40deg C and relative humidity of 15-90%		
6	Power Supply		
6.1	Power input to be 220-240VAC, 50Hz fitted with Indian plug		
6.2	Deleted		
7	Standards & Safety		
7.1	Should be USFDA or European CE with 4 digit notified body		
	number or BIS approved product		
7.2	Manufacturer should have EN ISO certification for quality standards.		
7.3	Complete system and all accessories mentioned should be from same		
	make.		
8	Training		
8.1	Comprehensive training for staff of user department and support		
	services till familiarity with the system.		
9	Service		
9.1	Percentage of uptime guarantee of the equipment during warranty and		
	( N/I ) period for which commitment is to be given must be specified		
1	CMC period for which commitment is to be given must be specified		
	with acceptance of applicable penalty clauses in case of failure to do		
0.2	with acceptance of applicable penalty clauses in case of failure to do so.		
9.2	with acceptance of applicable penalty clauses in case of failure to do so.  Manufacturer should have own registered office/own registered		
9.2	with acceptance of applicable penalty clauses in case of failure to do so.  Manufacturer should have own registered office/own registered service centre/100% Subsidiary company in India. Necessary		
9.2	with acceptance of applicable penalty clauses in case of failure to do so.  Manufacturer should have own registered office/own registered service centre/100% Subsidiary company in India. Necessary document in the name of manufacturer/100% subsidiary company like		
	with acceptance of applicable penalty clauses in case of failure to do so.  Manufacturer should have own registered office/own registered service centre/100% Subsidiary company in India. Necessary document in the name of manufacturer/100% subsidiary company like GST Registration/Trade License to be submitted along with bid;		
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10.1 10.2 10.2	with acceptance of applicable penalty clauses in case of failure to do so.  Manufacturer should have own registered office/own registered service centre/100% Subsidiary company in India. Necessary document in the name of manufacturer/100% subsidiary company like GST Registration/Trade License to be submitted along with bid;  Documentation  Product Literature in original along with that of accessories and indigenous components if any. Photocopies/computer generated copies are not acceptable  Statement of compliance with tender specifications with clear and unambiguous links to relevant portions of product literature/authentic document, which should be highlighted. Alternatives provided for noncompliant specifications with justification must be described in detail with supporting literature.  BOQ  System as specified - 1 no  OEM trolley - 01 nos	1	Nos Nos
10.1 10.2	with acceptance of applicable penalty clauses in case of failure to do so.  Manufacturer should have own registered office/own registered service centre/100% Subsidiary company in India. Necessary document in the name of manufacturer/100% subsidiary company like GST Registration/Trade License to be submitted along with bid;  Documentation  Product Literature in original along with that of accessories and indigenous components if any. Photocopies/computer generated copies are not acceptable  Statement of compliance with tender specifications with clear and unambiguous links to relevant portions of product literature/authentic document, which should be highlighted. Alternatives provided for noncompliant specifications with justification must be described in detail with supporting literature.  BOQ  System as specified - 1 no  OEM trolley - 01 nos  Mains cable with power plug for standard Indian sockets - 01 nos	1 1 1	Nos Nos Nos
10 10.1 10.2	with acceptance of applicable penalty clauses in case of failure to do so.  Manufacturer should have own registered office/own registered service centre/100% Subsidiary company in India. Necessary document in the name of manufacturer/100% subsidiary company like GST Registration/Trade License to be submitted along with bid;  Documentation  Product Literature in original along with that of accessories and indigenous components if any. Photocopies/computer generated copies are not acceptable  Statement of compliance with tender specifications with clear and unambiguous links to relevant portions of product literature/authentic document, which should be highlighted. Alternatives provided for noncompliant specifications with justification must be described in detail with supporting literature.  BOQ  System as specified - 1 no  OEM trolley - 01 nos  Mains cable with power plug for standard Indian sockets - 01 nos  Foot switches for different outputs(through single or multiple	1	Nos Nos
10.1 10.2 1 2 3 4	with acceptance of applicable penalty clauses in case of failure to do so.  Manufacturer should have own registered office/own registered service centre/100% Subsidiary company in India. Necessary document in the name of manufacturer/100% subsidiary company like GST Registration/Trade License to be submitted along with bid;  Documentation  Product Literature in original along with that of accessories and indigenous components if any. Photocopies/computer generated copies are not acceptable  Statement of compliance with tender specifications with clear and unambiguous links to relevant portions of product literature/authentic document, which should be highlighted. Alternatives provided for noncompliant specifications with justification must be described in detail with supporting literature.  BOQ  System as specified - 1 no  OEM trolley - 01 nos  Mains cable with power plug for standard Indian sockets - 01 nos  Foot switches for different outputs(through single or multiple footswitch)	1 1 1	Nos Nos Nos
10.1 10.2	with acceptance of applicable penalty clauses in case of failure to do so.  Manufacturer should have own registered office/own registered service centre/100% Subsidiary company in India. Necessary document in the name of manufacturer/100% subsidiary company like GST Registration/Trade License to be submitted along with bid;  Documentation  Product Literature in original along with that of accessories and indigenous components if any. Photocopies/computer generated copies are not acceptable  Statement of compliance with tender specifications with clear and unambiguous links to relevant portions of product literature/authentic document, which should be highlighted. Alternatives provided for noncompliant specifications with justification must be described in detail with supporting literature.  BOQ  System as specified - 1 no  OEM trolley - 01 nos  Mains cable with power plug for standard Indian sockets - 01 nos  Foot switches for different outputs(through single or multiple footswitch)  Reusable Silicon neutral electrode for adults and children along, with	1 1 1	Nos Nos Nos Nos
10.1 10.2 1 2 3 4	with acceptance of applicable penalty clauses in case of failure to do so.  Manufacturer should have own registered office/own registered service centre/100% Subsidiary company in India. Necessary document in the name of manufacturer/100% subsidiary company like GST Registration/Trade License to be submitted along with bid;  Documentation  Product Literature in original along with that of accessories and indigenous components if any. Photocopies/computer generated copies are not acceptable  Statement of compliance with tender specifications with clear and unambiguous links to relevant portions of product literature/authentic document, which should be highlighted. Alternatives provided for noncompliant specifications with justification must be described in detail with supporting literature.  BOQ  System as specified - 1 no  OEM trolley - 01 nos  Mains cable with power plug for standard Indian sockets - 01 nos  Foot switches for different outputs(through single or multiple footswitch)	1 1 1	Nos Nos Nos

	for electrode handle - 02 nos		
7	set of electrodes (4 different types) with electrode container with	5	Nos
	holder		each
8	Tip cleaner	20	Nos
9	Bipolar forceps (non stick) with cable, straight (18-22cm approx), and	1	Nos
	Bayonet (18-22cm approx)		each
10	Reusable cable for connecting to standard mono polar and bipolar	2	Nos
	laparoscopic instruments		
11	Resuable dedicated instruments for open and laparoscopic for vessel	2	Nos
	sealing use (Life of minimum 50 caes)		each

	Sch.5		
	Suction Machine		
	High vacuum suction unit, run on electricity with two suction jars of		
1	4-5 liters capacity each. If one jar filled, it should be		
	automatically/manually connect to other jar.		
2	Auto cut off device of preventing entry of fluid in pump.		
3	Fast and efficient jar change facility.		
4	Easy access and controls		
5	It should be heavy duty and noiseless, with		
3	piston/cylinder/Diaphragm technology.		
	Should be able to create desired maximum vacuum in least possible		
6	time, vacuum should be up to -90 K pascal with minimum		
	capacity of 45L/min.		
7	Light and maneuverable fitted on a mobile trolley.		
8	One plastic suction jar cover, steam sterilizable to be provided extra.		
	Two extra suction jar (Plastic) of capacity 4-5 ltrs. Should be quoted		
9	along with accessories like lid, tubing etc. with the equipment to		
	make the unit functional.		
10	Should be CE or USFDA or BIS or ISO 13485 for for quality and		
10	safety purpose.		
11	The firm should clearly indicate in the technical bid itself that the		
11	prices of all standard accessories are included in the quoted price.		
	The firm will give rate list of all possible spares, accessories &		
	consumables if any, as part of financial bid. If price of any spare is		
12	not mentioned & is required for repair in life time of		
	equipment/instrument, then the firm will be obliged to give it free		
	throughout life cycle of the equipment.		
	BOQ	Qty	UOM
1	Suction Machine including Trolley as per specification	1	No

Sl.	Sch.6	
No	Pulse Oximeter	
1	Compact portable bedside pulse oximeter with Colour LCD/TFT	
	display.	
2	Continuous monitoring of SpO2 (arterial blood oxygen saturation),	
	pulse rate and signal strength(nellcor/masimo technology)	
3	Measuring range:	
a	Spo2: 10 to 100% minimal graduation 1%	
b	Pulse rate: Pulse rate: 20 to 240 bpm, minimal graduation 1 bpm	
4	Accuracy SpO2 : 50 to 69% (± 3%), 70 to 100 % (±3%)	
5	Display shows: SpO2(%), PR, Plethymograph & perfusion bar/blip	
	bar	
6	The motion artifact should be minimal	
7	Large bright display (4 inch or more) readable from more than 6 feet	
	distance	

8	User preset of high/low alarms on SpO2 and pulse rate monitoring.		
9	Audio visual alarm for SpO2 and pulse rate in case measurements		
	are outside preset range		
10	Silencing feature for audio alarm		
11	Display reports system errors, probe failure and built in battery		
	status		
12	Automatic switch from mains to batteries in case of power failure		
13	Power requirements: 220 V/50Hz and internal re-chargeable		
	battery (autonomy at least. 2 hrs, automatic recharge)-		
14	It should be European CE with a four digit notified body number/		
	US FDA/BIS approved product and certificate to be submitted.		
15	Manufacturer should have own registered office/own registered		
	service centre/100% Subsidiary company in India. Necessary		
	document in the name of manufacturer/100% subsidiary company		
	like GST Registration/Trade License to be submitted along with bid;		
16	It must show spo2 value for low perfusion patients.		
17	Automatic Signal averaging time 4 to 12 sec		
	BOQ	Qty	UOM
1	Pulse Oximeter as per specification	1	No
2	Reusable SpO2 sensors neonate, clip-on type.	1	No
3	Patient extension cable	2	Nos
4	Reusable SpO2 sensors(finger type) for children and adults	2	Nos
			each
5	Spare set of fuses	2	Nos

	Sch.7	
	Multipara Monitor-5 Para	
1	Description of Function	
1.1	It should provide monitors of ECG, NIBP, SpO2, Temperature,	
	Respiration	
2	Operational Requirements	
2.1	Comprised of bedside monitors	
2.2	Capability of storage of patient data and printing of patient reports.	
2.3	Demonstration of the equipment to be given if required.	
3	Technical Specifications	
3.1	Minimum 12 inches or more multicoloured TFT display.	
3.2	Should have facility to monitor and display - ECG, NIBP,	
	SpO2(Nellcor/Masimo), Temperature, Respiration and	
	upgradable to ETCO2(Sidestream or Microstream or	
	mainstream) & IBP.	
3.3	Digital and 4 waveforms/traces display of all parameters.	
	Specification include – monitoring of heart rate & respiratory rate	
	in addition to above to make it a complete monitor.	
3.4	Multichannel ST segment analysis.	
3.5	Automatic arrhythmia detection & alarm for standard	
	arrhythmia.	
3.6	Should be suitable for Adult to Neonate usage	
3.7	Should be able to measure B.P in automatic, manual and stat mode.	
3.8	Motion tolerant NIBP with cuff overpressure protection	
3.9	Should be capable of measuring oxygen Saturation even in case of	
	motion artifact.	
3.10	Should have audio – visual alarms for all parameters and should	
	display alphanumeric alarm messages.	
3.11	Trend of at least 48 hours.	
3.12	Should have automatic and manual alarm setting for all parameters	
3.13	Battery backup of at least 2 hours, when fully charged.	

<ul> <li>4.1 Accessory as per BOQ</li> <li>4.2 Necessary wall mounting solution/ mounting for monitors</li> <li>5 Environmental factors</li> <li>5.1 The unit shall be capable of operating continuously in ambient temperature of 0 -40° C and relative humidity of 15-90%</li> <li>5.2 The unit shall be capable of being stored continuously in ambient temperature of 20 – 60° C.</li> <li>6 Power Supply</li> <li>6.1 Power input to be 220-240VAC, 50Hz fitted with Indian plug</li> <li>7 Standard Safety And Training</li> <li>7.1 It should have US FDA orBIS or European CE with four digit</li> </ul>	
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7 Standard Safety And Training	
7.1 It should have US FDA orBIS or European CE with four digit	
notified body number certificate for the quoted model and	
certificate to be submitted.	
7.2 Manufacturer/ Supplier should have ISO certification for quality	
standards.	
7.3 Manufacturer should have own registered office/own registered	
service centre/100% Subsidiary company in India. Necessary	
document in the name of manufacturer/100% subsidiary company	
like GST Registration/Trade License to be submitted along with	
bid;	
8 Documentation	
8.1 User Manual in English	
8.2 Service manual in English	
8.3 List of important spare parts and accessories with their part number	
and costing and to be blocked for 5 years.	TIOM
BOQ Qty	No
1Monitor as per tender specification12Wall Mount1	No
3 5 Leads ECG cable with electrodes 2	Nos
4 Reusable Spo2 probe adult 2	Nos
5 Reusable Spo2 probe pediatric 1	No
6 Reusable Spo2 probe neonatal 1	No
7 NIBP cuff for Adult ,child and neonate 2	No
7 Nibi cuii ioi Addit ,ciiid and neonate	each
8 NIBP Hose 2	No
9 Temperature probe nasopharyngeal (Adult & Paediatric) 1	No
7 Temperature proof hasopharyngear (Naun & Lacaratre)	each
Sch.8	
ECG Machine	
1 Twelve channel 5.7" or more LCD display for all 12 leads along with	
on screen details.	
2 Recording for 12 channels simultaneously and have option for user	
selectable any lead as Rhythm lead. Can able to print ECG at A4 size	
paper through inbuilt printer.	
3 Recording speed selection of 5, 10/12.5, 25 and 50 mm/sec.	
4 Sensitivity of 2.5,5,10,20 mm/mV.	
5 Facility to enter patient information (Patient ID, Name, Age, Sex,	
Hospital's name) which get updated in system and is recorded on the	
recorder A4 paper	
6 Patient memory function 20 patients or more	
7 Waveforms can be recorded.	
8 Interpretation software.	
9 Mains and in built rechargeable battery backup atleast 2 hrs/ 30 ECG	
10 Should have USB port/SD card (to be supplied by the bidder)/	
equivalent port to send the data in the Computer.  Tender Enquiry No.: HITES/PCD/MP/CLINICAL/RC-02/19-20 dated 01.06.2019	

11	Manufacturer should have own registered office/own registered service centre/100% Subsidiary company in India. Necessary document in the name of manufacturer/100% subsidiary company		
	like GST Registration/Trade License to be submitted along with bid;		
12	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.		
	BOQ	Qty	UOM
1	ECG Machine as per Specification with standard accessories	1	No
2	Interpretation software.	1	No
3	ECG paper	100	
		patients	

SN	Sch.9		
	Electro-surgical cautery unit		
1	Microprocessor/microcontroller controlled		
2	Should provide monopolar output for cut, coagulation (fulguration &	,	
	spray) & blend		
3	Should have bipolar cut and coagulation in multiple levels with		
	automatic bipolar coagulation.		
4	Activation by foot switch and hand switch		
5	Activation of bipolar by foot switch and automatic start/stop system		
6	Auto diagnosis on switching on and during working to continuously		
	monitor all parameters		
7	Automatic stoppage of output in case of malfunction with acoustic		
	and visual signal with display of error code.		
8	Output powers adjustable automatically or manually from the		
-	control panel.		
9	Should be usable with laparoscopic monopolar and bipolar		
	instruments.		
10	System for neutral plate safety by continuous monitoring of contact		
	quality and connection		
11	System for monitoring and control of leakage current		
12	Leakage current on the patient should be less than 10 micro Amp		
13	The maximum power of different type outputs should be as:-		
	Monopolar Cutting Max -		
	300W- 400W		
	Bipolar Cutting 90 W or more		
	Bipolar Coagulation 90 W or more		
	Spray Coagulation – Max 120 W at 300 Ohms		
14	All the Accessories should be mentioned in BOQ and rate of each		
	accessories should be quoted seperately which should be valid for		
	the entire warranty period.		
1.7	All accessories should be of same make of Main Equipment		
15	The equipment should be European CE with 4 digit notified body no		
	or US FDA or BIS safety standard.		
4 -	It should have IEC 60601-1 certificate for the quoted model.		
16	Manufacturer should have own registered office/own registered		
	service centre/100% Subsidiary company in India. Necessary		
	document in the name of manufacturer/100% subsidiary company		
GT.	like GST Registration/Trade License to be submitted along with bid;		7107.7
SN	BOQ	Qty	UOM
1	System as specified	1	Nos
2	Reusable push button Handpiece	2	Nos
3	Electrode set (Pin point, flat tip-short, flat tip-long blade)	10	Nos

			each
4	Explosion protective double pedal foot switch	1	Nos
5	Reusable Siliconearth pad	2	Nos
6	Reusable Bipolar forcep with cord straight & angled (18-19.5cm &	1	Nos
	19-22.5cm)		each

Sl.		Sch.10	
No		General Surgery Set	
1	Open surgery instruments are required to carry on conventional general, gastrointestinal, urological procedures		
2	The instruments quoted should	be of high quality and standard	
3	Instrument should be Europe enclosed	an CE or USFDA or BIS approved & copy to	be
4	Bidder has to quote all the Ins	struments as a set and rate for each Instrume	nt
5	The instruments must be ISO ce	ertified and copy to be enclosed.	
6	The part number and name of instrument	f manufacturer should be engraved on the ea	ch
7	<b>Demonstration of the Set is m</b>	ust.	
8	MAJOR BASIC SET		
	Instrument	Specifications	Qty
1	Sponge Holding Forceps	a- Rampley type. 180 mm long	4
		b- Rampley type. 250 mm long c- FOERSTER-	4
		BALLENGER. Serrated jaws; straight 180 mm long	6
		d- FOERSTER-BALLENGER. Serrated jaws; curved 245 mm long	
		e- FOERSTER-BALLENGER sponge & dressing forcep,smooth jaws 245mm	6
2	Steel Basin	a- Small size b- Large size (These items can be quoted from 3rd party and no certification is required for the same.)	5 5
3	Galley Pots	a- 8.3x5.4x4.1 cm (These items can be quoted from 3rd party and no certification is required for the same.)	20
4	Cheattle forceps	270-280 mm long (These items can be quoted from 3rd party and no certification is required for the same.)	10
		a- 170 mm size b- 250 mm size	10
5	Kidney trays	c- 275 mm size	10
		(These items can be quoted from 3rd party and no certification is required for the same.)	10
C	BP handle of standard length	a- No. 3	15
6	and type	b- No.4	15
7	II 1 ( 1 'C 1 11	c- No. 7	05
7	Humby"s knife handle	Length of 30 – 32 cm	2

b) Backhaus type. 8-10 cm (These items can be quoted from 3rd party and no certification is required for the same.)  a- Curved, blunt tip, 145 mm b- curved, blunt tip, 180 mm long c- curved, blunt tip, 230 mm long	60 60 10 10 10 06
(These items can be quoted from 3rd party and no certification is required for the same.)  a- Curved, blunt tip, 145 mm  b- curved, blunt tip, 180 mm long	10 10 10
a- Curved, blunt tip, 145 mm  Metzenbaum Scissors, (Tungsten Carbide)  b- curved, blunt tip, 180 mm long	10 10
9 Metzenbaum Scissors, (Tungsten Carbide) b- curved, blunt tip, 180 mm long	10
(Tungsten Carbide) b- curved, blunt tip, 180 mm long	10
c- curved, blunt tip, 230 mm long	
	06
Metzenbaum Scissors, a- fine, straight, blunt tip, 145 mm	
(Tungsten Carbide) b- fine, straight, blunt tip, 180 mm	06
11 Baby-Metzenbaum Scissors a- fine, curved, pointed tip, 145 mm	6
a- Straight, B/B; 14-15 cm long	04
b- Straight, B/B; 18-19 cm long	04
c- Straight, S/S; 12-13 cm long Operating scissors	04
d- Straight, S/S; 16-17 cm long	04
e- Curved, B/B, 17-18 cm long	04
f- Curved, S/S, 17-18 cm long	04
a) Straight, 11-12cm	04
13 Suture cutting Scissors b) Straight, 16-18 cm	10
c) Curved, 20-22cm	10
a- Straight, 11-12 cm	06
14 Iris Scissors	06
b- Curved, 11-12 cm  Metzenbaum"s – Thorek	
15 Scissors (Tungsten Carbide) a- 20-21 cm long	6
a- 180-190 mm long; 25 degree with beau the tip of posterior blade	d at 01
b- 180-190 mm long; 45 degree	02
17 Debakey vascular forceps a- 140 mm long with 2 to 2.5 mm tip	2
	05
a- Straight, bevelled edges, 13-14 cm	0.5
b- Curved, bevelled edges, 13-14 cm  18 Mayo"s Scissors	05
c- Straight, bevelled blades, 18-20 cm	05
d- Curved bevelled blades, 18-20 cm	05
19 Stitch cutting scissors Straight type; 13-15 cm long	10
20 Lister"s Bandage scissors a- Double finger bow of 18-20 cm	2
21 ALLIS Baby tissue grasping forceps 4/5 teeth a- 130 mm long	15

	ALLIS tissue grasping	a- 155 mm long	24
22	Forceps atraumatic jaw 150mm" "	h 200 mm long	24
	ALLIS tissue grasping	b- 200 mm long	24
23	forceps; 4x5 teeth	a- 155 mm long	24
24	ALLIS tissue grasping forceps; 2x3 teeth	a- 155 mm long	12
	Torceps, 2x3 teem	a. 11-12 cm long	10
25	Standard Dissecting forceps, medium width	b. 15-16 cm long	10
	medium widui	o 20 21 om long	02
	G. 1 17E' E '41	c. 30-31 cm long a- 11-12 cm long	10
26	Standard Tissue Forceps with 1 x 2 toothed	C C	
	WAUGH toothed dissecting	b- 15-16 cm long	10
27	Forceps medium	a- 200 mm long	6
28	ADSON dissecting forceps; bayonet shaped	a- 175 mm long	6
20		a- 12-13 cm long	02
29	Lister Sinus Forceps	b- 17-18 cm long	06
30	Micro Dissecting Forceps	15-16 cm long	3
31	Mini-Adson"s dissecting	11-12cm;	10
32	Forceps Micro-Adson"s tissue Forceps	11-12cm; 1x2 toothed	8
32	Where-Adson's tissue Forceps	a- 150 mm long	06
33	DEBAKEY dissecting and tissue forceps; jaws 2mm width	b- 200 mm long	06
	width	c- 240 mm long	06
34	Mc Indoe"s dissecting forceps	a- 15-16 cm long	2
		a- Debakey"s type:30-35mm; angled10 mm jaw	05
35	Bull dog clamp	b- 40-45 mm;20mm straight jaw	05
		c- 55-60 mm; straight 20-22 mm jaw length	05
			36
		a- Curved, serrated Jaws, 130 mm	36
		b- Curved, serrated Jaws, 175 mm	
25	SPENCER WELLS	c- Curved, serrated Jaws, 230 mm	36
36	Haemostatic Forceps	d- Straight, serrated Jaws, 130 mm	36
		e- Straight, serrated Jaws, 175 mm	
		f- Straight, serrated Jaws, 230 mm	36
37	Dunhill Hemostatic Forceps	a- Straight, 125 mm	36 24
31	Dumin Temostatic Porceps	a- Suaigm, 123 mm	∠+

38	MICRO-HALSTEAD	a- Straight, 120-130 mm	60
	Mosquito Artery Forceps	b- Curved, 120-130 mm	60
		a- 100 mm, straight	30
39	Baby-Mosquito (Hartmann	h 100mm august	20
		b- 100mm, curved	30
40	KOCHERS haemostatic	a- Straight, 1x2 teeth, 130-140 mm	10
40	forceps	b- Curved, 1x2 teeth, 130-140 mm	
			10
41	KOCHERS- OCHSNER	a- Straight, 1x2 teeth, 225 mm	10
71	haemostatic forceps	b- Curved, 1x2 teeth, 225 mm	10
		a- Curved, 180-200 mm long	06
42	Lahey"s Hemostatic Forceps		
		b- Curved, 220-230 mm long	06
43	KELLYS Dissecting &	a- Curved, 190 mm long	12
73	Hemostatic Forceps	b- Curved, 240 mm long	12
		a- 160 mm long	04
	MIXTERS Dissecting &		
44	ligature forceps	b- 220 mm long	04
		c- 250 mm long	04
4.5	MIXTERS- Baby Dissecting		
45	& ligature forceps	a- 130- 140 mm long	6
	Adson Baby Dissecting and	a- 140-150 mm long	03
46	Hemostatic Forceps	h 190 mm long	02
	_	b- 180 mm long a- 155 mm long	03
47	BABCOCK tissue grasping	a- 135 mm long	24
	Forceps atraumatic jaw	b- 200 mm long	24
48	Duval intestinal and tissue	a- 230 mm long	3
	grasping forceps	- C	
49	PEAN KIDNEY CLAMP	a- 220 mm long a- Straight type; 220 mm long	3 06
	Kocher Atraumatic Intestinal	b- Straight type; 280 mm long	06
50	Clamps; very soft and elastic	c- Curved type; 220 mm long	06
		d- Curved type; 280 mm long	06
51	Baby Kocher Intestinal	a- Straight; 130 mm long	06
	clamps: very elastic	b- Curved; 130 mm long	06
52	Stomach clamps large	a- 145mm jaw length; 315mm long	2
53	Desjardins Gallstone Forceps (of different curvatures)	a- 225 mm long, b- 240 mm long	06 06
54	Mixter Gallstone Forceps	22-23 cm long	3
	•	a- 5 mm size	02
55	Bakes Gall Duct Dilator	b- 10mm	02
		a- Single Sharp hook; 15-16 cm long	12
56	Skin Hook	b- Double Hooklets; 15-16 cm	06
	CUSHING VEIN	·	06
57	RETRACTOR	a- 10 X 13 mm, 205 mm long	6
<b>70</b>	DEBAKEY TANGENTIAL	50	
58	OCCLUSION CLAMPS	a- 58mm x 270mm	2
59	KRYENBHUL nerve hook	a- 180-190 mm long	6
	with small ball	-	
60	Proctoscope	a- Paediatric size	01

APO   Rectal Punch Biopsy Forces   b - Adult Size   0.2			b- Adult size	05
MAYO HEGAR needle holder T/C Tip				
AAYO HEGAR needle holder T/C Tip   b-180 mm long   10   10   10   10   10   10   10   1	61	Rectal Punch Biopsy Forceps		
bolder Tick Tip   bolder   bolder Tick Tip   c-200 cm long   10   10   10   10   10   10   10   1		MANOTECAR		10
Case	62		· ·	10
August   Care		holder 1/C Tip	C	10
BABY CRILE WOOD Needle   Holder   Hol	-62	D D 1 W 11 W 11		04
Holder	63	De Bakey Needle Holders		04
CASTROVIEJO needle holder, TC tip   b- 180 mm long   0.3 a - 145 mm long   0.2 a - 145 mm long   0.2 a - Frame of 175x150 mm with 4 blades of   40x30 mm   b- Frame of 175x150 mm with 4 blades of   40x40 mm   a - Saddle hook type of 17-18 mm; 23-24 cm   0.2   0.5 addle hook type of 20-21 mm; 23-24 cm   0.2   0.5 addle hook type of 23-24mm; 23-24 cm   0.2   0.5 addle hook type of 23-24mm; 23-24 cm   0.2   0.5 addle hook type of 23-24mm; 23-24 cm   0.2   0.5 addle hook type of 23-24mm; 23-24 cm   0.2   0.5 addle hook type of 23-24mm; 23-24 cm   0.6 addle hook type of 23-24mm   0.6 addle hook type of	64			6
DENIS-BROWNE abdominal retractors   DENIS-BROWNE abdominal retractors   Frame of 175x150 mm with 4 blades of 40x30 mm	65	Ryder-vascular needle holder		
10   10   10   10   10   10   10   10	66		Ç	
DENIS-BROWNE abdominal retractors	-00	holder, TC tip	ů	02
A0x40 mm	67		40x30 mm	2 sets
Cil-Vernet saddle hook retractors		retractors		2
Deaver Retractor   Series			a- Saddle hook type of 17-18 mm; 23-24 cm	02
10		Gil-Vernet saddle hook	S	02
C- Saddle hook type of 23-24mm; 23-24 cm   long	68		~ ~	02
Senn-Miller retractor			· ·	
Commons   Comm			* =	02
Cm long   a- Ring type fenestrated handle; 30x11mm, 21-22cm long   b- Ring type fenestrated handle; 40x11mm, 21-22cm long   c- Ring type fenestrated handle; 50x11mm, 21-22cm long   d- Ring type fenestrated handle; 50x11mm, 21-22cm long   d- Ring type fenestrated handle; 85x15mm, 22-23cm long   d- Ring type fenestrated handle; 50x11mm, 21-22cm long   d- Ring type fenestrated handle; 40x11mm, 21-22cm long   d- Ring type fenestrated handle; 50x11mm, 21-25cm long   d- Ring type fenestrated handle; 50x11m	60	Cara Millan naturates	a- Triplet hooklets, blunt hooklets; 16-18	2
21-22cm long   b- Ring type fenestrated handle; 40x11mm, 21-22cm long   c- Ring type fenestrated handle; 50x11mm, 21-22cm long   d- Ring type fenestrated handle; 50x11mm, 21-22cm long   d- Ring type fenestrated handle; 85x15mm, 22-23cm long   d- Ring type fenestrated handle; 50x11mm, 21-22cm long   d- Ring type fenestrated handle; 5	09	Senn-iviller retractor	cm long	3
Campenbeck's retractor   Campenbeck's retrac				15
C- King type fenestrated handle; S0x11mm, 21-22cm long d- Ring type fenestrated handle; 85x15mm, 22-23cm long	70	T 1-55 1-55 4		06
21-22cm long   d- Ring type fenestrated handle; 85x15mm,   22-23cm long   d- Ring type fenestrated handle; 85x15mm,   22-22-23cm long   d- Ring type fenestrated handle; 85x15mm,   242-25cm	70	Langenbeck's retractor		06
22-23cm long   22-23cm long   3 - 29x6 mm jaw length; 19-20 cm long   6   71   8 - 29x6 mm jaw length; 19-20 cm long   2   2   3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3			<u> </u>	00
10				04
71         Brunner's Retractor         a- Jaw length of 14 x 3 cm, 24-25 cm long         2           a. 30-35 cm long, 3.8-4.2cm wide b. 30-35 cm long, 4.8-5.2cm wide c. 30-35 cm long, 7.0-7.5cm wide d. 30-35 cm long, 2.0- 2.5cm wide e. 20-25cm long, 2.0- 2.5cm wide e. 20-25cm long, 2.0-2.4cm wide         06           73         Morris wound retractors         a- Limb of 70x40 mm; 245 mm long b- Limb of 70x65 mm; 245 mm long         05           74         Allisons Lung retractor         a- 320 mm long; jaw width of 54 mm         2           75         Joll retractor         15 - 16 cms size         4           76         Balfour -Standard abdominal Retractor         Size 20 cm; lateral blades of 100x35 mm with one central blades         2           77         Doyen''s retractor         Blade of 45x88 mm, 24- 25 cm long         6           78         Czerny retractor         175mm long, 38 X 22mm         6           79         Abdominal Spatula         b- Soft, Malleable; 32-34cm long, 50mm wide         2           6         c- Soft, Malleable; 32-34cm long, 30mm         2				
A a. 30-35 cm long, 3.8-4.2cm wide b. 30-35 cm long, 4.8-5.2cm wide c. 30-35 cm long, 2.0- 2.5cm wide e. 20-25cm long, 2.0- 2.5cm wide e. 20-25cm long, 2.0-2.4cm wide   02				
Cm long, 4.8-5.2cm wide c. 30-35 cm long, 7.0-7.5cm wide d. 30-35 cm long, 2.0- 2.5cm wide e. 20-25cm long, 2.0- 2.5cm wide e. 20-25cm long, 2.0-2.4cm wide   02   04	71	Brunner"s Retractor	,	2
72         Deaver Retractor         7.0-7.5cm wide d. 30-35 cm long, 2.0-2.4cm wide         06           2.5cm wide e. 20-25cm long, 2.0-2.4cm wide         02           73         Morris wound retractors         a- Limb of 70x40 mm; 245 mm long b- Limb of 70x65 mm; 245 mm long         05           74         Allisons Lung retractor         a- 320 mm long; jaw width of 54 mm         2           75         Joll retractor         15 - 16 cms size         4           76         Balfour -Standard abdominal Retractor         Size 20 cm; lateral blades of 100x35 mm with one central blades         2           77         Doyen"s retractor         Blade of 45x88 mm, 24- 25 cm long         6           78         Czerny retractor         175mm long, 38 X 22mm         6           79         Abdominal Spatula         b- Soft, Malleable; 32-34cm long, 50mm wide         2           79         Abdominal Spatula         b- Soft, Malleable; 32-34cm long, 30mm         2				
2.5cm wide e. 20-25cm long, 2.0-2.4cm wide   02   02			_	
73         Morris wound retractors         a- Limb of 70x40 mm; 245 mm long b- Limb of 70x65 mm; 245 mm long         05           74         Allisons Lung retractor         a- 320 mm long; jaw width of 54 mm         2           75         Joll retractor         15 - 16 cms size         4           76         Balfour -Standard abdominal Retractor         Size 20 cm; lateral blades of 100x35 mm with one central blades         2           77         Doyen"s retractor         Blade of 45x88 mm, 24- 25 cm long         6           78         Czerny retractor         175mm long, 38 X 22mm         6           79         Abdominal Spatula         b- Soft, Malleable; 32-34cm long, 50mm wide         2           79         Abdominal Spatula         c- Soft, Malleable; 32-34cm long, 30mm         2	72	Deaver Retractor	-	
Morris wound retractors  a- Limb of 70x40 mm; 245 mm long b- Limb of 70x65 mm; 245 mm long 05  Allisons Lung retractor a- 320 mm long; jaw width of 54 mm 2  Joll retractor 15 - 16 cms size 4  Balfour – Standard abdominal Retractor with one central blades of 100x35 mm with one central blades  Doyen"s retractor Blade of 45x88 mm, 24- 25 cm long  Czerny retractor 175mm long, 38 X 22mm a- Soft, Malleable; 32-34cm long, 50mm wide b- Soft, Malleable; 32-34cm long, 40mm wide c- Soft, Malleable; 32-34cm long, 30mm 2				
73         Morris wound retractors         a- Limb of 70x40 mm; 245 mm long b- Limb of 70x65 mm; 245 mm long         05           74         Allisons Lung retractor         a- 320 mm long; jaw width of 54 mm         2           75         Joll retractor         15 - 16 cms size         4           76         Balfour – Standard abdominal Retractor         Size 20 cm; lateral blades of 100x35 mm with one central blades         2           77         Doyen's retractor         Blade of 45x88 mm, 24- 25 cm long         6           78         Czerny retractor         175mm long, 38 X 22mm         6           79         Abdominal Spatula         b- Soft, Malleable; 32-34cm long, 50mm wide         2           79         Abdominal Spatula         c- Soft, Malleable; 32-34cm long, 30mm         2			wide	
b- Limb of 70x65 mm; 245 mm long  74 Allisons Lung retractor  75 Joll retractor  76 Balfour – Standard abdominal Retractor  77 Doyen's retractor  78 Czerny retractor  79 Abdominal Spatula  b- Limb of 70x65 mm; 245 mm long  a- 320 mm long; jaw width of 54 mm  2			Limb of 70v40 mm 245 v 1	04
74 Allisons Lung retractor 75 Joll retractor 76 Balfour – Standard abdominal Retractor 77 Doyen's retractor 78 Czerny retractor 79 Abdominal Spatula  8 Joll retractor 15 - 16 cms size 4  8 Size 20 cm; lateral blades of 100x35 mm with one central blades 9 With one central blades 17 Doyen's retractor 175mm long, 38 X 22mm 6 175mm long, 38 X 22mm 6 175mm long, 38 X 22mm 7 8 Position of the properties of the	73	Morris wound retractors		
74Allisons Lung retractora- 320 mm long; jaw width of 54 mm275Joll retractor15 - 16 cms size476Balfour – Standard abdominal RetractorSize 20 cm; lateral blades of 100x35 mm with one central blades277Doyen's retractorBlade of 45x88 mm, 24-25 cm long678Czerny retractor175mm long, 38 X 22mm6a- Soft, Malleable; 32-34cm long, 50mm wide2b- Soft, Malleable; 32-34cm long, 40mm wide2c- Soft, Malleable; 32-34cm long, 30mm2			D- LIMD OF /UXO3 mm; 243 mm long	05
75 Joll retractor 15 - 16 cms size 4  76 Balfour – Standard abdominal Retractor with one central blades 5  77 Doyen's retractor Blade of 45x88 mm, 24-25 cm long 6  78 Czerny retractor 175mm long, 38 X 22mm 6  a- Soft, Malleable; 32-34cm long, 50mm wide b- Soft, Malleable; 32-34cm long, 40mm wide c- Soft, Malleable; 32-34cm long, 30mm 2	71	Allicons I una notre stan	o 220 mm long jour width of 54	
76Balfour –Standard abdominal RetractorSize 20 cm; lateral blades of 100x35 mm with one central blades277Doyen's retractorBlade of 45x88 mm, 24- 25 cm long678Czerny retractor175mm long, 38 X 22mm6a- Soft, Malleable; 32-34cm long, 50mm wide2b- Soft, Malleable; 32-34cm long, 40mm wide2c- Soft, Malleable; 32-34cm long, 30mm2		9		
76         Retractor         with one central blades         2           77         Doyen"s retractor         Blade of 45x88 mm, 24- 25 cm long         6           78         Czerny retractor         175mm long, 38 X 22mm         6           a- Soft, Malleable; 32-34cm long, 50mm         2           wide         b- Soft, Malleable; 32-34cm long, 40mm         2           wide         c- Soft, Malleable; 32-34cm long, 30mm         2	13			4
77         Doyen's retractor         Blade of 45x88 mm , 24- 25 cm long         6           78         Czerny retractor         175mm long, 38 X 22mm         6           a- Soft, Malleable; 32-34cm long, 50mm wide         2           b- Soft, Malleable; 32-34cm long , 40mm wide         2           c- Soft, Malleable; 32-34cm long , 30mm         2	76			2
78 Czerny retractor 175mm long, 38 X 22mm 6 a- Soft, Malleable; 32-34cm long, 50mm wide b- Soft, Malleable; 32-34cm long , 40mm wide c- Soft, Malleable; 32-34cm long , 30mm 2	77			6
a- Soft, Malleable; 32-34cm long, 50mm wide b- Soft, Malleable; 32-34cm long , 40mm wide wide c- Soft, Malleable; 32-34cm long , 40mm 2		•		
79 Abdominal Spatula wide b- Soft, Malleable; 32-34cm long, 40mm wide c- Soft, Malleable; 32-34cm long, 30mm 2	, ,		•	
Abdominal Spatula  b- Soft, Malleable; 32-34cm long, 40mm wide c- Soft, Malleable; 32-34cm long, 30mm 2			_	_
wide c- Soft, Malleable; 32-34cm long, 30mm 2	70	Alada minal Cartal		2
	/9	Abdominai Spatula	-	
wide			c- Soft, Malleable; 32-34cm long, 30mm	2
			wide	

