Advertisement No: BHU/FPA/N-3/2014/ **Dated: 28-02-2014**

BID DOCUMENT

(e - Procurement)

Supply of Medical Equipment in Trauma Centre, IMS

Issued On:

28-02-2014

OFFICE OF DIRECTOR
INSTITUTE OF MEDICAL SCIENCES
BANARAS HINDU UNIVERSITY
VARANASI-221005, INDIA

Checklist for Bid/Tender Submission

(The following check-list must be filled in and submitted with the bid documents)

Pre- Qualification Bid

Sr. No.	Particulars	Yes/No
1.	Have you attached the techno commercial unpriced bid form duly filled in appropriately?	
2.	Have you attached a copy of the last audited balance sheet of your firm	
3.	Have you attached the details of the income tax clearance certificate, proof of manufacturing unit/ dealership letter/ general order suppliers and copy of Central / State sales tax registration certificate?	
4.	Have you attached the copies of relevant work orders from Govt. Depts. / PSUs and Central Autonomous Bodies?	
5.	EMD: Have you submitted EMD asked for (as specified in BDS).	
6.	Have you submitted samples of all items indicated in the respective schedule of requirements at the address of tender inviting authority within due date.	
7.	Have you enclosed the schedule of requirement indicating the make offered without indicating the pricing components along with the techno commercial unpriced bid?	
8.	Have you submitted the bids both techno commercial unpriced and priced bid separately for each tender?	
9.	Have you enclosed the statement of deviations from financial terms and conditions, if any?	

Priced Bid:		
1.	Have you signed and attached the priced bid form?	
2	Have you attached the schedule of requirements duly priced?	

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PART 1 – BIDDING PROCEDURES

Section I: Instructions for Online Bid Submission

Instructions to the Bidders to submit the bids online through the Central Public Procurement Portal for e Procurement at https://eprocure.gov.in/eprocure/app

1) Possession of valid Digital Signature Certificate (DSC) and enrollment/registration of the contractors/bidders on the e-Procurement/e-tender portal are prerequisite for e-tendering.

2) Bidder should register for the enrollment in the e-Procurement site using the "Online Bidder Enrollment" option available on the home page. Portal enrollment is generally free of charge. During enrollment/registration, the bidders should provide only valid and true information including valid email id. All the correspondence shall be made directly with the contractors/bidders through email id as registered.

3) Bidder need to login to the site through their user ID/ password chosen during enrollment/registration.

4) Then the Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by SIFY/TCS/nCode/eMudra or any other Certifying Authority recognized by Controller of Certifying Authorities (CCA) India on eToken/SmartCard, should be registered.

5) The registered DSC only should be used by the bidder in the transactions and should ensure safety of the same.

6) Contractor/Bidder may go through the tenders published on the site and download the tender documents/schedules for the tenders.

7) After downloading / getting the tender document/schedules, the Bidder should go through them carefully and then submit the documents as required, otherwise bid will be rejected.

8) Any clarifications may be sought online through the tender site, through the contact details or during pre-bid meeting if any. Bidder should take into account the corrigendum if any published before submitting the bids online.

9) Bidder may log in to the site through the secured login by the user id/ password chosen during enrolment/registration and then by submitting the password of the e-Token/Smartcard to access DSC.

10) Bidder may select the tender in which he/she is interested in by using the search option and then move it to the 'my tenders' folder.

11) From my tender folder, he may select the tender to view all the details uploaded there.

12) It shall be deemed that the bidder has read and understood all the terms and conditions before submitting the offer. Bidder should go through the tender schedules carefully and upload the documents as asked; otherwise, the incomplete bid shall stand rejected.

13) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document/schedule and ordinarily it shall be in PDF/xls/rar/jpg/dwf formats. If there is more than one document, all may be clubbed together and provided in the requested format. Bidders Bid documents may be scanned with 100 dpi with black and white option. It is advisable that each document to be uploaded through online for the tenders should be less than 2 MB. If any document is more than 2MB, it can be reduced through zip/rar and the same if permitted may be uploaded. The file size being less than 1 MB the transaction uploading time will be very fast.

14) The Bidders can update well in advance, the documents such as certificates, annual report details etc., under "My Space option" and these can be selected as per tender requirements and then send along with bid documents during bid submission. This will facilitate the bid submission process faster by reducing upload time of bids.

15) Bidder should submit the Tender Fee/ EMD as specified in the tender. The hard copy should be posted/couriered/given in person to the Tender Inviting Authority, within bid submission due date and time as indicated in the tender. Scanned copy of the instrument should be uploaded as part of the offer.

16) While submitting the bids online, the bidder shall read the terms and conditions and may accept the same to proceed further to submit the bid packets.

17) The bidder has to select the payment option as offline to pay the Tender FEE/ EMD as applicable and enter details of the instruments.

18) The details of the DD/any other accepted instrument, physically delivered, should tally with the details available in the scanned copy and the data entered during bid submission time, otherwise submitted bid shall not be acceptable or liable for rejection.

19) The bidder has to digitally sign and upload the required bid documents one by one as indicated. Very act of using DSC for downloading the bids and uploading their offers shall be deemed to be a confirmation that they have read, understood and agreed with all clauses of the bid document including General conditions of contract without any exception.

20) The bidder has to upload the relevant files required as indicated in the cover content. In case of any irrelevant files, the bid may be rejected.

21) If the price bid format is provided in a spread sheet file like BoQ_XXXX.xls, the rates offered should be entered in the allotted space only and uploaded after filling the relevant columns. The Priced-bid/BOQ template shall not be modified / replaced by the bidder; else the bid submitted is liable to be rejected for the tender.

22) The bidders are advised to submit the bids through online e-tendering system to the Tender Inviting Authority (TIA) well before the bid submission due date and time (as per

Server System Clock). The TIA shall not be held responsible for any delay or the difficulties faced during the submission of bids online by the bidders.

23) After the bid submission (i.e. after Clicking "Freeze Bid Submission" in the portal), the acknowledgement number indicated by the system should be printed by the bidder and kept as a record of evidence for online submission of bid for the particular tender and also be used as entry pass to participate in the bid opening.

24) The time settings fixed in the server side and displayed at the top of the tender site, shall remain valid for all actions of requesting, bid submission, bid opening etc., in the e-Tender system. The bidders should follow such time during bid submission.

25) All the data being entered by the bidders would be encrypted using Public Key Infrastructure (PKI) encryption techniques to ensure the secrecy of the data. The data entered is not retrievable by unauthorized persons during the bid submission and until the time of bid opening by any person.

26) Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers' public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.

27) The confidentiality of the bids is maintained with the use of Secured Socket Layer (SSL) 128 bit encryption technology. Data storage encryption of sensitive fields is done.

28) The bidder should logout of the tendering system using the normal logout option available at the top right hand corner and not by selecting the (X) exit option in the browser.

29) For any queries regarding e-Tendering process, the bidders may contact at address as provided in the tender document. Parallely for any further queries, the bidders are advised to contact over phone: 1-800-233-7315 or send a mail to – cppp-nic@nic.in.

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Section II. Instructions to Bidders

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Section II. Instructions to Bidders

A. General

1. Scope of Bid

1.1 **Scope of Work :**

Supply of **<u>Medical Equipment</u>** as per Specifications

1.2 Throughout these Bidding Documents unless the context otherwise requires:

(a) "in writing" means communicated in written form (e.g. by mail, e-mail, fax, telex) with proof of receipt;

(b) "singular" means "plural" and vice versa; and

(c) "day" means calendar day.

2. Corrupt and Fraudulent Practices

2.1 The Purchaser requires compliance with its policy in regard to corrupt and fraudulent practices as set forth in Section V.

2.2 Further in pursuance of this policy, Bidder shall permit and cause its agents (whether declared or not), sub-contractors, sub-consultants, service providers or suppliers to provide access to purchaser to all the accounts, records and other documents relating to submission of the applicant, bid submission (in case prequalified), and contract performance (in case of award), to inspect and to have them audited by auditors appointed by the purchaser.

3. Eligible Bidders

3.1 A Bidder may be a firm, a company, a limited liability partnership (LLP), a government-owned entity or any combination of such entities in the form of a joint venture (JV) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent.

3.2 In the case of a joint venture, all members shall be jointly and severally liable for the execution of the contract in accordance with the Contract terms. The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the bidding process and during the contract execution in the event the JV is awarded the contract.

3.3 A Bidder shall not have a conflict of interest. Any Bidder found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest for the purpose of this bidding process, if the Bidder:

(a) directly or indirectly controls, is controlled by or is under common control with another Bidder; or

(b) receives or has received any direct or indirect subsidy from another Bidder; or

(c) has the same legal representative as another Bidder; or

(d) has a relationship with another Bidder, directly or through common third parties, that puts it in a position to influence the bid of another Bidder, or influence the decisions of the Purchaser regarding this bidding process; or

(e) participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid shall result in the disqualification of all Bids in which such Bidder is involved. This, however does not limit the inclusion of the same subcontractor in more than one bid; or

(f) any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the bid; or

(g) any of its affiliates has been hired (or is proposed to be hired) by the Purchaser for the contract implementation; or

(h) would be providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the project that it provided or was provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm; or

(i) has a close business or family relationship with a professional staff of the Purchaser (or of the project implementing agency, or of a recipient of a part of the loan) who:

(i) are directly or indirectly involved in the preparation of the bidding documents or specifications of the contract, and/or the bid evaluation process of such contract; or

(ii) would be involved in the implementation or supervision of such contract.

3.4 A foreign firm and individual may be ineligible if as a matter of law or regulations, India prohibits commercial relations with the country of bidder.

3.5 A Bidder shall provide such evidence of eligibility satisfactory to the Purchaser, as the Purchaser shall reasonably request.

B. Contents of Bidding Document

4. Sections of Bidding Document

4.1 The Bidding Documents consist of Parts 1, 2 ,3 and 4, which include all the Sections indicated below, and should be read in conjunction with any Addenda if any, issued.

PART 1 Bidding Procedures

- Section I. Instructions for Online Bid Submission
- Section II. Instructions to Bidders
- Section III. Bid Data Sheet (BDS)
- Section IV. Prequalification
- Section V. Policy of University against the Corrupt and fraudulent Practices.

PART 2 Supply Requirements

- Section VI. Schedule of Requirements

PART 3 Contract

- Section VII General Conditions of Contract
- Section VIII. Special Conditions of Contract

PART 4 Bidding and Contract Forms

- Section VIII. Bidding Forms
- Section VIII. Contract Forms

4.2 The Invitation for Bids issued by the Purchaser is not part of the Bidding Document.

4.3 Unless obtained directly from the Purchaser, the Purchaser is not

responsible for the completeness of the document, responses to requests for clarification, the Minutes of the pre-Bid meeting (if any), or Addenda to the Bidding Document. In case of any contradiction, documents obtained directly from the Purchaser shall prevail.

4.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Documents and to furnish with its Bid all information or documentation as required by the Bidding Documents.

5. Clarification of Bidding Documents, Site Visit, Pre-Bid Meeting

5.1 A Bidder requiring any clarification of the Bidding Document shall contact the Purchaser in writing at the Purchaser's address specified in the BDS or raise its enquiries during the pre-bid meeting if provided. The Purchaser will respond in writing to any request for clarification, provided that such request is received prior to the deadline for submission of bids within a period specified in the BDS. The Purchaser shall forward copies of its response to all Bidders who have acquired the Bidding Documents, including a description of the inquiry but without identifying its source. If so specified in the BDS, the Purchaser shall also promptly publish its response at the web page identified in the BDS. Should the clarification results in changes to the essential elements of the Bidding Documents, the Purchaser shall amend the Bidding Documents following the due procedure.

5.2 If so specified in the BDS, the Bidder is advised to visit and examine the project site and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for procurement of Goods. The costs of visiting shall be at the Bidder's own expense.

5.3 The Bidder and any of its personnel or agents shall be granted permission by the Purchaser to enter upon its premises and lands upon the express condition that the Bidder, its personnel, and agents shall indemnify the Purchaser against all liability in respect thereof.

5.4 If so specified in the BDS, the Bidder's designated representative is invited to attend a pre-bid meeting. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.

5.5 The Bidder is advised to submit any questions in writing to reach the Purchaser not beyond one week preceding the meeting.

5.6 Minutes of the pre-bid meeting, if applicable, including the text of the questions asked by Bidders, without identifying the source, and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Bidders who have acquired the Bidding Documents. Any modification to the Bidding Documents that may become necessary as a result of the pre-bid meeting shall be made by the Purchaser exclusively through the issue of an addendum and not through the minutes of the pre-bid meeting. Absence in the pre-bid meeting shall not be a cause for disqualification of a Bidder.