		d- Soft, Malleable; 20-22cm long, 25mm	
		wide	2
80	Satinsky Tangential clamps	a- 22 cm long	4
81	De Bakey multipurpose	a- 15 cm long	03
01	vascular clamps	b- 22 cm long	03
82	PEAN hemostatic forceps	a- Straight, 155 mm long	03
		b- Curved, 155 mm long	03
83	De Bakey-Pean Hemostatic	a- Curved, 200 mm long	06
	Forceps Lovelace Lung Grasping	b- Straight, 200 mm long a- Small	06
84	Forceps	b- Large	01
	Тогеерз	o Eurge	06
0.5		a- DIA.:1.5mm; 145mm long, malleable,	
85	Fistula Probe, double ended,	b- DIA.: 2 mm; 200mm long, malleable	
			06
86	NELATON Grooved directors	CURVED 160MM"	3
87	Universal Trocar	14 m long, 7-09 mm thick	2
		a- Frazier type; 3 mm: 19-20 cm long	06
88	Suction Tips	b- Poole type; Sump suction tube of 10mm	
		size and 23-24 cm long.	06
	MAYOS safety pin instrument		
89	Holder	a- 140 mm long	12
00	DOYEN'S rib raspatories; left,	. 175 1	2
90	adult	a- 175 mm long	3
91	DOYEN'S rib raspatories;	a- 175 mm long	3
71	right, adult	a- 1/5 mm long	3
0.0	SAUERBRUCH RIN		
92	RONGEURS	a- 310 mm long, round bite	1
	Powerfulc/action 310mm LISTON-KEY-HORSLEY		
93	bone cutting forceps	S shaped; 255mm long	1
-	SIM"S RECTAL		
94	SPECULUM	A- 15-16 cm with solid blades	2
95	MOLLISON S/R	AVA prongs shorn 150mm	2
93	RETRACTOR	4X4 prongs sharp 150mm	2
96	Hernia Ring Forceps for	a- 145 mm long	6
	retraction of cord	a 115 mm long	
97	DESCHAMPS-blunt ligature	215 mm long	3
	needles; right hand FARABEUF periosteal		
98	elevators	155	2
99	BRISTOW periosteal elevator	230 mm long	2
	VOLKMANN double ended		
100	bone currette	170-180 mm long	4
101	CUSCO standard vaginal	a- Small, 80x24 mm	01
101	speculum	b- Large, 110x37 mm	01
		a- Infant size; lateral blades of approx.	03
		12x15 mm long	
	FINOCHIETTO chest	b- Baby size; lateral blades of approx. 30x30mm long	02
102	retractor	c- Large size; lateral blades of 80x65 mm	
		long	02
		d- Large size; lateral blades of 80x65 mm	Ω1
		long	01
103	Bailey Baby rib contractors	155 mm long	1
104	Bailey rib contractors for	Long claw; 200mm long	4

	adults		
105	BENSON pyloric spreader	155 mm long	1
106	DITTEL urethral bougies	No 8-30 Fr Gauze	2 sets
107	Container Systems: Metal	For sterilization and hand instruments and other accessories. Different sizes	3
		Neurosurgery Set	
108	A. Craniotomy set		
		Hudson's Brace	
		Trephine set	
		Barr Hole - Burr set	
		Ronqeur	
		Suction Cannula fine tip Medium &	
		Small-3	
		Bayonett forecapes	
	B Spinal surgery Set		
	Laminectomy.		
		Mastoid retractos urth Ratchet- 02	
		Joint thyriod Retroctor	
		Tenotomy seissors.	
	Varicose vein stripper-		
	Matalic with Acorn head)		
	Small and medim Large.		
	Mathieus ANAL Retractor		
	(Self retaining)		
	Becks CBD Dilator set-1		
109	Hemorrhoidal banding gon with accessories	Suction type	4

Sl.	Sch.11
No	Pediatric surgical instrument set
- 110	1)Pediatric Retractor System-1 No.
	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 removable 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/BIS 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 – 2
	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

20 % can be from 3rd party.

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	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
	2)Pediatric Open Surgical Instruments( Non reflective)
-	A. Finochietto Chest Retractor – Neonatal - 01
	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/BIS certification
	B. Finochietto Chest Retractor – Neonatal - 2
	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/BIS certification
	C. Finochietto Chest Retractor – Infant – 2
	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/BIS certification
	D. Finochietto Chest Retractor – Small Infant – 2
	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/BIS certification
	3. Shunt related instrument
	A. Skull trephin for Neonate & Paediatric - 2 each
	B. Hoffman Shunt Passer - 2
	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
	5. US FDA/European CE/BIS certification
	C. Hoffman Shunt Passer - 2
	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
	5. US FDA/European CE/BIS certification
	D. Ventricular Cannula – 2
	1. For Hydrocephalus
	2. Reusable
	3. Stainless steel
	4. Closed end with three side holes
	5. Graduated
	6. Size – 5 Fr
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1	7. Length – 10 cms
	5. US FDA/European CE/BIS certification
	E. Ventricular Cannula – 2
	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
	5. US FDA/European CE/BIS certification  F. Ventricular Cannula – 2
	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
	5. US FDA/European CE/BIS certification
	4. Sscissor
	A. Mayo Dissecting Scissors – 15  1. Stainless steel
	2. Length – 4 Inch 3. Curved
	4. Blunt Tip 5. US FDA/European CE/BIS certification
	B. Mayo Dissecting Scissors – 15  1. Stainless steel
	2. Length – 6 Inch
	3. Curved
	4. Blunt Tip
	5. Ring Handle
	5. US FDA/European CE/BIS certification
	5. Malleable Retractor
	A. Ribbon Type Malleable Retractor – 5
	1. Size 1 1/2 inch width, Length – 13 inches
	2. Malleable
	3. Ribbon type
	5. US FDA/European CE/BIS certification
	B. Ribbon Type Malleable Retractor – 5
	1. Size 1 inch width, Length – 13"
	2. Malleable
	3. Ribbon type
	5. US FDA/European CE/BIS certification
	C. Ribbon Type Malleable Retractor – 5
	1. Size 1/2 inch width, Length – 7 inches
	2. Malleable
	3. Ribbon type
	5. US FDA/European CE/BIS certification
	D. Ribbon Type Malleable Retractor – 5
	1. Size 10mm width, Length – 5 inches
	2. Malleable
	3. Ribbon type
	5. US FDA/European CE/BIS certification
	6. Abdominal Retractor
<u> </u>	

	A. Denis Browne Abdominal Retractor – Child Size – 1	Ì
	1. Ring/Frame Only	1
	2. Size – 18x14 cms	1
	3. Stainless Steel	•
	4. Oval Sproket Frame	1
	5. US FDA/European CE/BIS certification	1
	B. Denis Browne Abdominal Retractor – Adult Size – 1	
	1. Ring /Frame Only	1
	2. Size – 25x18 cms	
	3. Stainless Steel	
	4. Oval Sproket Frame	
	5. US FDA/European CE/BIS certification	
	C. Valve Allien Retractor Blades for Denis Browne Abdominal	
	Retractors – 2	
	1. 40x40 mm bades	
	5. US FDA/European CE/BIS certification	]
	D. Valve Allien Retractor Blades for Denis Browne Abdominal	1
	Retractors – 2	-
	1. 30x40 mm bades	-
	5. US FDA/European CE/BIS certification	-
	E. Valve Allien Retractor Blades for Denis Browne Abdominal	-
	Retractors – 2	4
	1. 50x40 mm bades	4
	5. US FDA/European CE/BIS certification	1
A	Artery forceps	10
1	Towel clip Doyens	12
2	Lanes artery forceps 4 inch	4
3	Straight artery forceps size 4 inch	12
4	Straight artery forceps size 6 inch	12
5	Curved artery forceps size 4 inch	12
6	Curved artery forceps size 6 inch	6
7	Curved artery forceps size 4 inches fine tipped	6
8	Curved artery forceps size 3 inch (Mosquito)	4
	Forceps, Tissue, Littlewood	4
10	Crile Forceps, straight - 5 ½"	4
11	Crile Forceps, curved- 5 ½"	4
12	Right angle artery forceps (Lahey type ) Blunt tipped 6 inch	6
13	Right angle artery forceps (Lahey type) Blunt tipped 3 inch (Mini)	6
14 D	Benson Pylorus Separator5-3/4"	2
В	Dissecting forceps	
1	Toothed dissecting forceps (Adson type) 4inch	6
2	Toothed dissecting forceps (Bonneys type) 6 inch	6
3	Toothed dissecting forceps (Adson type) 6 inch	6
4	Toothed dissecting forceps (Adson type) 3 inch	4
5	Toothed dissecting forceps (Bonneys type)3 inch	4
6	Non -Toothed dissecting forceps (Adson type) 4inch	2
7	Non -Toothed dissecting forceps (Macindoe) type 6 inch	4
8	Debakey forceps 20 cm with tip width of 1.5mm	2
9	Debakey forceps 30 cm with tip width of 1.5mm	2
10	Debakey forceps 30 cm with tip width of 2 mm	2
11	Debakey forceps 20 cm with tip width of 2 mm	2
12	Debakey forceps 30 cm with tip width of 1mm	2
13	Debakey forceps 20 cm with tip width of 1mm	2
C	Scissors	
1	Lister Bandage Scissors- 51/2"	2
	Enging: No. : HITES/DCD/MB/CLINICAL/DC 02/10/20 dated 01/05/2010	

2	Micro metzenbaum 3 inches(Tungsten carbide)	l 1
3	Metzenbaum Scissors 6 inches(Tungsten carbide)	2
4	Metzenbaum scissors curved (Tungsten carbide)- 51/4"	2
5	Iris scissors curved fine(Tungsten carbide)- 41/2"	2
6	Iris scissors curved standard- 41/2"	2
7	Suture cutting scissors 6 inch	2
8	Curved iris scissors 6 inch	6
9	Curved iris scissors 3 inch	6
D	Needle Holder	0
<b>—</b>		1
$\frac{1}{2}$	Micro Needle holder Length 14cm Straight	1
$\frac{2}{3}$	Micro Needle holder Length 18 cm Straight	1
4	Micro Needle holder Length 14cm curved	1
	Micro Needle holder Length 18 cm curved	1
E	Micro Scissors	1
1	Micro Scissors Length 14cm Straight	1
2	Micro Scissors Length 18 cm, Straight	1
3	Micro Scissors Length 14cm, Curved	1
4	Micro Scissors Length 18 cm, Curved	1
F	Micro & Other forceps	_
1	Sponge holding forceps 9 inch	6
2	Sponge holding forceps 6 inch	6
3	Babcock forceps 6 inch	6
4	Babcock forceps 4 inch	6
5	Allies forceps 6 inch(3/4 toothed)	6
6	Allies forceps 6 inch (1/2 toothed)	6
7	Allies forceps 3 inch(3/4 toothed)	6
8	Allies forceps 3 inch (1/2 toothed)	6
	Ames forceps 3 men (1/2 toothed)	Ů
9	Mixter forceps 180 mm length, curved half serrated jaw	6
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9	Mixter forceps 180 mm length, curved half serrated jaw	
9 G	Mixter forceps 180 mm length, curved half serrated jaw  BP Blade	6
9 G 1	Mixter forceps 180 mm length, curved half serrated jaw  BP Blade  Scalpel handle (Bald Parker) no-4	6
9 G 1 2	Mixter forceps 180 mm length, curved half serrated jaw  BP Blade  Scalpel handle (Bald Parker) no-4  Scalpel handle (Bald Parker) no-3	6 6
9 G 1 2 3	Mixter forceps 180 mm length, curved half serrated jaw  BP Blade  Scalpel handle (Bald Parker) no-4  Scalpel handle (Bald Parker) no-3  Scalpel handle (Bald Parker) no-7	6 6
9 G 1 2 3 H	Mixter forceps 180 mm length, curved half serrated jaw  BP Blade  Scalpel handle (Bald Parker) no-4  Scalpel handle (Bald Parker) no-3  Scalpel handle (Bald Parker) no-7  Needle holders Tungsten carbide tip	6 6 6
9 G 1 2 3 H	Mixter forceps 180 mm length, curved half serrated jaw  BP Blade  Scalpel handle (Bald Parker) no-4  Scalpel handle (Bald Parker) no-3  Scalpel handle (Bald Parker) no-7  Needle holders Tungsten carbide tip  Mayo Straight Needle holder 6 inch	6 6 6
9 G 1 2 3 H 1 2	Mixter forceps 180 mm length, curved half serrated jaw  BP Blade  Scalpel handle (Bald Parker) no-4  Scalpel handle (Bald Parker) no-3  Scalpel handle (Bald Parker) no-7  Needle holders Tungsten carbide tip  Mayo Straight Needle holder 6 inch  Crile wood Straight Needle holder 5 inch  De-Bakey Straight Needle holder 5 inch	6 6 6 6 2
9 G 1 2 3 H 1 2 3	Mixter forceps 180 mm length, curved half serrated jaw  BP Blade  Scalpel handle (Bald Parker) no-4  Scalpel handle (Bald Parker) no-3  Scalpel handle (Bald Parker) no-7  Needle holders Tungsten carbide tip  Mayo Straight Needle holder 6 inch  Crile wood Straight Needle holder 5 inch	6 6 6 6 2 2
9 G 1 2 3 H 1 2 3 4	Mixter forceps 180 mm length, curved half serrated jaw  BP Blade  Scalpel handle (Bald Parker) no-4  Scalpel handle (Bald Parker) no-3  Scalpel handle (Bald Parker) no-7  Needle holders Tungsten carbide tip  Mayo Straight Needle holder 6 inch  Crile wood Straight Needle holder 5 inch  De-Bakey Straight Needle holder 5 inch  Bozemann Straight Needle holder 7 inch	6 6 6 6 2 2
9 G 1 2 3 H 1 2 3 4 I	Mixter forceps 180 mm length, curved half serrated jaw  BP Blade  Scalpel handle (Bald Parker) no-4  Scalpel handle (Bald Parker) no-3  Scalpel handle (Bald Parker) no-7  Needle holders Tungsten carbide tip  Mayo Straight Needle holder 6 inch  Crile wood Straight Needle holder 5 inch  De-Bakey Straight Needle holder 5 inch  Bozemann Straight Needle holder 7 inch  Retractors	6 6 6 6 2 2 2
9 G 1 2 3 H 1 2 3 4 I	Mixter forceps 180 mm length, curved half serrated jaw  BP Blade  Scalpel handle (Bald Parker) no-4  Scalpel handle (Bald Parker) no-3  Scalpel handle (Bald Parker) no-7  Needle holders Tungsten carbide tip  Mayo Straight Needle holder 6 inch  Crile wood Straight Needle holder 5 inch  De-Bakey Straight Needle holder 5 inch  Bozemann Straight Needle holder 7 inch  Retractors  Deavers retractor with fibre optic light cable 16mmX 9 inches	6 6 6 6 2 2 2
9 G 1 2 3 H 1 2 3 4 I I	Mixter forceps 180 mm length, curved half serrated jaw  BP Blade  Scalpel handle (Bald Parker) no-4  Scalpel handle (Bald Parker) no-3  Scalpel handle (Bald Parker) no-7  Needle holders Tungsten carbide tip  Mayo Straight Needle holder 6 inch  Crile wood Straight Needle holder 5 inch  De-Bakey Straight Needle holder 5 inch  Bozemann Straight Needle holder 7 inch  Retractors  Deavers retractor with fibre optic light cable 16mmX 9 inches  Deavers retractor 25mmX 30 cm	6 6 6 6 2 2 2 2
9 G 1 2 3 H 1 2 3 4 I 1 2 3	Mixter forceps 180 mm length, curved half serrated jaw  BP Blade  Scalpel handle (Bald Parker) no-4  Scalpel handle (Bald Parker) no-3  Scalpel handle (Bald Parker) no-7  Needle holders Tungsten carbide tip  Mayo Straight Needle holder 6 inch  Crile wood Straight Needle holder 5 inch  De-Bakey Straight Needle holder 5 inch  Bozemann Straight Needle holder 7 inch  Retractors  Deavers retractor with fibre optic light cable 16mmX 9 inches  Deavers retractor 19mmX 18 cm	6 6 6 2 2 2 2 1 2
9 G 1 2 3 H 1 2 3 4 I 1 2 3	Mixter forceps 180 mm length, curved half serrated jaw  BP Blade  Scalpel handle (Bald Parker) no-4  Scalpel handle (Bald Parker) no-7  Scalpel handle (Bald Parker) no-7  Needle holders Tungsten carbide tip  Mayo Straight Needle holder 6 inch  Crile wood Straight Needle holder 5 inch  De-Bakey Straight Needle holder 5 inch  Bozemann Straight Needle holder 7 inch  Retractors  Deavers retractor with fibre optic light cable 16mmX 9 inches  Deavers retractor 19mmX 18 cm  Deavers retractor 25mmX 30 cm  Deavers retractor 38mmX 30 cm  Deavers retractor 51mmX 30 cm	6 6 6 6 2 2 2 2 2 2 2
9 G 1 2 3 H 1 2 3 4 I 1 2 3 4 5	Mixter forceps 180 mm length, curved half serrated jaw  BP Blade  Scalpel handle (Bald Parker) no-4  Scalpel handle (Bald Parker) no-7  Scalpel handle (Bald Parker) no-7  Needle holders Tungsten carbide tip  Mayo Straight Needle holder 6 inch  Crile wood Straight Needle holder 5 inch  De-Bakey Straight Needle holder 5 inch  Bozemann Straight Needle holder 7 inch  Retractors  Deavers retractor with fibre optic light cable 16mmX 9 inches  Deavers retractor 19mmX 18 cm  Deavers retractor 25mmX 30 cm  Deavers retractor 51mmX 30 cm  Deavers retractor with handle 76mmX 30 cm	6 6 6 6 2 2 2 2 2 2 2 2 2
9 G 1 2 3 H 1 2 3 4 I 1 2 3 4 5 6	Mixter forceps 180 mm length, curved half serrated jaw  BP Blade  Scalpel handle (Bald Parker) no-4  Scalpel handle (Bald Parker) no-7  Scalpel handle (Bald Parker) no-7  Needle holders Tungsten carbide tip  Mayo Straight Needle holder 6 inch  Crile wood Straight Needle holder 5 inch  De-Bakey Straight Needle holder 5 inch  Bozemann Straight Needle holder 7 inch  Retractors  Deavers retractor with fibre optic light cable 16mmX 9 inches  Deavers retractor 19mmX 18 cm  Deavers retractor 25mmX 30 cm  Deavers retractor 38mmX 30 cm  Deavers retractor with handle 76mmX 30 cm  Langenbacks Retractor ultra small	6 6 6 2 2 2 2 2 2 2 2 2
9 G 1 2 3 H 1 2 3 4 I 1 2 3 4 5 6	Mixter forceps 180 mm length, curved half serrated jaw  BP Blade  Scalpel handle (Bald Parker) no-4  Scalpel handle (Bald Parker) no-7  Scalpel handle (Bald Parker) no-7  Needle holders Tungsten carbide tip  Mayo Straight Needle holder 6 inch  Crile wood Straight Needle holder 5 inch  De-Bakey Straight Needle holder 5 inch  Bozemann Straight Needle holder 7 inch  Retractors  Deavers retractor with fibre optic light cable 16mmX 9 inches  Deavers retractor 19mmX 18 cm  Deavers retractor 25mmX 30 cm  Deavers retractor 38mmX 30 cm  Deavers retractor with handle 76mmX 30 cm  Langenbacks Retractor ultra small  Langenbeck retractor small	6 6 6 6 2 2 2 2 2 2 2 2 2 2 2 2
9 G 1 2 3 H 1 2 3 4 I 1 2 3 4 5 6	Mixter forceps 180 mm length, curved half serrated jaw  BP Blade  Scalpel handle (Bald Parker) no-4  Scalpel handle (Bald Parker) no-7  Scalpel handle (Bald Parker) no-7  Needle holders Tungsten carbide tip  Mayo Straight Needle holder 6 inch  Crile wood Straight Needle holder 5 inch  De-Bakey Straight Needle holder 5 inch  Bozemann Straight Needle holder 7 inch  Retractors  Deavers retractor with fibre optic light cable 16mmX 9 inches  Deavers retractor 19mmX 18 cm  Deavers retractor 25mmX 30 cm  Deavers retractor 38mmX 30 cm  Deavers retractor with handle 76mmX 30 cm  Langenbacks Retractor ultra small  Langenbeck retractor Large	6 6 6 6 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
9 G 1 2 3 H 1 2 3 4 I 1 2 3 4 5 6 7	Mixter forceps 180 mm length, curved half serrated jaw  BP Blade  Scalpel handle (Bald Parker) no-4  Scalpel handle (Bald Parker) no-7  Scalpel handle (Bald Parker) no-7  Needle holders Tungsten carbide tip  Mayo Straight Needle holder 6 inch  Crile wood Straight Needle holder 5 inch  De-Bakey Straight Needle holder 5 inch  Bozemann Straight Needle holder 7 inch  Retractors  Deavers retractor with fibre optic light cable 16mmX 9 inches  Deavers retractor 19mmX 18 cm  Deavers retractor 25mmX 30 cm  Deavers retractor 38mmX 30 cm  Deavers retractor 51mmX 30 cm  Deavers retractor with handle 76mmX 30 cm  Langenbacks Retractor ultra small  Langenbeck retractor Large  Langenbeck retractor Medium	6 6 6 2 2 2 2 2 2 2 2 1 2 2 2 1 2
9 G 1 2 3 H 1 2 3 4 I 1 2 3 4 5 6 7 8 9 10	Mixter forceps 180 mm length, curved half serrated jaw  BP Blade  Scalpel handle (Bald Parker) no-4  Scalpel handle (Bald Parker) no-7  Needle holders Tungsten carbide tip  Mayo Straight Needle holder 6 inch  Crile wood Straight Needle holder 5 inch  De-Bakey Straight Needle holder 5 inch  Bozemann Straight Needle holder 7 inch  Retractors  Deavers retractor with fibre optic light cable 16mmX 9 inches  Deavers retractor 19mmX 18 cm  Deavers retractor 38mmX 30 cm  Deavers retractor 51mmX 30 cm  Deavers retractor 51mmX 30 cm  Deavers retractor with handle 76mmX 30 cm  Langenbacks Retractor ultra small  Langenbeck retractor Large  Langenbeck retractor Medium  Morris Abdominal retractor 70x40 mm blade	6 6 6 6 2 2 2 2 2 2 2 2 1 2 2 2 2 2 2 2
9 G 1 2 3 H 1 2 3 4 I 1 2 3 4 5 6 7 8 9 10 11 12	Mixter forceps 180 mm length, curved half serrated jaw  BP Blade  Scalpel handle (Bald Parker) no-4  Scalpel handle (Bald Parker) no-3  Scalpel handle (Bald Parker) no-7  Needle holders Tungsten carbide tip  Mayo Straight Needle holder 6 inch  Crile wood Straight Needle holder 5 inch  De-Bakey Straight Needle holder 5 inch  Bozemann Straight Needle holder 7 inch  Retractors  Deavers retractor with fibre optic light cable 16mmX 9 inches  Deavers retractor 19mmX 18 cm  Deavers retractor 25mmX 30 cm  Deavers retractor 38mmX 30 cm  Deavers retractor 51mmX 30 cm  Deavers retractor with handle 76mmX 30 cm  Langenbacks Retractor ultra small  Langenbeck retractor Large  Langenbeck retractor Medium  Morris Abdominal retractor 70x40 mm blade  Zerney Retractor wide blade 4 inch	6 6 6 6 2 2 2 2 2 2 2 1 2 2 2 1 2 2 2 2
9 G 1 2 3 H 1 2 3 4 I 1 2 3 4 5 6 7 8 9 10 11 12 13	Mixter forceps 180 mm length, curved half serrated jaw BP Blade Scalpel handle (Bald Parker) no-4 Scalpel handle (Bald Parker) no-7 Scalpel handle (Bald Parker) no-7 Needle holders Tungsten carbide tip Mayo Straight Needle holder 6 inch Crile wood Straight Needle holder 5 inch De-Bakey Straight Needle holder 5 inch Bozemann Straight Needle holder 7 inch Retractors Deavers retractor with fibre optic light cable 16mmX 9 inches Deavers retractor 19mmX 18 cm Deavers retractor 25mmX 30 cm Deavers retractor 38mmX 30 cm Deavers retractor 51mmX 30 cm Deavers retractor with handle 76mmX 30 cm Langenbacks Retractor ultra small Langenbeck retractor Small Langenbeck retractor Medium Morris Abdominal retractor 70x40 mm blade Zerney Retractor wide blade 4 inch Zerney Retractor medium blade 6 inch	6 6 6 6 2 2 2 2 2 2 2 2 2 1 2 2 2 2 2 2
9 G 1 2 3 H 1 2 3 4 I 1 2 3 4 5 6 7 8 9 10 11 12 13 14	Mixter forceps 180 mm length, curved half serrated jaw  BP Blade  Scalpel handle (Bald Parker) no-4  Scalpel handle (Bald Parker) no-7  Scalpel handle (Bald Parker) no-7  Needle holders Tungsten carbide tip  Mayo Straight Needle holder 6 inch  Crile wood Straight Needle holder 5 inch  De-Bakey Straight Needle holder 5 inch  Bozemann Straight Needle holder 7 inch  Retractors  Deavers retractor with fibre optic light cable 16mmX 9 inches  Deavers retractor 19mmX 18 cm  Deavers retractor 25mmX 30 cm  Deavers retractor 38mmX 30 cm  Deavers retractor 51mmX 30 cm  Deavers retractor with handle 76mmX 30 cm  Langenbacks Retractor ultra small  Langenbeck retractor Large  Langenbeck retractor Large  Langenbeck retractor Medium  Morris Abdominal retractor 70x40 mm blade  Zerney Retractor wide blade 4 inch  Zerney Retractor medium blade 6 inch  Zerney Retractor 8 inches	6 6 6 6 2 2 2 2 2 2 2 2 1 2 2 2 2 2 2 2
9 G 1 2 3 H 1 2 3 4 I 1 2 3 4 5 6 7 8 9 10 11 12 13	Mixter forceps 180 mm length, curved half serrated jaw BP Blade Scalpel handle (Bald Parker) no-4 Scalpel handle (Bald Parker) no-7 Scalpel handle (Bald Parker) no-7 Needle holders Tungsten carbide tip Mayo Straight Needle holder 6 inch Crile wood Straight Needle holder 5 inch De-Bakey Straight Needle holder 5 inch Bozemann Straight Needle holder 7 inch Retractors Deavers retractor with fibre optic light cable 16mmX 9 inches Deavers retractor 19mmX 18 cm Deavers retractor 25mmX 30 cm Deavers retractor 38mmX 30 cm Deavers retractor 51mmX 30 cm Deavers retractor with handle 76mmX 30 cm Langenbacks Retractor ultra small Langenbeck retractor Small Langenbeck retractor Medium Morris Abdominal retractor 70x40 mm blade Zerney Retractor wide blade 4 inch Zerney Retractor medium blade 6 inch	6 6 6 6 2 2 2 2 2 2 2 2 2 1 2 2 2 2 2 2

2	Belfour doyen medium size self retaining retractor pediatric size	1
3	Mastoid self retaining retractor 3 inch	3
4	Denis Brown self retaining retractor	1
K	Vascilar Forceps & clamps	
4	Satinsky clamp Straight, curved ,right angled length 9" inches double angled 235 mm,	
1	atraumatic jaw length 68 mm	2
2	Satinsky clamp Straight, curved ,right angled length 9 inches double angled 245 mm,	2
2	atraumatic jaw length 76 mm 10.5 inches	
2	Satinsky clamp Straight, curved ,right angled length 9 inches double angled 135 mm,	
3	atraumatic jaw length 74 mm 11.5 inches	2
4	Ring Handled Bulldog Clamps 5 inches (12.5cm Long), Straight	2
5	Ring Handled Bulldog Clamps 5 inches (12.5cm Long), 45 Degree, Curved	2
6	Ring Handled Bulldog Clamps 5 inches (12.5cm Long) 90 Degree, Curved	2
7	Micro bulldog clamp Straight and curved, 1 cm, with applicator	1
L	Skin grafting instrument	
1	Micro Needle holder	2
2	Humby skin graft knife Handle (paediatric size) with 5 Boxes of 10 Sterile Stainless	5
	Steel skin graft blades compatible with the handle.	
3	Mesher For expanding skin grafts	5
M	Clamps ( non crushing)	
1	Pyers stomach Crushing clamp (pediatric)	1
2	Intestinal non crushing clamp straight (Pediatric/ medium size)	4
3	Intestinal non crushing clamp straight (Small size/ Neonatal )	2
4	Intestinal non crushing clamp curved (Pediatric/ medium size)	2
5	Intestinal non crushing clamp curved (Small size/ Neonatal )	2
N	Other Instruments	
1	Ventriculo peritoneal shunt introducer	2
2	Oral self retaining retractor	2
3	Periosteum elevator Length 160 mm blade width 8 mm	2
4	Bone nibbler Length 7 inches, 4 mm wide	2
5	Rib raspatory set pediatric size(right and left)	1.
		each
	Rib approximator pediatric size	1
7	Hook skin retractors	6
8	Cat"s paw retactor	6
9	Copper malleable retractor width 30 mm	6
10	Copper malleable retractor width 15 mm	6
11	Cheatle forceps 10 inches, heavy, with box joint, made of stainless steel and autoclavable	6
12	Proctoscope Paediatric Reusable, stainless steel with obturator	6
13	Desjardin type Gall stone forceps Set consisting of 5 forceps with varying angle	2
N	Bidder has to supply all the Instruments as asked in the tender. 75 % of equipment sl be from single manufacturer. If any firm does not quote any instruments in particula that firm will be disqualified. This is for the sales of uniformity in price comparison	
	that firm will be disqualified. This is for the sake of uniformity in price comparison.	
O	$\pm 10$ % variation in dimension of the instrument is acceptable provided that it is suital for pediatric surgery.	ble

	Sch.12	
	VASCULAR INSTRUMENT SET	
	Bidder has to quote both A ,B &C	
A	Micro Vascular Instruments Set	
1	The instruments quoted should be of high quality and standard	
2	The Instruments should be US-FDA or European CE certified	
	with 4 digit notified body no or BIS. Certified	

3	All needle holders &Metzenbaum scissors should be Tungsten	
	Carbide <b>Insert</b>	
4	One year comprehensive warranty for all the Instruments.	
5	Dedicated Slotted sterilization container with lock and silicon mat	
6	The name of the manufacturer/part number should be	
	impregnated/imprinted over the Instrument	
7	Items mentioned at BOQ S.No 3,6,11,13,15 and 19 are to be	
	demonstrated and feedback of evaluation committee regarding	
	satisfactory performance will be taken into account for technical	
	approval.	
8	Bidder should quote for all the Instruments of the set. At least	
	80% of the quoted instruments should be from same	
	manufacturer.	
9	+/- 10% variation in dimensions is acceptable	
	The following specifications are applicable to sets where size of	
	the instruments is not mentioned:	
1	Dissecting forceps and Artery forceps:	
	Small: tip size: 1mm, length: 4.5"-6"	
	Medium: tip size: 1.5mm, length: 7"-8.5"	
	Long/Large: tip size: 2mm, length: 9.5"-11"	
2	Scissors and Needle holders: The sizes mentioned against these	
	instruments to be interpreted as follows: -	
	Small: 6-8"	
	Medium: 9-10"	
	Long/Large: 11-12"	
	BOQ for 'Micro Vascular Instruments Set'	
S.No.	Name of the Item	Qty in Nos.
1	Right angled vascular clamps 14 cm	2
2	Right angled vascular clamps 23 cm	2
3	Right angled vascular clamps 19 cm	2
3 4	Right angled vascular clamps 19 cm  T Vein hook:- 11-13cm	2 1
4	T Vein hook:- 11-13cm	1
4 5	T Vein hook:- 11-13cm Tissue forceps Pott's smith 15 cm	1 1
4 5 6	T Vein hook:- 11-13cm Tissue forceps Pott's smith 15 cm Tissue forceps Pott's smith 18 cm	1 1 1
4 5 6 7	T Vein hook:- 11-13cm Tissue forceps Pott's smith 15 cm Tissue forceps Pott's smith 18 cm Adson tissue forceps 12 cm	1 1 1 3
4 5 6 7 8	T Vein hook:- 11-13cm Tissue forceps Pott's smith 15 cm Tissue forceps Pott's smith 18 cm Adson tissue forceps 12 cm Debakey's atraumatic forceps 15 cm	1 1 1 3 1
4 5 6 7 8 9	T Vein hook:- 11-13cm Tissue forceps Pott's smith 15 cm Tissue forceps Pott's smith 18 cm Adson tissue forceps 12 cm Debakey's atraumatic forceps 15 cm Debakey's atraumatic forceps 19 cm	1 1 1 3 1 1
4 5 6 7 8 9	T Vein hook:- 11-13cm Tissue forceps Pott's smith 15 cm Tissue forceps Pott's smith 18 cm Adson tissue forceps 12 cm Debakey's atraumatic forceps 15 cm Debakey's atraumatic forceps 19 cm Debakey's atraumatic forceps angled jaw 24 cm	1 1 1 3 1 1
4 5 6 7 8 9 10	T Vein hook:- 11-13cm  Tissue forceps Pott's smith 15 cm  Tissue forceps Pott's smith 18 cm  Adson tissue forceps 12 cm  Debakey's atraumatic forceps 15 cm  Debakey's atraumatic forceps 19 cm  Debakey's atraumatic forceps angled jaw 24 cm  Debakey's atraumatic forceps(angled jaw)19.5cm	1 1 1 3 1 1 1
4 5 6 7 8 9 10 11	T Vein hook:- 11-13cm  Tissue forceps Pott's smith 15 cm  Tissue forceps Pott's smith 18 cm  Adson tissue forceps 12 cm  Debakey's atraumatic forceps 15 cm  Debakey's atraumatic forceps 19 cm  Debakey's atraumatic forceps angled jaw 24 cm  Debakey's atraumatic forceps(angled jaw)19.5cm  Debakey's atraumatic forceps (angled jaw)15cm	1 1 3 1 1 1 1 1
4 5 6 7 8 9 10 11	T Vein hook:- 11-13cm Tissue forceps Pott's smith 15 cm Tissue forceps Pott's smith 18 cm Adson tissue forceps 12 cm Debakey's atraumatic forceps 15 cm Debakey's atraumatic forceps 19 cm Debakey's atraumatic forceps angled jaw 24 cm Debakey's atraumatic forceps (angled jaw)19.5cm Debakey's atraumatic forceps (angled jaw)15cm Debakey's atraumatic forceps (angled jaw)15cm Debakey vascular scissors 25deg, 15-17cm & 45 deg, 15-17cm: 1 each Needle holder crile wood debakey 18 cm	1 1 3 1 1 1 1 1
4 5 6 7 8 9 10 11 12	T Vein hook:- 11-13cm Tissue forceps Pott's smith 15 cm Tissue forceps Pott's smith 18 cm Adson tissue forceps 12 cm Debakey's atraumatic forceps 15 cm Debakey's atraumatic forceps 19 cm Debakey's atraumatic forceps angled jaw 24 cm Debakey's atraumatic forceps (angled jaw)19.5cm Debakey's atraumatic forceps (angled jaw)15cm Debakey vascular scissors 25deg, 15-17cm & 45 deg, 15-17cm: 1 each Needle holder crile wood debakey 18 cm Needle holder crile wood debakey 25 cm	1 1 3 1 1 1 1 1
4 5 6 7 8 9 10 11 12 13	T Vein hook:- 11-13cm Tissue forceps Pott's smith 15 cm Tissue forceps Pott's smith 18 cm Adson tissue forceps 12 cm Debakey's atraumatic forceps 15 cm Debakey's atraumatic forceps 19 cm Debakey's atraumatic forceps angled jaw 24 cm Debakey's atraumatic forceps (angled jaw)19.5cm Debakey's atraumatic forceps (angled jaw)15cm Debakey vascular scissors 25deg, 15-17cm & 45 deg, 15-17cm: 1 each Needle holder crile wood debakey 18 cm Needle holder crile wood debakey 25 cm Needle holder crile wood debakey 30 cm	1 1 3 1 1 1 1 1 1 1 1
4 5 6 7 8 9 10 11 12 13 14 15 16	T Vein hook:- 11-13cm  Tissue forceps Pott's smith 15 cm  Tissue forceps Pott's smith 18 cm  Adson tissue forceps 12 cm  Debakey's atraumatic forceps 15 cm  Debakey's atraumatic forceps 19 cm  Debakey's atraumatic forceps angled jaw 24 cm  Debakey's atraumatic forceps (angled jaw)19.5cm  Debakey's atraumatic forceps (angled jaw)15cm  Debakey vascular scissors 25deg, 15-17cm & 45 deg, 15-17cm: 1 each  Needle holder crile wood debakey 18 cm  Needle holder crile wood debakey 25 cm  Needle holder crile wood debakey 30 cm  Satinsky vascular clamps medium: 24-26cm	1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 2
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	T Vein hook:- 11-13cm Tissue forceps Pott's smith 15 cm Tissue forceps Pott's smith 18 cm Adson tissue forceps 12 cm Debakey's atraumatic forceps 15 cm Debakey's atraumatic forceps 19 cm Debakey's atraumatic forceps angled jaw 24 cm Debakey's atraumatic forceps (angled jaw)19.5cm Debakey's atraumatic forceps (angled jaw)15cm Debakey's atraumatic forceps (angled jaw)15cm Debakey vascular scissors 25deg, 15-17cm & 45 deg, 15-17cm: 1 each Needle holder crile wood debakey 18 cm Needle holder crile wood debakey 25 cm Needle holder crile wood debakey 30 cm Satinsky vascular clamps medium : 24-26cm Satinsky vascular clamps small :-18-22cm	1 1 3 1 1 1 1 1 1 1 1 1 1 1 2
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	T Vein hook:- 11-13cm Tissue forceps Pott's smith 15 cm Tissue forceps Pott's smith 18 cm Adson tissue forceps 12 cm Debakey's atraumatic forceps 15 cm Debakey's atraumatic forceps 19 cm Debakey's atraumatic forceps angled jaw 24 cm Debakey's atraumatic forceps (angled jaw)19.5cm Debakey's atraumatic forceps (angled jaw)15cm Debakey vascular scissors 25deg, 15-17cm & 45 deg, 15-17cm: 1 each Needle holder crile wood debakey 18 cm Needle holder crile wood debakey 25 cm Needle holder crile wood debakey 30 cm Satinsky vascular clamps medium : 24-26cm Satinsky vascular clamps small :-18-22cm Debakey's vascular clapms medium 16-18cm	1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 2 2 2
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	T Vein hook:- 11-13cm Tissue forceps Pott's smith 15 cm Tissue forceps Pott's smith 18 cm Adson tissue forceps 12 cm Debakey's atraumatic forceps 15 cm Debakey's atraumatic forceps 19 cm Debakey's atraumatic forceps angled jaw 24 cm Debakey's atraumatic forceps (angled jaw)19.5cm Debakey's atraumatic forceps (angled jaw)15cm Debakey vascular scissors 25deg, 15-17cm & 45 deg, 15-17cm: 1 each Needle holder crile wood debakey 18 cm Needle holder crile wood debakey 25 cm Needle holder crile wood debakey 30 cm Satinsky vascular clamps medium: 24-26cm Satinsky vascular clamps small:-18-22cm Debakey's vascular clamps medium 16-18cm Debakey vascular clamp small 10-12cm	1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	T Vein hook:- 11-13cm Tissue forceps Pott's smith 15 cm Tissue forceps Pott's smith 18 cm Adson tissue forceps 12 cm Debakey's atraumatic forceps 15 cm Debakey's atraumatic forceps 19 cm Debakey's atraumatic forceps angled jaw 24 cm Debakey's atraumatic forceps (angled jaw)19.5cm Debakey's atraumatic forceps (angled jaw)15cm Debakey vascular scissors 25deg, 15-17cm & 45 deg, 15-17cm: 1 each Needle holder crile wood debakey 18 cm Needle holder crile wood debakey 25 cm Needle holder crile wood debakey 30 cm Satinsky vascular clamps medium : 24-26cm Satinsky vascular clamps small :-18-22cm Debakey's vascular clamps medium 16-18cm Debakey vascular clamps small 10-12cm Bull dog clamps 5.5-7.5cm	1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 2 2 2
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 <b>B</b>	T Vein hook:- 11-13cm Tissue forceps Pott's smith 15 cm Tissue forceps Pott's smith 18 cm Adson tissue forceps 12 cm Debakey's atraumatic forceps 15 cm Debakey's atraumatic forceps 19 cm Debakey's atraumatic forceps angled jaw 24 cm Debakey's atraumatic forceps (angled jaw)19.5cm Debakey's atraumatic forceps (angled jaw)15cm Debakey vascular scissors 25deg, 15-17cm & 45 deg, 15-17cm: 1 each Needle holder crile wood debakey 18 cm Needle holder crile wood debakey 25 cm Needle holder crile wood debakey 30 cm Satinsky vascular clamps medium : 24-26cm Satinsky vascular clamps small :-18-22cm Debakey's vascular clamps medium 16-18cm Debakey vascular clamp small 10-12cm Bull dog clamps 5.5-7.5cm Major Vascular Instruments Set	1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 <b>B</b>	T Vein hook:- 11-13cm Tissue forceps Pott's smith 15 cm Tissue forceps Pott's smith 18 cm Adson tissue forceps 12 cm Debakey's atraumatic forceps 15 cm Debakey's atraumatic forceps 19 cm Debakey's atraumatic forceps angled jaw 24 cm Debakey's atraumatic forceps (angled jaw)19.5cm Debakey's atraumatic forceps (angled jaw)15cm Debakey's atraumatic forceps (angled jaw)15cm Debakey vascular scissors 25deg, 15-17cm & 45 deg, 15-17cm: 1 each Needle holder crile wood debakey 18 cm Needle holder crile wood debakey 25 cm Needle holder crile wood debakey 30 cm Satinsky vascular clamps medium: 24-26cm Satinsky vascular clamps small:-18-22cm Debakey's vascular clapms medium 16-18cm Debakey vascular clapms medium 16-18cm The instruments quoted should be of high quality and standard	1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 <b>B</b>	T Vein hook:- 11-13cm  Tissue forceps Pott's smith 15 cm  Tissue forceps Pott's smith 18 cm  Adson tissue forceps 12 cm  Debakey's atraumatic forceps 15 cm  Debakey's atraumatic forceps 19 cm  Debakey's atraumatic forceps angled jaw 24 cm  Debakey's atraumatic forceps (angled jaw)19.5cm  Debakey's atraumatic forceps (angled jaw)15cm  Debakey vascular scissors 25deg, 15-17cm & 45 deg, 15-17cm:  1 each  Needle holder crile wood debakey 18 cm  Needle holder crile wood debakey 25 cm  Needle holder crile wood debakey 30 cm  Satinsky vascular clamps medium : 24-26cm  Satinsky vascular clamps small :-18-22cm  Debakey's vascular clamps medium 16-18cm  Debakey vascular clamps medium 16-18cm  Debakey vascular clamps small 10-12cm  Bull dog clamps 5.5-7.5cm  Major Vascular Instruments Set  The instruments quoted should be of high quality and standard  The Instruments should be US-FDA or European CE certified	1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 <b>B</b> 1	T Vein hook:- 11-13cm  Tissue forceps Pott's smith 15 cm  Tissue forceps Pott's smith 18 cm  Adson tissue forceps 12 cm  Debakey's atraumatic forceps 15 cm  Debakey's atraumatic forceps 19 cm  Debakey's atraumatic forceps angled jaw 24 cm  Debakey's atraumatic forceps (angled jaw)19.5cm  Debakey's atraumatic forceps (angled jaw)15cm  Debakey vascular scissors 25deg, 15-17cm & 45 deg, 15-17cm:  1 each  Needle holder crile wood debakey 18 cm  Needle holder crile wood debakey 25 cm  Needle holder crile wood debakey 30 cm  Satinsky vascular clamps medium : 24-26cm  Satinsky vascular clamps small :-18-22cm  Debakey's vascular clamps medium 16-18cm  Debakey vascular clamp small 10-12cm  Bull dog clamps 5.5-7.5cm  Major Vascular Instruments Set  The instruments quoted should be of high quality and standard  The Instruments should be US-FDA or European CE certified with 4 digit notified body no or BIS certified	1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 <b>B</b>	T Vein hook:- 11-13cm  Tissue forceps Pott's smith 15 cm  Tissue forceps Pott's smith 18 cm  Adson tissue forceps 12 cm  Debakey's atraumatic forceps 15 cm  Debakey's atraumatic forceps 19 cm  Debakey's atraumatic forceps angled jaw 24 cm  Debakey's atraumatic forceps (angled jaw)19.5cm  Debakey's atraumatic forceps (angled jaw)15cm  Debakey's atraumatic forceps (angled jaw)15cm  Debakey vascular scissors 25deg, 15-17cm & 45 deg, 15-17cm: 1 each  Needle holder crile wood debakey 18 cm  Needle holder crile wood debakey 25 cm  Needle holder crile wood debakey 30 cm  Satinsky vascular clamps medium: 24-26cm  Satinsky vascular clamps small:-18-22cm  Debakey's vascular clamps medium 16-18cm  Debakey vascular clamps small 10-12cm  Bull dog clamps 5.5-7.5cm  Major Vascular Instruments Set  The instruments quoted should be of high quality and standard  The Instruments should be US-FDA or European CE certified with 4 digit notified body no or BIS certified  All needle holders & Metzenbaum scissors should be Tungsten	1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 <b>B</b> 1	T Vein hook:- 11-13cm  Tissue forceps Pott's smith 15 cm  Tissue forceps Pott's smith 18 cm  Adson tissue forceps 12 cm  Debakey's atraumatic forceps 15 cm  Debakey's atraumatic forceps 19 cm  Debakey's atraumatic forceps angled jaw 24 cm  Debakey's atraumatic forceps (angled jaw)19.5cm  Debakey's atraumatic forceps (angled jaw)15cm  Debakey vascular scissors 25deg, 15-17cm & 45 deg, 15-17cm:  1 each  Needle holder crile wood debakey 18 cm  Needle holder crile wood debakey 25 cm  Needle holder crile wood debakey 30 cm  Satinsky vascular clamps medium : 24-26cm  Satinsky vascular clamps small :-18-22cm  Debakey's vascular clamps medium 16-18cm  Debakey vascular clamp small 10-12cm  Bull dog clamps 5.5-7.5cm  Major Vascular Instruments Set  The instruments quoted should be of high quality and standard  The Instruments should be US-FDA or European CE certified with 4 digit notified body no or BIS certified	1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2

5	The name of the manufacturer/part number should be	
	impregnated/imprinted over the Instrument	
6	Items mentioned at BOQ SNo 2,5,9,15,21,40,41,52,58,66 are to	
	be demonstrated and feedback of evaluation committee regarding	
	satisfactory performance will be taken into account for technical	
	approval.	
7	Bidder should quote for all the Instruments of the set. At least	
	80% of the quoted instruments should be from same	
	manufacturer.	
8	+/- 10% variation in dimensions is acceptable	
	The following specifications are applicable to sets where size of	
	the instruments is not mentioned:	
1	Dissecting forceps and Artery forceps:	
	Small: tip size: 1mm, length: 4.5"-6"	
	Medium: tip size: 1.5mm, length: 7"-8.5"	
	Long/Large: tip size: 2mm, length: 9.5"-11"	
2	Scissors and Needle holders: The sizes mentioned against these	
	instruments to be interpreted as follows: -	
	Small: 6-8"	
	Medium: 9-10"	
	Long/Large: 11-12"	
~	BOQ for 'Major Vascular Instruments Set'	0 1 1 1 10
S.No.	Name of the Item	Qty in Nos./Set
1	Adson non-toothed micro dressing forceps:12-14cm	1
2	Adson Tissue Forceps 12 cm.	3
3	Artery forceps spencer wells 14-16cm	4
4	Artery forceps spencer wells 16 cm	4
5	Artery forceps-Halsted(Adson) curved 17-19cm	3
6	Artery forceps-Halsted(Adson) straight 17-19cm	2
7	Baby satinsky 14-18cm	2
8	Bozemann Needle holder 24 cm.	1
9	Bozmann Needle holder serrated 20-22cm	1
10	Cooley atraumatic forceps 12-14cm	2
11	Cooley vascular clamps 16-18cm	1
12	Crile wood Needle holder serrated 14-16cm	1
13	Cushing dressing forceps (curved) 17-19cm	1
14	Cushing nerve hook 18-20cm	1
15	Debakey atraumatic vascular clamp 15-17cm	1
16	Debakey multipurpose vascular clamps 14-16cm	1
17	Debakey vascular scissors 25 deg & 45 deg & length 15-17cm – 1 each	1
18	Debakey's atraumatic forceps 12 cm.	1
19	Debakey's atraumatic forceps 12 cm.  Debakey's atraumatic forceps 15 cm.	1
20	Debakey's atraumatic forceps 19 cm.	1
21	Debakey's atraumatic forceps angled jaw 15 cm.	1
22	Debakey's atraumatic forceps angled jaw 19.5 cm.	1
23	Debaky atraumatic forceps (angled) 23-25cm	1
24	Debaky atraumatic forceps (long)	1
25	Debaky atraumatic forceps (Medium)	1
26	Debaky atraumatic forceps (Small)	1
27	Debaky atraumatic forceps 30° (Medium)	2
28	Debaky atraumatic forceps 30° (small)	2
29	Debaky atraumatic forceps 45°(angled)	2
30	Debaky atraumatic forceps 90° (angled)	2
31	Debaky Needle holder serrated 17-19cm	1
31	Debaky Needle Holder Schaled 17-17em	1

33	Debaky vascular scissors angled 45 deg15-17cm	1
34	Golden Handle small needle holder 6-8"	1
35	Halsted mosquito hemostatic forceps 12cm	1
36	Iris scissors curved 11.5 cm	1
37	Kelley clamp long curved 14-16cm	3
38	Lahey gall duct forceps 18-20cm	1
39	Mayo scissors noble curved 20 cm	1
40	Mayo scissors noble straight 17 cm	1
41	Metzenbaum dissecting scissors 15-17cm	1
42	Metzenbaum dissecting scissors curved 14-16cm	1
43	Metzembaum scissors(curved) 20 cm.	1
44	Metzembaum scissors(curved) 14 cm.	1
45	Metzembaum scissors(curved) 26 cm.	1
46	Mosquito Artery forceps(curved) 12-14cm	5
47	Mosquito Artery forceps(straight) 12-14cm	5
48	Needle holder (crile wood Debakey) 15 cm.	1
49	Needle holder (crile wood Debakey) 18 cm.	1
50	Needle holder (crile wood Debakey) 25 cm.	1
51	Needle holder (crile wood Debakey) 30 cm.	1
52	Pott's Smith dissecting forceps 17-19cm	1
53	Reynolds scissors fine curved 17-19cm	1
54	Rt.angled clamp 14 cm.	2
55	Rt.angled clamp 19 cm.	2
56	Rt.angled clamp 23 cm.	2
57	Satinsky blood vessel clamp medium 22-24cm	2
58	Satinsky blood vessel clamp (Big) 26-28cm	2
59	Satinsky blood vessel clamp (Small) 20-24cm	2
60	Tissue Forceps 18.5 cm.	1
61	Tissue forceps Pott's Smith 15 cm.	1
62	Tissue forceps Pott's Smith 18 cm.	1
63	Vein Hook 12-14cm	2
64	Reynolds' vascular forceps small	2
65	Reynolds' vascular forceps medium	2
66	Reynolds' vascular forceps long	2
67	Eyelid retractor 12-14cm	2
C	Surgical Loupes	2 Nos.

Sl.	Sch.13
No	Urology Surgical Set
A	BLADDER SET (One Each)
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.DUROTP
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.130MM 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
В	KIDNEY SET (TWO EACH)
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.DUROTP
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 DUROGRIP DE BAKEY NEEDLE HOLDER, 230 MM
45	DUROGRIP DE BAKET NEEDLE HOLDER, 250 MM  DUROGRIP DE BAKEY NEEDLE HOLDER, 250 MM
45	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
$\mathcal{I}_{\mathbf{I}}$	MINOLICE INDOMINAL RELIGIOTOR

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
С	INSTRUMENTS FOR RADICAL PROSTATE SURGERY 1 each
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  Curved needle holder double curved
15	3.5 x optical loupe
16	Head light with light source
17	300 watt Xenon Dual port light source
18	Balfour Retractor, self retaining with three blades (63x35mm) maximum spread 180mm-4
10	No.
19	Baby Satinsky clamp,18 cm,straight-4 No.
20	Equipment Trolley-2 no (one for storage of equipment and one for procedure)
$\mathbf{D}$	VASCULAR - SUPPLEMENT (ONE EACH)
1	DE'BAKEY VESSEL CLAMP, JAW 48MM,265 MM
2	
3	DE'BAKEY VESSEL CLAMP, JAW 54MM,270 MM DE'BAKEY VESSEL CLAMP, JAW 58MM,270 MM
4	DE'BAKEY VESSEL CLAMP, JAW 58MM,270 MM
1 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
E	URETHRA SET (ONE EACH)
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.DUROTP
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
F	URETHRAL - MICRO - SUPPLEMENT (ONE EACH)
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
G	GENITAL SET (TWO EACH)
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.DUROTP
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
H	AUTOCLAVABLE INSTRUMENT BOX FOR STORAGE: 7 nos( one for each of the
	above set)
I	All above instrument should be of high medical grade.
J	All instruments should be US-FDA or European CE approved with 4 digit notified body
17	number or BIS (copy of certificate have to be enclosed with the bid)
K	Company name and catalogue number engraved on each instruments
L	Corrosion free surgical grade stainless steel (Stainless steel alloy of 350-450 grade)
M	Item Code and Manufacturer name should be LASER engraved on the instrument.
N	Instruments supplied should be 80% or more from the same manufacturer.
O	Tolerance in dimension +/-10%

Sl.No	Sch.14	
	Laproscopy set Paediatric	
A	PEDIATRIC LAPAROSCOPE WITH 5 MM INSTRUMENTS	
1.	TELESCOPE 5 MM, 0 DEGREE ANGLE OF VIEW AUTOCLAVABLE. WORKING	
	LENGTH 290-300 MM	
2.	TELESCOPE 5 MM, 30 DEGREE ANGLE OF VIEW AUTOCLAVABLE WORKING	
	LENGTH 290-300 MM	
3.	10MM, 30°, TELESCOPE FORWARD-OBLIQUE TELESCOPE 30° ENLARGED	
	VIEW, DIAMETER 10 MM, LENGTH <b>30-31</b> CM, AUTOCLAVABLE, FIBER OPTIC	
	LIGHT TRANSMISSION INCORPORATED	
4.	10MM, 0°, TELESCOPE STRAIGHT FORWARD TELESCOPE ENLARGED VIEW,	
	DIAMETER 10 MM, LENGTHLENGTH <b>29-31</b> CM, AUTOCLAVABLE, FIBER OPTIC	

	LIGHT TRANSMISSION INCORPORATED
5.	10-11 MM TROCAR TROCAR WITH PYRAMIDAL TIP, CANNULA,
	INSUFFLATION STOPCOCK, LENGTH 8.5-10CM, AUTOMATIC OR
	MULTIFUNCTIONAL VALVE
6.	5.5 - 6 MM TROCAR (FOR 5MM INSTRUMENT) TROCAR WITH PYRAMIDAL TIP,
0.	CANNULA WITH LUER-LOCK CONNECTOR FOR INSUFFLATION, LENGTH 5-6
	CM AUTOMATIC OR SILICONE LEAFLET VALVE
7	5.3-3.5 MM TROCAR (FOR 5MM INSTRUMENT) TROCAR WITH PYRAMIDAL TIP,
/	
	CANNULA WITH LUER-LOCK CONNECTOR FOR INSUFFLATION, LENGTH 8.5-
	10 CM AUTOMATIC VALVE
7.	5.5-6 MM TROCAR (FOR 5MM INSTRUMENT) TROCAR WITH PYRAMIDAL TIP,
	CANNULA WITH LUER-LOCK CONNECTOR FOR INSUFFLATION, LENGTH 8.5-
	10 CM AUTOMATIC VALVE
8.	TROCAR SLEEVE 10 MM DIA, WITH <b>MULTIFUNCTIONAL</b> VALVE WITH TAP,
	OBLIQUE DISTAL TIP, WORKING LENGTH 100-105 MM
9.	TROCAR METAL SLEEVE STANDARD 5.5-6 MM DIA, WITH INSUFFLATIONS
	TAP' WITH STRAIGHT DISTAL TIP RETAINING THREAD WORKING LENGTH
	100 MM
10.	REDUCER 11/5 MM
11.	REDUCER /REDUCER SLEEVE: 6/3 MM
12.	REDUCING SLEEVE DIA 11/5 MM WORKING LENGTH 160 MM
13.	5MM DISSECTING AND GRASPING FORCEPS ROTATING WITH CONNECTOR
13.	PIN FOR UNIPOLAR COAGULATION, SIZE 5 MM, LENGTH 33 to 36CM, HEAVY,
	DOUBLE ACTION JAWS WITH PLASTIC HANDLES, WITH HEMOSTAT STYLE
	RATCHET, OUTER TUBE, INSULATED, FORCEPS INSERT
14.	5 MM CHOLANGIOGRAPHY FIXATION CLAMP CHANNEL FOR 6 FR
	CATHETER WITH 2 WAY STOPCOLCK FOR CONTRAST MEDIUM AND SALINE
	SOLUTION AND FLEXIBLE TUBING WITH 2 LUER LOCK CONNECTORS, SIZE 5
	MM
15.	10 MM CLIP APPLICATOR DISMANTLING, ROTATING, LENGTH 36 CM WITH
	METAL HANDLE, METAL OUTER SHEATH, INSERT FOR MEDIUM AND LARGE
	SIZE CLIPS
16.	5 MM NEEDLE HOLDER MACRONEEDLE HOLDER, SIZE 5 MM, LENGTH 33
	CM ,SELF CORRECTING, ERGONOMIC HANDLE WITH RATCHET, LEFT
	CURVED JAWS WITH TUNGSTEN CARBIDE INSERTS
17.	BOWEL GRASPER 5MM, FENESTRATED DOUBLE ACTION JAW, LENGTH 30CM
18.	SUCTION IRRIGATION TUBE 5MM, WITH MULTIPLE OPENINGS, LENGTH 31-36
10.	CM WITH HANDLE FOR SUCTION AND IRRIGATION WITH 2 WAY STOPCOCK
	AND ADAPTOR
19.	10MM FORCEPS 33-36 CM, FORCEPS, ROTATING, DISMANTLING WITHOUT
1).	CONNECTOR PIN FOR COAGULATION, DOUBLE ACTION JAWS FOR
	RETRIEVING GALLSTONES
20	
20.	ENDOSCOPIC BOWEL CLAMP 5MM, 33-36 CM, ROTATIONAL, DISMANTLING.
21.	DEBAKEY GRASPING FORCEPS 5MM, 30 -33 CM LENGTH, ATRAUMATIC,
	ROTATIONAL, DISMANTLING
22.	GRASPING/DISSECTING FORCEPS 5MM DIA, MONOPOLAR PERFORATED WITH
	HORIZONTAL SERRATIONS, DOUBLE JAW ACTION WITH LOCKING
	MECHANISM ROTATABLE WITH WORKING LENGTH 300 MM OR MORE
23.	GRASPING/DISSECTION FORCEPS, 5MM MONOPOLAR "MARYLAND
	DISSECTOR" CURVED WITH FINE HORIZONTAL SERRATION, DOUBLE JAW
	ACTION WITH LOCKING MECHANISM ROTATABLE WORKING LENGTH 300
	MM OR MORE
24.	GRASPING FORCEPS 5 MM MONOPOLAR WITH TEETH DOUBLE JAW ACTION
<b>∠⊣.</b>	WITH LOCKING MECHANISM ROTATABLE, WORKING LENGTH 300 MM OR
	·
25	MORE  CD A SPINIC AND DISSECTING FOR CERS SAMA REPEOR A TER FINE HORIZONTAL
25.	GRASPING AND DISSECTING FORCEPS 5MM PERFORATED FINE HORIZONTAL
	SERRATIONS, 20 MM LONG SINGLE JAW ACTION, MODU LINE WITH LOCKING

	MECHANISM ROTATABLE WORKING LENGTH 300 MM	
26.	GRASPING AND EXTRACTION FORCEPS, 2 X 3 CLAWS 5 MM, SINGLE JAW	
	ACTION WITH LOCKING MECHANISM ROTATABLE, WORKING LENGTH 300	
	MM OR MORE	
27.	CLAW FORCEPS 10MM, 2/3 CLAWS	
28.	NEEDLE HOLDER CURVED RIGHT WITH AUXILIARY ALIGNED HANDLE 5 MM	
	DIA, WORKING LENGTH <u>300-360 MM</u> COMPLETE WITH INNER SHEATH AND	
	HANDLE	
29.	SCISSOR 5 MM DIA, MONOPOLAR MODULAR SYSTEM "METZENBAUM"	
	CURVED LEFT DOUBLE JAW ACTION WITHOUT LOCKING MECHANISM ROTATABLE, WORKING LENGTH 310-360 MM	
20	· · · · · · · · · · · · · · · · · · ·	
30.	SPARE INSERT FOR METZENBAUM SCISSOR BIPOLAR GRASPING FORCEPS <b>5.0-5.5</b> MM DIA, WORKING LENGTH <b>330 - 360</b>	
31.	MM	
32.	UNIPOLAR CAUTERY LEAD, CONNECTING CABLE FOR 5 MM LAPAROSCOPIC	
32.	INSTRUMENTS, 3 M LONG	
33.	HOOK ELECTRODE MONOPOLAR 5MM, WORKING LENGTH 340-360 MM	
34.	H.F. BIPOLAR CONNECTING CABLE 3 M LONG	
35.	FASCIAL CLOSURE INSTRUMENT 2 TO 2.8 MM SIZE, 16-17 CM LONG	
36.	SUCTION-IRRIGATION TUBE SET WITH TRUMPET TYPE PLUNGER VALVE, 5	
	MM AND/OR 10 MM TUBE, WORKING LENGTH 350-360 MM	
В	PEDIATRIC LAPAROSCOPE WITH 3.5 MM INSTRUMENTS	
37.	TELESCOPE 3.3MM, 30 DEGREE LENGTH <b>25-30</b> CM ENLARGED VIEW	
	AUTOCLAVEABLE FIBREOPTIC LIGHT TRANSMISSION INCORPORATED	
	TROCAR SIZE 3.9 MM	
38.	3 MM 30 DEGREE TELESCOPE LENGTH <b>14-18</b> CM ENLARGED VIEW	
	AUTOCLAVABLE FIBREOPTIC LIGHT TRANSMISSION INCORPORATED	
39.	3.5 / 3.9 MM TROCAR FOR 3 -3.5 MM INSTRUMENT TROCAR WITH PYRAMIDAL	
	TIP CANNULA, LENGTH 5 -6 CM, WITH LUER-LOCK CONNECTOR FOR	
40.	INSUFFLATION, SILICON LEAFLET VALVE TROCAR 3.5-3.9 MM DIA, WITH PYRAMIDAL TIP WORKING LENGTH 100 MM	
41.	REDUCING SLEEVE DIA 5.5-6 MM/3-3.5 MM WORKING LENGTH 100 MM	
42.	3 MM -3.5 MM PERCUTANEOUS PYLORIC SPREADER CLICK-LINE 3 MM,	
72.	LENGTH 20 -25 CM, METAL HANDLE WITHOUT RATCHET, ROTATING, OUTER	
	SHEATH WITH WORKING INSERT	
43.	3MM -3.5 MM GRASPING FORCEPS, ROTATING, SIZE 3 MM, LENGTH 20 -25 CM,	
	HEAVY, DOUBLE ACTION JAWS WITH PLASTIC HANDLES, ATRAUMATIC,	
	FENESTRATED, WITH HEMOSTAT STYLE RATCHET, OUTER TUBE WITH	
	INSERT, INSULATED, WITH LUER LOCK ADAPTOR FOR CLEANING	
44.	3 MM KELLY FORCEPS, ROTATING WITH CONNECTOR PIN FOR UNIPOLAR	
	COAGULATION, SIZE 3 MM, LENGTH 20 CM, HEAVY, DOUBLE ACTION JAWS	
	WITH PLASTIC HANDLES, WITH HEMOSTAT STYLE RATCHET, OUTER TUBE	
45.	WITH INSERT, INSULATED, WITH LUER LOCK ADAPTOR FOR CLEANING	
45.	3 MM METZENBAUM SCISSORS, ROTATING WITH CONNECTOR PIN FOR UNIPOLAR COAGULATION, SIZE 3 MM, LENGTH 20 CM, DOUBLE ACTION	
	JAWS WITH PLASTIC HANDLES, CONICAL, CURVED, SERRATED JAWS,	
	WITHOUT RATCHET, OUTER TUBE WITH INSERT, INSULATED, WITH LUER	
	LOCK ADAPTOR FOR CLEANING	
46.	GRASPING/DISSECTING FORCEPS 3.5 MM "MARYLAND DISSECTOR", CURVED	
	LEFT, BOTH JAW OPENING WITH LOCKING MECHANISM, ROTATABLE	
	WORKING LENGTH 200 MM OR MORE	
47.	ATRAUMATIC GRASPING FORCEPS 3.5 MM, BOTH JAWS OPENING WITH	
	LOCKING MECHANISM ROTATABLE WORKING LENGTH 200 MM OR MORE	
48.	GRASPING FORCEPS 3.5 MM, BABCOCK, BOTH JAWS OPENING WITH LOCKING	
	MECHANISM ROTATABLE, WORKING LENGTH 200 MM OR MORE	
49.	DISSECTOR 3.5 MM WITHOUT LOCKING MECHANISM, ROTATABLE	
	WORKING LENGTH 200 MM OR MORE	

50.	BIOPSY FORCEPS 3.5 MM DIA CUTTING ACTION WITHOUT LOCKING
	MECHANISM ROTATABLE, WORKING LENGTH 300 MM APPROX.
51.	BIPOLAR GRASPING FORCEPS 3.5 MM WITH SPRING HANDLE MODULAR
	SYSTEM 200 MM OR MORE
52.	HOOK ELECTRODE MONOPOLAR 3 MM WITH DISTAL EXTENDED
	INSULATION 200MM OR MORE
53.	MODULAR NEEDLE HOLDER 3 MM DIA, WITH WORKING LENGTH 300 MM
	APPROX.
54.	MONOPOLAR CONNECTING CABLE FOR 4 MM PIN, 3 M LONG
55.	SUCTION IRRIGATION TUBE 3MM, WITH MULTIPLE OPENINGS, LENGTH 20
	CM WITH HANDLE FOR SUCTION AND IRRIGATION WITH 2 WAY STOPCOCK
	AND ADAPTOR FOR USE WITH TROCAR SIZE 3.5 MM
	Added Para:
	All the instrument set Should be US FDA/ European CE certified with 4 digit notified
	body No
56.	CO2 INSUFFLATION UNIT
	ELECTRONIC CO2 INSUFFLATOR WITH
	a) PIN INDEX CONNECTION
	b) AN ADJUSTABLE FLOW RATE OF <b>20 LITRE PER MINUTE OR MORE</b>
	c) PRESSURE RANGE ADJUSTABLE BETWEEN 0-30 MM HG, PRESSURE
	d) FLOW RATE DISPLAYED ON THE FRONT PANEL
	e) PROVIDED WITH SILICON AUTOCLAVABLE TUBING WITH LUER
	ATTACHMENT.
	f) INSTRUMENT SHALL WORK ON ELECTRIC SUPPLY AS PER INDIAN
	STANDARDS
	g) HIGH PRESSURE CONNECITING TUBE WITH PIN INDEX CONNECTOR
	h) PRESSURE REDUCER VALVE
	Added Para:
	i) Co2 Cylinder (45kg): 02 nos
	j) Unit Should be US FDA/ European CE certified with 4 digit notified body No
57.	LAPARO PUMP
	a) LAPARO PUMP INCLUDING HOLDER FOR IRRIGATION STAND
	b) REUSABLE TUBE SET,
	c) CABLE 3MM LONG
	d) VACUUM TUBE FROM PUMP TO SECRETION TRAP, HYGIENE FILTER FOR
	ASPIRATION
	e) ASPIRATION CONTAINER FOR ABOVE 3 LITRES, AUTOCLAVABLE (PKT
	OF 2)
	Added Para:
	Should be US FDA/ European CE certified with 4 digit notified body No
58	Pediatric Cysto Urethroscope- 8/9.5 French
	Grasping Forceps- 3 french
	BIOPSY FORCEPS 3 french
	Hook Electrodes 3 french
	Knife- 3 french
	Bugbee Electroded- 3 french
59	Pediatric Resectoscope- 11 French

1	Sch.15
	Cystoscope & Resectoscope
	30 degree Telescope of size: 4mm, length 28-30cm - 2 Nos
	0 degree Telescope of size: 4mm, length 28-30cm - 1 Nos
	70 degree Telescope of size: 4mm, length 28-30cm - 1 Nos
	Should have very high quality of rod lens system
	Should have fiber optic light transmission incorporated.
	The Telescope should be autoclavable.