6. Amendment of Bidding Document

6.1 At any time prior to the deadline for submission of bids, the Purchaser may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the bidding documents by corrigendum. In case of e-procurement, corrigendum / amendment shall be published on http://eprocure.gov.in/eprocure/app .

6.2 Any addendum issued shall be part of the Bidding Documents and shall be communicated in writing to all who have obtained the Bidding Documents from the Purchaser. The Purchaser shall also promptly publish the addendum on the Purchaser's web page.

6.3 The Purchaser may, at its discretion to give prospective Bidders reasonable time in which to take an addendum into account in preparing their bids, extend the deadline for the submission of bids.

C. Preparation of Bids

7. Cost of Bidding

7.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Purchaser shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

8. Language of Bid

8.1 The Bid, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Purchaser, shall be written in the language specified in the BDS**.** Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages into the language specified in the BDS**,** in which case, for purposes of interpretation of the Bid, such translation shall govern.

9. Documents Comprising the Bid

9.1 The tender/Bid shall be submitted online in two part, viz., Technical Bid and Commercial Bid.

9.1.1 **TECHNICAL BID**

The following documents are to be scanned and uploaded as part of the Technical Bid as per the tender document:

(a) Scanned copy of Tender Forms (Techno Commercial Un-Priced Bid) and Tender Acceptance Letter);

(b) Scanned copy of the completed schedules,

(c) Scanned copy of Bid Security or copy of proof for submission of Tender Document Fee/ Earnest Money Deposit etc ;

(d) Scanned copy of written confirmation authorizing the signatory of the Bid to commit the Bidder;

(e) Scanned copy of documentary evidence (i) establishing the Bidder's qualifications to perform the contract if its bid is accepted and (ii) the Bidder's eligibility to bid;

(f) Scanned copy of (i) documentary evidence, that the Goods and Related Services to be supplied by the Bidder are of eligible origin and (ii) conform to the Bidding Documents, and (iii) any other document **r**equired in the BDS;

(g) Scanned copy of Pre-qualification Details as per Section-IV like PAN/TIN/Sales Tax / Service Tax etc.

(h) Technical Bid.

All the original documents as well as the original payment instrument like Demand Draft/Pay order or banker cheque of any scheduled bank against Tender Fee/EMD, samples as specified in this tender document have to be sent to the address of the Purchaser mentioned in Bid Data Sheet (BDS) by post/speed post/courier/by hand on or before bid Submission closing date & time. Beyond that the tender shall be summarily rejected without assigning any reason.

9.1.2 **COMMERCIAL BID**

The commercial bid comprises of :

(i) Scanned copy of Tender Form (Price Bid)

(ii) Price bid in the form of BoQ_XXXX.xls.

(iii) Scanned copy of item wise breakup of price bid.

The Price bid format is provided as BoQ_XXXX.xls along with this Tender Document at https://eprocure.gov.in/eprocure/app. Bidders are advised to download this BoQ_BIOCHEM.xls and quote their offer/rates in the prescribed column. Bidders can quote Basic Price in INR or CURRENCY (for other than INR) but it is mandatory to quote taxes/levies in INR only, in the prescribed column and upload the same in the commercial bid.

9.2 In addition to the above requirements, bids submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful bid shall be signed by all members and submitted with the bid, together with a copy of the proposed Agreement, there to.

9.3 The Bidder shall furnish in the Tender Forms information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Bid.

10. Tender Forms(Technical and Price) and Price Schedule(BOQ)

10.1 Tender Forms and Price Schedules (Bill of Quantity-BOQ) shall be prepared using the relevant forms furnished in Section IX, Bidding Forms and BOQ provided. The forms must be completed without any alterations to the text, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.

11. Alternative Bids

11.1 Unless otherwise specified in the BDS**,** alternative bids shall not be considered.

12. Bid Prices and Discounts

12.1 The prices and discounts quoted by the Bidder in the Tender Forms and in the Price Schedules(BOQ) shall conform to the requirements specified as under.

(a) All lots (contracts) and items must be listed and priced separately in the Price Schedules(BOQ).

(b) The price to be quoted in the Tender Forms shall be the total price of the bid, excluding any discounts offered.

(c) The Bidder shall quote any discount and indicate the methodology for their application in the Tender Forms.

(d) Prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account, unless otherwise specified in the BDS A bid submitted with an adjustable price quotation shall be treated as non-responsive and shall be rejected. However, if in accordance with the BDS, prices quoted by

the Bidder shall be subject to adjustment during the performance of the Contract, a bid submitted with a fixed price quotation shall not be rejected, but the price adjustment shall be treated as zero.

12.2 If so bids are being invited for individual lots (contracts) or for any combination of lots (packages). Unless otherwise specified in the BDS**,** prices quoted shall correspond to 100 % of the items specified for each lot and to 100% of the quantities specified for each item of a lot. Bidders wishing to offer discounts for the award of more than one Contract shall specify in their bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Discounts shall be submitted provided the bids for all lots (contracts) are opened at the same time.

12.3 Prices shall be quoted as specified in each Price Schedule(BOQ) as provided. The dis-aggregation of price components is required solely for the purpose of facilitating the comparison of bids by the Purchaser. This shall not in any way limit the Purchaser's right to contract on any of the terms offered. In quoting prices, the Bidder shall be free to use transportation through carriers registered in any eligible country. Similarly, the Bidder may obtain insurance services from any eligible country. Prices shall be entered in the following manner:

(a) For Goods manufactured in India:

(i) the price of the Goods quoted EXW (ex-works, ex-factory, ex warehouse, ex showroom, or off-the-shelf, as applicable), including all customs duties and sales and other taxes already paid or payable on the components and raw material used in the manufacture or assembly of the Goods;

(ii) any sales tax/VAT and other taxes payable on the Goods, if the contract is awarded to the Bidder; and

(iii) the price for inland transportation, insurance, and other local services required to convey the Goods to their final destination (Project Site) as specified in the BDS**.**

(b) For Goods manufactured outside India, to be imported:

(i) the price of the Goods quoted under Carriage and Insurance Paid (CIP) Model up to named place of destination in India as specified in the BDS**;**

(ii) the price for inland transportation, insurance, and

other local services required to convey the Goods from the named place of destination to their final destination (Project Site) specified in the BDS**;**

(c) For Goods manufactured outside India, already imported:

(i) the price of the Goods, including the original import value of the Goods; plus any mark-up (or rebate); plus any other related local cost, and custom duties and other import taxes already paid or to be paid on the Goods already imported.

(ii) the custom duties and other import taxes already paid (need to be supported with documentary evidence) or to be paid on the Goods already imported;

(iii) the price of the Goods, obtained as the difference between (i) and (ii) above;

(iv) any sales and other taxes which will be payable on the Goods if the contract is awarded to the Bidder; and

(v) the price for inland transportation, insurance, and other local services required to convey the Goods from the named place of destination to their final destination (Project Site) specified in the BDS.

(d) for Related Services, other than inland transportation and other services required to convey the Goods to their final destination, whenever such Related Services are specified in the Schedule of Requirements:

(i) the price of each item comprising the Related Services (inclusive of any applicable taxes).

13. Currencies of Bid and Payment

13.1 The currency(ies) of the bid and the currency(ies) of payments shall be as specified in the BDS.The Bidder shall quote in Indian Rupees the portion of the bid price that corresponds to expenditures incurred in Indian Rupees, unless otherwise specified in the BDS.

14. Documents Establishing the Eligibility and Qualifications of the Bidder

14.1 To establish Bidder's their eligibility, Bidders shall complete the Tender Form (Techno Commercial Un-Priced Bid & Priced Bid), included in Section-IX, Bidding Forms.

14.2 The documentary evidence of the Bidder's qualifications to perform the contract if its bid is accepted shall establish to the

Purchaser's satisfaction:

(a) that, if required in the BDS, a Bidder that does not manufacture or produce the Goods it offers to supply shall submit the Manufacturer's Authorization using the form included in Section IX, Bidding Forms to demonstrate that it has been duly authorized by the manufacturer or producer of the Goods to supply these Goods in India;

(b) that, if required in the BDS, in case of a Bidder not doing business within India, the Bidder is or will be (if awarded the contract) represented by an Agent in the country equipped and able to carry out the Supplier's maintenance, repair and spare parts-stocking obligations prescribed in the Conditions of Contract and/or Technical Specifications; and

(c) that the Bidder meets each of the qualification criterion .

15. Period of Validity of Bids

15.1 Bids shall remain valid for the period specified in the BDS after the bid submission deadline date prescribed by the Purchaser. A bid valid for a shorter period shall be rejected by the Purchaser as non – responsive.

15.2 In exceptional circumstances, the Purchaser may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. A Bidder may refuse the request without forfeiting its Earnest Money Deposit (EMD). A Bidder acceding to the request will neither be required nor permitted to modify the bid.

15.3 Bid evaluation will be based on the bid prices without taking into consideration the above modifications.

16. Bid Security

16.1 The Bidder shall furnish as part of its bid, a bid security, as specified in the BDS, in original form the amount and currency as specified in the BDS.

16.2 If a bid security is specified , the bid security shall be a demand guarantee in any of the following forms at the Bidder's option :

(a) an unconditional guarantee issued by a bank or financial institution (such as an insurance, bonding or surety company);

(b) an irrevocable letter of credit;

(c) a banker's cheque or Demand Draft ; or

(d) any other security as specified in the BDS,

of a reputed source from an eligible country. If the unconditional guarantee is issued by a financial institution located outside India, the issuing financial institution shall have a correspondent financial institution located in India to make it enforceable The bid security shall be valid for forty five (45) days beyond the original validity period of the bid, or beyond the extended period.

16.3 If a Bid Security is specified, any bid not accompanied by a substantially responsive Bid Security, shall be rejected by the Purchaser as non-responsive.

16.4 If a Bid Security is specified, the Bid Security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's signing the contract and furnishing the Performance Security.

16.5 The Bid Security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the contract and furnished the required performance security.

16.6 The Bid Security of the bidder may be forfeited or the Bid Securing Declaration executed:

(a) if he withdraws from the bid during the period of bid validity specified by the Bidder on the Tender Forms, or any extension thereto provided by the Bidder ; or

(b) if he being successful Bidder fails to:

(i) sign the Contract; or
(ii) furnish a performance security.

16.7 The bid security of a JV must be in the name of the JV that submits the bid. If the JV has not been legally constituted into a legally enforceable entity at the time of bidding, the bid security shall be in the names of all members as named in the letter of intent.

D. Submission and Opening of Bids

17. Sealing and Marking of Bids

17.1 The Bidder shall submit the bids electronically, through the e-procurement system (https://eprocure.gov.in/eprocure/app). Any document submitted through any other means will not be considered as part of the Bid except for the Originals as asked for in

this tender.

18. Deadline for Submission of Bids

18.1 The Purchaser may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Documents, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

19. Late Bids

19.1 The e-Procurement system would not allow any late submission of bids after due date and time as per server system. After electronic online proposal submission, the system generates a unique identification number which is time stamped. This shall be treated as acknowledgement of the proposal submission

20. Withdrawal, Substitution, and Modification of Bids

20.1 A Bidder may withdraw, substitute, or modify its bid on the e-procurement system before the date and time specified but not beyond**.**

20.2 No bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Tender Forms or any extension thereof Modification/Withdrawal of the Bid sent through any other means shall not be considered by the Purchaser.

21. Bid Opening

21.1 The Purchaser shall open the bids as per electronic bid opening procedures specified in Central Public Procurement Portal (CPPP) at the date and time specified. Bidders can also view the bid opening by logging on to the e-procurement system. Specific bid opening procedures are laid down at https://eprocure.gov.in/eprocure/app under the head "Bidders Manual Kit". The tenderer/bidder will be at liberty to be present either in person or through an authorized representative at the time of opening of the Bid or they can view the bid opening event online at their remote end. Price Bids of only those tenderers shall be opened whose technical bids qualify.

21.2 The withdrawn bid will be available in the system therefore will be considered, If bidder once withdraws the bid then he will not be able to participate in the respective tender again. Modification to the bid shall be opened and read out with the corresponding bid. Only bids that are opened and read out at bid opening shall be considered further.

21.3 The Purchaser shall prepare a record of the bid opening that shall include,; the name of the Bidder; whether there is a withdrawal,

substitution, or modification; the Bid Price including any discounts and alternative bids; and the presence or absence of a bid security, if one was required. The Bidders' representatives who are present in the office of the Purchaser to witness the bid opening shall be requested to sign the record. The omission/refusal of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be made available on the e-procurement system.

E. Evaluation and Comparison of Bids

22. Confidentiality

22.1 Information relating to the evaluation of bids and recommendation of contract award shall not be disclosed to bidders or any other persons not officially concerned with the bidding process until information on Contract Award is communication to all Bidders.

22.2 No Bidder shall contact the purchaser on any matter relating to its bid from the time of the bid opening to the time the contract is awarded. If the Bidder wishes to bring additional information to the notice of the Purchaser it should be done in writing.

22.3 Any effort by a Bidder to influence the purchaser in its decisions on bid evaluation, bid comparison or contract award decisions may result in rejection of the Bidder's bid.

23. Clarification of Bids

23.1 To assist in the examination, evaluation, comparison of the bids, and qualification of the Bidders, the Purchaser may, at its discretion, ask any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder in respect to its Bid and that is not in response to a request by the Purchaser shall not be considered. The Purchaser's request for clarification and the response shall be in writing. No change, including any voluntary increase or decrease, in the prices or substance of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Purchaser in the Evaluation of the bids.

23.2 If a Bidder does not provide clarifications of its bid by the date and time set in the Purchaser's request for clarification, its bid may be rejected.

24. Determination of Responsiveness

24.1 The Purchaser's determination of a bid's responsiveness is to be based on the contents of the bid itself.

24.2 A substantially responsive Bid is one that meets the requirements of the Bidding Documents without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that:

(a) if accepted, would

(i) affect in any substantial way the scope, quality, or performance of the Goods and Related Services specified in the Contract; or

(ii) limit in any substantial way, inconsistent with the Bidding Documents, the Purchaser's rights or the Bidder's obligations under the Contract; or

(b) if rectified, would unfairly affect the competitive position of other bidders presenting substantially responsive bids.

24.3 The Purchaser shall examine the technical aspects of the bid submitted in accordance with instructions specified in tender document, in particular, to confirm that all requirements enumerated in the 'Schedule of Requirements' Section-VI have been complied with, without any material deviation or reservation or omission.

24.4 If a bid is not responsive to the requirements of Bidding Documents, it shall be rejected by the Purchaser and may not subsequently be made responsive by correction of the material deviation, reservation or omission.

25. Conversion to Single Currency

25.1 For evaluation and comparison purposes, the currency(ies) of the Bid shall be converted in a single currency as specified in the BDS.

26. Margin of Preference

26.1 Unless otherwise specified in the BDS**,** a margin of preference shall not apply.

27. Evaluation of Bids

27.1 The Purchaser shall use the criteria and methodologies listed in this Clause. No other evaluation criteria or methodologies shall be permitted.

27.2 To evaluate a Bid, the Purchaser shall consider the following:

(a) evaluation will be done for Items or Lots (contracts), as specified in the BDS; and the Bid Price

(b) price adjustment due to discounts offered;

(c) converting the amount resulting from above, if relevant, to a single currency;

(d) price adjustment due to quantifiable nonmaterial nonconformities in;

27.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in bid evaluation.

27.4 The Purchaser's evaluation of a bid shall exclude and not take into account:

(a) in the case of Goods manufactured in the India, sales and other similar taxes, which will be payable on the goods if a contract is awarded to the Bidder;

(b) in the case of Goods manufactured outside India, already imported or to be imported, customs duties and other import taxes levied on the imported Good, sales and other similar taxes, which will be payable on the Goods if the contract is awarded to the Bidder;

(c) any allowance for price adjustment during the period of execution of the contract, if provided in the bid.

27.5 The Purchaser's evaluation of a bid may require the consideration of other factors, in addition to the Bid Price quoted. These factors may be related to the characteristics, performance, and terms and conditions of purchase of the Goods

and Related Services. The effect of the factors selected, if any, shall be expressed in monetary terms to facilitate comparison of bids.

28. Comparison of Bids

28.1 The Purchaser shall compare the evaluated prices of all substantially responsive bids established to determine the lowest evaluated bid. The comparison shall be on the basis of CIP-Carriage and Insurance Paid to (place of destination) prices for imported goods and EXW – Ex Works (named place of delivery) prices, plus cost of inland transportation and insurance to place of destination, for goods manufactured within India, together with prices for any required installation, training, commissioning and other services. The evaluation of prices shall not take into account custom duties and other taxes levied on imported goods quoted CIP and sales and similar taxes levied in connection with the sale or delivery of goods.

29. Qualification of the Bidder

29.1 The Purchaser shall determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated and substantially responsive bid meets the qualifying criteria.

29.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder.

29.3 An affirmative determination shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the bid, in which event the Purchaser shall proceed to the next lowest evaluated bid to make a similar determination of that Bidder's qualifications to perform satisfactorily.

30. Purchaser's Right to Accept Any Bid, and to Reject Any or All Bids

30.1 The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to Bidders. In case of annulment, all bids submitted and specifically, bid securities, shall be promptly returned to the Bidders.

F. Award of Contract

31. Award Criteria

31.1 The Purchaser shall award the Contract to the Bidder whose bid has been determined to be the lowest evaluated bid and is substantially responsive to the Bidding Documents, provided the Bidder is determined to be qualified to perform the Contract satisfactorily.

32. Purchaser's Right to Vary Quantities at Time of Award

32.1 At the time the Contract is awarded, the Purchaser reserves the right to increase or decrease the quantity of Goods and Related Services originally specified in Section VI, Schedule of Requirements, provided this does not exceed the percentages specified in the BDS, and without any change in the unit prices or other terms and conditions of the bid and the Bidding Documents.

33. Notification of Award

33.1 Prior to the expiration of the period of bid validity, the Purchaser shall, notify the successful Bidder, in writing, that its Bid has been accepted. The notification letter (hereinafter and in the Conditions of Contract and Contract Forms called the "Letter of Acceptance") shall specify the sum that the Purchaser will pay the Supplier in consideration of the supply of Goods (hereinafter and in the Conditions of Contract and Contract Forms called "the Contract Price"). At the same time, the Purchaser shall also notify all other Bidders of the results of the bidding.

33.2 Until a formal Contract is prepared and executed, the notification of award shall constitute a binding Contract.

33.3 The Purchaser shall promptly respond in writing to any unsuccessful Bidder who, after notification of award, requests in writing the grounds on which its bid was not selected.

34. Signing of Contract

34.1 Promptly after notification, the Purchaser shall send the successful Bidder the Contract Agreement.

34.2 Within twenty-eight (28) days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the Purchaser.

34.3 Notwithstanding anything contained in clause 34.2, in case signing of the Contract Agreement is prevented by any export restrictions attributable to the Purchaser, or to the use of the products/goods, systems or services to be supplied, where such export restrictions arise from trade regulations from a country supplying those products/goods, systems or services, the Bidder shall not be bound by its bid, always provided however, that the Bidder can demonstrate to the satisfaction of the Purchaser that signing of the Contact Agreement has not been prevented by any lack of diligence on the part of the Bidder in completing any formalities, including applying for permits, authorizations and licenses necessary for the export of the products/goods, systems or services under the terms of the Contract.

35. Performance Security

35.1 Within twenty eight (28) days of the receipt of notification of award from the Purchaser, the successful Bidder, if required,

shall furnish the Performance Security in accordance with the General Conditions of Contract (GCC), using for that purpose the Performance Security Form included in Section-X, Contract Forms, or another Form acceptable to the Purchaser. If the Performance Security furnished by the successful Bidder is in the form of a bond, it shall be issued by a bonding or insurance company that has been determined by the successful Bidder to be acceptable to the Purchaser. A foreign institution providing a bond shall have a correspondent financial institution located in India.

35.2 Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event the Purchaser may award the Contract to the next lowest evaluated Bidder, whose bid is substantially responsive and is determined by the Purchaser to be qualified to perform the Contract satisfactorily.

Section III. Bid Data Sheet (BDS)

The following specific data for the goods to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). In case of inconsistency, the provisions herein shall prevail over those in ITB.

Serial No.	A. General
1.	The reference number of the Invitation for Bids is **BHU/FPA/N-3/2014/** **Dated: 28-02-2014**
2.	The Purchaser is **The Director, IMS, BHU, Varanasi**
3.	Maximum number of members in the JV shall be: **4**
	B. Contents of Bidding Documents
4.	For Clarification of bid purposes only, the Purchaser's address is **The Director, IMS, BHU, Varanasi** Attention : ***Prof. R.G. Singh*** Address : **The Director, IMS, BHU, Varanasi** Floor/ Room number: - City : **Varanasi** ZIP Code : **221005** Country : **India** Telephone : **91-542-2367568** **91-542-6703248** **91-542-2309450** Facsimile number : **91-542-2367568** Electronic mail address : **directorims@gmail.com**
5.	Web page https://eprocure.gov.in/eprocure/app
6.	A site visit shall **not** be organized by the purchaser.
7.	A Pre-Bid meeting : **NA**

C. Preparation of Bids	
8.	The language of the bid is: **English or Hindi**. All correspondence exchange shall be in **English or Hindi** language. Language for translation of supporting documents and printed literature is **English or Hindi**.
9.	The Bidder shall submit the following additional documents in its bid**: NA**
10.	Alternative Bids **shall not** be considered.
11.	The prices quoted by the Bidder **shall not** be subject to adjustment during the performance of the Contract.
12.	Place of Destination: **Office of Director, IMS, BHU, Varanasi**
13.	Final destination: **Office of Director, IMS, BHU, Varanasi**
14.	The prices shall be quoted by the bidder in : **Foreign Currency of Principal's Country(Preferably in Indian Rupees)** The Bidder is required to quote in Indian Rupees (INR), the portion of the bid price that corresponds to expenditures incurred in Indian Rupees (INR).
15.	Manufacturer's authorization **is** Required
16.	After sales service **is** Required.
17.	The bid validity period shall be **120 days.**
18.	EMD/Bid security shall be paid @ **2%** of the estimated value(s) of quoted items or Rs. 50000/- whichever is higher by the way of Demand Draft (DD)/Bank Guarantee (BG) in favor of the Registrar, Banaras Hindu University, Varanasi-221005 and should be valid for a period of 45 days beyond the BID validity period. All tenders received without EMD/Bank Security shall be rejected. TENDER FEE **: NIL**
19.	Other types of acceptable securities: **NA**

D. Submission and Opening of Bids	
20.	For bid submission purposes only, the Purchaser's address is **The Director, IMS, BHU, Varanasi – 221005.** Attention : **Prof. R.G. Singh** Street Address : **Office of Director, IMS, BHU, Varanasi**. Floor/ Room number: **IMS Ground Floor** City : **Varanasi** ZIP/Postal Code : **221005** Country : **India** The deadline for bid submission is: Date : **21th March 2014** Time : **4:00 PM** The electronic bidding opening procedures shall be as given in Section I-Instructions for Online Bid Submission.
21.	The bid opening shall take place at : **Committee Room, Office of Director, IMS, BHU, Varanasi** Street Address : **Banaras Hindu University, Varanasi** Floor/ Room number : City : **Varanasi** Country : **India** Date : **24th March 2014** Time : **11:00 am** The electronic bidding opening procedures shall be as given in Section I-Instructions for Online Bid Submission.
E. Evaluation and Comparison of Bids	
22.	The currency that shall be used for bid evaluation and comparison purposes to convert all bid prices expressed in various currencies into a single currency is: **Indian Rupees** The source of exchange rate shall be: **Reserve Bank of India.** The date for the exchange rate shall be: **Last day for submission of Bids.**

23.	A margin of domestic preference shall apply.
24.	Evaluation will be done for concern equipment. Note: ***Bids will be evaluated for each item and the Contract will comprise the item(s) awarded to the successful Bidder.***
F. Award of Contract	
25.	The maximum percentage by which quantities may be increased is: ***20%*** The maximum percentage by which quantities may be decreased is: ***30%***

Section IV. Prequalification

1. A notarized affidavit by the firm that it has never been black-listed must be attached along with the Bid, failing which the Bid shall be rejected.

2. Profile of each Bidder and past experience in supply of the material (certificates to be enclosed), proof of manufacturing Unit/Dealership letter and general order supplier. Manufacturer's authorization certificate as prescribed in Section IX in case bidder is not manufacturer.

3. List of other Govt. Departments, Public Sector units and Central Autonomous Bodies for which the bidder is supplying material or having the similar type of contracts and a certificate regarding the satisfactory performance of the contract.

4. Copy of the audited balance sheet of the bidder for the previous three financial years indicating the turnover in supply of the material.

5. True copy of Permanent Account Number.

6. Details of Sales Tax / VAT along with a copy of certificate to be attached.

7. Service Tax No. along with copy of certificate.

8. TIN along with copy of certificate.

9. Submission of samples if required, for all items indicated in the schedule of requirements. The make of items proposed to be supplied should be indicated in the format of the schedule of requirements and submitted along with the techno commercial un priced bid without indicating the pricing components.