2	Cystoscope Sheath
	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	Telescope bridge
	Telescope bridge with two instrument channel to fit with the cystoscope - 2 no.
4	Flexible Grasping forceps
4	Compatible Grasping forceps 33cm or more to be provided to fit the purpose - 4 nos.
5	Flexible cup biopsy forcep
3	Compatible cup biopsy forceps 33cm or more to be provided to fit the purpose - 2 no.
6	Rigid Biopsy and Grasping Forcep
U	Optical Rigid Biopsy forcep compatible with Cystoscope sheath to be provided - 1 no.
	Toomey glass syringe 100 CC - 1 no.
	Toomey glass syringe 100 cc - 1 no.  Toomey glass syringe of 100 cc with adaptor to fit with sheath - 1 no.
7	ELLIK Evacuator
7	
0	ELLIK Evacuator with 2 bulb and adaptor to be provided - 2 sets.
8	Urethrotome sheath
	20-21 FR optical Urethrotome sheath with one channel to be provided -1 no.
0	Straight cold knife 5 nos.
9	Resectoscope sheath
	26 FR continuos 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
10	obturator & visual obturator - 1 no. Each
10	Working Element set
	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
	Cutting loop single stem - 30 Nos.  Collins knife - 5 nos.
	High Frequency cord - 5 Nos.
	Protection tube 1 no
	Protection tube 1 no
11	OTIC Heatherstome morallel expanding (edivertable from 15.25 Fm)
11	OTIS Urethrotome parallel expanding (adjustable from 15-35 Fr)
	Compatible double edged blade - 5 nos.
12	Compatible double edged blade - 5 nos.  Coagulating Electrode, 5 Fr., unipolar, length 50-55 cm -2 nos.
12 13	Compatible double edged blade - 5 nos.  Coagulating Electrode, 5 Fr., unipolar, length 50-55 cm -2 nos.  Stone Punch with Sheath size 24-26Fr or less – One
12	Compatible double edged blade - 5 nos.  Coagulating Electrode, 5 Fr., unipolar, length 50-55 cm -2 nos.  Stone Punch with Sheath size 24-26Fr or less – One  Video Processor & Light source
12 13	Compatible double edged blade - 5 nos.  Coagulating Electrode, 5 Fr., unipolar, length 50-55 cm -2 nos.  Stone Punch with Sheath size 24-26Fr or less — One  Video Processor & Light source  Outputs - suitable video output
12 13	Compatible double edged blade - 5 nos.  Coagulating Electrode, 5 Fr., unipolar, length 50-55 cm -2 nos.  Stone Punch with Sheath size 24-26Fr or less – One  Video Processor & Light source  Outputs - suitable video output  Unit should be compact and light weight.
12 13	Compatible double edged blade - 5 nos.  Coagulating Electrode, 5 Fr., unipolar, length 50-55 cm -2 nos.  Stone Punch with Sheath size 24-26Fr or less – One  Video Processor & Light source  Outputs - suitable video output  Unit should be compact and light weight.  Light source - Combined or separate LED/150W Xenon (covered under warranty)
12 13	Compatible double edged blade - 5 nos.  Coagulating Electrode, 5 Fr., unipolar, length 50-55 cm -2 nos.  Stone Punch with Sheath size 24-26Fr or less — One  Video Processor & Light source  Outputs - suitable video output  Unit should be compact and light weight.  Light source - Combined or separate LED/150W Xenon (covered under warranty)  Lamp can be turned on/off without turning off the equipment.
12 13 14	Compatible double edged blade - 5 nos.  Coagulating Electrode, 5 Fr., unipolar, length 50-55 cm -2 nos.  Stone Punch with Sheath size 24-26Fr or less – One  Video Processor & Light source  Outputs - suitable video output  Unit should be compact and light weight.  Light source - Combined or separate LED/150W Xenon (covered under warranty)  Lamp can be turned on/off without turning off the equipment.  Electronic magnification up to 1.5X by a touch of scope remote switches/adapters/coupler
12 13	Compatible double edged blade - 5 nos.  Coagulating Electrode, 5 Fr., unipolar, length 50-55 cm -2 nos.  Stone Punch with Sheath size 24-26Fr or less – One  Video Processor & Light source  Outputs - suitable video output  Unit should be compact and light weight.  Light source - Combined or separate LED/150W Xenon (covered under warranty)  Lamp can be turned on/off without turning off the equipment.  Electronic magnification up to 1.5X by a touch of scope remote switches/adapters/coupler  Monitor
12 13 14	Compatible double edged blade - 5 nos.  Coagulating Electrode, 5 Fr., unipolar, length 50-55 cm -2 nos.  Stone Punch with Sheath size 24-26Fr or less – One  Video Processor & Light source  Outputs - suitable video output  Unit should be compact and light weight.  Light source - Combined or separate LED/150W Xenon (covered under warranty)  Lamp can be turned on/off without turning off the equipment.  Electronic magnification up to 1.5X by a touch of scope remote switches/adapters/coupler  Monitor  15 inches or more LCD/LED HD Monitor of Medical Grade. It should be mountable on trolley.
12 13 14	Compatible double edged blade - 5 nos.  Coagulating Electrode, 5 Fr., unipolar, length 50-55 cm -2 nos.  Stone Punch with Sheath size 24-26Fr or less – One  Video Processor & Light source  Outputs - suitable video output  Unit should be compact and light weight.  Light source - Combined or separate LED/150W Xenon (covered under warranty)  Lamp can be turned on/off without turning off the equipment.  Electronic magnification up to 1.5X by a touch of scope remote switches/adapters/coupler  Monitor  15 inches or more LCD/LED HD Monitor of Medical Grade. It should be mountable on trolley.  Computer with Software
12 13 14 15 16	Compatible double edged blade - 5 nos.  Coagulating Electrode, 5 Fr., unipolar, length 50-55 cm -2 nos.  Stone Punch with Sheath size 24-26Fr or less – One  Video Processor & Light source  Outputs - suitable video output  Unit should be compact and light weight.  Light source - Combined or separate LED/150W Xenon (covered under warranty)  Lamp can be turned on/off without turning off the equipment.  Electronic magnification up to 1.5X by a touch of scope remote switches/adapters/coupler  Monitor  15 inches or more LCD/LED HD Monitor of Medical Grade. It should be mountable on trolley.  Computer with Software  Should be supplied with suitable computer system with facility for recording images and video.
12 13 14	Compatible double edged blade - 5 nos.  Coagulating Electrode, 5 Fr., unipolar, length 50-55 cm -2 nos.  Stone Punch with Sheath size 24-26Fr or less – One  Video Processor & Light source  Outputs - suitable video output  Unit should be compact and light weight.  Light source - Combined or separate LED/150W Xenon (covered under warranty)  Lamp can be turned on/off without turning off the equipment.  Electronic magnification up to 1.5X by a touch of scope remote switches/adapters/coupler  Monitor  15 inches or more LCD/LED HD Monitor of Medical Grade. It should be mountable on trolley.  Computer with Software  Should be supplied with suitable computer system with facility for recording images and video.  Trolley
12 13 14 15 16	Compatible double edged blade - 5 nos.  Coagulating Electrode, 5 Fr., unipolar, length 50-55 cm -2 nos.  Stone Punch with Sheath size 24-26Fr or less – One  Video Processor & Light source  Outputs - suitable video output  Unit should be compact and light weight.  Light source - Combined or separate LED/150W Xenon (covered under warranty)  Lamp can be turned on/off without turning off the equipment.  Electronic magnification up to 1.5X by a touch of scope remote switches/adapters/coupler  Monitor  15 inches or more LCD/LED HD Monitor of Medical Grade. It should be mountable on trolley.  Computer with Software  Should be supplied with suitable computer system with facility for recording images and video.  Trolley  Suitable Trolley to mount monitor, scopes, light source and all accessories.
12 13 14 15	Compatible double edged blade - 5 nos.  Coagulating Electrode, 5 Fr., unipolar, length 50-55 cm -2 nos.  Stone Punch with Sheath size 24-26Fr or less – One  Video Processor & Light source  Outputs - suitable video output  Unit should be compact and light weight.  Light source - Combined or separate LED/150W Xenon (covered under warranty)  Lamp can be turned on/off without turning off the equipment.  Electronic magnification up to 1.5X by a touch of scope remote switches/adapters/coupler  Monitor  15 inches or more LCD/LED HD Monitor of Medical Grade. It should be mountable on trolley.  Computer with Software  Should be supplied with suitable computer system with facility for recording images and video.  Trolley  Suitable Trolley to mount monitor, scopes, light source and all accessories.  Manufacturer should have own registered office/own registered service centre/100% Subsidiary
12 13 14 15	Compatible double edged blade - 5 nos.  Coagulating Electrode, 5 Fr., unipolar, length 50-55 cm -2 nos.  Stone Punch with Sheath size 24-26Fr or less – One  Video Processor & Light source  Outputs - suitable video output  Unit should be compact and light weight.  Light source - Combined or separate LED/150W Xenon (covered under warranty)  Lamp can be turned on/off without turning off the equipment.  Electronic magnification up to 1.5X by a touch of scope remote switches/adapters/coupler  Monitor  15 inches or more LCD/LED HD Monitor of Medical Grade. It should be mountable on trolley.  Computer with Software  Should be supplied with suitable computer system with facility for recording images and video.  Trolley  Suitable Trolley to mount monitor, scopes, light source and all accessories.  Manufacturer should have own registered office/own registered service centre/100% Subsidiary company in India. Necessary document in the name of manufacturer/100% subsidiary company
12 13 14 15 16	Compatible double edged blade - 5 nos.  Coagulating Electrode, 5 Fr., unipolar, length 50-55 cm -2 nos.  Stone Punch with Sheath size 24-26Fr or less – One  Video Processor & Light source  Outputs - suitable video output  Unit should be compact and light weight.  Light source - Combined or separate LED/150W Xenon (covered under warranty)  Lamp can be turned on/off without turning off the equipment.  Electronic magnification up to 1.5X by a touch of scope remote switches/adapters/coupler  Monitor  15 inches or more LCD/LED HD Monitor of Medical Grade. It should be mountable on trolley.  Computer with Software  Should be supplied with suitable computer system with facility for recording images and video.  Trolley  Suitable Trolley to mount monitor, scopes, light source and all accessories.  Manufacturer should have own registered office/own registered service centre/100% Subsidiary company in India. Necessary document in the name of manufacturer/100% subsidiary company like GST Registration/Trade License to be submitted along with bid;
12 13 14 15 16	Compatible double edged blade - 5 nos.  Coagulating Electrode, 5 Fr., unipolar, length 50-55 cm -2 nos.  Stone Punch with Sheath size 24-26Fr or less – One  Video Processor & Light source  Outputs - suitable video output  Unit should be compact and light weight.  Light source - Combined or separate LED/150W Xenon (covered under warranty)  Lamp can be turned on/off without turning off the equipment.  Electronic magnification up to 1.5X by a touch of scope remote switches/adapters/coupler  Monitor  15 inches or more LCD/LED HD Monitor of Medical Grade. It should be mountable on trolley.  Computer with Software  Should be supplied with suitable computer system with facility for recording images and video.  Trolley  Suitable Trolley to mount monitor, scopes, light source and all accessories.  Manufacturer should have own registered office/own registered service centre/100% Subsidiary company in India. Necessary document in the name of manufacturer/100% subsidiary company

Sl.No	Sch.16
	Laparoscope Set

1	Telescope 10mm 30 degree: 2 No. (Should have following specifications)
a	Completely distortion free.
b	HD Optics for better contrast & colour reproduction.
c	Deleted
d	Large field of view and depth of focus.
e	Autoclavable type and should be supplied with autoclavable tray.
2	Telescope 5 -5.5mm 30 degree: 1 No. (Should have following
	specifications)
a	Completely distortion free.
b	HD Optics for better contrast & colour reproduction.
С	Deleted
d	Large field of view and depth of focus.
e	Autoclavable type and should be supplied with autoclavable tray.
3	<b>Telescope 10mm 0 degree</b> : 1 No. (Should have following specifications)
a	Completely distortion free.
b	HD Optics for better contrast & colour reproduction.
c	Deleted
d	Large field of view and depth of focus.
e	Autoclavable type and should be supplied with autoclavable tray.
4	Laparoscopic Hand Instrument set: quantity mentioned in front of each
	article.All forceps/Hand Instruments should be 5-5.5 mm in size and
	length should be between 33-36cm (Should have the following specifications).
a	Atraumatic bowel Grasping Forceps, both jaw opening 5 x 330 mm, ratchet,
, a	non locking 2 no.
b	Insert only of atraumatic bowel Grasping Forceps, both jaw opening 5 x 330
~	mm, ratchet: 2 no.
С	Maryland Forceps, 5 x 330 mm, Monopolar 2 no.
d	Metzenbaum Scissors, 5 x 330 mm, Monopolar 2 no.
e	Insert only of Metzenbaum Scissors, 5 x 330 mm, Monopolar 2 no.
f	Hook Scissors, 5 x 330 mm, Monopolar 2 no
g	Monopolar HF-Cable 4 no
h	Straight Needle Holder, 5 x 330 mm 2 no
i	Self-Alignment Needle Holder, 5-5.5 x 330-360 mm - 2 nos
j	Curved Needle Holder (one right and one left) - 5-5.5 x 330-360 mm - 2
	nos
k	Suction/Irrigation Tube (trumpet) with tubing distal holes - 2 nos, 5-5.5
	x 330-360 mm - 2 nos
<u>l</u>	Non disposable Verses Needle, 120 mm 4 no Fan retractor 5mm 2 no
m	
0 0	Haem O'-lock clip endo-applier for large clips 10mm 2 no Haem O'-lock clip endo-applier for extra large clips 10mm 1 no
p	Laparoscopic liga clip applicator 10mm 1 no
q	Laparoscopic Babcock 5mm 2no
r	Laparoscopic Babcock 10mm 1 no
S	Laparoscopic right angle dissecting forceps 5mm 2 no
t	Laparoscopic right angle dissecting forceps 10mm 2 no
u	Insert only of laparoscopic right angle dissecting forceps 5mm 2 no
v	Insert only of laparoscopic right angle dissecting forceps 10mm 2 no
w	Tray to accommodate all hand instruments 2 no
5	Others
a	Trocar & Cannula(metallic) 5-6mm: 5no 11mm: 5no
b	Deleted
С	Laparoscopic extra peritoneal Hassan's port: 2
	CAMERA CONTROL UNIT & CAMERA
6	High definition Endoscopic camera system should have following features:

L	Dura Digital IID tacknalogy with high definition video of 1020 v 1000m
b	Pure Digital HD technology with high definition video of 1920 x 1080p (min) native resolution.
С	Should have progressive scan technology
d	Consistent use of 16:9 format for input and output for HDTV function
e	3 chip CCD /3 chip CMOS having hi-fidelity image transmission with
	digital conversion at camera head itself
f	The system should have digital zoom and integrated optical zoom with
	auto focus to enhance the quality of image size & cross speciality
	standardization of the camera system, regardless of the telescope used.
g	System should be able to optimize all the settings and should be ready as
	soon as connected to camera control unit with automatic brightness control
h	Should be compatible for remote controlled operation of various features
i	Image Sensor:3 x 1/3 Progressive scan CCD/CMOS Chip.
<u>j</u>	AGC Microprocessor controlled
k	Lens F14-30mm ± 10 %
<u>l</u>	Video Outputs HDTV-DVI-D/3GSDI/HDSDI
m	The Camera should be capable of directly recording full HD quality photos(1920x1080p) and full HD quality videos(1920x1080p) into an
	internal memory of 300 GB or more / into an external hard drive of
	300GB or more. If not, a 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.
n	Camera settings (e.g. white balance, zoom, gain, sharpness etc.) should be
	possible directly from the camera head buttons.
0	Deleted
7	MONITOR
a	One Wide Screen Monitor having the following features:
b	26" full HD medical grade monitor in 16: 9/10 HDTV format, LED/LCD
	display  Develoring Minimum of 1020 or 1020 or inch
c d	Resolution: Minimum of 1920 x 1080 pixels  SDI/HD-SDI
	All required cables and connectors, which should be specified
e f	TFT/LCD/LED screen stand/Fixtures for connecting to Pendant
1	System/Ceiling Light Arm
g	Dustproof and Drip water protected
8	CO2 Electronic INSUFFLATOR - 2 no
a	Fully automatic, electronically controlled gas fill
b	Adjustable flow rate of 30 litres per minute or more and pressure range
	adjustable between 0 to 30 mm Hg
c	Optical and acoustic warning signals in case of malfunction or excessive
	pressure with automatic release of over pressure by back flow
d	Selective connection to medical gas pipeline as well as direct connection to
	high pressure CO2 cylinder should be available
e	Control by keys on front panel
f	Clear and adjacent front display of actual and preset flow rate, actual and
	preset pressure, gas consumed  Facility for probabiling of gas to body temperature with either internal or
g	Facility for preheating of gas to body temperature with either internal or external heating device
h	Should have smoke evacuation available in the system or separate smoke
"	evacuation system should be offered
i	Memory for retention of previous pressure settings
j	Should include pin-index connection to small/big gas cylinder with regulator,
	high pressure hose, mains cord, silicone autoclavable tubing set, universal
	wrench and gas filter
9	LIGHT SOURCE (Xenon 300) with TWO Spare Bulbs
a	Xenon cold light fountain with 300 watts xenon lamp

b	Colour temperature of at least 5800 °K
С	Manual and automatic adjustment of light intensity
d	Brightness control to be regulated manually or automatically via the output
	signal of a video camera
e	Lamp life 500 hrs or more
f	Display of lamp life/Bulb usage meter warning light
g	Deleted
h	The light source should comply with IEC 60601-1, belong to Class II a with
	CE mark
i	Light Guide Cable, Must be Autoclavable: 2 No. (Should have following
	specifications): High Resistance protection tube, Reduced diameter with high
	fiber density,Small bending radius for comfortable use,3 mtr. Length
10	SUCTION-IRRIGATION UNIT
a	Controlled suction and irrigation unit with flow rate of at least 11/min.
b	Irrigation pressure control between 0-400 mm Hg, preferably by roller pump
С	Suction pressure control 0.6 bar or more.
d	Control from control panel and/or foot pedal
e	Deleted
f	Overflow protection on suction bottles
g	Accessories should include silicone suction tubing set with reusable pressure
	domes, bacterial filter and suction bottles with cap (minimum 5 ltrs.)
11	VIDEO-CART (same OEM)
a	Made of Stainless Steel/Epoxy coated metal with minimum 4 shelves
b	Portable on 4 antistatic dual castors, 2 with locking brakes
c	Required number of shelves for housing all the units of the set
d	Preferable adjustable arm for fixation to either side for fixing the TFT
	monitor
e	Deleted
f	Cable Manager
g	Power box with concealed wiring for providing electrical connections of
	proper rating to all the units suitable for Indian plugs
12	CARBON DIOXIDE CYLINDER
a	5-6kg cylinder 2 nos
	10-12 kg cylinder 2 nos
13	Dormia Basket-01 set
	Fogarty Ballon Catheter
14	The complete system must be European CE (with 4 digit notified body
	no.) or USFDA or BIS approved.
15	Suitable online UPS 2kVA with 30min battery backup for the complete
	system should be supplied.

Sl.	Sch. 17	
No	Video Endoscopy System	
1	Gastro Video Scope: - 1 Nos	
1.1	Build in HDTV compatible CCD	
1.2	Should have digital chromo endoscope such as NBI/S/I Scan/ FICE or equivalent	
	or better technology	
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	Depth of Field: Normal 2-100mm or better	

ا ا	Distal End outer diameter: 9.9mm or less	1
e f	Angulation of Tip:	
1	A) Upwards-210 Deg or more	
	B) Downwards-90 Deg or more C) Right- 100 Deg or more	
_	D) Left-100 Deg or more Instrument Channel >= 2.8mm	
<u>g</u>		
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	
	h) Deleted	
	i) Reusable Rotable Clip fixing Device short and long- 5 each with one hundred single	
	use clip.	
	j) Hemoclips compatible with rotable clip fixing device- 40 Each	
	k) Extra Suction and air water Buttons 5 each	
	1) Biopsy Channel Valves- 2 Packs of 100 each	
	m) Bougie Esophageal Dilators- 1 Box	
	o) Injection Needle21G- 10 with each scope	
	p)Grasping Forceps Rat Tooth, Rubber Tip -5 Each	
•	Illtrathin Endagagna, 1 nos	
2	Ultrathin Endoscope: 1 nos	
a	Outer Diameter- 5.4-6mm	
	Outer Diameter- 5.4-6mm Field of View- 100Deg-140 Deg	
a b c	Outer Diameter- 5.4-6mm Field of View- 100Deg-140 Deg Direction- Forward	
a b	Outer Diameter- 5.4-6mm Field of View- 100Deg-140 Deg Direction- Forward Working length- 1-1.2 Mtr	
a b c d e	Outer Diameter- 5.4-6mm Field of View- 100Deg-140 Deg Direction- Forward Working length- 1-1.2 Mtr Depth pf Field- 4-100mm	
a b c d	Outer Diameter- 5.4-6mm  Field of View- 100Deg-140 Deg  Direction- Forward  Working length- 1-1.2 Mtr  Depth pf Field- 4-100mm  Angulation of Tip	
a b c d e	Outer Diameter- 5.4-6mm  Field of View- 100Deg-140 Deg  Direction- Forward  Working length- 1-1.2 Mtr  Depth pf Field- 4-100mm  Angulation of Tip  A) Upwards - 180 Deg to 210 Deg	
a b c d e	Outer Diameter- 5.4-6mm  Field of View- 100Deg-140 Deg  Direction- Forward  Working length- 1-1.2 Mtr  Depth pf Field- 4-100mm  Angulation of Tip  A) Upwards - 180 Deg to 210 Deg  B) Downward 70-90 deg	
a b c d e	Outer Diameter- 5.4-6mm  Field of View- 100Deg-140 Deg  Direction- Forward  Working length- 1-1.2 Mtr  Depth pf Field- 4-100mm  Angulation of Tip  A) Upwards - 180 Deg to 210 Deg  B) Downward 70-90 deg  C) Right 90-100deg	
a b c d e	Outer Diameter- 5.4-6mm  Field of View- 100Deg-140 Deg  Direction- Forward  Working length- 1-1.2 Mtr  Depth pf Field- 4-100mm  Angulation of Tip  A) Upwards - 180 Deg to 210 Deg  B) Downward 70-90 deg  C) Right 90-100deg  D) Left 90-100deg	
a b c d e	Outer Diameter- 5.4-6mm  Field of View- 100Deg-140 Deg  Direction- Forward  Working length- 1-1.2 Mtr  Depth pf Field- 4-100mm  Angulation of Tip  A) Upwards - 180 Deg to 210 Deg  B) Downward 70-90 deg  C) Right 90-100deg  D) Left 90-100deg  Instrument Channel 2.0-2.2mm	
a b c d e f	Outer Diameter- 5.4-6mm  Field of View- 100Deg-140 Deg  Direction- Forward  Working length- 1-1.2 Mtr  Depth pf Field- 4-100mm  Angulation of Tip  A) Upwards - 180 Deg to 210 Deg  B) Downward 70-90 deg  C) Right 90-100deg  D) Left 90-100deg  Instrument Channel 2.0-2.2mm  Automatic Scope Identification system with compatible video Processor	
a b c d e f	Outer Diameter- 5.4-6mm  Field of View- 100Deg-140 Deg  Direction- Forward  Working length- 1-1.2 Mtr  Depth pf Field- 4-100mm  Angulation of Tip  A) Upwards - 180 Deg to 210 Deg  B) Downward 70-90 deg  C) Right 90-100deg  D) Left 90-100deg  Instrument Channel 2.0-2.2mm  Automatic Scope Identification system with compatible video Processor  System must be suitable for High Resolution., High Magnification images of the GI	
a b c d e f	Outer Diameter- 5.4-6mm  Field of View- 100Deg-140 Deg  Direction- Forward  Working length- 1-1.2 Mtr  Depth pf Field- 4-100mm  Angulation of Tip  A) Upwards - 180 Deg to 210 Deg  B) Downward 70-90 deg  C) Right 90-100deg  D) Left 90-100deg  Instrument Channel 2.0-2.2mm  Automatic Scope Identification system with compatible video Processor  System must be suitable for High Resolution., High Magnification images of the GI  Tract with the facility to provide images with optical chromoendoscopy.	
a b c d e f	Outer Diameter- 5.4-6mm  Field of View- 100Deg-140 Deg  Direction- Forward  Working length- 1-1.2 Mtr  Depth pf Field- 4-100mm  Angulation of Tip  A) Upwards - 180 Deg to 210 Deg  B) Downward 70-90 deg  C) Right 90-100deg  D) Left 90-100deg  Instrument Channel 2.0-2.2mm  Automatic Scope Identification system with compatible video Processor  System must be suitable for High Resolution., High Magnification images of the GI  Tract with the facility to provide images with optical chromoendoscopy.  Standard Accessories (Compatible with ultrathin probe) - (Price to be quoted)	
a b c d e f	Outer Diameter- 5.4-6mm  Field of View- 100Deg-140 Deg  Direction- Forward  Working length- 1-1.2 Mtr  Depth pf Field- 4-100mm  Angulation of Tip  A) Upwards - 180 Deg to 210 Deg  B) Downward 70-90 deg  C) Right 90-100deg  D) Left 90-100deg  Instrument Channel 2.0-2.2mm  Automatic Scope Identification system with compatible video Processor  System must be suitable for High Resolution., High Magnification images of the GI  Tract with the facility to provide images with optical chromoendoscopy.  Standard Accessories (Compatible with ultrathin probe) - (Price to be quoted separately and it should be valid for warranty period)	
a b c d e f	Outer Diameter- 5.4-6mm  Field of View- 100Deg-140 Deg  Direction- Forward  Working length- 1-1.2 Mtr  Depth pf Field- 4-100mm  Angulation of Tip  A) Upwards - 180 Deg to 210 Deg  B) Downward 70-90 deg  C) Right 90-100deg  Instrument Channel 2.0-2.2mm  Automatic Scope Identification system with compatible video Processor  System must be suitable for High Resolution., High Magnification images of the GI  Tract with the facility to provide images with optical chromoendoscopy.  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	
a b c d e f	Outer Diameter- 5.4-6mm  Field of View- 100Deg-140 Deg  Direction- Forward  Working length- 1-1.2 Mtr  Depth pf Field- 4-100mm  Angulation of Tip  A) Upwards - 180 Deg to 210 Deg  B) Downward 70-90 deg  C) Right 90-100deg  D) Left 90-100deg  Instrument Channel 2.0-2.2mm  Automatic Scope Identification system with compatible video Processor  System must be suitable for High Resolution., High Magnification images of the GI  Tract with the facility to provide images with optical chromoendoscopy.  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	
a b c d e f	Outer Diameter- 5.4-6mm  Field of View- 100Deg-140 Deg  Direction- Forward  Working length- 1-1.2 Mtr  Depth pf Field- 4-100mm  Angulation of Tip  A) Upwards - 180 Deg to 210 Deg  B) Downward 70-90 deg  C) Right 90-100deg  D) Left 90-100deg  Instrument Channel 2.0-2.2mm  Automatic Scope Identification system with compatible video Processor  System must be suitable for High Resolution., High Magnification images of the GI  Tract with the facility to provide images with optical chromoendoscopy.  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	
a b c d e f	Outer Diameter- 5.4-6mm  Field of View- 100Deg-140 Deg  Direction- Forward  Working length- 1-1.2 Mtr  Depth pf Field- 4-100mm  Angulation of Tip  A) Upwards - 180 Deg to 210 Deg  B) Downward 70-90 deg  C) Right 90-100deg  D) Left 90-100deg  Instrument Channel 2.0-2.2mm  Automatic Scope Identification system with compatible video Processor  System must be suitable for High Resolution., High Magnification images of the GI  Tract with the facility to provide images with optical chromoendoscopy.  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  Colonovideoscope- 1Nos.	
a b c d e f	Outer Diameter- 5.4-6mm  Field of View- 100Deg-140 Deg  Direction- Forward  Working length- 1-1.2 Mtr  Depth pf Field- 4-100mm  Angulation of Tip  A) Upwards - 180 Deg to 210 Deg  B) Downward 70-90 deg  C) Right 90-100deg  D) Left 90-100deg  Instrument Channel 2.0-2.2mm  Automatic Scope Identification system with compatible video Processor  System must be suitable for High Resolution., High Magnification images of the GI  Tract with the facility to provide images with optical chromoendoscopy.  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  Colonovideoscope- 1Nos.  Build in HDTV compatible CCD	
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a b c d e f	Outer Diameter- 5.4-6mm Field of View- 100Deg-140 Deg Direction- Forward Working length- 1-1.2 Mtr Depth pf Field- 4-100mm Angulation of Tip A) Upwards - 180 Deg to 210 Deg B) Downward 70-90 deg C) Right 90-100deg D) Left 90-100deg Instrument Channel 2.0-2.2mm Automatic Scope Identification system with compatible video Processor System must be suitable for High Resolution., High Magnification images of the GI Tract with the facility to provide images with optical chromoendoscopy. 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 Colonovideoscope- 1Nos. Build in HDTV compatible CCD Should have chromo endoscopy such as NBI/S/I Scan/ FICE or equivalent or better technology	
a b c d e f	Outer Diameter- 5.4-6mm  Field of View- 100Deg-140 Deg  Direction- Forward  Working length- 1-1.2 Mtr  Depth pf Field- 4-100mm  Angulation of Tip  A) Upwards - 180 Deg to 210 Deg  B) Downward 70-90 deg  C) Right 90-100deg  D) Left 90-100deg  Instrument Channel 2.0-2.2mm  Automatic Scope Identification system with compatible video Processor  System must be suitable for High Resolution., High Magnification images of the GI  Tract with the facility to provide images with optical chromoendoscopy.  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  Colonovideoscope- 1Nos.  Build in HDTV compatible CCD  Should have chromo endoscopy such as NBI/S/I Scan/ FICE or equivalent or better technology  Inbuilt Feature like Variable/Graduated stiffness, High force transmission & Passive	
a b c d e f	Outer Diameter- 5.4-6mm  Field of View- 100Deg-140 Deg  Direction- Forward  Working length- 1-1.2 Mtr  Depth pf Field- 4-100mm  Angulation of Tip  A) Upwards - 180 Deg to 210 Deg  B) Downward 70-90 deg  C) Right 90-100deg  D) Left 90-100deg  Instrument Channel 2.0-2.2mm  Automatic Scope Identification system with compatible video Processor  System must be suitable for High Resolution., High Magnification images of the GI  Tract with the facility to provide images with optical chromoendoscopy.  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  Colonovideoscope- 1Nos.  Build in HDTV compatible CCD  Should have chromo endoscopy such as NBI/S/I Scan/ FICE or equivalent or better technology  Inbuilt Feature like Variable/Graduated stiffness, High force transmission & Passive Bending for ease of Insertion.	
a b c d e f	Outer Diameter - 5.4-6mm  Field of View- 100Deg-140 Deg  Direction- Forward  Working length- 1-1.2 Mtr  Depth pf Field- 4-100mm  Angulation of Tip  A) Upwards - 180 Deg to 210 Deg  B) Downward 70-90 deg  C) Right 90-100deg  D) Left 90-100deg  Instrument Channel 2.0-2.2mm  Automatic Scope Identification system with compatible video Processor  System must be suitable for High Resolution., High Magnification images of the GI  Tract with the facility to provide images with optical chromoendoscopy.  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  Colonovideoscope- 1Nos.  Build in HDTV compatible CCD  Should have chromo endoscopy such as NBI/S/I Scan/ FICE or equivalent or better technology  Inbuilt Feature like Variable/Graduated stiffness, High force transmission & Passive Bending for ease of Insertion.  Fully Immiscible in disinfectant memory Chip for monitor display of scope's model no.	
a b c d e f	Outer Diameter- 5.4-6mm  Field of View- 100Deg-140 Deg  Direction- Forward  Working length- 1-1.2 Mtr  Depth pf Field- 4-100mm  Angulation of Tip  A) Upwards - 180 Deg to 210 Deg  B) Downward 70-90 deg  C) Right 90-100deg  D) Left 90-100deg  Instrument Channel 2.0-2.2mm  Automatic Scope Identification system with compatible video Processor  System must be suitable for High Resolution., High Magnification images of the GI  Tract with the facility to provide images with optical chromoendoscopy.  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  Colonovideoscope- 1Nos.  Build in HDTV compatible CCD  Should have chromo endoscopy such as NBI/S/I Scan/ FICE or equivalent or better technology  Inbuilt Feature like Variable/Graduated stiffness, High force transmission & Passive Bending for ease of Insertion.	

ĺ	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.		
a	Insertion Tube outer dia :13.2mm or less		
b	Field of view: 140 Deg or more		
С	Depth of field: 3-100 mm or better		
d	Distal End outer Diameter: 13.2 mm or less		
e	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		
f	Instrument Channel -3.2 -3.8mm		
g	Working Length- 1600mm or more		
h	Total Length 2000mm or more		
i	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)	1	
	3) Hot Biopsy Forceps reusable- 2 nos		
	4) Electrosurgical snare- 2 nos		
	5) Multiple Sample Biopsy forceps- 5 nos		
	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>—</b>			
4	Side viewing Duodenovideoscope (Therapeutic): - 1 Nos		
4.1	Side viewing Duodenovideoscope (Therapeutic): - 1 Nos Should have chromo endoscopy such as NBI/S/I Scan/ FICE or equivalent or		
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4.1	Side viewing Duodenovideoscope (Therapeutic): - 1 Nos Should have chromo endoscopy such as NBI/S/I Scan/ FICE or equivalent or better technology Fully Immerssible in Disinfectant solution		
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4.1 4.2 4.3	Side viewing Duodenovideoscope (Therapeutic): - 1 Nos Should have chromo endoscopy such as NBI/S/I Scan/ FICE or equivalent or better technology Fully Immerssible in Disinfectant solution In build Scope identification memory chip for monitor display of scope's model No. serial non, no of connections/Cumulative uses etc.		
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4.1  4.2  4.3  4.4  a  b  c  d  e  f  j	Side viewing Duodenovideoscope (Therapeutic): - 1 Nos  Should have chromo endoscopy such as NBI/S/I Scan/ FICE or equivalent or better technology  Fully Immerssible in Disinfectant solution  In build Scope identification memory chip for monitor display of scope's model No. serial non, no of connections/Cumulative uses etc.  Scope should be the latest available in the world Market.  Field of view: 90-110 deg or more  Direction of View: 5 Deg/10 Deg, backward oblique viewing  Depth of Field: 4/5 to 60mm or better  Distal End outer diameter: 11-14 mm or less  Insertion Tube Outer Diameter: 11-14 mm or less  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  Working Length: 1.2-1.4 mtr  Channel Inner Diameter: 4.2 mm or more  Minimum Visible Distance: 10 mm or closer from Distal end  The bidder has to specify the technology for appropriate manual clensing of the scope and provide the same (Price should be quoted separately)		
4.1  4.2  4.3  4.4  a  b  c  d  e  f  j	Side viewing Duodenovideoscope (Therapeutic): -1 Nos  Should have chromo endoscopy such as NBI/S/I Scan/ FICE or equivalent or better technology  Fully Immerssible in Disinfectant solution In build Scope identification memory chip for monitor display of scope's model No. serial non, no of connections/Cumulative uses etc.  Scope should be the latest available in the world Market.  Field of view: 90-110 deg or more  Direction of View: 5 Deg/10 Deg, backward oblique viewing  Depth of Field: 4/5 to 60mm or better  Distal End outer diameter: 11-14 mm or less Insertion Tube Outer Diameter: 11-14 mm or less Angulation of Tip:  A) Upwards: 120 Deg or more  B) Downwards: 90 Deg or more  C) Right: 100-110 deg or more  Working Length: 1.2-1.4 mtr  Channel Inner Diameter: 4.2 mm or more  Minimum Visible Distance: 10 mm or closer from Distal end  The bidder has to specify the technology for appropriate manual clensing of the scope and provide the same (Price should be quoted separately)  Accessories: (Price to be quoted separately and it should be valid for warranty period)		
4.1  4.2  4.3  4.4  a  b  c  d  e  f  j	Side viewing Duodenovideoscope (Therapeutic): - 1 Nos Should have chromo endoscopy such as NBI/S/I Scan/ FICE or equivalent or better technology Fully Immerssible in Disinfectant solution In build Scope identification memory chip for monitor display of scope's model No. serial non, no of connections/Cumulative uses etc. Scope should be the latest available in the world Market. Field of view: 90-110 deg or more Direction of View: 5 Deg/10 Deg, backward oblique viewing Depth of Field: 4/5 to 60mm or better Distal End outer diameter: 11-14 mm or less Insertion Tube Outer Diameter: 11-14 mm or less 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 Working Length: 1.2-1.4 mtr Channel Inner Diameter: 4.2 mm or more Minimum Visible Distance: 10 mm or closer from Distal end The bidder has to specify the technology for appropriate manual clensing of the scope and provide the same (Price should be quoted separately) Accessories: (Price to be quoted separately and it should be valid for warranty period) Sigmoidoscope-1 no		
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4.1  4.2  4.3  4.4  a  b  c  d  e  f  j	Side viewing Duodenovideoscope (Therapeutic): - 1 Nos Should have chromo endoscopy such as NBI/S/I Scan/ FICE or equivalent or better technology Fully Immerssible in Disinfectant solution In build Scope identification memory chip for monitor display of scope's model No. serial non, no of connections/Cumulative uses etc. Scope should be the latest available in the world Market. Field of view: 90-110 deg or more Direction of View: 5 Deg/10 Deg, backward oblique viewing Depth of Field: 4/5 to 60mm or better Distal End outer diameter: 11-14 mm or less Insertion Tube Outer Diameter: 11-14 mm or less Angulation of Tip: A) Upwards: 120 Deg or more B) Downwards: 90 Deg or more C) Right: 100-110 deg or more C) Right: 100-110 deg or more Working Length: 1.2-1.4 mtr Channel Inner Diameter: 4.2 mm or more Minimum Visible Distance: 10 mm or closer from Distal end The bidder has to specify the technology for appropriate manual clensing of the scope and provide the same (Price should be quoted separately) Accessories: (Price to be quoted separately and it should be valid for warranty period) Sigmoidoscope-1 no Viewing Direction: Forward		

	Flexible portion diameter: 13mm or less	
	Bending capacity: up/down: 180 deg	
	Left/right: 160 deg	
	Working channel dia: 3.5mm or more	
	Working length: 700mm or more	
	Total length: 1000mm or more	
6	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 sphincterotome10 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.	
5	VIDEO PROCESSOR- 1 Nos	
5.1	Should be compatible with Anlog, HD-SDI AND DVI Output for HDTV monitor	
3.1	should be available	
5.2	Equipped with High resolution HDTV Imaging capacity	
5.3	Compact and ergonomically designed	
5.4	Should be compatible HD plus video scopes with chrome endoscopy such as	
	NBI/S/I Scan/ FICE or equivalent or better technology	
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	Should have in built light source or separate light source with NBI/S/I Scan/ FICE	
	or equivalent or better technology	
5.10	Image capability/HD Plus video high Intensity LED of 100W with 25000 hrs.,	
	preferably with emergency halogen light/LED for backup.	
5.11	Backlit Front panel indicator. Equipped with automatic light adjustment forced air-	
	cooling, regulated air feeding pump and fan with low noise.	
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	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	
5.17	Two water bottles compatible with the processor	
5.18	One high pressure suction machine (>1KPA) should be supplied	
6	HIGH DEFINITION MONITOR	
	High definition LED/LCD 26"or more medical grade monitor −1 no. with high	
	resolution 1920X1080p	
	Lower Power consumption	
1	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	+

I	screen images.	l	
	Should be supplied with 32 " 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 notiofied body no or USFDA or		
	BIS approved except suction machine, UPS, computer, printer, trolley and endoscopic		
	software		
SN	BOQ	Qty	UOM
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
	h) Deleted  i) Payaghla Petabla Clin fiving Davigs short and long 5 such with one hundred single		M-
	i) Reusable Rotable Clip fixing Device short and long- 5 each with one hundred single use clip.	5	Nos each
	<u> </u>	40	
	j) Hemoclips compatible with rotable clip fixing device k) Extra Suction and air water Buttons	40	Nos Nos
	1) Biopsy Channel Valves- 2 Packs of 100 each	2	sets
	m) Bougie Esophageal Dilators	1	box
	o) Injection Needle21G	10	Nos
3	Ultrathin Endoscope	1	No
4	Standard Accessories (Compatible with ultrathin probe) - (Price to be quoted	1	110
_	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
	5) Multiple Sample Biopsy forceps	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
7	11) Biopsy channel valves- 1packs of 100 each.  Duodenovideoscope (Therapeutic)	1	sets
8	Sigmoidoscope (Therapeutic)	1	No No
9	ERCP Accessories- (Price to be quoted separately and it should be valid for warranty	1	110
7	period)		
	1) Single use standard ERCP cannula	10	Nos
	2) Single use ERCP guide-wire 0.025" with high stiffness, 450cm working length and	5	Nos
	hydrophilic tip - 5 nos with straight tip & 5 nos with angled tip		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	1	sets
	marker (6mm, 8mm & 10mm)		
	11) Reusable stent removal forceps	10	Nos
	Guidewires		
	12) Wire with Hydraulic tip at both end along with radio opaque marker over the tip	10	Nos
	(0.035", 450 cm)		
	13) Compatible cleaning brushes for the elevators and suction channels	1	No
10	VIDEO PROCESSOR	1	No
11	LED light source	1	No
13	High definition LED 26"or more monitor	1	No
14	32 " LED HD monitor	1	No
15	High pressure suction machine	1	No
16	Trolley	1	No

	Sch.18
	Flibre Optic Video Bronchoscope
	The flexible Fiberoptic Bronchoscope should be supplied complete with light
	source and trolley and minimum 15" LCD Monitor
A	Adult Scope:
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	It should have separate channel for oxygen and suction
7	Working length should be 600 mm or more
8	Total length should be 850 mm or more
9	UP and DOWN Angulations should be 140 degree and 130 degree or more.
10	Can be fully immersed in disinfectant solution and water
11	Should be European CE with 4 digit notified body number/US FDA
	approved.
В	Paediatric Scope:
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	Can be fully immersed in disinfectant solution and water
10	Should be European CE with 4 digit notified body number/US FDA
	approved.
C	Video Processor & Light source
1	Outputs - suitable video output
2	Unit should be compact and light weight.
3	Light source - Combined or separate LED/150W Xenon (covered under
	warranty)
4	Lamp can be turned on/off without turning off the equipment.

5	Electronic magnification up to 1.5X by a touch of scope remote switches/adapters/coupler		
D	Should be European CE with 4 digit notified body number/US FDA /BIS approved for the quoted model of Scope and Light Source		
E	Monitor		
	15 inches or more LCD/LED HD Monitor of Medical Grade. It should be mountable on trolley.		
F	Computer with Software		
	Should be supplied with suitable computer system with facility for recording images and video.		
G	Trolley		
	Suitable Trolley to mount monitor, scopes, light source and all accessories.		
H	UPS		
	Total system should have an online UPS of min 30 mins, backup.		
Ι	Manufacturer should have own registered office/own registered service centre/100% Subsidiary company in India. Necessary document in the name of manufacturer/100% subsidiary company like GST Registration/Trade License to be submitted along with bid;		
SI NO	BOQ	Qty	UOM
1	Flexible Fiberoptic Bronchoscope Adult	1	No
2	Flexible Fiberoptic Bronchoscope Paediatric- Price to be quoted Separately	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)	2	pieces
1o	Online UPS		

	Cal. 10	
SN	Sch.19 C-arm with ERCP	
	Equipment should have AERB Type Approval Certificate for radiation safety	
	The offered model should be European CE with 4 digit notified body number or	+ + -
	USFDA or BIS for the quoted model.	
Α	X-RAY GENERATOR	+ + -
1 1		<u> </u>
2	Frequency: 30 KHz or better	
	Power output: 2 KW or more	
3	KV range : 40-110 KV or better	<del>                                     </del>
4	mA in radiography : 20mA or more	
5	3 mA or more in normal fluoroscopy and 8 mA or more in High Level Fluro	
6	Should have facility for continuous fluoroscopy and Pulse fluoroscopy ( Pulse rate	
	upto 8 pulse per second)	
7	Should have Digital Spot for high quality single image, 10 mA or more	
8	Housing heat capacity of minimum 400 KHU or fluroscopy time 30 min minimum	
В	X-Ray tube Head	
1	Must have anode heat capacity of min 40,000 HU & cooling rate of min 25,000	
1	HU/Min	
2	Should have dual/Single focal spots	
3	Collimation: motorized iris and motorized rotating blades	
4	Tube assembly filtration of 3.0 mm Al or higher	
C	C-Arm mechanism and control panel	
1	Locks for stabilization at desired position	
2	It should have the following range of movements:	
3	Motorized vertical movements more than 400mm	

	Min 18 inch or more, black and white, flicker free, high resolution (1280x1024	
2	pixels or better), medical grade flat screen TFT, manual control of brightness and contrast, mounted on mobile trolley with locking device	
f)	Digital image processor	
	Provision to record multiple images on CD,DVD& USB with embedded DICOM	
1	viewer.	
2	Image processing at 1K * 1K Matrix	
3	Contrast enhancement, edge enhancement, zoom facility  Recursive filter	
5	Last image hold	
6	Image rotation, vertical and horizontal reversal	
	Medical imaging software's with ability to store 5000DICOM Compatable images in	
7	internal storage or equivalent video	
g)	Additional features	
1	The equipment should work on a Power supply of 220-240 Volts, 50-60 Hz, 15 amp.	
3	Lead Aprons with all round protection (0.5mm lead equivalent approved by BARC) –	
	03	
4	Lead Aprons with front protection (0.5mm lead equivalent approved by BARC)- 3  Thyroid shield (0.5mm lead equivalent approved by BARC). 3	
5	Thyroid shield (0.5mm lead equivalent approved by BARC) - 3	
6	Lead Eye glass 2 nos  Imaging table (Carm compatible) with following specifications: 1 No (Price to	
7	Imaging table (C arm compatible) with following specifications: 1 No (Price to be quoted separately)	
i.	3 axis floating top table, stain free, radiolucent with minimum attenuation	
ii.	The table should have electromagnetic locks	
iii.	Length of table top: 1900 mm or more	
iv.	Width of table top: atleast 450 mm or more	
v.	Longitudinal travel: ±300mm or more	
vi.	Transverse travel: ± 100 mm or more	
vii.	Up/ down movement : 200 mm or more	
	•	
viii.	Height of table top: 850-1050 mm	
viii.	Patient weight carrying capacity: 110 kg or more	

2	Lead Aprons with all round protection	1	Nos
3	Lead Aprons with front protection	3	Nos
4	Thyroid shield	3	Nos
5	Lead eye glasses	2	Nos
6	Imaging table as per specifications: 1 No (Price to be quoted separately)	1	Nos

No   Ultrasonic cutting and coagulation device (Harmonic Scalpel)	Sl.	Sch.20		
SN Ultrasonic cutting & coagulation , advanced Radio frequency/Bipolar energy system  A GENERATOR  1 System should be a single/dual generator with single/dual footswitch that provides ultrasonic energy and advanced RF energy technology for soft tissue dissection and vessel sealing  2 Should have the ability to select hand switch or footswitch activation or both for ultrasonic and advanced RF energy instruments and the ability to change selection during use can seal and transect vessel upto 7mm with system feedback mechanism for better patient safety.  3 Should have very minimal lateral thermal with spread not more than 1mm.  4 RF energy instruments compatible with generator should have controlled gap mechanism for uniform compression across the instrument jaw for better sealing and transaction of vessels and tissue bundles upto 7mm simultaneously.  5 Should have standby mode to ensure safety.  6 Should be able to power ultrasonic energy instruments with 35 KHz and above frequency.  7 Should be compatible for RF energy and ultrasonic energy instruments for open and laparoscopic surgery.  8 Should be able to power energy instruments with microprocessor controlled bipolar electrosurgical radiofrequency technology with a sinusoidal forced impedance output.  9 Should be equipped with smart advanced RF energy technology to measure the tissue impedance and control the power delivery and that can simultaneously seal and transect vessels up to 7mm, large tissue pedicles and vascular bundles with system feedback.  10 Should be compatible with 360 deg shaft rotation and can simultaneously seal and transect vessel upto 7mm, large tissue pedicles and vascular bundles with system feedback the system feedback and succular bundles with ultrasonic energy instruments which can simultaneously seal and transect vessel upto 7mm, large tissue pedicles and vascular bundles with system feedback be able to simultaneously ent and coagulate tissues with integrated hand activation control buttons.  14 Should provide class I protection aga				
System should be a single/dual generator with single/dual footswitch that provides ultrasonic energy and advanced RF energy technology for soft tissue dissection and vessel sealing use can seal and transect vessel upto 7mm with system feedback mechanism for better patient safety.  Should have the ability to select hand switch or footswitch activation or both for ultrasonic and advanced RF energy instruments and the ability to change selection during use can seal and transect vessel upto 7mm with system feedback mechanism for better patient safety.  Should have very minimal lateral thermal with spread not more than 1mm.  RF energy instruments compatible with generator should have controlled gap mechanism for uniform compression across the instrument jaw for better sealing and transaction of vessels and tissue bundles upto 7mm simultaneously.  Should have standby mode to ensure safety.  Should have standby mode to ensure safety.  Should be able to power ultrasonic energy instruments with 35 KHz and above frequency.  Should be compatible for RF energy and ultrasonic energy instruments for open and laparoscopic surgery.  Should be compatible for RF energy and ultrasonic energy instruments for open and laparoscopic surgery.  Should be able to power energy instruments with microprocessor controlled bipolar electrosurgical radiofrequency technology with a sinusoidal forced impedance output.  Should be equipped with smart advanced RF energy technology to measure the tissue impedance and control the power delivery and that can simultaneously seal and transect vessels up to 7mm, large tissue pedicles and vascular bundles with system feedback.  Should be compatible with 360 deg shaft rotation and can simultaneously seal and transect vessel upto 7mm, large tissue pedicles and vascular bundles with system feedback.  Should be compatible with integrated RF/bipolar or ultrasonic energy instruments which can simultaneously seal and transect vessels 7mm, large pedicles and vascular bundles with ultrasonic energy instruments whi				
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18 Well-equipped service centre should present in India with trained OEM Engineers/Technicians B FOOT SWITCH & CABLE	17	· · ·		
Engineers/Technicians  B FOOT SWITCH & CABLE		point any problem in the system.		
B FOOT SWITCH & CABLE	18	* * * *		
C   Accessories: All the accessories should be mentioned in BOQ and price should				
	C	Accessories: All the accessories should be mentioned in BOQ and price should		

	be quoted seperately. Price should be valid for the entire warranty period.		
1	Generator cart - 1 no		
2	Adapters for ultrasonic and rafiofrequency instruments (if required)		
3	Hand piece/Hand pieces (transducer) compatible with various hand instruments		
	used in open and laparoscopic surgeries. Sufficient number of transducers so as to		
	last 90 cases to be supplied		
	(Certificate from OEM regarding life of each transducer)		
4	Ultrasonic 5 mm Laparoscopic hand activated curved tip coagulating probe		
	Quantity 2 nos		
5	Ultrasonic hand activated curved tip coagulating probe for open surgery: <b>Quantity</b>		
	2nos		
6	Advanced RF/Bipolar 5 mm Laparoscopic hand activated curved tip coagulating		
	probe: Quantity 2 nos		
7	Advanced RF/Bipolar hand activated curved tip coagulating probe for open		
	surgery Quantity 2 nos		
	BOQ	Qty	UOM
1	System as specified	1	Nos
2	Generator cart	1	Nos
3	Hand piece/Hand pieces (transducer) compatible with various hand instruments	3	Nos
	used in open and laparoscopic surgeries. Sufficient number of transducers so as to		
1			
	last 90 cases to be supplied		
4	last <b>90 cases to be supplied</b> Ultrasonic 5 mm Laparoscopic hand activated curved tip coagulating probe	2	Nos
4 5	last 90 cases to be supplied	2 2	Nos Nos
	last <b>90 cases to be supplied</b> Ultrasonic 5 mm Laparoscopic hand activated curved tip coagulating probe		
5	last <b>90 cases to be supplied</b> Ultrasonic 5 mm Laparoscopic hand activated curved tip coagulating probe Ultrasonic hand activated curved tip coagulating probe for open surgery	2	Nos
5	last 90 cases to be supplied  Ultrasonic 5 mm Laparoscopic hand activated curved tip coagulating probe  Ultrasonic hand activated curved tip coagulating probe for open surgery  Advanced RF/Bipolar 5 mm Laparoscopic hand activated curved tip coagulating	2	Nos

	Sch.21		
	Anaesthesia Workstation		
1	Compact and modular, three gas Anesthesia workstation with an integrated		
	ventilator for adult to infants and integrated airway monitor for airway pressures		
	and volume.		
2	The Machine should be suitable for low and minimal flow anesthesia application		
	with compliance compensation of breathing circuit, fresh gas flow		
	compensation/ decoupling.		
3	Anesthesia machine should have minimum 60 min. battery backup.		
4	Manufacturer should have own registered office/own registered service		
	centre/100% Subsidiary company in India. Necessary document in the name of		
	manufacturer/100% subsidiary company like GST Registration/Trade License to		
	be submitted along with bid;		
5	Gas Delivery System		
a	Should have pin index yokes one for oxygen and one nitrous oxide besides		
	separate connection for central gas supply for oxygen, nitrous oxide and air.		
b	The machine should have pressure gauges for cylinders and central supply lines		
	visible from the front of anesthesia machine. The gas connections should be		
	non-interchangeable.		
c	Automatic cutoff of N2O / oxygen pressure failure.		
d	Hypoxic guard for liner regulation of minimum oxygen concentration at 25%		
	volume and must ensure a minimum oxygen flow of 200ml at low fresh gas		
	flow setting even below total 500 ml fresh gas flow.		
e	Audio-visual oxygen failure alarm.		
f	Emergency oxygen flush at 30-70L/min bypassing the vaporizer		
g	Should have O2 monitoring with paramagnetic/Galvanic fuel cell technology		
	and should be covered under warranty for 5 years and thereafter under CMC.		
	Anaethesia gas monitoring (Either on the machine or on the monitor)		
h	Should have Auxiliary O2 flow meter.		
	' N. HITTER DODANICI BUILDAY DO 00/10 00 1 - 101 00/0010		

6	Flow meter
a	Dual cascade type flow meter tubes for oxygen and N2O (Or electronic gas
	mixing). Range 100ml /min to 10lit/min.
b	Calibrated in multiple scales. Single tube for air 100 ml to 10L/min
7	Vaporizer
a	Machine should have facility to mount two quick mount type selectatec
	vaporizer for easy interchangeability and safety
c	Should be provided with a temperature / pressure compensated and flow
	independent vaporizer for Isoflourane, halothane, Sevoflourane and Desflourane
	Cost of all the Vaporizers should be quoted separately. If any vaporizer is of
	other make authorisation should be submitted
d	Vaporizer should have extended delivery range with standard marking.
e	The vaporizer design should be with one time life time calibrated.
8	Breathing System
a	Should have semi closed circle absorber system. Initial Soda Lime requirement
	of the absorber capacity to be supplied as standard.
b	Should have adjustable pressure relief valve from 5 to 60m bar.
c	Should have change over from spontaneous to Bag ventilation with single step.
d	Should have an external fresh gas outlet for connecting Magill or Bain's circuit.
9	Anesthesia Ventilator
a	Electronically controlled electrically driven / pneumatically driven ventilator
b	Should not require changing of bellows for adult & infants.
c	Modes: Volume controlled, manual / spont, pressure controlled
	mode,pressure support (or SIMV with PS), SIMV
d	Tidal volume : 20 ~ 1400ml
e	PEEP: 4-20 mbar
f	Breathing Frequency: 4 to 60 BPM
g	IE Ratio: 2:1 to 1:3
h	Inspiratory pause : 0 – 50% of Ti
i	Flow: 1 to 60 L/min.
j	Pressure limiting (Pmax): 15 – 70 cm H2O
k	Should automatically compensate for compliance of breathing system
10	Airway Monitoring
a	Integrated monitor (6" or more color display/EL) for electronic
	monitoring and display of following set and measured values
b	Expiratory Tidal Volume, Expiratory Minute volume, PEEP, Peak and Mean and Plateau
С	airway pressure, Frequency, Waveform and loop display for Airway pressure,
	flow and volume. (Either on monitor or on the machine)
11	Alarm limits and alarms
a	Adjustable high / low limits with audio and visual alarms for the following:-
b	Minute volume, airway pressure (incl stenosis and disconnect), Insp oxygen
	concentration, audio power supply fail alarm, low driving gas pressure, low
	battery Apnoea alarm
12	Machine should have RS 232 connectivity port.
13	Modular Monitor (Module for ECG, SpO2, NIBP, Dual Temp, Resp
	(Combined or seperate module)
a	Should be suitable for adult, paediatric and neonatal patients monitoring
b	Should have minimum 6 channels of waveforms with minimum 12" color touch
	screen display with vertical and horizontal cursors.
c	Battery backup for 60 minutes should be provided through internal batteries or UPS
d	Should have automatic graphic and tabular trending of all monitored parameters
u	as standard for at least 24 hours.
e	Should have minimum ECG, NIBP, SpO2 (Masimo/Nellcor technology), 2
*	IBPs, 2 Temp.

f	Should have ST segment analysis and arrhythmia detection including life		
	threatening arrhythmias such as V. TACH, ASYST, V. FIB as standard features	•	
g h	Should have manual as well as automatic scaling of screen format.		
h	Should have user selectable parameter priority and colour selection for		
	parameter on screen.		
i	Anaesthesia depth monitoring by BIS/entropy/equivalent (Price to be quoted		
	separately)		
14	The quoted model (Both Anaesthesia and Monitor) should be European CF	C	
	with four digit notified body number or US FDA or BIS approved for the quoted model and certificate to be submitted.		
15	Anaesthesia machine with ventilator and patient monitor should be from same		
10	manufacturer.		
16	The machine should be supplied with active AGSS system with Jar & necessary	7	
	components to connect with the central AGSS system		
17	Scope for supply with each machine:- (As per BOQ)		
Sl.No	BOQ	Qty	UOM
1	Anaesthesia Machine with Integrated ventilator without vaporizer	1	No
2	Isoflurane vaporizer	1	No
3	Sevoflurane vaporizer	1	No
4	Halothane vaporizer	1	110
5	Desflurane Vaporizer	1	
	Note: Each Institute will be supplied 2 No. Halothane 1 desflurane	-	
	Vaporizer.in addition to the standard configuration of Sevoflurane		
	vaporizer & Isoflurane vaporizer.		
6	Module for ECG, SpO2, NIBP, Dual Temp, Resp (Combined or seperate)	1	No
7	Module for 2IBP if separate	1	No
8	Module for BIS/Entropy/Anaesthesia depth monitoring	1	No
9	Adult autoclavable patient tubing (Silicon)	2	No
10	Paediatric autoclavable patient tubing (Silicon)	2	No
11	Vaporizer for Isoflourance	1	No
12	Vaporizer for Sevoflourance.	1	No
13	5 lead ECG cable	2	No
14	SpO2 finger sensor with extension cable (adult)	2	No
15	SpO2 finger sensor with extension cable (Paeds)	1	No
16	SpO2 finger sensor with extension cable (Infant)	1	No
17	Skin Temperature probe	1	No
18	Rectal / Esophageal temperature probe	1	No
19	NIBP Hose	2	No
20	Adult cuffs	2	No
21	Paeds cuffs	2	No
22	Infant cuffs	2	No
		2	No
	Large Adult cult	4	
23	Large Adult cuff IBP reusable cable		_
23 24	IBP reusable cable	2	No
23			_

	Sch.22		
	ICU Monitor with CNS		
	Monitor should have the following –		
1	Modular/New Modular monitor with non-invasive measurements & features		
	suitable for Neonate, Pediatrics & Adult patients		
2	Bright, highly visible minimum 15 " or more Colour TFT display with full touch		
	screen facility.		
3	Weight less than 10 kgs including battery.		
4	Facility of displaying minimum 8 or more waveform along with related numerical		

	parameters on single screen.		
5	Facility to monitor ECG, SpO2, NIBP, 2 IBP, Respiration, temperature and		
	EtCO2. (Price of ETCO2 Module should be quoted seperately)		
6	Facility for enlarge numeric display to be visible from 10 feet distance. arrhythmia		
	detection, ST- analysis.		
7	Facility to monitor last min 48 Hours or more graphical and numerical trends		
	having options to select the items to be displayed in NIBP trend table.		
8	Internal rechargeable battery for 1 hours or more operation along with battery		
	charge indicator		
9	Event review facility including NIBP.		
10	Review up to 24 hours files for the numeric data of alarm occurrences from the		
10	alarm history table.		
11	Graded audio/visual alarm colour coding & should be visible from a distance.		
12	ESU & Defibrillation protection.		
13	Complete system should have US FDA or BIS or European CE with four		
10	digit notified body number certificate for the quoted model and certificate to		
	be submitted.		
14	Deleted		
15	CNS of 19" LED to be provided with one laser printer. The cabling has to be done		
10	by bidder in the HDU One CNS with 16 monitors (Price to be quoted separately)		
16	Manufacturer should have own registered office/own registered service		
10	centre/100% Subsidiary company in India. Necessary document in the name of		
	manufacturer/100% subsidiary company like GST Registration/Trade License to		
	be submitted along with bid;		
17			
1 I/	Livionitors should be supplied with accessories mentioned in BOO.		
17	Monitors should be supplied with accessories mentioned in BOQ.  BOQ	Qty	UOM
I /		Qty	UOM
	BOQ	Qty 1	UOM No
I	BOQ For Monitor per unit		
<b>I</b>	For Monitor per unit Monitor without modules	1	No
1 1 3	For Monitor per unit  Monitor without modules  Mounting Bracket	1 1	No No
1 1 3	BOQ For Monitor per unit Monitor without modules Mounting Bracket Module for ECG, SpO2, NIBP, Dual Temp, Resp (Combined or separate or	1 1	No No
1 1 3 4	For Monitor per unit  Monitor without modules  Mounting Bracket  Module for ECG, SpO2, NIBP, Dual Temp, Resp (Combined or separate or integrated)	1 1 1	No No No
1 1 3 4	For Monitor per unit  Monitor without modules  Mounting Bracket  Module for ECG, SpO2, NIBP, Dual Temp, Resp (Combined or separate or integrated)  Module for 2IBP if separate	1 1 1	No No No
1 1 3 4 5 6	For Monitor per unit  Monitor without modules  Mounting Bracket  Module for ECG, SpO2, NIBP, Dual Temp, Resp (Combined or separate or integrated)  Module for 2IBP if separate  Module for ETCO2  5 Leads ECG cable	1 1 1 1	No No No No
1 1 3 4 5 6 7	For Monitor per unit  Monitor without modules  Mounting Bracket  Module for ECG, SpO2, NIBP, Dual Temp, Resp (Combined or separate or integrated)  Module for 2IBP if separate  Module for ETCO2	1 1 1 1 1 1 2	No No No No No No
1 1 3 4 5 6 7 8	For Monitor per unit  Monitor without modules  Mounting Bracket  Module for ECG, SpO2, NIBP, Dual Temp, Resp (Combined or separate or integrated)  Module for 2IBP if separate  Module for ETCO2  5 Leads ECG cable  Reusable Spo2 probe adult	1 1 1 1 1 1 2 2	No
1 1 3 4 5 6 7 8 9	For Monitor per unit  Monitor without modules  Mounting Bracket  Module for ECG, SpO2, NIBP, Dual Temp, Resp (Combined or separate or integrated)  Module for 2IBP if separate  Module for ETCO2  5 Leads ECG cable  Reusable Spo2 probe adult  Reusable Spo2 probe pediatric	1 1 1 1 1 2 2	No Nos No
1 1 3 4 5 6 7 8 9	For Monitor per unit  Monitor without modules  Mounting Bracket  Module for ECG, SpO2, NIBP, Dual Temp, Resp (Combined or separate or integrated)  Module for 2IBP if separate  Module for ETCO2  5 Leads ECG cable  Reusable Spo2 probe adult  Reusable Spo2 probe pediatric  NIBP Hose	1 1 1 1 1 2 2 1 2	No Nos No
1 1 3 4 5 6 7 8 9	For Monitor per unit  Monitor without modules  Mounting Bracket  Module for ECG, SpO2, NIBP, Dual Temp, Resp (Combined or separate or integrated)  Module for 2IBP if separate  Module for ETCO2  5 Leads ECG cable  Reusable Spo2 probe adult  Reusable Spo2 probe pediatric  NIBP Hose  NIBP cuff for Adult & Pediatrics	1 1 1 1 1 2 2 1 2	No Nos No Nos No
1 3 4 5 6 7 8 9 10 11	For Monitor per unit  Monitor without modules  Mounting Bracket  Module for ECG, SpO2, NIBP, Dual Temp, Resp (Combined or separate or integrated)  Module for 2IBP if separate  Module for ETCO2  5 Leads ECG cable  Reusable Spo2 probe adult  Reusable Spo2 probe pediatric  NIBP Hose	1 1 1 1 1 2 2 1 2 2	No No No No No No No No No Nos No Nos No each
1 3 4 5 6 7 8 9 10 11	For Monitor per unit  Monitor without modules  Mounting Bracket  Module for ECG, SpO2, NIBP, Dual Temp, Resp (Combined or separate or integrated)  Module for 2IBP if separate  Module for ETCO2  5 Leads ECG cable  Reusable Spo2 probe adult  Reusable Spo2 probe pediatric  NIBP Hose  NIBP cuff for Adult & Pediatrics  Core Temperature probe	1 1 1 1 2 2 1 2 2	No No No No No No No No No Nos No Nos No Nos No Nos No Nos No
1 1 3 4 5 6 7 8 9 10 11 12 13	For Monitor per unit  Monitor without modules  Mounting Bracket  Module for ECG, SpO2, NIBP, Dual Temp, Resp (Combined or separate or integrated)  Module for 2IBP if separate  Module for ETCO2  5 Leads ECG cable  Reusable Spo2 probe adult  Reusable Spo2 probe pediatric  NIBP Hose  NIBP cuff for Adult & Pediatrics  Core Temperature probe  IBP cable	1 1 1 1 2 2 1 2 2 2	No N
1 3 4 5 6 7 8 9 10 11 12 13 14	For Monitor per unit  Monitor without modules  Mounting Bracket  Module for ECG, SpO2, NIBP, Dual Temp, Resp (Combined or separate or integrated)  Module for 2IBP if separate  Module for ETCO2  5 Leads ECG cable  Reusable Spo2 probe adult  Reusable Spo2 probe pediatric  NIBP Hose  NIBP cuff for Adult & Pediatrics  Core Temperature probe  IBP cable  IBP transducers  ETCO2 sample line	1 1 1 1 2 2 2 1 2 2 2 2 2	No No No No No No No No No Nos No Nos No Nos No each Nos Nos Nos
1 3 4 5 6 7 8 9 10 11 12 13 14 15 16	For Monitor per unit  Monitor without modules  Mounting Bracket  Module for ECG, SpO2, NIBP, Dual Temp, Resp (Combined or separate or integrated)  Module for 2IBP if separate  Module for ETCO2  5 Leads ECG cable  Reusable Spo2 probe adult  Reusable Spo2 probe pediatric  NIBP Hose  NIBP cuff for Adult & Pediatrics  Core Temperature probe  IBP cable  IBP transducers  ETCO2 sample line  Reusable Spo2 Extension Cable	1 1 1 1 2 2 1 2 2 2 2 1 2 2 10 10	No No No No No No No No Nos No Nos No Nos No Nos Nos
1 3 4 5 6 7 8 9 10 11 12 13 14 15 16 II	For Monitor per unit  Monitor without modules  Mounting Bracket  Module for ECG, SpO2, NIBP, Dual Temp, Resp (Combined or separate or integrated)  Module for 2IBP if separate  Module for ETCO2  5 Leads ECG cable  Reusable Spo2 probe adult  Reusable Spo2 probe pediatric  NIBP Hose  NIBP cuff for Adult & Pediatrics  Core Temperature probe  IBP cable  IBP transducers  ETCO2 sample line  Reusable Spo2 Extension Cable  For CNS per unit	1 1 1 1 2 2 1 2 2 2 2 1 2 2 10 10	No No No No No No No No No Nos No Nos No Nos Nos
1 3 4 5 6 7 8 9 10 11 12 13 14 15 16	For Monitor per unit  Monitor without modules  Mounting Bracket  Module for ECG, SpO2, NIBP, Dual Temp, Resp (Combined or separate or integrated)  Module for 2IBP if separate  Module for ETCO2  5 Leads ECG cable  Reusable Spo2 probe adult  Reusable Spo2 probe pediatric  NIBP Hose  NIBP cuff for Adult & Pediatrics  Core Temperature probe  IBP cable  IBP transducers  ETCO2 sample line  Reusable Spo2 Extension Cable  For CNS per unit  CNS as per Spec + plus cabling	1 1 1 1 1 2 2 2 1 2 2 2 10 10 10	No No No No No No No No Nos No Nos No Nos No Nos Nos
1 3 4 5 6 7 8 9 10 11 12 13 14 15 16 II	For Monitor per unit  Monitor without modules  Mounting Bracket  Module for ECG, SpO2, NIBP, Dual Temp, Resp (Combined or separate or integrated)  Module for 2IBP if separate  Module for ETCO2  5 Leads ECG cable  Reusable Spo2 probe adult  Reusable Spo2 probe pediatric  NIBP Hose  NIBP cuff for Adult & Pediatrics  Core Temperature probe  IBP cable  IBP transducers  ETCO2 sample line  Reusable Spo2 Extension Cable  For CNS per unit	1 1 1 1 1 2 2 2 1 2 2 2 10 10 10	No No No No No No No No No Nos No Nos No Nos Nos

	Sch.23
	Defibrillator
1	Description of Function
1 1	Defibrillator is required for reviving the heart functions by providing selected
1.1	quantum of electrical shocks with facility for monitoring vital parameters.
2	Operational Requirements
2.1	Defibrillator should be Bi- Phasic, light weight and latest model