10. Willingness to execute all orders which are placed to meet emergency requirement on priority basis. The Bidder shall note that standards for workmanship, material and equipment, and references to brand names designated by the Purchaser in the schedule of requirements are intended to be descriptive only and not restrictive. The Bidder may substitute alternative standards, brand names and/or catalogue numbers in his bid, provided that it demonstrates to the Purchaser's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.

Section V. Policy of University against the Corrupt and Fraudulent Practices

University strictly adheres to its policy against corruption and requires that bidders and their agents, subagents, sub-contractors, suppliers etc. shall not indulge in any kind of corrupt practices, fraudulent practices, collusive practices, coercive practices, obstructive practices or other kinds of corruption declared as crimes under Indian law.

a) If bidder or their agents, subagents, sub-contractors, suppliers etc. are found, directly or indirectly, involved in such practices, bid or agreement and execution thereof at any stage may be rejected or cancelled as the case may be by the University and besides it , University may initiate legal actions including civil and criminal proceeding.

For the purpose of this provision the terms are defined as follows:

(i) "Corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;[1];

(ii) "Fraudulent Practices" is any act or omission including a misrepresentation which knowingly or recklessly made to mislead another party to obtain financial or other benefit or to avoid an obligation;[2]

(iii) "Collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;[3]

(iii) "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;[4]

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1 For the purpose of this sub-paragraph, "*another party*" refers to a public official acting in relation to the procurement process or contract execution. In this context, "*public official*" includes university staff and employees of other organizations taking or reviewing procurement decisions.

2 For the purpose of this sub-paragraph, "party" refers to a public official; the terms "benefit" and "obligation" relate to the procurement process or contract execution; and the "act or omission" is intended to influence the procurement process or contract execution.

3 For the purpose of this sub-paragraph, "party" refers to participants in the procurement process (including public officials) attempting either themselves, or through another person or entity not participating in the procurement or selection process, to simulate competition or to establish bid prices at artificial, non-competitive levels, or are privy to each other's bid prices or other conditions.

4 For the purpose of this sub-paragraph, "party" refers to a participant in the procurement process or contract execution.

(v) "obstructive practice" is:

deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede an investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation.

b) Besides actions under clause (a) University may also take action to blacklist such bidder either indefinitely or for a specified period.

PART 2 – Supply Requirements

Section VI. Schedule of Requirements

Contents

1. List of Goods and Delivery Schedule

Line Item N°	Description of Goods	Quantity	Physical unit	Final Destination as specified in BDS	Delivery (as per Incoterms) Date		
					Earliest Delivery Date	Latest Delivery Date	Bidder's offered Delivery date [*to be provided by the bidder*]
[insert item No]	*[insert description of Goods]*	*[insert quantity of item to be supplied]*	*[insert physical unit for the quantity]*	*[insert place of Delivery]*	*[insert the number of days following the date of effectiveness the Contract]*	*[insert the number of days following the date of effectiveness the Contract]*	*[insert the number of days following the date of effectiveness the Contract]*
	Department of Neurosurgery						
	Craniotomy Set	1	Nos	As Per Tender Document	21 Days	30 Days	
	Laminectomy Set	1	Nos	As Per Tender Document	21 Days	30 Days	
	Leyla Self retaining brain retractor set	1	Nos	As Per Tender Document	21 Days	30 Days	
	High frequency surgical diathermy	2	Nos	As Per Tender Document	21 Days	30 Days	
	Xenon operating head light	1	Nos	As Per Tender Document	21 Days	30 Days	
	Mayfield skull clamp set	1	Nos	As Per Tender Document	21 Days	30 Days	
	Wilson spinal frame (Radiolucent)	1	Nos	As Per Tender Document	21 Days	30 Days	

	Shunt Surgery Set	1	Nos	As Per Tender Document	21 Days	30 Days	
	Department of Plastic Surgery						
	Total performance system power tool with saws, driver and burrs	1	Nos	As Per Tender Document	21 Days	30 Days	
	Electronic Tourniquet	1	Nos	As Per Tender Document	21 Days	30 Days	
	Magnifying Loupes	2	Nos	As Per Tender Document	21 Days	30 Days	
	Microsurgery set containing micro instruments and vascular clamps	1	Nos	As Per Tender Document	21 Days	30 Days	
	Nerve Stimulator-mapper-locator	1	Nos	As Per Tender Document	21 Days	30 Days	
	Surgical Cautery	1	Nos	As Per Tender Document	21 Days	30 Days	
	Micro motor set with accessories – bits, punches, burrs	1	Nos	As Per Tender Document	21 Days	30 Days	
	Maxillofacial mini plating set	2	Nos	As Per Tender Document	21 Days	30 Days	
	Vascular Doppler	1	Nos	As Per Tender Document	21 Days	30 Days	

	Surgical instruments Set As per attached list of Plastic surgery			As Per Tender Document	21 Days	30 Days	
	Department of General Surgery						
	Electro Surgical Unit (Diathermy)	2	Nos	As Per Tender Document	21 Days	30 Days	
	Surgical Instruments Set As per attached list	2	Nos	As Per Tender Document	21 Days	30 Days	
	Department of Orthopaedic						
	Diathermy	4	Nos	As Per Tender Document	21 Days	30 Days	
	Electrical Suction Pump	4	Nos	As Per Tender Document	21 Days	30 Days	
	General Orthopaedic Instrument set for 4 OT, as per attached list	12	Set	As Per Tender Document	21 Days	30 Days	
	Nailing Set As per attached list	1	Set	As Per Tender Document	21 Days	30 Days	
	Skeletal Traction apparatus Set As per attached list	4	Set	As Per Tender Document	21 Days	30 Days	
	Power drill system	2	Nos	As Per Tender Document	21 Days	30 Days	
	Pneumatic tourniquet	4	Nos	As Per Tender Document	21 Days	30 Days	
	Eschmarch tourniquet	4	Nos	As Per Tender Document	21 Days	30 Days	

	Pulse lavage system	2	Nos	As Per Tender Document	21 Days	30 Days	
	Vacuumed Assisted Closure Device (VAC)	3	Nos	As Per Tender Document	21 Days	30 Days	
	Orthopaedic Surgical Instruments Set for 4 OT As per attached list	12	Set	As Per Tender Document	21 Days	30 Days	
	Department of Anaesthesia & ICU of Trauma Centre						
	Recovery Room Trolley	4	Nos	As Per Tender Document	21 Days	30 Days	
	Crash Carts (Resuscitation Trolley)	4	Nos	As Per Tender Document	21 Days	30 Days	
	Scoop Stretchers	10	Nos	As Per Tender Document	21 Days	30 Days	
	ECG Machine	4	Nos	As Per Tender Document	21 Days	30 Days	
	Portable X-ray machines with integrated CR	1	Nos	As Per Tender Document	21 Days	30 Days	
	Portable ultrasound with three Probes	2	Nos	As Per Tender Document	21 Days	30 Days	
	Bi-Pap Ventilator	2	Nos	As Per Tender Document	21 Days	30 Days	
	ICU Ventilator	10	Nos	As Per Tender Document	21 Days	30 Days	
	Intermittent Pneumatic Compression Device	10	Nos	As Per Tender Document	21 Days	30 Days	

	AMBU bag	10	Nos	As Per Tender Document	21 Days	30 Days	
	Chest vibration system	2	Nos	As Per Tender Document	21 Days	30 Days	
	Biphasic Defibrillator with AED	2	Nos	As Per Tender Document	21 Days	30 Days	
	Defibrillator with Monitor	5	Nos	As Per Tender Document	21 Days	30 Days	
	Non Invasive Cardiac Support Pump with AED	1	Nos	As Per Tender Document	21 Days	30 Days	
	Bed Side Monitors (Five Para)	40	Nos	As Per Tender Document	21 Days	30 Days	
	Modular Monitors	32	Nos	As Per Tender Document	21 Days	30 Days	
	Central Station	2	Nos	As Per Tender Document	21 Days	30 Days	
	NIBP Monitor	2	Nos	As Per Tender Document	21 Days	30 Days	
	Minimally invasive cardiac output monitoring	1	Nos	As Per Tender Document	21 Days	30 Days	
	Syringe infusion pumps	100	Nos	As Per Tender Document	21 Days	30 Days	
	Rapid infusion pumps	2	Nos	As Per Tender Document	21 Days	30 Days	
	Ripple mattresses (to prevent pressure sores)	20	Nos	As Per Tender Document	21 Days	30 Days	

	Patient Warming system for intra operative application Operation system- Adult	7	Nos	As Per Tender Document	21 Days	30 Days	
	Patient Warming system for Recovery Area Recovery system- Adult	4	Nos	As Per Tender Document	21 Days	30 Days	
	Patient Positioning System	2	Nos	As Per Tender Document	21 Days	30 Days	
	Patient Transfer System - Slide Model	10	Nos	As Per Tender Document	21 Days	30 Days	
	Electrically operated thermal blankets	8	Nos	As Per Tender Document	21 Days	30 Days	
	Blood Warming System	2	Nos	As Per Tender Document	21 Days	30 Days	
	IV Fluid Warmer	6	Nos	As Per Tender Document	21 Days	30 Days	
	Electric suction machines	4	Nos	As Per Tender Document	21 Days	30 Days	
	Resuscitation kits (laryngoscopes, Ambu bag, LMA, Tracheostomy set, etc.)	2	Set	As Per Tender Document	21 Days	30 Days	
	Flexible Fiber Optics Laryngoscope Adult	1	Nos	As Per Tender Document	21 Days	30 Days	

	Flexible Fiber Optics Laryngoscope Paediatric	1	Nos	As Per Tender Document	21 Days	30 Days	
	Dialysis Machine with SLED	1	Nos	As Per Tender Document	21 Days	30 Days	
	CRRT	1	Nos	As Per Tender Document	21 Days	30 Days	
	Ambulatory Blood Pressure Monitor	2	Nos	As Per Tender Document	21 Days	30 Days	

2. List of Related Services and Completion Schedule

Service	Description of Service	Quantity[1]	Physical Unit	Place where Services shall be performed	Final Completion Date(s) of Services
[insert Service No]	*[insert description of Related Services]*	*[insert quantity of items to be supplied]*	*[insert physical unit for the items]*	*[insert name of the Place]*	*[insert required Completion Date(s)]*

1. If applicable

3. Technical Specifications

"**Summary of Technical Specifications**

MEDICAL EQUIPMENT

Item No	Name of Equipment	Units	Approx. Cost in Rs. Lac
	Department of Neurosurgery		
1.	Craniotomy Set	1	30
2.	Laminectomy Set	1	25
3.	Leyla Self retaining brain retractor set	1	10
4.	High frequency surgical diathermy	2	10
5.	Xenon operating head light	1	10
6.	Mayfield skull clamp set	1	5
7.	Wilson spinal frame (Radiolucent)	1	6
8.	Shunt Surgery Set	1	4
		Total	**100**
	Department of Plastic Surgery		
9.	Total performance system power tool with saws, driver and burrs	1	12.4
10.	Electronic Tourniquet	1	7.09
11.	Magnifying Loupes	2	6.6
12.	Microsurgery set containing micro instruments and vascular clamps	1	4.4
13.	Nerve Stimulator-mapper-locator	1	0.4
14.	Surgical Cautery	1	30
15.	Micro motor set with accessories – bits, punches, burrs	1	0.75
16.	Maxillofacial mini plating set	2	1
17.	Vascular Doppler	1	3.4
18.	Surgical instruments Set As per attached list of Plastic surgery		4
		Total	**70**
	Department of General Surgery		
19	Electro Surgical Unit (Diathermy)	2	16
20	Surgical Instruments Set As per attached list	2	10
		Total	**26**
	Department of Orthopaedic		
21	Diathermy	4	20
22	Electrical Suction Pump	4	0.6
23	General Orthopaedic Instrument set for 4 OT, as per attached	12set	25

	list		
24	Nailing Set As per attached list	1set	0.75
25	Skeletal Traction apparatus Set As per attached list	4set	0.24
26	Power drill system	2	25
27	Pneumatic tourniquet	4	5
28	Eschmarch tourniquet	4	0.03
29	Pulse lavage system	2	0.01
30	Vacuumed Assisted Closure Device (VAC)	3	0.42
31	Orthopaedic Surgical Instruments Set for 4 OT As per attached list	12 set	75
		Total	**152.05**
	Department of Anaesthesia & ICU of Trauma Centre		
Item No	**Name of Equipment**	**Units**	**Approx. Cost in Rs. Lac**
32	Recovery Room Trolley	4	12
33	Crash Carts (Resuscitation Trolley)	4	5
34	Scoop Stretchers	10	5
35	ECG Machine	4	5
36	Portable X-ray machines with integrated CR	1	16
37	Portable ultrasound with three Probes	2	25
38	Bi-Pap Ventilator	2	6
39	ICU Ventilator	10	100
40	Intermittent Pneumatic Compression Device	10	15
41	AMBU bag	10	0.6
42	Chest vibration system	2	3.8
43	Biphasic Defibrillator with AED	2	15
44	Defibrillator with Monitor	5	20
45	Non Invasive Cardiac Support Pump with AED	1	15
46	Bed Side Monitors (Five Para)	40	48
47	Modular Monitors	32	125
48	Central Station	2	25
49	NIBP Monitor	2	5
50	Minimally invasive cardiac output monitoring	1	8
51	Syringe infusion pumps	100	50
52	Rapid infusion pumps	2	10
53	Ripple mattresses (to prevent pressure sores)	20	5
54	Patient Warming system for intra operative application Operation system- Adult	7	7
55	Patient Warming system for Recovery Area Recovery system- Adult	4	28
56	Patient Positioning System	2	8
57	Patient Transfer System - Slide Model	10	6.5
58	Electrically operated thermal blankets	8	8