, .,	Should monitor 3 vital parameters and display them	
2.2	Should print the ECG on thermal recorders.	
	Should work on both Manual mode upto 200J or more and Automated external	
2.4	defibrillation (AED) mode up to 150 J or more.	
2.5	Should be capable of doing synchronized & asynchronized cardioversion	
2.6	Can be operated from mains as well as battery	
2.7	Should have defibrillator testing facility	
2.8	Demonstration of the equipment is a must.	
3	Technical Specifications	
Should be a Low Energy Biphasic defibrillator monitor with Recorder, having		
3.1	capability to arrest all arrhythmia within a maximum energy of 200 Joules for	
	manual mode	
	Should monitor ECG through paddles, pads and monitoring electrodes and	
3.2	Defibrillate through pads and paddles. Should have Automatic or Manual Lead	
	switching to see patient ECG through paddles or leads	
3.3	Should measure and compensate for chest impedance for a range of 25 to 125 ohms	
3.4	Should have a built in min 48mm strip printer/ thermal recorder	
3.5	Should have charging time of less than 6 seconds for maximum energy. Charging	
3.3	indicator should be there.	
3.6	Should have bright 5.5" or more LCD / TFT display for viewing messages and	
	ECG waveform of 3 seconds	
3.7	Single Adult and pediatric paddles should be available.	
3.8	Should have event summary facility for recording and printing at least 250 events	
	and 50 waveforms. Patient data storage 90 mins of ECG and events.	
3.9	Should have a battery capable of usage for at least 90minutes or 30 discharges.	
3.10	Should be capable of printing Reports on Event summary, configuration, self-test,	
3.11	battery capacity etc Should have facility for self-test/check before usage and set up function	
	Should have SPO2 and EtCO2 integrated facility. (Optional – price to be quoted	
3.12	separately)	
	In manual mode the unit should provide energy selection at (2-200 J in	
3.13		
3.14	variable step) joules and AED mode of upto minimum 150 Joules.	
	Should have user friendly 1,2,3 color coded operation.	
3.15	Should have user friendly 1,2,3 color coded operation.  Voice prompts on AED mode	
3.15		
	Voice prompts on AED mode	
3.16	Voice prompts on AED mode Printing reports of events summary configuration/set test/ battery capacity  System Configuration Accessories, spares and consumable As per BOQ	
3.16	Voice prompts on AED mode Printing reports of events summary configuration/set test/ battery capacity  System Configuration Accessories, spares and consumable As per BOQ Environmental factors	
3.16	Voice prompts on AED mode Printing reports of events summary configuration/set test/ battery capacity  System Configuration Accessories, spares and consumable As per BOQ  Environmental factors  The unit shall be capable of operating continuously in ambient temperature of 10 -	
3.16	Voice prompts on AED mode Printing reports of events summary configuration/set test/ battery capacity  System Configuration Accessories, spares and consumable As per BOQ  Environmental factors  The unit shall be capable of operating continuously in ambient temperature of 10 - 400 C and relative humidity of 15-90%	
3.16 4 5 5.1	Voice prompts on AED mode  Printing reports of events summary configuration/set test/ battery capacity  System Configuration Accessories, spares and consumable  As per BOQ  Environmental factors  The unit shall be capable of operating continuously in ambient temperature of 10 - 400 C and relative humidity of 15-90%  The unit shall be capable of being stored continuously in ambient temperature of 0	
3.16 4 5 5.1 5.2	Voice prompts on AED mode Printing reports of events summary configuration/set test/ battery capacity  System Configuration Accessories, spares and consumable As per BOQ Environmental factors The unit shall be capable of operating continuously in ambient temperature of 10 - 400 C and relative humidity of 15-90% The unit shall be capable of being stored continuously in ambient temperature of 0 -500 C and relative humidity of 15-90%	
3.16 4 5 5.1 5.2 6	Voice prompts on AED mode Printing reports of events summary configuration/set test/ battery capacity  System Configuration Accessories, spares and consumable As per BOQ Environmental factors The unit shall be capable of operating continuously in ambient temperature of 10 - 400 C and relative humidity of 15-90% The unit shall be capable of being stored continuously in ambient temperature of 0 -500 C and relative humidity of 15-90%  Power Supply	
3.16 4 5 5.1 5.2 6 6.1	Voice prompts on AED mode Printing reports of events summary configuration/set test/ battery capacity  System Configuration Accessories, spares and consumable As per BOQ  Environmental factors  The unit shall be capable of operating continuously in ambient temperature of 10 - 400 C and relative humidity of 15-90%  The unit shall be capable of being stored continuously in ambient temperature of 0 -500 C and relative humidity of 15-90%  Power Supply  Power input to be 220-240VAC, 50Hz	
3.16 4 5 5.1 5.2 6 6.1 6.2	Voice prompts on AED mode Printing reports of events summary configuration/set test/ battery capacity  System Configuration Accessories, spares and consumable As per BOQ Environmental factors The unit shall be capable of operating continuously in ambient temperature of 10 - 400 C and relative humidity of 15-90% The unit shall be capable of being stored continuously in ambient temperature of 0 -500 C and relative humidity of 15-90%  Power Supply Power input to be 220-240VAC, 50Hz Resettable overcurrent breaker shall be fitted for Protection	
3.16 4 5 5.1 5.2 6 6.1	Voice prompts on AED mode Printing reports of events summary configuration/set test/ battery capacity  System Configuration Accessories, spares and consumable As per BOQ Environmental factors The unit shall be capable of operating continuously in ambient temperature of 10 - 400 C and relative humidity of 15-90% The unit shall be capable of being stored continuously in ambient temperature of 0 -500 C and relative humidity of 15-90%  Power Supply Power input to be 220-240VAC, 50Hz Resettable overcurrent breaker shall be fitted for Protection  Standards, Safety and Training	
3.16 4 5 5.1 5.2 6 6.1 6.2	Voice prompts on AED mode Printing reports of events summary configuration/set test/ battery capacity  System Configuration Accessories, spares and consumable As per BOQ  Environmental factors  The unit shall be capable of operating continuously in ambient temperature of 10 - 400 C and relative humidity of 15-90%  The unit shall be capable of being stored continuously in ambient temperature of 0 -500 C and relative humidity of 15-90%  Power Supply Power input to be 220-240VAC, 50Hz Resettable overcurrent breaker shall be fitted for Protection  Standards, Safety and Training Should have US FDA or BIS or European CE with four digit notified body	
3.16 4 5 5.1 5.2 6 6.1 6.2 7 7.1	Voice prompts on AED mode  Printing reports of events summary configuration/set test/ battery capacity  System Configuration Accessories, spares and consumable  As per BOQ  Environmental factors  The unit shall be capable of operating continuously in ambient temperature of 10 - 400 C and relative humidity of 15-90%  The unit shall be capable of being stored continuously in ambient temperature of 0 -500 C and relative humidity of 15-90%  Power Supply  Power input to be 220-240VAC, 50Hz  Resettable overcurrent breaker shall be fitted for Protection  Standards, Safety and Training  Should have US FDA or BIS or European CE with four digit notified body number certificate for the quoted model and certificate to be submitted.	
3.16 4 5 5.1 5.2 6 6.1 6.2 7	Voice prompts on AED mode Printing reports of events summary configuration/set test/ battery capacity  System Configuration Accessories, spares and consumable  As per BOQ Environmental factors  The unit shall be capable of operating continuously in ambient temperature of 10 - 400 C and relative humidity of 15-90%  The unit shall be capable of being stored continuously in ambient temperature of 0 -500 C and relative humidity of 15-90%  Power Supply Power input to be 220-240VAC, 50Hz Resettable overcurrent breaker shall be fitted for Protection Standards, Safety and Training Should have US FDA or BIS or European CE with four digit notified body number certificate for the quoted model and certificate to be submitted. Should conform to international test protocols on exposure to shock forces and to	
3.16 4 5 5.1 5.2 6 6.1 6.2 7 7.1	Voice prompts on AED mode  Printing reports of events summary configuration/set test/ battery capacity  System Configuration Accessories, spares and consumable  As per BOQ  Environmental factors  The unit shall be capable of operating continuously in ambient temperature of 10 - 400 C and relative humidity of 15-90%  The unit shall be capable of being stored continuously in ambient temperature of 0 -500 C and relative humidity of 15-90%  Power Supply  Power input to be 220-240VAC, 50Hz  Resettable overcurrent breaker shall be fitted for Protection  Standards, Safety and Training  Should have US FDA or BIS or European CE with four digit notified body number certificate for the quoted model and certificate to be submitted.  Should conform to international test protocols on exposure to shock forces and to vibration forces. The standard should be documented.	
3.16 4 5 5.1 5.2 6 6.1 6.2 7 7.1 7.2	Voice prompts on AED mode  Printing reports of events summary configuration/set test/ battery capacity  System Configuration Accessories, spares and consumable  As per BOQ  Environmental factors  The unit shall be capable of operating continuously in ambient temperature of 10 - 400 C and relative humidity of 15-90%  The unit shall be capable of being stored continuously in ambient temperature of 0 -500 C and relative humidity of 15-90%  Power Supply  Power input to be 220-240VAC, 50Hz  Resettable overcurrent breaker shall be fitted for Protection  Standards, Safety and Training  Should have US FDA or BIS or European CE with four digit notified body number certificate for the quoted model and certificate to be submitted.  Should conform to international test protocols on exposure to shock forces and to vibration forces. The standard should be documented.  Manufacturer should have own registered office/own registered service	
3.16 4 5 5.1 5.2 6 6.1 6.2 7 7.1	Voice prompts on AED mode  Printing reports of events summary configuration/set test/ battery capacity  System Configuration Accessories, spares and consumable  As per BOQ  Environmental factors  The unit shall be capable of operating continuously in ambient temperature of 10 - 400 C and relative humidity of 15-90%  The unit shall be capable of being stored continuously in ambient temperature of 0 -500 C and relative humidity of 15-90%  Power Supply  Power input to be 220-240VAC, 50Hz  Resettable overcurrent breaker shall be fitted for Protection  Standards, Safety and Training  Should have US FDA or BIS or European CE with four digit notified body number certificate for the quoted model and certificate to be submitted.  Should conform to international test protocols on exposure to shock forces and to vibration forces. The standard should be documented.  Manufacturer should have own registered office/own registered service centre/100% Subsidiary company in India. Necessary document in the name of	
3.16 4 5 5.1 5.2 6 6.1 6.2 7 7.1 7.2	Voice prompts on AED mode  Printing reports of events summary configuration/set test/ battery capacity  System Configuration Accessories, spares and consumable  As per BOQ  Environmental factors  The unit shall be capable of operating continuously in ambient temperature of 10 - 400 C and relative humidity of 15-90%  The unit shall be capable of being stored continuously in ambient temperature of 0 -500 C and relative humidity of 15-90%  Power Supply  Power input to be 220-240VAC, 50Hz  Resettable overcurrent breaker shall be fitted for Protection  Standards, Safety and Training  Should have US FDA or BIS or European CE with four digit notified body number certificate for the quoted model and certificate to be submitted.  Should conform to international test protocols on exposure to shock forces and to vibration forces. The standard should be documented.  Manufacturer should have own registered office/own registered service centre/100% Subsidiary company in India. Necessary document in the name of manufacturer/100% subsidiary company like GST Registration/Trade License to be	
3.16 4 5 5.1 5.2 6 6.1 6.2 7 7.1 7.2	Voice prompts on AED mode  Printing reports of events summary configuration/set test/ battery capacity  System Configuration Accessories, spares and consumable  As per BOQ  Environmental factors  The unit shall be capable of operating continuously in ambient temperature of 10 - 400 C and relative humidity of 15-90%  The unit shall be capable of being stored continuously in ambient temperature of 0 -500 C and relative humidity of 15-90%  Power Supply  Power input to be 220-240VAC, 50Hz  Resettable overcurrent breaker shall be fitted for Protection  Standards, Safety and Training  Should have US FDA or BIS or European CE with four digit notified body number certificate for the quoted model and certificate to be submitted.  Should conform to international test protocols on exposure to shock forces and to vibration forces. The standard should be documented.  Manufacturer should have own registered office/own registered service centre/100% Subsidiary company in India. Necessary document in the name of	
3.16 4 5 5.1 5.2 6 6.1 6.2 7 7.1 7.2	Voice prompts on AED mode Printing reports of events summary configuration/set test/ battery capacity  System Configuration Accessories, spares and consumable  As per BOQ  Environmental factors  The unit shall be capable of operating continuously in ambient temperature of 10 - 400 C and relative humidity of 15-90%  The unit shall be capable of being stored continuously in ambient temperature of 0 -500 C and relative humidity of 15-90%  Power Supply  Power input to be 220-240VAC, 50Hz  Resettable overcurrent breaker shall be fitted for Protection  Standards, Safety and Training  Should have US FDA or BIS or European CE with four digit notified body number certificate for the quoted model and certificate to be submitted.  Should conform to international test protocols on exposure to shock forces and to vibration forces. The standard should be documented.  Manufacturer should have own registered office/own registered service centre/100% Subsidiary company in India. Necessary document in the name of manufacturer/100% subsidiary company like GST Registration/Trade License to be submitted along with bid;	
3.16 4 5 5.1 5.2 6 6.1 6.2 7 7.1 7.2	Voice prompts on AED mode Printing reports of events summary configuration/set test/ battery capacity  System Configuration Accessories, spares and consumable As per BOQ Environmental factors  The unit shall be capable of operating continuously in ambient temperature of 10 - 400 C and relative humidity of 15-90%  The unit shall be capable of being stored continuously in ambient temperature of 0 -500 C and relative humidity of 15-90%  Power Supply Power input to be 220-240VAC, 50Hz Resettable overcurrent breaker shall be fitted for Protection  Standards, Safety and Training Should have US FDA or BIS or European CE with four digit notified body number certificate for the quoted model and certificate to be submitted.  Should conform to international test protocols on exposure to shock forces and to vibration forces. The standard should be documented.  Manufacturer should have own registered office/own registered service centre/100% Subsidiary company in India. Necessary document in the name of manufacturer/100% subsidiary company like GST Registration/Trade License to be submitted along with bid;  Documentation	

8.3	List of important spare parts and accessories with their part number and costing	
	Log book with instruction for daily, weekly, monthly and quarterly maintenance	
8.5	checklist. The job description of the hospital technician and company service	
	engineer should be clearly spelt out.	
	Compliance Report to be submitted in a tabulated and point wise manner clearly	
<b>8.7</b>	mentioning the page/Para number of original catalogue/data sheet. Any point, if not	
	substantiated with authenticated catalogue/manual, will not be considered.	
	BOQ	Qty
1	Defibrillator as per specification	1 No
2	Paddles Adult/Paediatric (pair)	1 Pair
3	ECG Rolls	10 Nos
4	Disposable pads	5 Nos
5	Complete set of ECG cable with electrodes	1 No

	Sch.24		
1	Defibrillator with CPR monitoring and TC pacing		
1	The defibrillator should be least, lightweight, small size with bright colored display		
2	The defibrillator should be Biphasic waveform with 3 wave form display		
3	Screen size minimum 6 inches diagonal		
4	It should display selected energy. Delivered energy either to be displayed		
	or printed in the report		
5	It should have ability to energy selection from Paddles or Unit.		
6	In manual mode the unit should provide energy selection at (2-200 J in		
	variable step) and AED mode of upto minimum 150 Joules.		
7	It should have ability to measure chest compression rate and depth in real time		
	with both visual & audible feedback		
8	The unit should have transcutaneous external pacing with 40 milli-second		
	pulse width		
9	The unit should do self test daily with facility to give print out of defibrillator		
	testing report and also have code ready indicator on unit.		
10	It should have ability to filter out CPR artifacts and allowing person to see		
	organized rhythms without interrupting chest compression		
11	The defibrillator should have facility to monitor following parameters		
a	ETCO2		
b	ECG		
12	Should have optional capability of internal defibrillation if and when required.		
13	Should have US FDA or BIS or European CE with four digit notified		
	body number certificate for the quoted model and certificate to be		
	submitted.		
14	Manufacturer should have own registered office/own registered service		
	centre/100% Subsidiary company in India. Necessary document in the name of		
	manufacturer/100% subsidiary company like GST Registration/Trade License		
	to be submitted along with bid;		
	BOQ	Qty	
1	Defibrillator with CPR monitoring and TC pacing	1	No
2	Paddles Adult/Paediatric (pair)	1	No
3	ECG Cable with electrodes	1	Set
4	ETCO2 Module	1	No
5	Reusable airway adapter to be used with ETCO2 sensor & cable	1	No
6	Battery (100 shocks at full charge)	1	No
7	Multi Function Defibrillator/Pacing padz (Disposable)	10	No
8	Reusable CPR feedback sensor	1	No
9	ECG Rolls	10	No

	To: 111
1	Should be touch screen.
2	Screen should be minimum of 12" inch or more and integrated,
	tiltable single screen. The screen should be Full HD screen.
3	Compressed air based
4	Should have the following modes.
a	Volume and Pressure Controlled modes
b	SIMV (Pressure controlled and volume controlled) with pressure
	support
С	Spontaneous modes like CPAP / PEEP
d	Inverse Ratio ventilation
e	Advanced/Intelligent mode like Pressure Regulated volume control
	and volume support mode.
f	Airway Pressure Release ventilation
g	Non-invasive ventilation with leak compensation
5	Should have the facility for following settings:
a	Tidal Volume: Minimum 5ml or less and maximum of 1500 ml or
	more in Volume control
b	PEEP upto 30 cmH2O or more
С	Pressure support upto 35 cmH2O
d	Flow Pattern: Square, Decelerating
e	Respiratory Rate upto 80 bpm or more
f	Inspiratory Plaetau upto 60% of Inspiratory time
g	SIMV Rate upto 60 cycles/min
h	FIO2: 21% - 100%
i	Inspiratory flow or pressure Trigger Sensitivity
j	Manual Cycle, Inspiratory Pause, Expiratory Pause.
6	Should be able to monitor and measure the following parameters
a	Tidal Volume
b	Plateau
С	Mean Airway Pressure
d	Peak Airway Pressure
e	Intrinsic PEEP
f	RSBI (Rapid Shallow Breathing Index)
<u>g</u> 7	Resistance and Compliance
/	In line Mahuligen with conchility of madusing < 2 misses days
	In-line Nebuliser with capability of producing < 3 micron drug
Q	particle.
8	particle. Should have the facility to find (Lower inflection point) and UIP
	particle.  Should have the facility to find (Lower inflection point) and UIP (Upper Inflection Point)
8	particle. Should have the facility to find (Lower inflection point) and UIP (Upper Inflection Point) Compiled trend analysis at least for 24 hours for all measured
9	particle. Should have the facility to find (Lower inflection point) and UIP (Upper Inflection Point)  Compiled trend analysis at least for 24 hours for all measured parameters.
	particle.  Should have the facility to find (Lower inflection point) and UIP (Upper Inflection Point)  Compiled trend analysis at least for 24 hours for all measured parameters.  Should have the facility to record multiple loops for comparison
9	particle. Should have the facility to find (Lower inflection point) and UIP (Upper Inflection Point)  Compiled trend analysis at least for 24 hours for all measured parameters.
9 10 11	particle.  Should have the facility to find (Lower inflection point) and UIP (Upper Inflection Point)  Compiled trend analysis at least for 24 hours for all measured parameters.  Should have the facility to record multiple loops for comparison Should have facility to measure:
9 10 11 a	particle.  Should have the facility to find (Lower inflection point) and UIP (Upper Inflection Point)  Compiled trend analysis at least for 24 hours for all measured parameters.  Should have the facility to record multiple loops for comparison  Should have facility to measure:  Pressure / Volume loops
9 10 11 a b	particle.  Should have the facility to find (Lower inflection point) and UIP (Upper Inflection Point)  Compiled trend analysis at least for 24 hours for all measured parameters.  Should have the facility to record multiple loops for comparison  Should have facility to measure:  Pressure / Volume loops  Flow/ volume loops
9 10 11 a b	particle.  Should have the facility to find (Lower inflection point) and UIP (Upper Inflection Point)  Compiled trend analysis at least for 24 hours for all measured parameters.  Should have the facility to record multiple loops for comparison  Should have facility to measure:  Pressure / Volume loops  Flow/ volume loops  Should display minimum 2 curves/graphs /loops simultaneously on
9 10 11 a b	particle.  Should have the facility to find (Lower inflection point) and UIP (Upper Inflection Point)  Compiled trend analysis at least for 24 hours for all measured parameters.  Should have the facility to record multiple loops for comparison Should have facility to measure:  Pressure / Volume loops  Flow/ volume loops  Should display minimum 2 curves/graphs /loops simultaneously on the screen
9 10 11 a b 12	particle.  Should have the facility to find (Lower inflection point) and UIP (Upper Inflection Point)  Compiled trend analysis at least for 24 hours for all measured parameters.  Should have the facility to record multiple loops for comparison  Should have facility to measure:  Pressure / Volume loops  Flow/ volume loops  Should display minimum 2 curves/graphs /loops simultaneously on the screen  Should have audio-visual alarms for the following parameters:  Peak inspiratory pressure – High & Low  FiO2 – high & low
9 10 11 a b 12 a b	particle.  Should have the facility to find (Lower inflection point) and UIP (Upper Inflection Point)  Compiled trend analysis at least for 24 hours for all measured parameters.  Should have the facility to record multiple loops for comparison  Should have facility to measure:  Pressure / Volume loops  Flow/ volume loops  Should display minimum 2 curves/graphs /loops simultaneously on the screen  Should have audio-visual alarms for the following parameters:  Peak inspiratory pressure – High & Low  FiO2 – high & low  Respiratory rate – high & low
9 10 11 a b 12 a b c d e	particle.  Should have the facility to find (Lower inflection point) and UIP (Upper Inflection Point)  Compiled trend analysis at least for 24 hours for all measured parameters.  Should have the facility to record multiple loops for comparison  Should have facility to measure:  Pressure / Volume loops  Flow/ volume loops  Should display minimum 2 curves/graphs /loops simultaneously on the screen  Should have audio-visual alarms for the following parameters:  Peak inspiratory pressure – High & Low  FiO2 – high & low  Respiratory rate – high & low  Tidal volume – high & low
9 10 11 a b 12 a b c d	particle.  Should have the facility to find (Lower inflection point) and UIP (Upper Inflection Point)  Compiled trend analysis at least for 24 hours for all measured parameters.  Should have the facility to record multiple loops for comparison  Should have facility to measure:  Pressure / Volume loops  Flow/ volume loops  Should display minimum 2 curves/graphs /loops simultaneously on the screen  Should have audio-visual alarms for the following parameters:  Peak inspiratory pressure – High & Low  FiO2 – high & low  Respiratory rate – high & low
9 10 11 a b 12 a b c d e	particle.  Should have the facility to find (Lower inflection point) and UIP (Upper Inflection Point)  Compiled trend analysis at least for 24 hours for all measured parameters.  Should have the facility to record multiple loops for comparison  Should have facility to measure:  Pressure / Volume loops  Flow/ volume loops  Should display minimum 2 curves/graphs /loops simultaneously on the screen  Should have audio-visual alarms for the following parameters:  Peak inspiratory pressure – High & Low  FiO2 – high & low  Respiratory rate – high & low  Tidal volume – high & low  Minute volume – high & low  Apnea
9 10 11 a b 12 a b c d e f g h	particle.  Should have the facility to find (Lower inflection point) and UIP (Upper Inflection Point)  Compiled trend analysis at least for 24 hours for all measured parameters.  Should have the facility to record multiple loops for comparison  Should have facility to measure:  Pressure / Volume loops  Flow/ volume loops  Should display minimum 2 curves/graphs /loops simultaneously on the screen  Should have audio-visual alarms for the following parameters:  Peak inspiratory pressure – High & Low  FiO2 – high & low  Respiratory rate – high & low  Tidal volume – high & low  Minute volume – high & low  Apnea  Gas supply failure
9 10 11 a b 12 a b c d e f	particle.  Should have the facility to find (Lower inflection point) and UIP (Upper Inflection Point)  Compiled trend analysis at least for 24 hours for all measured parameters.  Should have the facility to record multiple loops for comparison  Should have facility to measure:  Pressure / Volume loops  Flow/ volume loops  Should display minimum 2 curves/graphs /loops simultaneously on the screen  Should have audio-visual alarms for the following parameters:  Peak inspiratory pressure – High & Low  FiO2 – high & low  Respiratory rate – high & low  Tidal volume – high & low  Minute volume – high & low  Apnea

16	Spares should be available for 10 years.		
17	Should be supplied with 2 nos Reusable Silicon adult the 1 no		
	Pediatrics tubing's and imported servo controlled humidifier.		
18	Should have US FDA or BIS or European CE with four digit notified		
	body number certificate for the quoted model and certificate to be		
	submitted.		
19	Ventilator should have external compressor, from the same		
	manufacturer (Price to be quoted separately).		
20	Expiratory valve/cassette/expiratory filter should be		
	autoclavable/sterilizable		
	and supply 2 no's with each unit.		
21	Oxygen sensor should be paramagnetic/ultrasonic/Galvanic and		
	covered under warranty & CMC and will be supplied free of cost		
	during warranty and CMC period.		
22	Should provide ET-tube leak compensation.		
23	Compressor should be US-FDA or European CE with 4 digit notified		
	body or BIS approved.		
24	Manufacturer should have own registered office/own registered		
	service centre/100% Subsidiary company in India. Necessary		
	document in the name of manufacturer/100% subsidiary company		
25	like GST Registration/Trade License to be submitted along with bid;		
25	Compressor, hinged arm (or circuit support arm) and ventilator		
CI NI -	trolley should be from the same manufacturer	04	HOM
Sl.No	BOQ	Qty	UOM No
2	Ventilator-High End (I.C.U) as per specification  Nebulizer	1	No No
3			
4	Servo controlled Imported Humidifier  Mahila Trallan	1	No No
_	Mobile Trolley		
5	Expiratory valve/cassette  Payable Silicon adult nations circuit with filter	2 2	Nos
6	Reusable Silicon adult patient circuit with filter	1	Nos
7	Reusable Silicon pediatric patient circuit with filter		No No
8	External compressor  Him and Army (Cinquit compart comp	1	No No
9	Hinged Arm/Circuit support arm	1	No

Sl.	Sch.26
No	Peripheral Nerve Stimulator(PNS)
1	Should be suitable to identify peripheral nerves and giving percutaneous
1	stimulation in neuron muscular block.
	Should have a percutaneous monopolar/ bipolar stimulating handle for
2	localization of nerves without puncturing the nerve which should be
	autoclavable/ETO sterilizable
3	Stimulation current: 0.1-5 mA
4	Stimulation voltage: 95 V max
5	Stimulation frequency: 1 Hz / 2 Hz
6	Impedance measuring range: $1 \text{ k}\Omega - 90 \text{ k}\Omega$ for target stimulation current >
0	0.5 mA
7	Stimulus duration: $0.05 \text{ ms} - 0.10 \text{ ms} - 0.30 \text{ ms} - 0.50 \text{ ms} - 1.00 \text{ ms} \pm 1\%$
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
11	than 10 minutes.
12	Should have LCD display for stimulation current/voltage.
	Equipment should be European CE with four digit notified body number or
13	US FDA or BIS approved for the quoted model and certificate to be
	submitted.

	Should be supplied complete with As per BOQ		
	BOQ	Qty	UOM
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	5	No
4	Plexus Cannula with Thin polymer insulation coating (Teflon coating not desirable) of Length 150mm	5	No
5	Needles for continuous plexus block of different sizes (total 10 nos.)	1	set

## Sch.27 ABG Machine

	112 0 1/14/011110		
1	Fully automatic, upgradeable, fast electrolyte & Blood gas analyzer.		
2	Essential Measured parameters; pH, pCO2, pO2, SaO2, co-oximetry, Hb,		
	Lactates, Glucose, Na+, K+, Ca++, Cl All these parameters should be		
	measured simultaneously.		
3	Calculated parameters should include BE, BE ecf, HCO3, Anion Gap etc.		
4	Sample volume-less than 150 micro litre		
5	Fast analysis time – less than 120 sec.		
6	Fully automatic liquid calibration of all parameters at user-defined intervals		
	without the use of external gas cylinders in case reagent based system		
7	Continuous reagent level monitoring with graphic display/alarm in case		
	reagent based system		
8	Data display on well-illuminated, adequate size screen display.		
9	Data print out on built in thermal printer		
10	Built in auto Quality control facility.		
11	Suitable UPS with at least 30 min backup.		
12	Cost of all consumables (including reagents, Cartridge, paper, electrode if		
	applicable) to be quoted for comparative evaluation. Consummables for two		
	year and extendables for another three years @ at least 20 samples/day for all		
	tests should be quoted and it will be taken for price comparison. It should be		
	quoted as per format in Annexure-1		
13	Stand by blood gas cum electrolyte analyzer in case of breakdown.		
14	Should have local service facility		
15	Guarantee to supply spares for minimum 10 years		
16	It must be UF-FDA /BIS/European CE with four digit notified body		
	number approved for the quoted model and certificate to be submitted.		
17	Compliance Report to be submitted in a tabulated and point wise manner		
	clearly mentioning the page/para number of original catalogue/data sheet.		
	BOQ		
1	ABG Machine as per specification	Unit	1 No.
		Cost	
2	All consumables (including reagents, Cartridge, paper, electrode if	(Per	14600
	applicable) per samples for all tests for first two years (365X20X2)	samples	samples
	As per Annexure-1 format	for all	
		tests)	
3	All consumables (including reagents, Cartridge, paper, electrode if applicable)	(Per	21900
	per samples for all tests for next three years (365X20X3)	samples	samples
	As per Annexure-1format	for all	
		tests)	

## Annexure:

Annexure: <u>ANNEXURE 1 (Cost of consumables)</u>										
						or 1 no. of ABG A				I =
		A	В	С	D	$\mathbf{E} = \mathbf{A} \div \mathbf{D}$	F	$G = E \times F$	Н	G*(1+H)  Total Cost of
Sl. No	List of Param eters	No. of tests per equipment (approximat e load being factored for bid ranking only)	make/ brand for Reagents/ Strips/ tubes/ cards/ cartidges/ consumables	Catalog ue No.	No. of tests/pac k	Total No. of packs to be used for number of tests specified at column"A"	Cost per Pack size (in Rs.)	Total Cost of Reagents/ Strips/ tubes/ cards/ cartidges/ consumables over 10 Years	Applica ble GST	Reagents/ Strips/ tubes/ cards/ cartidges/ consumab les over 10 Years inclusive of GST
1	pН	36,500						-		
2	pCo2	36,500						-		
3	pO2	36,500						-		
4	Sa02 with co- oximetr y	36,500						-		
5	tHb	36,500						-		
6	Lactate s	36,500						-		
7	Glucose	36,500						-		
8	NA+	36,500						-		
9	K+	36,500						-		
10	Ca++	36,500						-		
11	Cl-	36,500						-		
Tota	l cost of Re	eagents/ Strips/ t	ubes/ cards/ cart		mables requ 12 above:	ired per equipme	nt for pe	rforming tests from	sr . no. 1	
			Table	e-2 (Cost cor	sideration f	or 1 no. of ABG A	nalvser)			
		A	В	C	D	$\mathbf{E} = \mathbf{C} \div \mathbf{D}$	F	$G = E \times F$	Н%	I = G*(1+H%
Sl. No.	Type of Consumable (Bidder may use number of rows against each item as desired)	Name of consumable item(s) to be used for tests at serial no. 1 to 12 in table-1	Make/ brand & Catalogue No.	Total Consum able item(s) required for cumulati ve no. of tests at serial no. 1 to 12 in table-1 at column 'A'	Pack size for consuma bles	Total number of Consumable packs to be used for cumulative no. of tests at column 'D'	Cost per Pack size	Total Cost of Consumable item	Applica ble GST	Total Cost of Reagents/ Strips/ tubes/ cards/ cartidges/ consumab les over 10 Years inclusive of GST
1	Calibra tors									
								1		

	1				ı			T	1	1
	Quality									
	control									
2	S									
	Additiv									
3	es									
	Cleane									
4	rs									
	Any									
	other									
-	Consu									
5	mables									
-										
	l	Total a	east of all Consum	ables et this	table requires	l for performing te	ete at tabl	<u> </u>		
		Total C	ost of all Collsum	avies at tills	table required	i ioi periorining te	sis at tabl	<b>□-1.</b>		
				Total Opey	cost for 1 equ	inment:				
	Т	otal Oney cost fo				ipment. in price bid at app	ronriete	nlace therein):		
Imm			n o equipment (t	o be medipe	oraccu iii iiia	in price blu at app	opriate	piace therein).		
	Important Note:									
(a) A	(a) Any reagent or any consumable required for performing all tests at column "A" in table-1; calibration, quality control, cleaning the lab system, etc. as detailed at column "A" in table-2, if not quoted, are to be provided free of									
	cost by the bidder during the validity of the contract. Items/consumables those may be required for sample collection									
	are beyond the scope of this contract.									
""	ne beyond the scope of this contract.									
(b) T	The above T	Total Opex cost f	or 3 equipment s	hall also be	considered fo	or ranking of bids				
						ummable cost for		vears and		
							50 0.10	J		
	subsequent 3 years. Ranking will be done by considering 5 years consummable cost.								1	

Sl.	Sch. No: 28					
No	PATIENT CONTROLLED ANALGESIA PUMP					
1	Must provide various modes like Bolus, Bolus + set rate; Bolus + Time limited					
1	rate; Bolus + Triggered rate					
2	Deleted					
3	LCD screen for display of menu & Protocols					
	Automatic detection of syringe size & proper syringe fixing. Must provide					
4	alarm for wrong loading of syringe (flanges out of slot; disengaged plunger					
	etc.)					
5	Display of Drug Names with a provision of memorizing 10 ~ 15 names by the					
3	operator shall be preferred.					
6	Pump must display monitored pumping pressure digitally for instant & easy to					
U	read pumping pressure in syringe system.					
7	Selectable Occlusion pressure trigger levels from 150 mmHg to 900 mmHg					
8	Anti bolus system to reduce pressure on sudden release of bolus.					
	Should have comprehensive alarm package including Occlusion pressure pre-					
9	alarm & alarm, End of infusion pre-alarm and alarm, Volume limit pre-alarm					
9	& alarm, KVO rate, Low battery pre-alarm and alarm, Syringe barrel, Plunger					
	detection alarm etc.					
10	Battery back should be for about 6 - 7 hr at 5ml/hr for 50ml syringes with a					
10	provision to display (numeric or graphical) residual battery life					

SN	BOQ	Qty	UOM
	PATIENT CONTROLLED ANALGESIA PUMP( PCA)	1	No

Sl.	Sch. 29		
No 1	Volumetric Infusion Pump  Description of Function		
1	Volumetric Infusion Pump is a medical device that delivers intravenous		
1.1	fluids and medicine to patients in hospitals, outpatient surgical centres,		
1.1	hospices, nursing homes, and in ambulances		
2	Operational Requirements		
2.1	Programmable volumetric infusion pump is required		
3	Technical Specifications		
3.1	Battery back-up operating time 4 hours.		
3.2	LCD programming display		
3.3	Pole clamp Multi-function mounting clamp		
3.4	Quick titration of rate or dose with volume-time programming		
2.5	Flow rate range: 1 to 99.9 ml/hr. (0.1 ml increments) and 99 to 800 ml/hr.		
3.5	(1ml increments.)		
3.6	Volume to be infused 1 to 99.9 ml (0.1ml increments) and 1 to 9999 ml(1		
3.0	ml increments).		
3.7	Both flow rates and volume to be infused should be configured to limit		
3.1	the maximum allowable range		
3.8	Accuracy ±5%.		
3.9	Pump Database: Events of 24 hours with real time.		
4	System Configuration Accessories, spares and consumables		
4.1	"Compatible with any standard (PVC) infusion sets for Infusion pump		
	available in local Indian market."		
4.2	5 numbers of required infusion sets should be supplied with the single		
	unit		
5	Environmental factors		
5.1	The unit shall be capable of being stored continuously in ambient		
	temperature of 0-50deg C and relative humidity of 15-90%  The unit shall be capable of operating continuously in ambient		
5.2	temperature of 10 -40deg C and relative humidity of 15-90%		
6	Power Supply		
6.1	Power input to be 220-240VAC, 50Hz fitted with Indian plug		
7	Standards, Safety and Training		
,	Should have US – FDA/BIS/European CE with four digit notified		
7.1	body number certificate for the quoted model and certificate to be		
	submitted.		
	Manufacturer/Supplier should have ISO certification for quality		
7.2	standards.		
8	Documentation		
8.1	User/Technical/Maintenance manuals to be supplied in English.		
8.2	Certificate of calibration and inspection from factory.		
	Manufacturer should have own registered office/own registered service		
8.3	centre in India. Necessary document in the name of manufacturer like		
	GST Registration/Trade License to be submitted along with bid.		
	BOQ	Qty	UOM
1	Infusion Pump as per specification	1	No
2	Infusion Set	5	No
3	Mounting Clamp	1	No

Sl.	Sch.30
No	Syringe Infusion Pump
1	The syringe pump should be programmable, user friendly, safe to use and should have battery backup and comprehensive alarm system.

	Must Work on commonly available standard 5ml/10ml/20ml/50ml/60		
2	ml Syringes with accuracy of minimum of +/-2% or better, with		
	automatic syringe size recognition.		
2	Should have US FDA or BIS or European CE with four digit notified		
3	body number certificate for the quoted model and certificate to be submitted.		
4	Flow rate programmable from 0.1 to 1000 ml/hr or more in steps of 0.1 ml/hr with user selectable flow set rate option. SAVE last infusion		
4	rate even when the AC power is switched OFF.		
	Bolus rate should be programmable to 40 to 1000 ml/hr or more with		
5	infused volume display and one key press bolus. Reminder audio after		
J	every 1 ml delivered/programmable bolus should be available		
	Display of Drug directory of more than 50 drugs, customized and		
6	adjustable.		
7	Key board locking system for patient safety.		
8	Keep Vein Open (KVO) must be available at 0.1 ml or set rate		
_	Selectable Occlusion pressure trigger levels selectable from		
9	300/500/900 mmHg. or atleast 3 selectable levels		
	Automatic detection of syringe size & proper fixing. Must provide		
10	alarm for wrong loading of syringe such as disengaged plunger,		
	unsecured barrel etc.		
11	Manual / automatic pusher		
12	Anti bolus system to reduce pressure on sudden release of occlusion.		
	Should have comprehensive ALARM package including: Occlusion		
13	limit exceed alarm. Near end of infusion pre-alarm & alarm, Volume		
10	limit pre-alarm & alarm, KVO rate flow, Low battery pre-alarm and		
	alarm, AC power failure and Drive disengaged alarm.		
1.4	Rechargeable Battery having at least 4hours backup for about 5ml/hr		
14	flow rate with 50ml syringes. Larger battery life and indication of		
	residual life will be preferred.  Multipoint power cable to power up to 4 pumps with one power		
15	cord when mounted on IV pole (price to be quoted		
13	separately). (This supply is in addition to standard power cable)		
	The unit shall be capable of stored and operating continuously in		
16	ambient temperature of 10 - 50deg C and relative humidity of 15-90%		
17	Power input to be 220-240VAC, 50Hz.		
	Manufacturer should have own registered office/own registered		
10	service centre/100% Subsidiary company in India. Necessary		
18	document in the name of manufacturer/100% subsidiary company like		
	GST Registration/Trade License to be submitted along with bid;		
19	User Manual and service manual in English.		
20	List of important spare parts and accessories with their part number		
20	and costing.		
21	Clamp to be supplied with each machine		
	BOQ	Qty	UOM
1	Syringe Pump as per specification	1	No
2	Multipoint power cable (One no for each 4 nos of Pumps)	1	No
+			
	Note: 4 no. Syringe Pump along along with 1 Multipoint power will be taken for ranking purpose.		

Sl.	Sch.31	
No	DVT Pump	
1	Provides graduated, sequential compression and rapid impulse inflation	
	to calf, foot & thigh.	
2	Pulse frequency 1 per minute range.	
3	Choice of three cuffs of universal size: Calf, thigh, foot (Price should	
	be quoted seperately and 50 nos each will be taken for ranking	

	purpose)		
4	No DVT sleeves should be required below cuffs.		
5	Should deliver constant pre-set pressure ranges – Distal 40 - 130		
	mm Hg		
6	Proximal 30-45 mmHg		
7	Alarm present		
8	Visual display screen for pressures and time present		
9	Portable, can be mounted on the bed.		
10	I.S.O. certificate		
11	Battery backup at least 4 hours.		
12	US-FDA/ European CE/BIS approved product for the quoted		
	model		
	BOQ	Qty	UOM
1	DVT Pump AS PER Specification	1	Nos
2	Cuffs of universal size: Calf, thigh, foot (5 nos each)	1	LS

Sl.	Sch.32		
No	Patient Warming System		
I	Technical Specification		
1	Should have the facility for Forced Air warming.		
2	Should have air flow setting for the air flow 30-50cfm for adult and		
	infant patient in same machine		
3	Should have single Hose for all type / Size of Blankets.		
4	Should have at-least 3 temperature control setting		
5	Should have over temperature sensor.		
6	Deleted		
7	Should have microprocessor control system		
8	Deleted		
9	Should have Temp. Range – Ambient to 43°C or better		
10	Should have High Efficiency Air Filter of 0.3 Micro size or better.		
11	The weight of Equipment should be less than 8.0 kg.		
12	Should distribute even temperature across the blankets		
13	Blanket should be light weight		
14	Should have safe warming avoids tissue damaging.		
15	Should ensure even temperature at all point of blanket		
16	The equipment should have easy attachment to IV pole, Bedrail or		
	Freestanding.		
17	Meet Regulatory standard for leakage current.		
18	Offered model should be USFDA or European CE with four digit		
	notified body number or BIS approved for the quoted model		
II	Accessories		
1	Adult Full Body Blankets: 10		
2	Paediatric Full Body Blankets 5		
3	Adult upper & lower body blanket - 10 nos each		
SN	BOQ	Qty	UOM
1	Patient Warming system as specified	1	No
2	Adult Full Body Blankets	5	No
3	Paediatric Full Body Blankets	2	No
4	Adult upper & lower body blanket	5	Nos
			each

Sl. No	Sch. : 33 Blood & Fluid Warmer
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.

5	Disposable tubing set for Fluid/Blood-500 Nos for fluid amd 100 nos for blood.(price to be quoted separately)		
6	Should have over temp alarm  Should have US FDA orBIS or European CE with four digit notified body number certificate for the quoted model and certificate to be submitted		
7	Should have Clamp for mounting on the IV stand		
	BOQ	Qty	UOM
1	Blood & Fluid Warmer with standard accessories	1	No
2	Disposable tubing set for Fluid/Blood (price to be quoted separately)	500 (for fluid) 100 (for blood)	Nos

	Sch.: 33		
	CPAP-BIPAP Machine		
1	The unit shall be capable of being stored continuously in ambient		
	temperature of 0-50deg C and relative humidity of 15-90%		
a	IPAP: 4 to 25 cm		
b	EPAP: 4 to 25 cm		
c	Breath rate: upto 30 BPM with spontaneous for time mode		
d	Timed inspiration: 0.5 to 3.0 sec		
e	Rise time: 150 to 400mSec		
2	Mode:- CPAP with PS, Biphasic pressure control, apnea backup		
3	System with leakage compensation.		
4	System should be supplied with all reusable accessories		
5	Power input to be 220-240VAC, 50Hz fitted with Indian plug		
6	Should have US FDA or BIS or European CE with four digit notified		
	body number certificate for the quoted model and certificate to be		
	submitted		
7	Comprehensive training for lab staff and support services till familiarity		
	with the system		
8	User/Technical/Maintenance manuals to be supplied in English.		
9	List of important spare parts and accessories with their part number and		
	costing.		
10	Log book with instructions for daily, weekly, monthly and quarterly		
	maintenance checklist.		
	BOQ	Qty	UOM
1	Non-invasive ventilator with standard accessories	1	No
2	Reusable Masks with all sizes (Oral & Nasal) small, medium, large (1 sets	1	LS
	each)		

	Sch. 35	
	General instrumentation set for fract	cure reduction
	Open surgery instruments are required to carry on	
	conventional general, gastrointestinal, urological	
1	procedures	
	The instruments quoted should be of high quality and	
2	standard	
	Instrument should be European CE or USFDA or BIS	
3	approved & copy to be enclosed	
	Bidder has to quote all the Instruments as a set and rate for	
4	each Instrument should be quoted	
	The instruments must be ISO certified and copy to be	
5	enclosed.	
	The part number and name of manufacturer should be	
6	engraved on the each instrument	
7	Demonstration of the Set is must.	

CI.	NT CALL	<b>D</b> : .	04
Sl No	Name of the Item	Dimension approx	Qty
1	Bone lever Short Narrow tip	width 8mm, Length 220mm	4
2	Bone lever Short Narrow tip	width 18mm, Length 235mm	4
3	Bone lever Long Narrow tip	width 18mm, Length 235mm	4
4	Bone lever with wide tip	width 22mm, Length 250mm	4
5	Bone lever with Long wide tip	width 24mm, Length 270mm	4
6	Cancellous bone Impactors with quick couplling handle	6.0mm, round	2
7	Cancellous bone Impactors with quick couplling handle	6.0mm, round, Flattened	2
8	Cancellous bone Impactors with quick couplling handle	8.0mm, round	2
9	Cancellous bone Impactors with quick couplling handle	Rectangular 6x 16mm	2
10	Cancellous bone Impactors with quick couplling handle	Rectangular 10x 20mm	2
11	Cancellous bone Impactors with quick couplling handle	Rectangular 10x 30mm	2
12	Rasps Flat Rectangular		1
	Kocher-Langenbeck retractors	21.5 cm/8 and 4/8", tip	4
13		size-40X18mm	
14	Kocher-Langenbeck retractors	21.5 cm/8 and 4/8", tip size-60X18mm	4
	Kocher-Langenbeck retractors	21.5 cm/8 and 4/8", tip	4
15		size-85X18mm	
16	Cjerny's retractors (Small, Medium, large)		2 each
17	Hammer Large with wooden & steel handle 500gm		2 each
18 19	Hammer Large with wooden & Steel handle 700gm Alexander Chisel (Straight and curved 17.5cm / 6 and 7/8", tip size 4mm-8mm		2 each
20	Stille Chisel (Straight and curved 20.5cm / 8 and 1/8", tip size 10mm, 15mm,20mm,25mm		2 each
21	Gouge for Cancellous bone graft straight	L 265 / 125mm, width 5,10,15 mm	2 each
22	Gouge for Cancellous bone graft curved	L 265 / 125mm, width 5,10,15 mm	2 each
23	Stille Osteotome – straight and curved -20.5cm / 8 and 1/8"	tip size 5mm, 10mm, 15mm, 25mm	2 each
24	Ring Curette (S, M & Large)	1311111, 2311111	2 each
25	ModelL USA Bone Curette with right angled tip 16.5 cm / 6 and 4/8"oval with hollow handle with hollow handle		2 each
26	Halle Bone Curette with right angled tip 21 cm / 8 and 2/8"oval malleable shaft with hollow handle		2 each
27	Volkmann's Curette 17cm / 6 and 6/8" oval, 27cm / 10 and 5/8"		2 each
28	Universal Chuck small with T-handle		2
29	Bone Cutter ( straight and curved)		1 each
30	Friedman Bone Rongeurs, 12.5cm / 4 and 7/8", 13.5cm / 5 and 3/8"-		2 each
31	Cleveland Bone Rongeurs 13.5cm / 5 and 3/8"		2 each

	Bone Rongeeurs S form , S shape 30 degree angle tip,		2 each
32	14.5cm / 5 and 6/8",		
33	Bone Rongeur 15.5cm /6 and 1/8" straight and 30 degree angle tip		2 each
34	Blumenthal Bone Rongeur 16cm / 6 and 2/8"		2 each
35	Marquard Bone Rongeur 20.5cm / 8 and 1/8"		2
36	Echlin Bone Rongeur 23cm / 9", curved tip		2
37	leksell-Stille Bone Rongeur 24.5cm / 9 and 5/8"		2
31	Stille- Luer Bone Rongeur 23cmc /9" straight and curved		2
38	tip		2
39	Bone hook Blunt with wide ANGLE	230mm	1
40	Bone hook Sharp with wide ANGLE	230mm	1
41	K-Wire bender for 2mm, 2.5mm and 3mm	20011111	2 each
42	Locking pliers, SS, 20.5cm / 8 and 1/8 "		2
43	Flat Nose plier, parallel grip, TC gold- 18cm / 7 and 1/8"		2
44	Wire Bending plier for wires upto 2.5 mm	150mm	2
45	Parallel plier Flat nose	160mm	2
46	Plier for Scew removal	205mm	2
	Universal bending plier	165mm	2
47	Vice Grip	180mm	2
	*		
49	Extraction Pliers for Scews	Small and Large	2 each
<b>50</b>	wire cutter front action 38cm/15" for soft wires upto		2
50	4mm and hard wires upto 3.2mm		
51	Plaster saw electric		2
52	Plaster spreader		2
53	Periosteal elevator with Steel handle with Straight Shaft and Straight Edge	width 13mm, length 195/80mm	4
54	Periosteal elevator with Steel with Curved Shaft and Straight Edge	width 13mm, length 195/80mm	4
34	Periosteal elevator with Steel handle 18cm / 7 and	193/6011111	4
55	1/8", 06mm tip, straight and curved		4
56			2
57	Self retaining wound spreader 4 pronged Medium  Mc Donald's dissector double ended 18.5 cm /7 and 2/8 "		2
31			1
58	Bone Nibbler(Double Action)- Straight & Curved- (S,M &L)		1 each
	Bone Nibbler(Single Action)- Straight & Curved- (S,M &		1 each
59	L)		
60	SS Wire passer- Small & large		1 each
	Drill Sleeve 3.5 & 4.5mm screwswith eccentric and		1 each
61	centric		
62	Hollow Mill- 3.5 & 4.5 mm screw remover		1 each
63	Counter Sink set 3.5 & 4.5mm		1 each
64	Plate Bender - with lever action		1 each
65	Herrington Rod Cutter		1 each
66	Parallel Drill sleeve - 1.5 & 1.2mm		1 each
67	Lowmans Clamp (small & large)-self reataning		1 each
68	Plate Holder(small & large)-self reataning		1 each
	Point reduction Clamp- AO type (small & large)-self		1 each
69	reataining Patella Holding Clamp- self reataining- single & double		1 each
70	prongs		
71	External Fixator with Distractor Modality for Long bones		1 each
72	Femoral Head Gauge		1 each
73	Finger Saw		1 each
74	Cork screw for Femoral Head Extraction		1 each
75	Solid Reamer with Canullation- for Femur(7mm to		1 each
	•		

	13mm)	
76	Solid Reamer for Fore arm Bone (2, 2.5, 3& 3.5mm)	1 each
77	bone Awl for Fore arm Bones	1 each
78	bone Awl for Long Bones	1 each
	Reduction Forceps -serrated head (self reataining, with	1 each
79	guard and locking)	
80	Solid Screw Driver- 3.5 & 4.5 mm	1 each
81	Cannulated Screw Driver- 3.5 & 4.5 mm	1 each
82	Bone Punch	1 each
83	Broken Nail remover	1 each
84	Towel Clip - Large Size ; Self Holding	2
85	mastoid retractor L, M & Small	1 each
86	Humphrey's Skin Grafting handle with blade	1
	Small metal suction Canulla (S, M & L) suitable for Spine	1 each
87	Surgery	

	Sch.: 36	
Total hip replacement (THR) set (cemented, uncemented and bipolar)		
1 set includes :		
Shall be FDA/CE /BIS approved		
	turer should also have ISO certification for quality standards.	
	ensive training for OT staff and support services till familiarity with the system on site.	
Documer		
	chnical/Maintenance manuals to be supplied in English.	
	nce report to be submitted in a tabulated and point wise manner clearly mentioning the page/para	
	vith authenticated catalogue/manual, without which it will not be considered.	
	ments should be made of SS 316	
	as to quote all below instruments as a set.	
	tted THR instruments (1 No. Each)	
S. No.	Item	
1	Charnley's Self Retaining retractor	
2	Vacuum liner inserter 28 or 22 mm	
3	Mechanical liner inserter 22 mm or 28 mm	
4	Liner/ shell disassembly instrument	
5	Liner extractor	
6	Gun sight alignment guide	
7	Alignment rod	
8	Drill guide	
9	Screw driver universal	
10	Screw driver straight	
11	Modular universal handle	
12	Screw forceps 15*	
13	Flexible depth guage	
14	A Frame Alignment Guide	
15	Liner provisional 46x(22or 28mm)	
16	Liner provisional 48x(22or 28mm)	
17	Liner provisional 50,52,54,56x(22or 28mm)	
18	Shell provisional's 46mm	
19	Shell provisional's 48mm	
20	Shell provisional's 50mm	
21	Shell provisional's 52mm	
22	Shell provisional's 54mm	
23	Shell provisional's 54mm	
24	Flexible drill bit 15mm, 30mm and 45mm	
25	Impacting plate for shell for various sizes	
43	Impacting place for shell for various sizes	

26	Acetabular cup pusher
27	Impactor lock nut
28	Acetabular cup remover
29	Acetabular reamer 40mm or 42mm
30	Acetabular reamer 44mm
31	Acetabular reamer 46mm
32	Acetabular reamer 48mm, 50,52,54 and 56mm
33	Shaft for Acetabular reamer
34	Coupling handle for shaft
35	Nylon face Impactor
36	Cup Impactor-positioner
37	Screw for left forceps 45*
Unceme	nted THR
S. No.	Item
1	Osteotomy guide 9-10mm, 11, 12-13, 14-15
2	Box osteotome small
3	Tapered awl
4	Thandle with chuck
5	Trochanteric reamer
6	IM Reamer 9 to 15mm in 0.5 mm increment
7	Rasp 9,10mm, 11,12,13,14,15mm
8	Rasp alignment tip 9,10,11,12,13,14,15
9	Rasp tip wrench
10	Cal car planer
11	Cone provisional 09/10,11,12/13,14/15
12	Femoral HEAD provisional 22mm
13	Femoral head provisional 28mm
14	Rasp handle
15	Alignment rod
16	Stem Impactor
17	Stem driver/inserter adaptor
18	Extractor hammer
19	Head Impactor
20	Tommy bar
	1
Total Hi	p Replacement (Cemented) instruments-
S. No.	Item
1	Osteotomy template
2	Box osteotome
3	Taper reamer
4	Trochanteric reamer
5	Straight reamer9mm
6	Muller Rasp of various sizes
7	Rasp handle
8	Cone provisional
9	Allen medullary plug of various sizes
10	Allen plug introducer
11	Cement restrictor plate and seal
12	Femoral pressuriser plate and seal
13	Muller stem Impactor
14	Stem extractor
15	Head trials 22/28 mm XS
16	Head trials 22/28 mm XM
-	

17	Head trials 22/28 mm XL
18	HEAD Impactor
19	Acetabular reamer of various sizes
20	Shaft for Acetabular reamer
21	Coupling T handle
22	Reamer adapter
23	Acetabular cup trials 43,45,47,49,51,53,55,57,59
24	Cup pusher cum positioner
25	Alignment rod
26	Pusher rod with plastic head 22 and 28 mm
27	Acetabular preparation drill with stop 9,11,13mm
28	Stem holder
29	Bone cement gun: Cartridge Type, Clear Cartridge-disposable Blade, Two-speed injection
	gun, large selection of nozzles, Up to 3 batch capacity for any application

Sch.: 37		
Set for knee replacement (Cemented)		
01 Nos	01 Nos	
	FDA/CE/BIS approved	
	ments should be made of SS 316	
	as to quote all below instruments as a set.	
S. No.	Item	
1	Intramedullary Drill w/Step	
2	IM Femoral A/P Sizing Guide	
3	Universal Handle Peg Driver	
4	Intramedullary Alignment Guide 9 & 4 Inches	
5	Anterior Femoral Cutting Guide 1x2	
6	Rotational Alignment Guide	
7	IM Distal Femoral Cutting Guide	
8	IM Femoral A/P Measuring Guide	
9	IM Femoral Finishing Guide of various sizes	
10	Trochlear Recess Finishing Guide of various sizes	
11	Notch / Chamfer Guide of various sizes	
12	Alignment Rod, Alignment rod with Coupler	
13	Extramedullary Alignment Arch	
14	Femoral Trial Left and Right of various sizes	
15	Universal Femoral File	
16	IM Femoral Impactor	
17	Spacer/Align Guide of various sizes	
18	Femoral Provisional Extractor	
19	T. Handle with Chuck	
20	ExtramedullaryTibial Cutting Guide	
21	Universal Ligament Retract Spring	
22	Tibial Depth Resection Gauge 1 nos	
23	Femoral Recutter 1 nos	
24	Stemmed Tibial Sizing Plates of various sizes	
25	Tibial Provisional / Holding Clamp 1 nos	
26	Cemented stemmed drill guide on e	
27	Cemented stemmed tibial drill	
28	Stemmed tibial broaches of various sizes	
29	Tibial provisional extractor	
30	TibialImpactor	
31	Stemmed tibial provisional Impactor	

32	Short spring screws pins
33	Grooved shout head holding pins
34	Holding pins
35	Headless holding pin
36	Hexhead holding pins
37	Tibial resection guide
38	Articular surface insertion instrument
39	Articular surface removal instrument
40	Female hex driver/extractor
41	Patella tendon retractor
42	Hex head screwdriver
43	Holding pin plier
44	Patellar clamp
45	Patellar drill guides
46	Patellar saw guide
47	Patellar/femoral drill
48	Patella trials of various sizes
49	Female hexa screw driver
50	Varus / valgus tibialrecutter
51	LPS Articular Surface provisional locking screw
52	Stemmed tibial plate provisional of various sizes
53	Townley femur caliper
54	Tibial retractor
55	Slap hammer
56	Bone screw drill 3.2mm
57	Recutter 2mm
58	A/Surface trial of various sizes

	Sch. 38	
	Interlocking Nailing Set for Long Bones	
1	The instruments quoted should be of high quality and standard	
	Instrument should be European CE or USFDA or BIS approved & copy to be	
2	enclosed	
	Bidder has to quote all the Instruments as a set and rate for each Instrument should be	
3	quoted	
4	The instruments must be ISO certified and copy to be enclosed.	
	The part number and name of manufacturer should be engraved on the each	
5	instrument	
6	Dimension mentioned is approx only.	
7	Material – titanium ( Instruments)	
8	Demonstration of the Set is must.	
Sl No	Name of the Item	Qty
	Drill Bit, 3.2mm dia., L 225/200mm for quick	2
1	coupling	
2	Holding Sleeve, large, L 120mm	1
3	Screwdriver, hexagonal, large, L 280mm	1
4	Pin Wrench, 4.5mm, L 120mm	1
5	Combination Wrench, 11/14mm, L 150mm	1
6	Awl, small, L 210mm	1
7	Tissue Protector, L 140mm	1
8	T-Handle with quick coupling, L 85mm	1
9	universal Nail & screw removing kit	1
	Hand Reamer, 8.0mm dia., for predrilling in	1
10	pseudarthroses	
11	Reaming Rod, 2.5mm dia., L 950mm, 3.5mm olive	1

12	Flexible Shaft, 7-13mm with 0.5mm increments dia., reaming depth to 470mm	1 each
13	Cleaning Brush for 3.6mm Flexible Shaft, L 600mm	]
14	Reduction Head, straight	1
15	Reduction Head, displacement 2.5mm	1
16	Reamer Head, 8.5mm dia.	1
17	Reamer Head, 9.0mm dia.	1
18	Reamer Head, 9.5mm dia.	1
19	Reamer Head, 10.0mm dia.	1
20	Reamer Head, 10.5mm dia.	1
21	Reamer Head, 11.0mm dia.	1
22	Reamer Head, 11.5mm dia.	1
23	Reamer Head, 12.0mm dia.	1
24	Reamer Head, 12.5mm dia.	1
25	Reamer Head, 13.0mm dia.	1
26	Reamer Head, 13.5mm dia.	1
27	Guide Rod, 3.0mm dia., with flat tip	1
28	Socket Wrench 11mm, cannulated, L 180mm	1
29	Driving Piece, curved, L 120mm	1
30		1
31	Guide Rod, cannulated, L 455mm	1
32		1
33	Grip, flexible, L 170mm	1
34	*	1
	Threaded Bolt, conical, for Tibial Nails 9.0 to	1
35	14.0mm dia.	
36	Knurled Nut for Tibial Nails 9.0 to 12.0mm dia.	1
	Insertion Handle, for Femoral Nails 9.0 to 12.0mm	1
37	dia.	
	Threaded Bolt, conical, for Femoral Nails 9.0 to	1
38	12.0mm dia	
39	Knurled Nut for Femoral Nails, 9.0 to 13.0mm dia.	1
40		1
41	Drill Sleeve 8.0/4.5	1
42	Insert Drill Sleeve 3.2	1
43	Trocar 8.0mm dia., L 110mm	1
44	Depth Gauge for Locking Bolts	1
	Drill Bit, 4.0/4.5mm dia., L 225/200mm, for quick	2
45	coupling	
46	Holding Forceps for Reaming Rod 2.5mm	1

SI	Sch.39
NO.	Fracture reduction OT tables
1	Each orthopedic table along with its accessories must be able to perform orthopedic trauma
1	surgeries, arthroscopy, pediatric orthopedics, spine and standard replacement surgeries
	Table must have the following standard features:
1	Radiolucent table top made up of Carbon Fiber or equivalent for orthopedic use
2	Radiolucent top for orthopedic use:
a)	Three or more sectional back plate
b)	Seat plate with detachable buttock support
c)	Radiolucent Perineal Post- child and adult size
d)	Detachable divided leg plates
e)	Should be able to slide longitudinally more than 250mm both side.
3	Should have provision for Eccentric Position.
4	Two foldable and detachable radiolucent traction bars fixed beneath the seat plate with two
4	adjustable pivot joints.
5	Accessory side rails for attaching accessories entire length of the table top. Rail should accept

6	standard accessories.  Hygenic steel base.
7	Additional radiolucent attachment/ plate for orthopaedic intervention in paediatric patients
8	Detachable pads made of foam core, approximately 50mm thick, should be molded and radiolucent
9	Deleted.
10	Table measurements and control panel:
a)	Table Top height range- 70cm – 120cm
b)	Trendelenburg/ Reverse Trendeleburg –upto 30 degree
c)	Lateral Tilt- 15-30 degree
<u>d)</u>	Motorised back plate up 80-90 degree and down upto -40 degree
e)	Hand control and Battery control for various table functions.
f)	Battery capacity for approximately 2 weeks with average use
g)	Can be operated directly from the mains for all electro hydraulic and Manual override movements
h)	Patient weight capacity >180kg for all positions.
i)	Handset can be connected on either side of the table (head or foot end).
i)	Length: 210 – 220cm
k)	Width: more than or equal to 50 cm without side rails.
1)	Table should be able to bring to zero position with single button
	Each table must be provided with the following accessories:
1	Hand operating table
2	Lateral brace kit for total hip replacement
3	Accessory for bilateral hip surgery
4	Body strap
5	Traction bars radiolucent-02
6	Total Knee Flexion and Support System for knee arthroscopy
7	Well Leg Support system
8	Traction boot small pair with multiplanner rotation
9	Traction boot large pair with multiplanner rotation
10	Radiolucent Arm Boards with Pad(2)
11	Beach chair position system with helmet type head rest for position of the patient along with
11	radiolucent. shoulder plates
12	Skull traction and head rest for cervical spine surgery
13	Accessories for genucubital position
14	Accessories for genupectoral position
15	Mayfield attachment for cervical spine
16	Accessories for interlocking nailing of humerus and tibia,
17	Accessories for interlocking nailing for femur in supine position
18	Anaesthesia screen with clamp
19	Silicone Gel pads (One set each) for various patient
a)	Gel pads as Head ring: open and closed type for both adult and pediatric use separately
B)	Gel pads for head rest in supine, prone and lateral positions separately for adults and children
c)	Gel pads as operating table pad, perineal table pad, sacral protector, arm protectors
d)	Gel pads for flexed knee in positions for spine surgery
e)	Gel pads thigh, leg, heel
f)	Gel pads for different positions
20	Thigh Bolster- 1 set- for arthoscopic applications
21	Hand Traction Kit
22	Cushions (One set each): as foam pads for different positions: Head ring, lateral positioning, leg rest cushion, cushions especially for spine surgery
	Should include below Pediatric accessories-
22	a) Pediatric traction boot.
23	b) Side post.
	c) Perineal post
24	Two or more detachable shoulder segment
25	Should be US-FDA or European CE with 4 digit notified body number or Declaration of
	conformity for quoted model along with ISO 13485 or BIS certified for the quoted model

26	Manufacturer should be ISO certfied for quality standards
27	Electrical safety conforms to standards for electrical safety IEC 60601-1 General Requirements (or
21	equivalent BIS Standard)
	Shall meet internationally recognised standard for Electro Magnetic Compatibility (EMC) for
28	electromedical equipment: IEC-60601-1-2: latest edition Or Equivalent BIS or should comply with
	89/366/EEC; EMC-directive as amended:
29	Certified to be compliant with IEC 60601-2-46: Particular requirements for the safety of Operating
29	Tables: latest edition or equivalent
	The IEC certificate namely IEC 60601-1, IEC-60601-1-2, IEC 60601-2-46 along with full test
30	report as per IEC guideline for the quoted model should be submitted from anyone of the labs
30	mentioned below TUV, SGS, Intertek, UL, SAMEER, Bharat Test House, Astute Labs or from the
	labs in their country of origin.

#### Sch.: 40 Simple Operation Table

#### 1 Description of Function

1.1 Hydraulic operating Tables are simple tables for performing surgical procedures and they work without electrical power.

#### **2 Operational Requirements**

2.1 OT Table is required for general surgery and should have X-Ray transluscent tops.

#### **3 Technical Specifications**

- 3.1 a. Four/five section table top with divided foot section
- b. Table top should permit x-ray penetration and fluoroscopy
- c. All table positioning, i.e., height, back section, lateral tilt, trendelenburg, and anti-trendelenburg, except foot and head section should be operated hydraulically
- d. Should have a manual position selector
- e. The casings on the frame and centre supporting column should be made of hygienic stainless steel
- f. Mattress should be radioluscent and suitable for fluoroscopy
- 3.2 Measurements:(**Tolerance of ±5% acceptable**)
- a. Height: 700-1040 mm (with 50 -70mm mattress)
- b. Side tilt: + 15-20 degrees
- c. Back section adjustment: 15 degrees to 70 degrees
- d. Foot section adjustment: 90 to 0 degree, detachable
- e. Trendelenburg: 25-30 degree
- f. Anti trendelenburg: 25-30 degree
- g. Head section adjustment: -40 to -30 degree, detachable
- h. Width: 600 mm
- i. Length: 2000 mm
- 4 System Configuration Accessories, spares and consumables
- 4.1 System as specified
- 4.2 ACCESSORIES: All accessories including the ones listed below should be quoted. The specific accessories and their quantity will depend upon actual requirement
- a. Padded arm rest with straps pair with clamps
- b. Anaesthesia screen with clamps
- c. Side supports: pair with clamps
- d. Shoulder supports: pair with clamps
- e. Knee crutches for lithotomy position: pair with clamps
- f. X-ray cassette tray

#### 5 Standards & Safety

- 5.1 Should be US-FDA or European CE with 4 digit notified body number or Declaration of conformity for quoted model along with ISO 13485 or BIS certified for the quoted model
- 5.2 Manufacturer and supplier should be ISO 13485 certfied for quality standards

Sch.: 41

	Pneumatic drill and reamer
1	Handpiece Heavy duty Push quick release
1	Operating pressure: 6 - 7 bars
	Weight of handpiece 600-800grams without any attachments
	Variable Speed from 0-900 rpm
	Separate forward and reverse triggers
	Instant change between clockwise and counterclockwise rotation
	Drill Chuck
	Quick coupling for drilling & Tapping & screwdriving
	Connecting Hose
	Reamer attachment - Flexible
	DHS/DCS Triple Reamers attachment
2	Radiolucent drill
2	Drill Bit 2.00 mm
	Drill Bit 2.50 mm
	Drill Bit 2.70 mm
	Drill Bit 3.20 mm
	Drill Bit 4.00 mm
	Drill Bit 4.00 mm Cannulated
3	K wire attachment with separate light weight handpiece
4	Torque Limiter attachment 1.5 NM
	Torque Limiter attachment 4.5 NM
5	Oscillating Saw Attachment
	Saw Blades (assorted) 14- standard thickness & length to be supplied
	Reciprocate-Saw-Attachment
	Saw Blade f/Reciprocate-Saw 80*1.05
	Trinkle Adapter
6	Aluminium case for Pneumatic Drill system, Perforated, Autoclavable - 1 no
7	Aluminium Box for accessory attachment, Perforated, Autoclavable - 1 no
8	It should be European CE with 4 digit notified body number/BIS/US FDA for the quoted model
	ELECTRIC OPERATED DRILL & SAW
1	Electric driven, autoclavable, versatile, forward & reverse mode with oscillating saw handpieces
2	Following are the general guidelines – it should be able to perform orthopaedic procedures of
	drilling, intramedullary reaming, sawing etc
3	Driving unit:- Includes motor, sturdy stand with wheels
4	Flexible shaft:- Minimum length-2 meters Autoclavable quick connection
5	Hand Piece for Drill:- Cannulated Autoclavable Pistol Type
	- Speed-1200 to 1500 RPM.
	- Jacob chuck.
	- Quick coupling chuck (AO type).
	- Hudsons chuck.
	-Light weight Chuck for K-wire.
	- Forward & Reverse options.
6	Hand Piece for Reamers :- Cannulated Autoclavable Pistol Type
	- Speed-400 RPM minimum.
	- Chuck for cannulated Reamers.
	- Forward & Reverse options.
7	Hand Piece for Saggital Saw:- Autoclavable Pistal Type
	- Easy Attachments of blades (without Instrument)
8	2 Blades each of different size used routinely in Orthopaedic surgery (Total No, 10).E8
9	It should be European CE with 4 digit notified body number/BIS/US FDA for the quoted model

	Sch. 42
	Electrical drill and reamer set
1	Electric driven, autoclavable, versatile, forward & reverse mode with oscillating saw handpieces
2	Following are the general guidelines – it should be able to perform orthopaedic procedures of drilling,

	intramedullary reaming, sawing etc
3	Driving unit:- Includes motor, sturdy stand with wheels
4	Flexible shaft:- Minimum length-2 meters Autoclavable quick connection
5	Hand Piece for Drill:- Cannulated Autoclavable Pistol Type
	- Speed-1200 to 1500 RPM.
	- Jacob chuck.
	- Quick coupling chuck (AO type).
	- Hudsons chuck.
	-Light weight Chuck for K-wire.
	- Forward & Reverse options.
6	Hand Piece for Reamers :- Cannulated Autoclavable Pistol Type
	- Speed-400 RPM minimum.
	- Chuck for cannulated Reamers.
	- Forward & Reverse options.
7	Hand Piece for Saggital Saw:- Autoclavable Pistal Type
	- Easy Attachments of blades (without Instrument)
8	2 Blades each of different size used routinely in Orthopaedic surgery (Total No, 10).E8
9	It should be European CE with 4 digit notified body number/BIS/US FDA for the quoted model

SN	Sch. 43	
	Mobile C-Arm  Equipment should have AERB Type Approval Certificate for radiation safety	
	The offered model should be European CE with 4 digit notified body number or USFDA	
	or BIS for the quoted model.	
A	X-RAY GENERATOR	 
1	Frequency: 40 KHz or better	 
2	Power output: 2 KW or more	
3	KV range: 40-110 KV or better	
4	mA in radiography : 20mA or more	
5	3 mA or more in normal fluoroscopy and 8 mA or more in High Level Fluro	
	Should have facility for continuous fluoroscopy and Pulse fluoroscopy (Pulse rate upto	
6	8 pulse per second)	
7	Should have Digital Spot for high quality single image, 10 mA or more	
8	Housing heat capacity of minimum 400 KHU or fluroscopy time 30 min minimum	
В	X-Ray tube Head	
1	Must have anode heat capacity of min 40,000 HU & cooling rate of min 25,000 HU/Min	
2	Should have dual/Single focal spots	
3	Collimation: motorized iris and motorized rotating blades	
4	Tube assembly filtration of 3.0 mm Al or higher	
C	C-Arm mechanism and control panel	
1	Locks for stabilization at desired position	
2	It should have the following range of movements:	
3	Motorized vertical movements more than 400mm	
4	Horizontal travel: 200mm or more	
5	Orbital movement: (-) 30 deg. To (+) 90 Deg. (120 Deg. Or more)	
6	Swing / panning movement : +/- 10 degrees or more	
7	Source image distance : 950 mm or more	
8	Depth of c-arm: 650 mm or more	
D	Control panel (Digital work station)	
1	It should have the following facilities:	
2	System should have capabilty of Pulse Fluoroscopy option to reduce to radiation	
	exposure with 1-10 pulse per second, which should be easily user selectable	 
3	Fluoroscopy and Radiography exposure on switching	 
4	Image rotation from control panel	 
5	Image intensification, mode selection (normal and zoom)	

6	Automatic brightness stabilizer		
7	Auto dose rate control		
8	Collimation for radiography .		
E	Integrated image processing, recording and memory system:		
a)	Image intensifier tube		
1	Input diameter 9" with dual field (9/6)		
2	Minimum central resolution (at monitor): 1.4 lp/mm or better at 9" FOV		
b)	CCD camera		
1	CCD camera with 1kx1k resolution for high resolution image acquisition		
c)	Integrated image processing, memory and recording system should have		
1	Medical Grade Monitors (Two Nos.)		
	Min 18 inch or more, black and white, flicker free, high resolution (1280x1024 pixels or		
2	better), medical grade flat screen TFT, manual control of brightness and contrast,		
	mounted on mobile trolley with locking device		
f)	Digital image processor		
1	Provision to record multiple images on CD,DVD& USB with embedded DICOM		
1	viewer.		
2	Image processing at 1K * 1K Matrix		
3	Contrast enhancement, edge enhancement, zoom facility		
4	Recursive filter		
5	Last image hold		
6	Image rotation, vertical and horizontal reversal		
7	Medical imaging software's with ability to store 5000DICOM Compatable images in		
/	internal storage or equivalent video		
g)	Additional features		
1	The equipment should work on a Power supply of 220-240 Volts, 50-60 Hz, 15 amp.		
3	Lead Aprons with all round protection (0.5mm lead equivalent approved by BARC)		
4	Lead Aprons with front protection (0.5mm lead equivalent approved by BARC)		
5	Thyroid shield (0.5mm lead equivalent approved by BARC)		
6	Lead Eye glass		
7	Thermal Printer- Compatible for Printing Images		
SN	BOQ	Qty	UOM
1	C arm as specified	1	Nos
2	Lead Aprons with all round protection	2	Nos
3	Lead Aprons with front protection	6	Nos
4	Thyroid shield	3	Nos
5	Lead eye glasses	2	Nos
6	Thermal Printer- Compatible for Printing Images	1	Nos
		•	1

Sl.	Sch. 44
No	Arthroscope
A	Bidder will be responsibale for installation and commissioning of complete high definition arthroscopy system in modular theatres.
В	Arthroscopy set complete with high definition camera, HD monitor minimum 19" Scope, general instruments shaver system, ACL reconstruction set arthroscopy pump system.
C	Arthroscopy shoulder surgery set and arthroscopic ankle surgery set imaging system
D	High definition camera system
1	Camera console 220 v with universal coupler & auocalavable /ETO /Sterilizable camera head.
2	Pure Digital signal with high definition video (1920*1080p native resolution)
3	Deleted
4	Automatic settings
5	integrated flexible scope filter
6	Signal to noise ratio 70 dB or less
7	progressive scan technology both on camera head & console
8	brightness control on console&camera head
9	Deleted