59	Blood Warming System	2	9
60	IV Fluid Warmer	6	9
61	Electric suction machines	4	0.6
62	Resuscitation kits (laryngoscopes, Ambu bag, LMA, Tracheostomy set, etc.)	2 set	4
63	Flexible Fiber Optics Laryngoscope Adult	1	10
64	Flexible Fiber Optics Laryngoscope Paediatric	1	10
65	Dialysis Machine with SLED	1	15
66	CRRT	1	15
67	Ambulatory Blood Pressure Monitor	2	3.4
			652.9

1: Department of Neurosurgery
Technical Specifications for Neurosurgery Equipment's

Item No -01: Craniotomy Set

Description

Instruments are for delicate surgery of brain so they should be of high quality steel with smooth mobility and fine cutting/holding nature. They should be already in use in prime institutions of India or aboard. Company Item should be US- FDA and European CE approved. Company should have own unit to repair the damaged instruments.

S.No.	Name of Items	Quantity
1	TC BABY-METZ SCISSORSDELCVDB/B 145 MM	1
2	TC TOENNIS-ADSON SCISS DEL CVD 175 MM	1
3	SCHMIEDEN-TAYLOR DURA SCISSORS 155 MM	1
4	NOIR METZENBAUM SCISSORS CVD 180 MM	1
5	ADSON DISSECT FORCEPS W/O T. 180 MM	1
6	JEFFERSON FORCEPS 180 MM	1
7	GERALD FORCEPS DEL STR 175 MM	1
8	GILLIES DISSECT. FORCEPS W/O T. 150 MM	1
9	TISSUE FORCEPS SERR 145 MM	1
10	CUSHING DEL STR FORCEPS 180 MM	1
11	DISSECT. FORCEPS MED. WIDE 1X2 T. 200 MM	1
12	JANSEN FORCEPS BAYO SERR 160 MM	1
13	GRUENWALD FORCEPS BAYO SERR 200 MM	1
14	DANDY DELICATE FORCEPS CVD 140 MM	40
15	TC BABY-CRILE-WOOD NDL HLDR SERR 150MM	1
16	TC DE'BAKEY NDL HOLDER DEL SERR 180MM	1
17	TC MAYO-HEGAR NDL HOLDERHVYSERR 185MM	1
18	ADSON-BABY RETRACTOR 3X4 BLUNT 140 MM	1
19	MOLLISON RETRACTOR SHARP 155 MM	1
20	GILLIES SKIN HOOK SHARP SM 180 MM	1
21	ADSON NERVE HOOK SHARP	2
22	DAVIS VASCULAR SPATULA 245 MM	1
23	FREER ELEVATOR S/B 185 MM	1
24	YAS. MICRO SCISS BAYOUP-CVDS/S 225 MM	1
25	YASARGIL TUMOR FCPS SERR 3 MM 220 MM	1
26	YASARGIL TUMOR FORCEPS 3 MM 220 MM	1
27	YASARGIL TUMOR FORCEPS 5MM 220MM	1
28	FERG-FRAZIER SUCT 7FR 110MM WRK-LGT	1
29	FERG-FRAZIER SUCT 9FR 3/110MM WRK-LGTH	1
30	FERG-FRAZIER SUCT 12FR 110MM WRK-LGT	1
31	HOOK HANDLE F/WIRE SAWS	4
32	DEMARTEL CONDF/WIRE SAWSFLEX X 350MM	6
33	OLIVECRONA UNBREAKABLE WIRE SAW 500 MM	5 Pack

S.No.	Name of Items	Quantity
34	RANEY SCALP HEMOST. CLIP PACK OF 25PCS	2 Pack
35	RANEY APPLY/REMOVING FCPS F/FF002 FF015P	1
36	LUER BONE RONGEUR ANG 150 MM	1
37	LUER BONE RONGEUR CVD 155MM	1
38	VENTRICULAR CANNULA CUSHING	2
39	HUDSON DRILL BRACE F/FF055R	1
40	HUDSON CEREBELLAR ATTACHMENT F/FF 055R	1
41	JANSEN SELF RETAINING RETRACTOR 100 MM X 4 INCHS	1
42	HUDSON BURR 9MM DIA	1
43	HUDSON BURR 14 MM DIA	1
44	HUDSON SPHERICAL BURR 16MM DIA	1
45	HUDSON SPHERICAL BURR 22 MM DIA	1
46	ANSON PERFORATING BURR 15 MM DIA	1
47	MCKENZIE TWIST DRILL 13MM DIA	1
48	CUSHING FLAT DRILL 14MM DIA	1
49	TWIST DRILL 2 MM DIA	1
50	DAHLGREN SKULL PUNCH W/2 X-HOOKS 210MM	1
51	SAFETY FORCEPS F. BORE HOLES	1
52	TREPHINE WITH GUARD 1.5 INCH ATTACHABLE TO ABOVE HUDSON BRACE	1
53	TREPHINE WITH GUARD 2 INCH ATTACHED TO ABOVE HUDSON BRACE	1
54	WILLIGER BONE RASPATORY 6.0MM 160MM	1
55	JOSEPH RASPATORY 4MM WIDTH 180MM	1
56	VOLKMANN BONE CURETTE #0 5.2MM 172MM	1
57	REILL CUTTER F/WIRE CLOSE BONE 2/1.6MM	1
58	NO.1 PENFIELD DISSECTOR 178 MM	1
59	NO.2 PENFIELD DISSECTOR 197 MM	1
60	NO. 3 PENFIELD DISSECTOR 197 MM	1
61	NO.4 PENFIELD DISSECTOR 203 MM	1
62	NO.5 PENFIELD DISSECTOR 292 MM	1
63	KERRISON PUNCH $90^0$2MM 85 MM upward	1
64	KERRISON PUNCH $90^0$3MM 85 MM upward	1
65	KERRISON PUNCH $90^0$4MM 85 MM upward	1
66	FREER ELEVATOR SHARP 190MM	1
67	PENNYBACKER PROBE DISSECTOR 229MM	1
68	YASARGIL SPRING-HOOK F/GALEA FIXATIONSM	2
69	YASARGIL SPRING-HK F/GALEA FIXATION LRG	2
70	WEITLANER RETRACTOR 3X4T. SH. 130MM	1
71	WEITLANER RETRACTOR 3X4T.BL.130MM	1
72	MOLLISON RETRACTOR SHARP 155MM	1
73	WULLSTEIN RETRACTOR 3X3 SHARP 130MM	1
74	YASARGIL MICRO SCISS BAYO ST/B225MM	1
75	YAS.MICRO SCISSDELBAYOSTS/S225MM	1

S.No.	Name of Items	Quantity
76	YASARGIL MICRO SCISSORS BAYOSTR 165MM	1
77	YASARGIL MICRO SCISS BAYOUP-CVD 165MM	1
78	YASARGIL MICRO SCISS BAYO STR 200MM	1
79	YASARGIL MICRO SCISS. BAYOUP-CVD 200MM	1
80	YASARGIL TUMOR/VESEL FCPS BAYO 3X200MM	1
81	YASARGIL TUMOR FORCEPS 3MM 220MM	1
82	MIRCO-FORCEPS BAYO FINE 184MM	1
83	YASARGIL MICROFORM BAYO FCPS. 6MM 180MM	1
84	YASARGIL MICROFORM BAYO FCPS.9MM 220MM	1
85	JEWELERS FORCEPS ANG-TIP 110MM	1
86	LUCAE FORCEPS BAYO SERR 140MM	1
87	FORCEPS BAYO 1X2 200MM	1
88	YASARGIL NEEDLE HOLDER BAYO STR 200MM	1
89	CASPAR EXPLOR.HOOK MED-TIP90DG 245MM	1
90	KRAYENBUEHL NERV HKSHRTBALL-TIP 184MM	1
91	ADSON NERVE HOOKBLUNT	1
92	DURA HOOK CAIRNS SHARP 127MM	2
93	VASCULAR SPATULA 3MM BLUNT 185MM	1
94	VASCULAR SPATULA 3MM BLUNT 215MM	1
95	CASPAR MICRO-DISSDWN-CVD 2.0MM 229MM	1
96	CASPAR DISSECTOR UPWARD CVD 1/210MM BAYONET	1
97	CASPAR DISSECTOR DWN-CVD 1/210MM BAYONET	1
98	YASARGIL RASPATORY DWN-CVD BAYO 185MM	1
99	SAMLL KNIFE F/TUMOR TISSUE 1.5MM 230MM	1
100	SAMLL KNIFE F/TUMOR TISSUE 2.0MM 230MM	1
101	SAMLL KNIFE F/TUMOR TISSRND 1.5MM 230MM	1
102	MICRO HOOK BLUNT 230MM	1
103	YASARGIL ARACHNOID KNIFE BAYONET SHAPE	1
104	YASARGIL ARACHNOID KNIFE BAYONET SHAPE	1
105	SHARP HOOK 90DG-TIP 185MM	1
106	FERG-FRAZIER SUCT 6FR 2/110MM WRK-LGTH	1
107	NOIR METZENBAUM SCISSORS CVD 180MM	1
108	NOIR METZENBAUM SCISSORS DEL CVD 180MM	2
109	TC CRILE-WOOD NDL HLDRSTD SERR 185MM	1
110	TC DE'BAKEY NDL HOLDER DEL SERR 180MM	1

Autoclavable container of rectangular shape to accommodate above instruments to be provided free of cost.

1. Specify Life of Equipment in standard operating condition from the date of Installation.
2. Comprehensive warranty for five years (free repair and replacement of all parts)
3. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years

4. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
5. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
6. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
7. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
8. Company Item should be US- FDA and European CE approved.
9. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
10. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Abbreviation Detail :

Diss = Dissector, DWN = Down, CVD = Curved, Sciss = Scissor, SERR = Serrated, TC=Titanium coated, NDL = Needle, HLDR= Holder, DEL = Delicate, S/B = Sharp/Blunt, S/S= Sharp /Sharp, HK=Hook, Suct = Suction, FCPS= Forcep, WRK=Working, LG-T=Length, ANG=Angular, STR=Strangth, Explor=Explorer, Med=Medium, Bayo=Bayonet, Ang=Angular.

Item No -02: Laminectomy Set

Description

Instruments are for delicate surgery of spine so they should be of high quality steel with smooth mobility and fine cutting/holding nature. They should be already in use in prime institutions of India or aboard. Company Item should be US- FDA and European CE approved. Company should have own unit to repair the damaged instruments.