10	Automatic Image Enhancer on console		
11	Optical zoom, autofocus & white balance on camera head		
12	integrated gain/shutter/enhancement with brightness control		
13	Two peripheral control on cemera head		
E	Xenon/LED light source		
1	light source xenon 300 watts or equivalent LED light source		
2	colour temperature 6000 k,		
3	universal jaw for accepting any make fiber optic cable adjustable light intensity from 0 to 100 percent		
4	one spare xenon lamps 300 watt ( <b>Incase of xenon source only</b> )		
5	fiber optic cable		
F	High definition LEDmonitor 19 or more"		
1	High Definition monitor, screen minimum 19", resolution 1920 x 1080p.		
2	option for wall mounting and desktop in same unit.		
G	Arthroscope Set		
	HD telescope 4mm, 30 Deg connect Arthroscope Sheath 5.9mm. Obturator for sheath 5.9mm obturator		
1	for sheath HOOK probe.		
	HD telescope 4mm, 70 Deg connect Arthroscope Sheath 5.9mm. Obturator for sheath 5.9mm obturator		
2	for sheath HOOK probe.		
3	Straight punch, cutting width 15 deg upbiter 30 deg left cutting 30 deg right( <b>One Each</b> )		
4	Cutting 90 deg left cutting 90 deg right cutting foriegnbody grasper with lock .(One Each)		
Н	Shaver system		
	Electronic control unit -1No. Foot control -1No. Handpiece Autoclave RPM <b>8000 or more</b> – 1No.		
1	Microdriver with drilling, wiring and micro saw attachment – 1No. Full radius resector -2Nos. End		
	cutter-2Nos. Aggressive cutter-2Nos. Meniscs cutter-2Nos. Oval Burr-2Nos.		
I	ACL Reconstruction Set		
1	Tendonstripper-open ended and closed ,all sizes		
2	Thickneess tester		
3	Tibial guide		
4	Femoral offset guide 4,5,6,7 mm		
5	Reamers 4,5,6,7,8,9,10		
6	Length guage for measuring the tunnel		
7	Reaming wire		
8	Currette		
9	Rasp		
J	Graft preparation board specifications		
1	Graft board with gliding sliders for easy and single handed operation		
2	Suitable for singal bundle, double bundled and bone tendon bone BTB repairs		
3	Compatible with endobutton type fixation devices.		
4	Built in seizers for the graft(both soft tissue and bone)		
5	Provisions for specific graft tensions		
6	Graft clamp teeth for secuing graft for tensioning during preparations		
K	Arthroscopoe pump system with Tubing		
1	Pole mount/stand alone console with autoclavable remote control		
2	Maximum flow rate of 1500- 2000 ml/minute with maximum pressure upto 120-150 mmHg		
3	Arthroscope Inflow/outflow tubing set		
L	High Definition Recording system		
1	Should be able to record Real time, Full HD(1920x1080p) digital video		
2	Stereo audio Input		
3	Disc Capacity of <b>320GB or more</b> and recording system should be windows XP/ Higher base		
4	Touch screen( Minimum 8") Control panel interface		
5	Multi session disc recording capability supports file formats for images: Bitmap(BMP), JPEG, JPEG2K		
6	Video inputs minimum <b>1 no.</b> S-video , <b>minimum 1 no.</b> composite ,1 XGA(1024X768) and 1 High -		
	Definition (1280X1024)		
7	Modular Cart		
7	<ul><li>front-locking casters</li><li>lipped top holds monitor</li></ul>		
	- tipped top tiolids ittorition		

• four equipment shelves
 • open back for equipment access

The system should be European CE/ US FDA/ BIS approved and all accessories should be from same manufacturer(20% of accessories may be from 3rd party with Euopean CE/ USFDA/ BIS certified)

	Sch. 45		
	Automatic External Defibrillator (AED)		
1	· Semi-automatic External Defibrillator compliant with American Heart Association 2010		
	Guidelines		
2	· Should have the ability to analyse rhythm automatically and shock should be delivered manually		
	after due warning.		
3	· Should have voice prompts in English		
4	· Should be supplied with long life non-rechargeable battery having capability to deliver atleast		
	100 shocks without replacing and should have a shelf life of atleast three years		
5	· Should be supplied with all accessories & carrying case		
6	· Atleast 10 nos of Disposable pads must be supplied along with.		
7	• Should be European CE with 4 digit notified body number or US FDA or BIS certified for the		
	quoted model		

	Sch.46			
	Automatic Tourniquet			
1	Electric power operated 220-240 volts			
2	Should be portable with moveable stand			
3	Built-in battery back-up of Approx. 30-45 minutes			
4	Automatic built-up of cuff pressure after operator setting the pressure with approx. range 100-450 mm Hg  Time setting 5-240 minutes in 5 minute increment			
5				
3	ALARM: Audible and visual alarm for over pressure, under pressure, exceeded set time tube kink, low			
6	battery.			
7	CONTROLS			
a	Manual alarm silence switch for operator			
b	Operator controlled time switch to read current alarm settings, increase or decrease settings and read			
D	elapsed time of cuff inflation			
c	Operator controlled pressure switch to read current settings, increase or decrease pressure settings, and			
	read current cuff pressure			
d	Operator controlled cuff switch to inflate or deflate the cuff			
8	Accessories			
	Reusable cuff with sleeves, reusable various sizes;			
a	Adult: Upper (18") and Lower limb (24") - 5 each			
b	<b>Pediatric:</b> Upper (8") and Lower limb (12") - 5 each			
c	Dual cuff, adult size 18" – 2 Nos			
d	Positive locking connectors with angled ports			
e	Cuff hose - 3			
f	Tourniquet stand			
g	Basket for accessories			
h	Carrying case for cuffs			
9	Should be European CE /US FDA/BIS certified for the quoted model			

SN	Sch.47 Digital Mammography	
	General description: Large field of view digital mammography system for general screening, diagnostics and interventional applications. The system should have US FDA or European CE with four digit notified body number certificate and certificate to be submitted.	
	The system should be AERB type approved.	

	The system should consist of:		
	Large field digital flat panel detector		
	2. Ergonomic examination gantry designed for mammography applications with motorized movements		
	3. Integrated digital acquisition system with user console and flat panel monitor		
	4. Single track dual focus mammography X-ray tube with additional beam filters and automatic collimator		
	5. High frequency generator		
	6. Exposure control system and selectable dose modes		
	7. Radiation shield and a mammography image receptor grid		
	8. Motorized compression device and compression paddles		
	9. Magnification device		
	10. Suitable hardware & software for Stereotactic breast Biopsy		
	TECHNICAL SPECIFICATIONS		
1	X-Ray Generator		
	a. High frequency generator type		
	b. 5.0 kW or more generator power		
	c. kV range: 25 to 35 or more in 1 kV steps		
	d. mAs range: 3 to 500		
	e. mA range: up to 100 or more		
	f. Exposure monitoring generator and tube load pre- exposure display		
	of the exposure parameters		
	g. Displayed parameters kV, mAs, target filter, density selection Auto record of the exposure parameters for each mammogram		
2			
2	X-Ray tube		
	a. Dual focus x-ray tube with small focal spot: 0.1 mm		
	b. Spot size large focal spot: 0.3 mm  c. Rotating Anode		
	c. Rotating Anode d. Anode heat storage capacity >150 kHU or more		
	e. Anode heat dissipation: 40 kHU/min		
	f. Beam or Target filter materials: mention the materials used.		
	g. Tube heat monitoring system / device/ program h. Tube current large focal spot (25-30kV): 100 mA		
	i. Tube current small focal spot (25-30 kV): 40mA		
3	Gantry assembly		
	a. Isocentric system		
	b. Motorized rotation and vertical movement		
	c. Dual speed movements		
	d. Rotation angle: +180 to -165 degree		
	e. Distance floor to image receptor:-70 to 140 cm		
	f. Source to image receptor distance (SID) : 62 cm or better		
	g. Wheelchair access		
	6. ************************************		
	h Face shield		
	h. Face shield i. Compression force display		

I	k. Automatic decompression after exposure	
	magnification stand with dedicated paddles	
	m. Magnification: 1.5 or more	
	n. Motorized compression force: 0 to 190 Newton or more	
	o. Maximum manual compression force: at least 175 N	
	p. Large paddle	
	q. Regular (19 x 23 )+/- 2 cm sliding paddle	
	r. Spot compression paddle	
4	Exposure control	
	a. Both manual and Auto mode (Automatic Technique selection) Should be available	
	b. Parameters controlled: kV mAs, filter	
5	Automatic technique selection	
	a. Parameters: Anode track, filter, kV mAs, and dose should be chosen automatically	
	Deleted	 
6	Collimator	
	a. Beam filter: 2 Nos. (Mo/Ag/Al) & Rh	
	b. Deleted	
	c. FOV can be modified manually and can also be selected automatically	
	based on the paddle and magnification platform	
7	Flat panel detector	
	a. Detector material (Amorphous Selenium or others) and Detector type     (Direct or Indirect)	
	b. Detector size:- 24 x30 cm (+/-1cm).	
	c. Pixel size: 100 um or less	
	d. DQE at 0 LP/mm: 60%	
	OR DQE at 5LP/mm: 29%	
	e. Deleted	
	f. Image depth>=14 bit	
8	g. Operating temperature: 20 to 30 degrees Celsius  Digital acquisition system	
0		
	Local storage capacity:8000 images & more      Preview image: <16 seconds	
	c. LCD image monitor	
	d. High luminance LCD: up to 500 cd/m2	
	e. Image annotation	
	f. Measurement functions	
	g. Automatic dose (Skin dose and average Glandular Dose) annotation	
	Automatic windowing	
	h. Multi format display	
	i. Zoom and roam	
	j. Image invert	
	k. Print layout for multi format printing	
	I. Integrated CD R/W	
	m. Thickness equalization (image harmonization)	
	n. Fine view (improved conspicuity)	
	1 ""	

1	o. Integrated quality Assurance program	
	p. Repeat reject analysis	
9	Connectivity	
	a. Autosend (Autopush)	
	b. Autoprint	
	c. Autodelete based on storage commitment	
	d. DICOM SEND (storage provide)	
	e. DICOM storage commitment (storage commitment user)	
	f. DICOM Work list (Modality work list user)	
	g. DICOM Query/ Retrieve user	
	h. DICOM Print (basic grayscale print user)	
	i. Verification service (verification provider)	
	j. DICOM CD	
10	Printer interface	
	a. Basic Grayscale print user	
	b. Validated printer list for hardcopy diagnostic	
11	Grid/ Breast support assembly	
	a. Grid ratio:5:1	
	b. Removal and installation of the grid/ breast support motorize	
42	c. Low attenuation carbon fiber support	
12	Accessories included	
	<ul><li>a. Pair of dual foot pedals</li><li>b. Radiation shield with 0.3 mm Pb equivalent at 49 kV</li></ul>	
	c. Face shield	
	d. Large paddle- 24x31cm (+/-2cm)	
	e. 19x23 cm paddle (+/-2cm)	
	f. Spot sliding compression paddle	
	g. Remote service modem	
	h. Deleted	
	i. User manual and technical documentation	
	j. UPS for power supply & backup of 30 minutes for the entire system	
	k. Dry view camera: 508 DPI or more, with 300 films each (size 18x24cm	
	and 24x30cm)	
	I. LED X-ray Film viewer with adjustable brightness; capable of holding 3	
	films of 14"x17" size. – 3 no.s	
13	Display workstation	
	a. Mammography diagnostic workstation	
	b. Two high contrast and resolution 5 MP LCD B & W monitors (Barco/NEC/Eizo make)	
	c. Multi-modality viewer to integrate with PACS and to view DICOM	
	images from other modalities.	
	d. Customizable having protocols	
	e. Dedicated mammography keypad	
	f. Customizable functions buttons	
	g. Patient list management tool	
	h. User selectable auto contrast modes	

<ul><li>i. On ling</li><li>j. Delete</li></ul>	ne storage capacity for > 15000 images	
,	e retrieval time to display (4 Views) : <4 seconds	
	minimum 6 GB	
	ant glass	
	otate, Invert	
•	rations and graphics	
	urements	
•	and roam	
•	ness and contrast	
	screen	
t. Contr	rast enhancement processing	
u. Intern	al DVD-ROM drive	
v. DICOI	M storage SCU/SCP	
w. DICON	// Query/ Retrieve SCU/SCP	
x. DICOI	M Print Storage commitment SCU	
y. DICOI	M Print (Color and B&W)	
z. DICOI	M Media interchange	
aa. TCP/IP	network layer	
The Si	ite Modification Work - Scope of Work – MAMMOGRAPHY	
Furnishing, Mammogra	pe of work includes complete Civil work, Electrical, Plumbing, Air-conditioning and Fire fighting for the construction of apply Centre	
2. While	preparing the plan, the following aspects have to be addressed.	
	should be taken to provide easy negotiation of the patient	
	trolleys through corridors and doors.	
	tion shielding for doors, walls, windows etc.	
	ture like desk, chairs, shelves etc.	
	ent stretcher and other furniture/ accessory to make the apply centre functional.	
	t of Site Modification Work for the area of 600sq.ft and Air- ng of Tonnage 6 TR will be considered for Ranking / Evaluation	
	over Bidders will have to quote the Unit Rates of the following ts of site modification work work.	
a) Civil wor		
b) Electrica	l work	
	itioning (HVAC)	
d) Interior I	Furnishing & Furniture	
e) Miscellaı	neous	
Sco	pe of work for Site Modification Mammography system:	
Dolotod		
Deleted		
The Mamm	nography CENTRE shall consist of the following rooms: graphy Room	

	b) Console room	
	c) Patient preparation room	
	The actual area of site modification work works done will be considered for payment, based on the site measurements.	
1 Civil work		
	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 Mammography equipment area.	
	iii. Platform for unloading and shifting the Mammography 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.	
	a. Flooring	
	600 x 600 mm vitrified tiles with 100mm tile skirting.	
	b. Painting	
	Two coats Plastic Emulsion Paint over 2 coats of wall putty including primer in patient preparation area, Lobby area, console room, Mammographyroom .	
	c. False Ceiling	
	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.	
2	Plumbing work	
2		
3	Plumbing work  All water pipes and fittings shall be of high density polythene of approved and standard make. The gratings shall be brass chrome plated. All plumbing	
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	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.			
5	Environment specifications:			
	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 ± 2° 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.			
6	Furniture:			
	a. Revolving chairs height adjustable, medium-back with hand-rest in the Control room, Radiologist room and viewing area. – 4 NO.S			
	b. Cupboard with laminate door shutters for storage of spare parts and			
	accessories and records as per requirement. – 2 NO.S			
	c. Drug trolleys for patient preparation area. – 1 No.			
	d. Name boards for all rooms			
	e. Tables for Workstation - 1 NO.			
	f. Changing rooms should have change lockers and dressing table.			
	g. Dustbins – 4 No's.			
	h. Deleted			
	All furniture items should be of standard make as mentioned in the table below.			
7	Miscellaneous:			
	a. Cabling of Network (LAN) connectivity for camera system, console system, workstation and computers etc.			
	b. Fire extinguisher Dry CO2 ABC type as required for the building safety 2 nos			
	LIST OF ITEMS AND SUGGESTED MANUFACTURERS.			
SL NO	ITEMS PREFERRED MAKES			
Α	FLOORING VITRIFIED TILES - Somany, Kajaria , H&R Johnson, RAK india			
В	PAINT - Dulux, Asian Paints ,Nerolac			
С	PLUMBING - Kohler, Jaguar , Grohe , Roca			
D	SANITARY ITEMS - CERA, Hindware, Parryware			
E	ELECTRICAL			
1	CABLES - Finolex, Havells ,V-Guard			
2	SWITCHES - Legrand, L&T, Crabtree , Roma			
3	DISTRIBUTION BOX , MCB - Legrand, L&T, Siemens, Havels			
4	LIGHT FITTINGS - Philips / Crompton / Wipro/Syska			
F	AIR CONDINTIONING - Daikin, Hitachi, Blue Star, Voltas,			
G	FURNITURE - HermenMiller, Godrej, Featherlite, Geeken			

	вод		
SI No.	Item Description	Qty	UOM
1	Digital mammography system with stereotactic biopsy	1	No
2	Dual foot pedals	2	No
3	Radiation shield	1	No
4	Face shield	1	No
5	Large paddle- 24x31cm (+/-2cm) - 1 Nos	1	No
6	19x23 cm +/- 2 cm sliding paddle - 1 Nos	1	No
7	Spot compression paddle - 1 Nos	1	No
8	Remote service modem	1	No
9	LED X-ray Film viewer	3	No
10	UPS for power supply & backup of 30 minutes for the entire system	1	No
11	Dry view camera: 508 DPI or more, with 300 films each ( size 18 X 24cm and 24X30cm)	1	No
12	Quality control toolkit	1	No
	Site Modification Work as per specification		
1	Civil works	600	sq ft
2	Electrical work	600	sq ft
3	Public health (plumbing and sanitary fittings).	600	sq ft
4	Air Conditioning	6	TR

#### **GENERAL TECHNICAL SPECIFICATIONS**

#### **GENERAL POINTS:**

#### 1. Warranty:

- a) Comprehensive Warranty as per Conditions of Contract of the TE document for complete Equipment from the date of installation, commissioning and 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 the bidder. Undertaking by the Principals that the spares for the Equipment shall be available for at least 10 years from the date of supply.

#### 3. Training:

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

- 4. Annual Comprehensive Maintenance Contract (CMC) of subject equipment with Turnkey:
  - a) The cost of Comprehensive Maintenance Contract (CMC) which includes preventive maintenance including testing & calibration as per technical/ service /operational manual of the manufacturer,

labour and spares, after satisfactory completion of Warranty period may be quoted for the period as specified in the List of Requirement on yearly basis for complete equipment (including Batteries for UPS, other vacuumatic parts wherever applicable) and Turnkey (if any). The supplier shall visit each consignee site as recommended in the manufacturer's technical/service/operational manual, but at least once in six months during the CMC period

- b) The cost of CMC may be quoted along with taxes applicable on the date of Tender Opening. The taxes to be paid extra, to be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such taxes and no claim for the same will be entertained later.
- c) Deleted.
- 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) Deleted
- g) All software updates should be provided free of cost during CMC.
- h) Failure of the above [4. e) to 4. g)] by the supplier, may lead to the forfeiture of the Bank Guarantee for Annual CMC.
- i) The payment of CMC will be made as stipulated in GCC Clause 21.

#### Turnkey / Site Modification Work (wherever applicable):

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

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

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

- **Note 1:** Bidder's attention is drawn to GIT clause 18 and GIT sub-clause 11.1 A (iii). The bidder 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 Electrical Safety Analyser/ Tester for Medical equipment to periodically check the electrical safety aspects as per BIS Safety Standards IS-13540 which is also equivalent to IEC electrical safety standard IEC-60601 is a part of the equipment. If the Electrical Safety Analyser/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:** Supplier should provide adequate training of personnel and supply only non-locked open software and standard interface interoperability conditions for networked equipment in hospital management information system (HMIS)
- **Note 4:** Training shall be given to the doctors, nurses, operators with proper training material, adequate operating manual & preliminary troubleshooting.

# **SECTION – VIII Quality Control Requirements**

Proforma for quality control of the manufacturer(s)

Tender Reference No.

Date of opening

Time

Name and address of the Bidder:

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

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

Signature and seal of the Bidder

#### SECTION - IX

#### **Qualification Criteria**

- 01. The Bidder must be a Manufacturer or its authorized agent.
- 02. (a) The manufacturer should have successfully executed at least three (03) supply orders/ contracts during last three years from the date of Tender opening, for the similar equipment performing similar functions and meeting major specification parameters of the quoted item, which is functioning satisfactorily in India.
  - (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.
  - (c) For the items as tabulated below, if the bid is being submitted by an authorized agent, Manufacturer should have own registered office/own registered service centre/100% Subsidiary company in India. Necessary document in the name of manufacturer/100% subsidiary company like GST Registration/Trade License to be submitted along with bid;

Sch. No.	Rfx. No.	Name of the Items
6	3000003995	Pulse oximeter
7	3000003996	Multi Para Monitors
8	3000003997	ECG machines
9	3000003998	Electro-surgical cautery unit
15	3000004004	Cystoscope & Resectoscope
18	3000004007	Flibre Optic Video Bronchoscope
21	3000004010	Anesthesia Work Station
22	3000004011	ICU monitor
23	3000004012	Defibrillator
24	3000004013	Defibrillator with CPR Monitoring and TC Pacing
25	3000004014	ICU Ventilator
29	3000004018	Volumetric Infusion pumps
30	3000004019	Syringe Infusion pumps

#### Note:

- 1. In support of 2 (a) & 2(b), the Bidder shall furnish Performance statement in the enclosed Proforma 'A'. The manufacturer as well as the Bidder shall furnish Satisfactory Performance/ installation Certificate in respect of above, duly translated in English and self-certified along with the tender.
- 2. The Bidder shall furnish a brief write-up, 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 Bidder shall also furnish details of Equipment and Quality Control in the enclosed Section VIII.
- 3. Notwithstanding anything stated above, the Purchaser reserves the right to assess the Bidder's capability and capacity to perform the contract satisfactorily before deciding on award of Contract, should circumstances warrant such an assessment in the overall interest of the Purchaser.
- 4. The 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.

Note: "If the bidder is a MSME, it shall declare in the bid document the Udyog Aadhar Memorandum Number issued to it under the MSMED Act, 2006. If a MSME bidder do not furnish the

<u>UAM Number along with bid documents, such MSME unit will not be eligible for the benefits</u> available under Public Procurement Policy for MSEs Order 2012."

<u>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.</u>

#### **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 along with the details asked for in SECTION –VIII: Quality Control Requirements.
- 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 from the date of tender opening)

Tender Reference No.	:		
Date of opening	:		
Time	:		
Name and address of the Bidder	:		
Name and address of the manufacturer	:		

Order placed by (full address of Purchaser)	Order number and date	Description and quantity of ordered goods and services (Model details, if any)	Value of order (Rs.)	Onte of contract  As per contract	•	Remarks indicating reasons for delay if any	Have the goods been functioning Satisfactorily (attach end user certificates as per format annexed)**
1	2	3	4	5	6	7	8

# Signature and seal of the Bidder

\*\* The documentary proof will be certificate(s) from the consignee(s)/end user(s) with cross-reference of order no. and date in the certificate duly self certified by the bidder authenticating the correctness of the information furnished. If at any time, information furnished is proved to be false or incorrect, the earnest money furnished will be forfeited.

# SECTION - X

TENDER FORM	_
То	Date
HLL Infra Tech Services Ltd., B-14A, Sector-62, Distt. Gautam Budh Nagar, Noida – 201307, UP	
Ref. Your TE document Nodated	
We, the undersigned have examined the above mentioned TE document, including an, dated (if any), the receipt of which is hereby confirmed. W deliver (Description of goods and services) in conformity with your attached herewith and made part of this tender.	Ve now offer to supply and
If our tender is accepted for Rate Contract, we undertake to supply the goods are mentioned above, in accordance with the delivery schedule specified in the Supply Or Contract.	
We further confirm that, if supply order is placed on us against Rate Contract, we performance security of required amount in an acceptable form in terms of Condition, if any, in Section-V – "Special Conditions of Contract", for due perform	GCC clause 5, read with
We agree to keep our tender valid for acceptance as required in the GIT clause 20, rea in Section - III – "Special Instructions to Tenderers" or for subsequently extended per We also accordingly confirm to abide by this tender up to the aforesaid period and thany time before the expiry of the aforesaid period.	riod, if any, agreed to by us.
We further understand that you are not bound to accept the lowest or any tender you above-referred tender enquiry.	u may receive against your
We confirm that we do not stand deregistered/banned/blacklisted by any statutor rules/procedures.	y Authorities as per govt.
We confirm that we fully agree to the terms and conditions specified in above including amendment/ corrigendum if any	mentioned TE document,
(Name and designation) Duly authorised to sign	(Signature with date) tender for and on behalf of

Tender Enquiry No.: HITES/PCD/MP/CLINICAL/RC-02/19-20 dated 01.06.2019

# 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 (<u>Please note, in the separate Notes & Attachment provided under Rfx information and not in the C-Folder Notes & Attachments</u>).

# SECTION - XIII

# BANK GUARANTEE FORM FOR EMD

Whereas (hereinafter called the "Bidder") 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 weof (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 Bidder withdraws or amends, impairs or derogates from the tender in any respect within the
period of validity of this tender.
(2) If the Bidder having been notified of the acceptance of his tender by the Purchaser during the period of its validity:-
a) fails or refuses to furnish the performance security for the due performance of the contract.
or
b) fails or refuses to accept/execute the contract.
or
<ul> <li>c) if it comes to notice that the information/documents furnished in its tender is incorrect, false, misleading or forged</li> </ul>
We undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both the two conditions, specifying the occurred condition(s).
This guarantee will remain in force for a period of forty-five days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.
(Signature of the authorised officer of the Bank)
Name and designation of the officer
Seal, name & address of the Bank and address of the Branch

 $Tender\ Enquiry\ No.:\ HITES/PCD/MP/CLINICAL/RC-02/19-20\ dated\ 01.06.2019$ 

# $\boldsymbol{SECTION-XIV}$

# MANUFACTURER'S AUTHORISATION FORM

To HLL Infra Tech Services Ltd, B-14A, Sector-62, Distt. Gautam Budh Nagar, Noida – 201307, UP
Dear Sirs,
Ref. Your TE document No, dated
We,who are proven and reputable manufacturers of(name and description of the goods offered in the tender) having factories athereby authorise Messrs(name and address of the agent) to submit a tender, subsequently negotiated and process the same further and enter into a contract with you against your requirement as contained in the above referred TE documents for the above goods manufactured by us.
We further confirm that no supplier or firm or individual other than Messrs (name and address of the above agent) is authorised to submit a tender, process the same further and enter into a contract with you against your requirement as contained in the above referred TE documents for the above goods manufactured by us.
We also hereby extend our full warranty, CMC as applicable as per clause 15 of the General Conditions of Contract, read with modification, if any, in the Special Conditions of Contract for the goods and services offered for supply by the above firm against this TE document.
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 than that which we would have quoted
directly. Yours faithfully,
[Signature with date, name and designation] for and on behalf of Messrs
[Name & address of the manufacturers]
Note:  1) This letter of authorisation should be on the letter head of the manufacturing firm and should be signed by a person competent and having the power of attorney to legally bind the manufacturer.

2) Original letter may be sent.

#### SECTION - XV

# BANK GUARANTEE FORM FOR PERFORMANCE SECURITY/ CMC SECURITY

То
CEO,
HLL Infra Tech Services Ltd,
B-14A, Sector-62, Distt. Gautam Budh Nagar, Noida – 201307, UP
Noida – 201307, O1
WHEREAS(Name and address of the supplier) (Hereinafter called "the supplier") has undertaken, in pursuance of supply order no datedto 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 upto(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 FOR ANNUAL COMPREHENSIVE MAINTENANCE CONTRACT

Annual CM Contract NoBetween			dated				
(Addre And	ess of He	ad of Hospital/Institut	te/Medical Colleg	e)			
(Name	& Addr	ess of the Supplier)					
	commi	issioning, handing ov to the above referre	er, Trial run, Tr	aining o	f operato	ors & warr	tract for supply, installation, ranty of goods) nensive Maintenance is hereby
Concid	1	2	3		4		5
	hedule	BRIEF DESCRIPTION	QUANTITY.	Maint	Annual Comprehensive Maintenance Contract Cost for Each Unit year wise*.		Total Annual Comprehensive Maintenance Contract
	No.	OF GOODS	(Nos.)	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	Cost for 3 Years [3 x (4a+4b+4c)]
				a	b	С	[e x ( ia + io + io)]
<ul><li>c)</li><li>d)</li><li>e)</li><li>f)</li><li>g)</li></ul>	maint next Turnle There penal Durin including Supplin 6 remaint All so The ban are contrawith the second supplication of the ban are contrawith the second supplication of the ban are contractions.	tenance, labour and s years as contained to years as contained to year years and calibrate years and calibrate years are years as years yea	pares, after satisfed in the above reference warranty during Corridor by double the supplier shall veration as per the ensignee site as record the date of the date of the corridor of the date of the corridor of the corrido	EMC period commence of cost of the date of cost of cos	ompletion ntract on and on 24 me period ach consisturer's se led in the ssful com during CN e) 2 monti ent to 2.	ignee's sit rvice/ tech manufactupletion of MC. hs after exy 5% of the Section X wenty one)	which includes preventive any period may be quoted for his for complete equipment and (days) X 365 (days) basis, with the for preventive maintenance nical/operational manual. The arer's manual, but at least once warranty period for preventive piry of entire CMC period] for a cost of the Equipmentas per CV of the TE document, along the days of issue of Annual CMC to Purchaser/Consignee.
h) i) j)	If the guara contra <b>Paym</b> the su	re is any lapse in the ntee for an amount o act) shall be payable to the terms: The payment terms:	performance of the Rsof the Consignee. The control of Annual CN basis after satill be made in Indiana.	the CMC (equival MC will lisfactory	ent to 2.5  ent to 2.5  e made a completion	contract, the 5 % of the against the ion of said	e proceeds Annual CMC bank e cost of the Equipment as per bills raised to the consignee by d period, duly certified by the
•	-	-	`		•		

# HLL Infra Tech Services Limited

	(Signature, name and address of Institute 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	
(Seal of the supplier) Date: Place:	

# SECTION - XVII

<u>CONSIGNEE RECEIPT CERTIFICATE</u>
(To be given by consignee's authorized representative)

To, M/s

2.

1)	Contract No. & date	:
	LC No: & date (for LC shipments)	:
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, Designation & Tel. No	:
9)	Seal of the Consignee	:
Сору	to,	
1.	M/s HITES	

Tender Enquiry No.: HITES/PCD/MP/CLINICAL/RC-02/19-20 dated 01.06.2019

#### SECTION – XVIII

#### FINAL ACCEPTANCE CERTIFICATE

(To be given by the Consignee)

received in good conditions along narks in Para no. 2 in accordance nissioned.
narks in Para no. 2 in accordance nissioned.
narks in Para no. 2 in accordance nissioned.
nent Note no dated
ade on that account.
Amount to be recovered

- The supplier has fulfilled its contractual obligations satisfactorily ##

- The supplier has failed to fulfil its contractual obligations with regard to the following:
  - o He has not adhered to the time schedule specified in the contract in dispatching the documents/drawings pursuant to 'Technical Specifications'.
  - o 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).
  - o The supplier as specified in the contract has not done training of personnel.
  - o The extent of delay for each of the activities to be performed by the supplier in terms of the contract is
  - o The amount of recovery on account of non-supply of accessories and spares is given under Para
  - o 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:

- 1) He has adhered to the time schedule specified in the contract in dispatching the documents/drawings pursuant to 'Technical Specification'.
- 2) 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).
- 3) Training of personnel has been done by the supplier as specified in the contract.
- 4) 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**

#### FORM OF INTEGRITY PACT

#### PRE-CONTRACT INTEGRITY PACT

This Pre-Contract Integrity Pact (herein after called the Integrity Pact) is made on $\31^{ST}$ $\$ day of the month of $\2018$ $\_$
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,

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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, t 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.
- 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

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<sup>\*</sup> 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.

# **SECTION-XX**

(Notice-cum-Cancellation Letter)

HLL Infra Tech Services Limited B-14A, Sector-62 Distt. Gautam Budh Nagar Noida – 201307, U.P.

Noida – 201307, U.P.		
	(Application where the Purchaser decided to short-close the R/C)	
	······································	
Sub:	Rate Contract for supply of	
Dear Sir,		
that the which accep (b) The quantities there is the control of th	been observed that there has been notable downfall in the prices after conclusion of the R/C and he stores are now obtainable on much lower rates (if it is possible to indicate a definite price at a the stores are now obtainable, the same can be counter offered to the R/C holder for their tance). The properties against R/C so far have not been to the requisite standard in as much as have been complaints from the user Departments in this regard, and conduct in performance of the R/C has not been satisfactory in respect of other reasons which can be indicated.	
Note: Purchas	er Officer has to assign any one or the other reasons as relevant.	
cancelled/with	ew of the above, it has been decided to short-clause the subject Rate Contract after (allow 15 days from the date of issue of the letter). The Rate Contract may be treated as adrawn after (date given for the withdrawal of the R/C). Any order placed by the ding Officers after the expiry of the notice period shall not be executed by you.	
	Your faithfully	

For and on behalf of the Purchaser

# **SECTION XXI**

# REVOCATION-CUM-CANCELLATION

(Application where R/C is revoked by the R/C Holder)

To,	
M/s H	LL Infra Tech Services Limited
B-14A	, Sector-62
Distt. (	Gautam Budh Nagar
	201307
U.P.	
Sub:	Rate Contract for supply of
oue.	Valid upto
	valia apro
Sir,	
ы,	
	It is not possible for us to continue to supply against the subject Rate Contract for the following reasons:-
	it is not possible for us to continue to supply against the subject Rate Contract for the following reasons
(a)	
(a)	
(b)	
	In terms of Clause of GCC, I/We hereby revoke the Rate Contract which will take effect 15 days from
the dat	e of receipt of this communication by your office. Formal Cancellation letter may be issued at the earliest.
	Yours faithfully
	(M/s)
Note for	or Purchase Officer:-
	The Purchase Officer is expected to issue the cancellation letter counting 15 days from the date
revoca	tion letter is received to HITES stating that:-
	C
	"In view of your letter datedthe Rate Contract is hereby treated
	as short-closed/withdrawn with effect from
	All orders placed prior to this cancellation are, however, to be executed at the
	earliest.
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## APPENDIX – A

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":-
    - 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.

- 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.
- 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.

- 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:
  - 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.

- 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 that 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,
  - a. reduce the minimum local content below the prescribed level;
  - b. 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

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.

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 / 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:

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 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
  - 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.
  - . Format of calculation of local content shall be as contained in **Enclosure-I**.

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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 / CDSCO
- 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

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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. 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	Total Cost	Percentage of
	(Domestic		Local Content
	Component)	b	c=(a/b)*100
I			
II			
III. Total Cost			
(Excluding tax and duties)			

#### Note:

- I. <u>Cost (Domestic Component)</u>: 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.
  - a. 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.
- b. 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.
- c. 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. <u>Total Cost</u>: Total cost may be calculated based on one of the following depending on data available. Each of these calculations should provide consistent result.
  - a. 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).
  - b. Ex-Factory Price of product minus profit after tax, minus warranty costs.

c. Market price minus post-production freight, insurance and other handling costs minus profit after tax, minus warranty costs minus sales and marketing expenses.

		Enclosure-II
Form to be	at for Affidavit of Self Certification provided on Rs. 100/- Stamp Paper	regarding Local Content in a Medical Device
1000	r	Date:
I	S/0,D/0,V	W/o, Resident
of	30.2 30 <b>3</b> 0.000 50 <b>3</b> 0	,
do he	reby solemnly affirm and declare as und	ler:
That issued	I will agree to abide by the terms and vide Notification No:	conditions of the policy of Government of India
under nomi	take to produce relevant records be	correct to best of my knowledge and belief and I fore the procuring entity or any authority so uticals, Government of India for the purpose of
That by me	the local content for all inputs which co e and I am responsible for the correctness	nstitute the said medical device has been verified so of the claims made therein.
be incan au purpo	correct and not meeting the prescribed whority so nominated by the Department se of assessing the local content, action	tion of the product mentioned herein is found to value-addition norms, based on the assessment of tof Pharmaceuticals, Government of India for the on will be taken against me as per Order No. P-Guidelines issued vide letter no. 31026/36/2016-
I agreand sl i) unit	nall make this available for verification	in the Company's record for a period of 8 years to any statutory authority: Manufacturer (Registered Office, Manufacturing
ii) iii)	location, nature of legal entity) Date on which this certificate is issue Medical devices for which the certific	ate is produced
iv) v) vi) vii) viii) ix)	Procuring entity to whom the certificate Percentage of local content claimed Name and contact details of the unit of Sale Price of the product Ex-Factory Price of the product Freight, insurance and handling	
x) xii) xiii)		
Autho	For and on behalf of orized signatory (To be duly authorized	(Name of firm/entity) by the Board of Director)