S.No.	Name of Items	Quantity
1	METZENBAUM SCISSORS CVD 145 MM	2
2	TC BABY-METZ SCISSORSDEL CVD B/B145 MM	2
3	METZENBAUM SCISSORS STR 145MM	2
4	TC BABY-METZ SCISSORSDELSTRB/B145MM	2
5	MAYO SCISSORS CVD 215MM	2
6	MAYO-HEGAR NEEDLE HOLDER 150MM	2
7	MAYO-HEGAR NEEDLE HOLDER 185MM	2
8	MAYO-HEGAR NEEDLE HOLDER 200MM	2
9	KOCHER-LANGENBECK RETR 25X6MM 216MM	2
10	KOCHER-LANGENBECK RETR 41X11MM 216 MM	2
11	KOCHER-LANGENBECK RETR 70X14MM 216MM	2
12	OBWEGESER RETR CVD-DWN 80X16 215MM	2
13	KOCHER RETRACTOR 60X25MM	2
14	ELVATRHRTPRS-HDL CVDRND-TIP6MM 191MM	2
15	KEY ELEVATOR 200MM 19.0MM BLADE STR	2
16	BECKMANN-ADSON RETR 4X4 SEMI-S 305MM	1
17	SELF-RETAINING RETR 3X4T. SHARP 195MM	1
18	ANDERSON-ADSON RETR 4X4 SHARP 190MM	2
19	KERRISON 130DG-UP 1MM 180MM	2
20	KERRISON 130DG-UP 2 MM 180MM	2
21	KERRISON 130DG-UP 3MM 180MM	1
22	KERRISON 130DG-UP 4MM 180MM	1
23	ZAUFAL-JANSEN BONE RONGEUR CVD 180MM	1
24	RUSKIN BONE RONGEUR CVD 190MM	1
25	SPURLING RONGEUR STR 4X10MM 180MM	1
26	SPURLING RONG CVD UP-BITE 4X10MM 180MM	1
27	CUSHING RONGEUR STR 2X10MM 180MM	1
28	CASPAR RONGEURSTRSERR 4X14MM 185MM	3
29	CASPAR RONGEUR UP-BI TESERR 3MM 185MM	3
30	LOVE-GRUENWALD RONGUP-BITE 3X10MM 180MM	1
31	WEIBLAKESLEY RONGEUR STR 3MM 121MM	1
32	TAKAHASHI RONGEUR STR 3MM 120MM	1
33	ADSON FORCEPS SERR 120MM	1
34	ADSON TISSUE FCPS FINE W/1X2T 120MM	1
35	ADSON TISSUE FCPS FINE W/1X2T 150MM	1
36	MC'INDOE DEL THUMB FCPS SERR 150MM	2

S.No.	Name of Items	Quantity
37	STANDARD FORCEPS SERR 200MM	1
38	STANDARD TISSUE FORCEPS 1X2 200MM	1
39	CUSHING DEL STR FORCEPS 200MM	2
40	WAUGH DEL. TISSUE FORCEPS 1X2 200MM	1
41	YASARGIL MICROFORM BAYO FCPS.6MM 200MM	1
42	YASARGIL MICROFORM BAYO FRCPS 1X2 180MM	1
43	YASARGIL MICROFORM BAYO FCPS.9MM 200MM	1
44	MICRO-ADSON FORCEPS SERR 150MM	1
45	MICRO-ADSON TISSUE FORCEPS 1X2 150MM	1
46	FARABEUF RASPATORY CVD 12.5MM BR.140MM	2
47	MAC DONALD ELEVATOR B/B 185MM	2
48	WATSON-CHEYNE DISSECTOR LGTH 191MM	2
49	ADSON ELEVATOR SHARP FLAT 8MM	1
50	RASPATORY ADSON CVD 5MM	1
51	FREER-YASARGIL ELEVATOR S/S 185MM	1
52	FREER ELEVATOR SHARP 190MM	1
53	DISSECTOR LIGHT MODEL	1
54	SUCTION CANNULA LEMPERT 2MM	3
55	SUCTION CANNULA LEMPERT 3MM	1
56	SUCTION CANNULA RND-TIP 4.0MM 180MM	1
57	ADSON NERVE HOOKBLUNT	1
58	FRAZIER DURA RETRACTOR 130MM	2
59	HOWARTH ELEVATOR	1
60	HEYWOOD-SMITH POLYP FORCEPS STR 250MM	2
61	TC GILLIES NDLHLDR/SCISANGW/EYE 159MM	2
62	SCALPEL HANDLE No. 7 ENLISH NO. 5. 5	2
63	LEMPERT BONE CURETTE 2.0MM 216MM	2
64	DAUBENSPECK BONE CURETTE NO.0 5.2MM 203MM	1

Autoclavable container of rectangular shape to accommodate above instruments to be provided free of cost.

1. Specify Life of Equipment in standard operating condition from the date of Installation.
2. Comprehensive warranty for five years (free repair and replacement of all parts)
3. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
4. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
5. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre . In case of failure in providing preventive service, Warranty/ AMC will

be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.

6. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
7. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
8. Company Item should be US- FDA and European CE approved.
9. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation. (In case of Equipment is imported from other Country.)
10. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Abbreviation Detail:

Diss = Dissector, DWN = Down, CVD = Curved, Sciss = Scissor, SERR = Serrated, TC=Titanium coated, NDL = Needle, HLDR= Holder, DEL = Delicate, S/B = Sharp/Blunt, S/S= Sharp /Sharp, HK=Hook, Suct = Suction, FCPS= Forcep, WRK=Working, LG-T=Length, ANG=Angular, STR=Strangth, Explor=Explorer, Med=Medium, Bayo=Bayonet, Ang=Angular. RETR=Retractor, HDL= Holder, RND=Round,

Item No -03: Leyla Self Retaining brain retractor Set

Description: This instrument is meant for retraction of brain with smooth movement and stability. It should be of high quality steel. Company Item should be US- FDA and European CE approved. Company must have supplied it to prime institution of India.

S. No.	Description	Quantity
1	BALL-AND-SOCKET JOINT BOLD	1
2	HOLDING ROD F. LEYLA-RETRACT., ISOLATED	1
3	COUPLING HEAD FOR FLEXIBLE ARM FF 270	1
4	COUPLING HEAD,ATTACHABLE,TURNABLE	1
5	RIECHERT MODIF.FIXAT.BAS F. 2 FLEX. ARMS	1
6	FIXATION DEVICE FOR FF 270	1
7	YASARGIL FLEXIBLE ARM ONLY, MOBILE	2
8	RIECHERT SUPPORT FOR FLAT BRAIN SPATULAS	2
9	SUPPORT F.ROUND SH. INSTR. UP TO 5.5MM D.	2
10	SPATULA, MALLEABLE, 200 X 12 MM	1
11	SPATULA, MALLEABLE, 200 X 17MM	1
12	BRAIN SPATULA, 14 X 200 MM	2
13	BRAIN SPATULA, 17 X 200MM	2
14	BRAIN SPATULA, 20 X 200MM	2
15	BRAIN SPATULA, HEIFETZ, 11MM,MALLEABLE	2
16	BRAIN SPATULA, HEIFETZ, 8MM, MALLEABLE	2
17	BRAIN SPATULA W.SILICO.INLAY, 6.0MM WIDE	2
18	BRAIN SPATULA W.SILICO.INLAY, 7.5MM WIDE	2
19	BRAIN SPATULA W.SILIC. INLAY, 10MM WIDE	2
20	BRAIN SPA;TULA W.SILIC.INLAY, 12.5MM WIDE	2
21	BRAIN SPATULA W.SILIC.INLAY, 15.0MM WIDE	2
		TOTAL

Autoclavable container of rectangular shape to accommodate above instruments to be provided free of cost.

1. Specify Life of Equipment in standard operating condition from the date of Installation.
2. Comprehensive warranty for five years (free repair and replacement of all parts)
3. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
4. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
5. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC

will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.

6. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
7. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
8. Company Item should be US- FDA and European CE approved.
9. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation. (In case of Equipment is imported from other Country.)
10. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -04: High Frequency Surgical Diathermy Set

1. High Frequency Microprocessor based 300 – 400 W of High reputed foreign make
2. Capable of Monopolar and bipolar coagulation separately without switchover
3. Micro adjustment of bipolar current
4. Digital display with touch control panel
5. Silicon patient plate
6. Bipolar cord – 10
7. Monopolar cord – 10
8. Vario foot control
9. Bipolar non sticky 1mm blunt tip bayonet forceps 6 inches long - 2
10. Bayonet Bipolar non sticky , 0.4 – 0.5 mm tipped 7 inches long forceps – 2
11. Unit should have Audio-visual error monitoring system
12. Voltage/ Ampere plug top as per Indian standard
13. Specify Life of Equipment in standard operating condition from the date of Installation.
14. Comprehensive warranty for five years (free repair and replacement of all parts)

15. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
16. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
17. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
18. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
19. Certificate for insuring availability of Spare Parts and services, by manufacturing Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
20. Trolley with inbuilt electric socket with strong four wheels
21. Submit User list
22. Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS)
23. General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC; EMC-directive.
24. The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%
25. Power input to be 220-240VAC, 50Hz fitted with Indian plug
26. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
27. User Manual in English
28. Service manual in English
29. List of important spare parts and accessories with their part number and costing
30. Certificate of calibration and inspection.
31. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
32. The job description of the hospital technician and company service engineer should be clearly spelt out
33. List of Equipment's available for providing calibration and routine Preventive Maintenance Support, as per manufacturer documentation in service/technical manual.

34. Company Item should be US- FDA and European CE approved.
35. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation. (In case of Equipment is imported from other Country.)
36. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -05: Xenon operating heat light

Equipment is used for lightening of brain/spine for operation while it is being worm on head. Company Item should be US- FDA and European CE approved, and world have supplied to prime institution of India.

1. Light source should be 300 Watt Xenon
2. Head clamp should be light weight
3. Focus of light should be adjustable
4. Light can be adjusted in all direction
5. Source should be mounted on the stand on wheel
6. Fibreoptic cable should be long and light
7. Electric cable should be long with Indian plug
8. It can work continuously with getting warm
9. 9.Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS)
10. General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC; EMC-directive.
11. The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%
12. Power input to be 220-240VAC, 50Hz fitted with Indian plug
13. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
14. User Manual in English
15. Service manual in English
16. List of important spare parts and accessories with their part number and costing
17. Certificate of calibration and inspection.
18. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
19. The job description of the hospital technician and company service engineer should be clearly spelt out
20. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.

21. Specify Life of Equipment in standard operating condition from the date of Installation.
22. Comprehensive warranty for five years (free repair and replacement of all parts)
23. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
24. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
25. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
26. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
27. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
28. Company Item should be US- FDA and European CE approved.
29. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
30. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -06: May Field skull clamp set

Description : It is for rigid fixation of skull during surgery so that there should not be any movement during using microscope. Company Item should be US- FDA and European CE approved and product should be original. It would have supplied it in prime institutions of India.

1. It should be original
2. Adult and pediatric pins to be provided
3. The clamp should be provided with table attachment
4. It should also be provided with sitting arrangement
5. Specify Life of Equipment in standard operating condition from the date of Installation.
6. Comprehensive warranty for five years (free repair and replacement of all parts)
7. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
8. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
9. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
10. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
11. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.

12. Company Item should be US- FDA and European CE approved.
13. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
14. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -07: Wilson spinal frame (Radiolucent)

Description: It is in used for spinal surgery in prone position
Features:

1. It should be radiolucent so that x-ray can be taken without artifact during surgery
2. It should be original from parent company
3. It should be strong enough to bear heavy weight patient
4. Specify Life of Equipment in standard operating condition from the date of Installation.
5. Comprehensive warranty for five years (free repair and replacement of all parts)
6. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
7. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
8. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
9. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
10. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation,

even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.

11. Company Item should be US- FDA and European CE approved.
12. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
13. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -08: Shunt Surgery Set

Description: It is meant for placement of ventriculo-peritoneal clamp in patients with hydrocephalus, Company Item should be US- FDA and European CE approved.

S.No.	Name of Items	Quantity
1	Surgical knife handle for 23 No. Blade	1
2	Surgical knife handle for 14 No. Blade	1
3	Jansen self retaining mastoid retractor small	2
4	Hudson Drill Brace	1
5	Hudson Burr 14 MM Diameter	1
6	Perforator 13mm Diameter	1
7	Dandy Delicate forceps Curved 140 mm	10
8	Penfield dissector set (No. 1,2,3,4,5)	1
9	Periosteal elevator	1
10	Cushing Ventricular Cannula	2
11	Subcutaneous tunnellor adult	1
12	Subcutaneous tunnellor paediatric	1
13	Abdominal Trocar	1
14	Fine tooth forcep 4”	1
14	Medium tooth focep	1
15	Langhen’s tissue retractor	2
16	Fine needle holder 4”Crile Wood	1
17	Medium size needle holder DE-Bakey	1
18	Noir Metzenbaum scissors Delicate curved180mm	1

1. Specify Life of Equipment in standard operating condition from the date of Installation.
2. Comprehensive warranty for five years (free repair and replacement of all parts)
3. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years

11. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired. During Warranty / AMC Period three preventive

Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.

12. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
4. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
5. Company Item should be US- FDA and European CE approved.
6. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
7. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

2: Department of Plastic Surgery

Technical Specifications for Plastic Surgery Equipment's

Item No -09: Total performance system power tool

1. Set Total performance system power tool (modular)
2. Battery Hand piece, modular
3. Power Module (2 per set)
4. Sterile Cover, for Power drill system
5. Lid for Battery Hand piece
6. AO/ASIF Quick Coupling
7. Drill Chuck (Drilling Speed), with Key
8. Attachment for Acetabular and Medullary Reaming,
9. Quick Coupling for Kirschner Wires _ 1.0 to 4.0 mm,
10. Quick Coupling for DHS/DCS® Triple Reamers
11. Screw Attachment, with AO/ASIF Quick Coupling
12. Sagittal Saw Attachment
13. Vario Case, size 1/1, Battery Hand piece,with Insert, without Lid, without Contents
14. Lid (Stainless Steel), size 1/1, for Vario Case
15. Oil Dispenser with 50 ml

Power Tool

16. Battery Handpiece, modular
17. Lid for Battery Handpiece

Charger, battery and accessories for battery

18. Universal Battery Charger II
19. Power Module
20. Sterile Cover

Attachments

21. AO/ASIF Quick Coupling
22. Drill Chuck (drilling speed), with key
23. Drill Chuck (reaming speed), with key
24. Drill Chuck, keyless
25. Attachment for Acetabular and Medullary Reaming
26. Quick Coupling for Kirschner Wires _ 1.0 to 4.0 mm
27. Quick Coupling for DHS/DCS® Triple Reamers
28. Screw Attachment, with AO/ASIF Quick Coupling
    - Torque Limiter, 1.5 Nm
    - Torque Limiter, 4.0 Nm
29. Hudson Quick Coupling (drilling speed),
30. Hudson Quick Coupling (reaming speed
31. Trinkle Quick Coupling (drilling speed),
32. Trinkle Quick Coupling (reaming speed),
33. Trinkle Quick Coupling (drilling speed), modified,
34. Trinkle Quick Coupling (reaming speed), modified,

35. Sagittal Saw Attachment,
36. Reciprocating Saw Attachment,
37. Adapter for Radiolucent Drive,
38. Top for Sternum for Reciprocating Saw Attachment
39. Radiolucent Drive
40. Angular Drive Unit for Medullary Reaming
41. Kuentscher Adapter
42. Harris Adapter

Accessories

43. Spare Key for Drill Chuck, clamping range up to _ 6.5 mm
44. Cleaning brush
45. Oil dispenser with oil

Vario Case

46. Vario Case, size 1/1, Battery Handpiece,with Insert, without Lid, without Contents
47. Insert, size 2/3, for Vario Case
48. Vario Case, size 1/2, for Trauma Recon System Battery Handpiece,without Lid, without Contents
49. Lid (Stainless Steel), size 1/1, for Vario Case
50. Lid (Stainless Steel), size 1/2, for Vario Case
51.
52. Total performance system power tool with saws, driver and burrs. Saggital saw hand piece, transverse saw hand piece, power drive, mini burr.
53. Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS)
54. General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC;EMC-directive.
55. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
56. Power input to be 220-240VAC, 50Hz fitted with Indian plug
57. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms (OR EQUIVALENT BIS Standard)
58. User Manual in English
59. Service manual in English
60. List of important spare parts and accessories with their part number and costing
61. Certificate of calibration and inspection.
62. Log book with instruction for daily, weekly, monthlyand quarterly maintenance checklist.
63. The job description of the hospital technician andcompany service engineer should be clearly spelt out
64. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as permanufacturer documentation in service/technicalmanual.
65. Specify Life of Equipment in standard operating condition from the date of Installation.
66. Comprehensive warranty for five years (free repair and replacement of all parts)
67. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years

68. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
69. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
70. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
71. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
72. Company Item should be US- FDA and European CE approved.
73. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
74. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS,BHU.

.Item No -10: Electronic Tourniquet with Accessories

1. Tourniquet with 4 cuffs.
2. Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS)
3. General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC; EMC-directive.
4. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
5. Power input to be 220-240VAC, 50Hz fitted with Indian plug
6. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
7. User Manual in English

8. Service manual in English
9. List of important spare parts and accessories with their part number and costing
10. Certificate of calibration and inspection.
11. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
12. The job description of the hospital technician and company service engineer should be clearly spelt out
13. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
14. Specify Life of Equipment in standard operating condition from the date of Installation.
15. Comprehensive warranty for five years (free repair and replacement of all parts)
16. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
17. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
18. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
19. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
20. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
21. Company Item should be US- FDA and European CE approved.
22. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)

23. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

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Item No -11: Magnifying Loupes

1. Magnifying Loupes on head band with cold light illumination system 4 x magnification.
2. Warrantee: 5 years Comprehensive warranty of unit and its accessories from date of satisfactory installation.
3. Specify Life of Equipment in standard operating condition from the date of Installation.
4. Comprehensive warranty for five years (free repair and replacement of all parts)
5. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
6. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
7. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
8. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
9. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
10. Company Item should be US- FDA and European CE approved.

11. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
12. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -12: Microsurgery set

1. Contain micro instruments and vascular clamps Basic instruments set.
2. Warrantee: 5 years Comprehensive warranty of unit and its accessories from date of satisfactory installation.
3. Specify Life of Equipment in standard operating condition from the date of Installation.
4. Comprehensive warranty for five years (free repair and replacement of all parts)
5. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
6. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
7. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
8. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
9. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
10. Company Item should be US- FDA and European CE approved.

11. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
12. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -13: Nerve Stimulator-mapper-locator set

1. Nerve Stimulator with Mapper locator cable, probe and power adapter.
2. Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS)
3. General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC; EMC-directive.
4. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
5. Power input to be 220-240VAC, 50Hz fitted with Indian plug
6. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
7. User Manual in English
8. Service manual in English
9. List of important spare parts and accessories with their part number and costing
10. Certificate of calibration and inspection.
11. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
12. The job description of the hospital technician and company service engineer should be clearly spelt out
13. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
14. Specify Life of Equipment in standard operating condition from the date of Installation.
15. Comprehensive warranty for five years (free repair and replacement of all parts)
16. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
17. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
18. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each

failure in preventive maintenance, any number of breakdown calls to be attended by company.

19. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
20. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
21. Company Item should be US- FDA and European CE approved.
22. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
23. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -14: Surgical Cautery

Surgical Cautery with Mono polar and bipolar cable cord with foot switch and patients pad. High Frequency Microprocessor based 300 – 400 W of High reputed foreign make

1. Company Item should be US- FDA and European CE approved.
2. Capable of Monopolar and bipolar coagulation separately without switchover
3. Micro adjustment of bipolar current
4. Digital display with touch control panel
5. Silicon patient plate
6. Bipolar cord – 10
7. Monopolar cord – 10
8. Vario foot control
9. Bipolar non sticky 1mm blunt tip bayonet forceps 6 inches long - 2
10. Bayonet Bipolar non sticky , 0.4 – 0.5 mm tipped 7 inches long forceps – 2
11. Unit should have Audio-visual error monitoring system
12. Voltage/ Ampere plug top as per Indian standard

13. Trolley with inbuilt electric socket with strong four wheels
14. Submit User list
15. Authorization letter from parent company and Item FDA/CE Approved certificate
16. Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS)
17. General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC; EMC-directive.
18. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
19. Power input to be 220-240VAC, 50Hz fitted with Indian plug
20. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
21. User Manual in English
22. Service manual in English
23. List of important spare parts and accessories with their part number and costing
24. Certificate of calibration and inspection.
25. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
26. The job description of the hospital technician and company service engineer should be clearly spelt out
27. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
28. Specify Life of Equipment in standard operating condition from the date of Installation.
29. Comprehensive warranty for five years (free repair and replacement of all parts)
30. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
31. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
32. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
33. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on

call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.

34. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
35. Company Item should be US- FDA and European CE approved.
36. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
37. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -15: Micro motor set With accessories bits, punches & burrs

1. Micro motor set with accessories – bits, punches, burrs.
2. Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS)
3. General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC; EMC-directive.
4. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
5. Power input to be 220-240VAC, 50Hz fitted with Indian plug
6. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
7. User Manual in English
8. Service manual in English
9. List of important spare parts and accessories with their part number and costing
10. Certificate of calibration and inspection.
11. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
12. The job description of the hospital technician and company service engineer should be clearly spelt out
13. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
14. Specify Life of Equipment in standard operating condition from the date of Installation.

15. Comprehensive warranty for five years (free repair and replacement of all parts)
16. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
17. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
18. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
19. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
20. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
21. Company Item should be US- FDA and European CE approved.
22. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
23. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -16: Maxillofacial mini plating set

1. Maxillofacial mini plating set with complete accessories.
2. Company Item should be US- FDA and European CE approved.
3. Specify Life of Equipment in standard operating condition from the date of Installation.
4. Comprehensive warranty for five years (free repair and replacement of all parts)
5. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
6. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
7. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
8. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
9. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
10. Company Item should be US- FDA and European CE approved.
11. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
12. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -17: Vascular Doppler

1. Bidirectional probe with intra operative monitoring probe.
2. Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS)
3. General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC; EMC-directive.
4. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
5. Power input to be 220-240VAC, 50Hz fitted with Indian plug
6. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
7. User Manual in English
8. Service manual in English
9. List of important spare parts and accessories with their part number and costing
10. Certificate of calibration and inspection.
11. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
12. The job description of the hospital technician and company service engineer should be clearly spelt out
13. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
14. Specify Life of Equipment in standard operating condition from the date of Installation.
15. Comprehensive warranty for five years (free repair and replacement of all parts)
16. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
17. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
18. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
19. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on

call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.

20. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
21. Company Item should be US- FDA and European CE approved.
22. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
23. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -18: Surgical instruments set for Plastic surgery.

S no.	Name of the instrument	Quantity	Distribution
1.	Scalpel handle no. 3 & 4	10 each	6 each for OT 2 each for OPD dressing room 2 each for ward dressing room
2.	Kidney trays	21	15 for OT 3 for OPD dressing room 3 for ward dressing room
3.	Small Bowls (Katori)	36	30 for OT 3 for OPD dressing room 3 for ward dressing room
4.	Sponge holding forceps	14	10 for OT 2 for OPD dressing room 2 for ward dressing room
5.	Artery forceps	60	40 for OT 10 for OPD dressing room 10 for ward dressing room
6.	Mosquito forceps	60	40 for OT 10 for OPD dressing room 10 for ward dressing room
7.	Cheatle forceps	18	12 for OT 3 for OPD dressing room 3 for ward dressing room
8.	Dissecting forceps 3”, 4”, 5”	16 each	10 each for OT

S no.	Name of the instrument	Quantity	Distribution
			2 each for OPD dressing room 2 each for ward dressing room
9.	Metzenbaum scissors 6” curved	18	12 for OT 3 for OPD dressing room 3 for ward dressing room
10.	Metzenbaum scissors 9” curved	12	12 for OT
11.	Sponge holding forceps	18	12 for OT 2 for OPD dressing room 4 for ward dressing room
12.	Stitch cutting scissors	20	12 for OT 4 for OPD dressing room 4 for ward dressing room
13.	Skin hooks single	20	For OT
14.	Skin hooks double sharp	20	For OT
15.	Skin hooks double blunt	20	For OT
16.	Compass double hook (moveble)	10	For OT
17.	Langenbeck retractor small	10	For OT
18.	Langenbeck retractor medium	10	For OT
19.	Czerney retractor	12	For OT
20.	Deaver’s retractor	8	For OT
21.	Doyen’s retractor	8	For OT
22.	Desmarre’s lid retractor	8	For OT
23.	Cat’s paw retractor	12	For OT
24.	Jeweller’s forceps small	8	For OT
25.	Jeweller’s forceps medium	8	For OT
26.	Jeweller’s forceps large	8	For OT
27.	Adson’s forceps tooth	12	For OT
28.	Adson’s forceps non-tooth	12	For OT
29.	Vulsellum forceps	6	For OT
30.	Mayo Scissors small straight	8	For OT
31.	Mayo Scissors small curved	8	For OT
32.	Mayo Scissors large straight	8	For OT
33.	Mayo Scissors large curved	8	For OT
34.	Iris scissors straight	8	For OT
35.	Iris scissors curved	8	For OT
36.	Allis Forceps	30	For OT
37.	Baby Allis Forceps	30	For OT
38.	Needle holder 4”	10	For OT
39.	Needle holder 5”	10	For OT
40.	Needle holder 7”	10	For OT
41.	Towel clips	60	For OT

S no.	Name of the instrument	Quantity	Distribution
42.	Chisel straight	8	For OT
43.	Chisel curved	8	For OT
44.	Bulldog clamps	20	For OT
45.	Giggley saw handle	6 pairs	For OT
46.	Dingman mouth gag with tongue depressor set	6 sets	For OT
47.	KilnerDott mouth gag with tongue depressor set	6 sets	For OT
48.	Fergusson mouth gag	6	For OT
49.	Heister's mouth gag	6	For OT
50.	Cleft palate elevators left,right,straight	6 sets	For OT
51.	Cleft palate elevators curved left,curvedright	6 sets	For OT
52.	Howarth elevator	6	For OT
53.	Cleft palate hook	6	For OT
54.	Cleft palate scissors 6"	6	For OT
55.	Cleft palate scissors 8"	6	For OT
56.	Dental scalers set	6 sets	For OT
57.	Cleft palate round scalpel handle	6	For OT
58.	Metallic rulers	6	For OT
59.	Cleft lip calipers	6	For OT
60.	Kilner alar retractor	6	For OT
61.	Aufricht retractor for rhinoplasty	6	For OT
62.	Killian's septal elevator straight	6	For OT
63.	Killian's septal elevator straight	6	For OT
64.	Cross serrated rasps	6	For OT
65.	Thudicum's nasal speculum	6	For OT
66.	Cartilage crusher	6	For OT
67.	Lucs forceps set of 3	6 sets	For OT
68.	Septum punch forceps	6	For OT
69.	Asch nasal forceps	6	For OT
70.	Walsham nasal forceps	6	For OT
71.	Nasal septal forceps straight	6	For OT
72.	Nasal septal forceps angled	6	For OT
73.	Aufricht scissors	6	For OT
74.	Skin grafting handle (Watson type)	12	For OT
75.	Silver's miniature skin	6	For OT

S no.	Name of the instrument	Quantity	Distribution
	grafting handle		
76.	Skin grafting meshing board	12	For OT
77.	Double action bone nibbler	6	For OT
78.	Double action bone cutter	6	For OT
79.	Wire cutter	6	For OT
80.	Fascial stripper	6	For OT
81.	Tendon stripper	6	For OT
82.	Tendon hook	6	For OT
83.	Tendon retriever	6	For OT
84.	Areola marker	6	For OT
85.	Key hole pattern areola marker	6	For OT
86.	Hand drill chuck type	3	For OT
87.	Hand drill collet type	3	For OT
88.	Rib shear	8	For OT
89.	Zygoma hook	4	For OT
90.	Jaw hook	4	For OT
91.	Ramus retractor	6	For OT
92.	Mandible retractor	6	For OT
93.	Rowe's maxillary disimpaction forceps left and right	6 each	For OT
94.	Rowe's mandible holding forceps	6	For OT
95.	Fergusson bone holding forceps	6	For OT
96.	Bristow's zygoma elevator	6	For OT
97.	K – wire cutter	6	For OT
98.	K-wire bender	6	For OT
99.	Wire twister	6	For OT
100.	Bone awl	6	For OT
101.	Bone currete	6	For OT

1. Specify Life of Equipment in standard operating condition from the date of Installation.
2. Comprehensive warranty for five years (free repair and replacement of all parts)
3. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
4. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
5. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to

Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.

6. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
7. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
8. Company Item should be US- FDA and European CE approved.
9. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
10. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

3: Department of General Surgery

Technical Specifications for General Surgery Instrument's

Item No -19: Electro Surgical Unit (Diathermy).

1. High Frequency Microprocessor based 300-400 W of High reputed foreign make
2. Capable of Monopolar and bipolar coagulation separately without switchover
3. Micro adjustment of bipolar current
4. Digital display with touch control panel
5. Silicon patient plate
6. Bipolar cord - 10
7. Monopolar cord -10
8. Vario foot control
9. Bipolar non sticky 1mm blunt tip bayonet forceps 6 inches long - 2
10. Bayonet Bipolar non sticky, 0.4 - 0.5 mm tipped 7 inches long forceps -2
11. Unit should have Audio-visual error monitoring system
12. Voltage/Ampere plug top as per Indian standard
13. Trolley with inbuilt electric socket with strong four wheels
14. Submit User list
15. Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS)
16. General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC; EMC-directive.
17. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
18. Power input to be 220-240VAC, 50Hz fitted with Indian plug
19. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
20. User Manual in English
21. Service manual in English
22. List of important spare parts and accessories with their part number and costing
23. Certificate of calibration and inspection.
24. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
25. The job description of the hospital technician and company service engineer should be clearly spelt out
26. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.

27. Specify Life of Equipment in standard operating condition from the date of Installation.
28. Comprehensive warranty for five years (free repair and replacement of all parts)
29. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
30. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
31. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
32. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
33. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
34. Company Item should be US- FDA and European CE approved.
35. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
36. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -20: Surgical Instruments Set Department of General

Surgery as per attached list:

SI. No	Name of the Instrument	Quantity	Distribution
1	Scalpel handle no.3 & 4	60 each	40 Each for OT
			10 Each for OPD dressing room
			10 Each for ward dressing room
2	Kidney trays	60 each	40 for OT
			10 for OPD dressing room
			10 for ward dressing room
3	Small Bowls (Katori)	60 each	40 for OT
			10 for OPD dressing room
			10 for ward dressing room
4	Sponge holding forceps	60 each	40 for OT
			10 for OPD dressing room
			10 for ward dressing room
5	Artery forceps (6 inch & 9 inch)	200 each	160 for OT
		(Different	20 for OPD dressing room
		sizes)	20 for ward dressing room
6	Mosquito forceps	100 each	80 for OT
			10 for OPD dressing room
			10 for ward dressing room
7	Cheatle forceps	36	24 for OT
			06 for OPD dressing room
			06 for ward dressing room
8	Dissecting forceps 3", 4", 5"	64 each	48 for OT
			08 for OPD dressing room
			08 for ward dressing room
9	Metzenbaum scissors 6" curved	36	24 for OT
			06 for OPD dressing room
			06 for ward dressing room
10	Metzenbaum scissors 9" curved	24	24 for OT
11	Stitch cutting scissors	40	24 for OT
			08 for OPD dressing room
			08 for ward dressing room
12	Skin hooks single	20	ForOT
13	Skin hooks double sharp	20	ForOT
14	Skin hooks double blunt	20	ForOT
15	Compass double hook (moveable)	20	ForOT
16	Langenbeck retractor small	20	ForOT
17	Langenback retractor medium	20	ForOT
18	Czerney retractor	48	ForOT
19	Deaver's retractor	24	ForOT

SI.	Name of the Instrument	Quantity	Distribution
20	Doyen's retractor	24	ForOT
21	Morris retractor	12 Large	ForOT
		12 Small	
22	Cat's paw retractor	12	ForOT
23	Jeweller's forceps small	16	ForOT
24	Jeweller's forceps medium	16	ForOT
25	Jeweller's forceps large	16	ForOT
26	Adson's forceps tooth	24	ForOT
27	Adson's forceps non-tooth	24	ForOT
28	Vulsellum forceps	12	ForOT
29	Mayo Scissors small straight	24	ForOT
30	Mayo Scissors small curved	24	ForOT
31	Mayo Scissors large straight	24	ForOT
32	Mayo Scissors large curved	24	ForOT
33	Iris scissors straight	08	ForOT
34	Iris scissors curved	08	ForOT
35	Allis forceps	60	ForOT
36	Baby Allis Forceps	60	ForOT
37	Needle holder 4"	20	ForOT
38	Needle holder 5"	20	ForOT
39	Needle holder 7"	20	ForOT
40	Towel clips	120	ForOT
41	Chisel straight	16	ForOT
42	Chisel curved	16	ForOT
43	Bulldog clamps	40	ForOT
44	Giggley saw handle	6 pairs	ForOT
45	Dingam mouth gag with tongue depressor set	2	ForOT
46	KilnerDott mouth gag with tongue depressor set	2	ForOT
47	Fergusson mouth gag	2	ForOT
48	Heister's mouth gag	2	ForOT
49	Cleft palate elevators left, right, straight	2	ForOT
50	Cleft palate elevators curved left, curved right	2	ForOT
51	Howarth elevator	2	ForOT
52	Cleft palate hook	1	ForOT
53	Cleft palate scissors 6"	1	ForOT
54	Cleft palate scissors 8"	1	ForOT
55	Dental scalersset	2	ForOT
56	Cleft palate round scalpel handle	2	ForOT
57	Metallic rulers	12	ForOT

SI.	Name of the Instrument	Quantity	Distribution
58	Cleft lip calipers	1	ForOT
59	Kilner alar retractor	1	ForOT
60	Aufricht retractor for rhinoplasty	1	ForOT
61	Killian's septal elevator straight	1	ForOT
62	Killian's septal elevator straight	1	ForOT
63	Cross serrated rasps	1	ForOT
64	Thudicum's nasal speculum	1	ForOT
65	Cartilage crusher	1	ForOT
66	Selfretaining abdominal wall	6	ForOT
	retractor		
67	Lues forceps set of 3	1	ForOT
68	Septum punch forceps	1	ForOT
69	Asch nasal forceps	1	ForOT
70	Walsham nasal forceps	1	ForOT
71	Nasal septal forceps straight	1	ForOT
72	Nasal septal forceps angled	1	ForOT
73	Aufricht scissors	6	ForOT
74	Skin grafting handle (Watson	12	ForOT
	type)		
75	Silver's miniature skin grafting	6	ForOT
	handle		
76	Skin grafting meshing board	2	ForOT
77	Double action bone nibbler	6	ForOT
78	Double action bone cutter	6	ForOT
79	Wire cutter	6	ForOT
80	Fascial stripper	1	ForOT
81	Tendon stripper	1	ForOT
82	Tendon hook	1	ForOT
83	Tendon retriever	1	ForOT
84	Areola marker	1	ForOT
85	Key hole pattern areola marker	1	ForOT
86	Hand drill chuck type	1	ForOT
87	Hand drill collet type	1	ForOT
88	Rib shear	8	ForOT
89	Zygomahook	1	ForOT
90	Jaw hook	1	ForOT
91	Ramus retractor	1	ForOT
92	Mandible retractor	1	ForOT
93	Rowe's macillarydisimpaction	1	ForOT
	forceps left and right		
94	Rowe's mandible holding forceps	1	ForOT
95	Fergusson bone holding forceps	1	ForOT
96	Bristow's zygoma elevator	1	ForOT

SI.	Name of the Instrument	Quantity	Distribution
97	K-wire cutter	1	ForOT
98	K-wire bender	1	ForOT
99	Wire twister	1	ForOT
100	Bone awl	1	ForOT
101	Bone currete	1	ForOT
102	Joel's Thyroid retractor	12	ForOT
103	Desjordin's store holding forceps	8	ForOT
104	Intestinal Clamps (Non crushing)	8	ForOT
105	Vascular Clamps (De Bakey's)	16	ForOT
106	Right angle Bowel Clamps (Non	8	ForOT
	crushing)		
107	Octopus self retaining abdominal	4	ForOT
	wall retractor		
108	Right angle artery Forceps (6 & 8	4 each	ForOT
	inch)		
109	Thoracotomy set	4	ForOT
110	Lung retractor	8	ForOT
III	Periosteal elevator (straight &	4 each	ForOT
	Curved)		

1. Specify Life of Equipment in standard operating condition from the date of Installation.
2. Comprehensive warranty for five years (free repair and replacement of all parts)
3. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
4. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
5. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
6. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.

7. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
8. Company Item should be US- FDA and European CE approved.
9. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
10. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

4: Department of Orthopaedic

Technical Specifications for Orthopaedic Instrument's

Item No -21: Diathermy

Diathermy with Monopolar, Bipolar and under water cutting, capabilities with multi hand switch facility.

1. High Frequency Microprocessor based 300-400 W of High reputed foreign make
2. Capable of Monopolar and bipolar coagulation separately without switchover
3. Micro adjustment of bipolar current
4. Digital display with touch control panel
5. Silicon patient plate
6. Bipolar cord - 10
7. Monopolar cord -10
8. Vario foot control
9. Bipolar non sticky 1mm blunt tip bayonet forceps 6 inches long - 2
10. Bayonet Bipolar non sticky, 0.4 - 0.5 mm tipped 7 inches long forceps -2
11. Unit should have Audio-visual error monitoring system
12. Voltage/Ampere plug top as per Indian standard
13. Trolley with inbuilt electric socket with strong four wheels
14. Submit User list
15. Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS)
16. General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC; EMC-directive.

17. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
18. Power input to be 220-240VAC, 50Hz fitted with Indian plug
19. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
20. User Manual in English
21. Service manual in English
22. List of important spare parts and accessories with their part number and costing
23. Certificate of calibration and inspection.
24. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
25. The job description of the hospital technician and company service engineer should be clearly spelt out
26. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical Manual.
27. Specify Life of Equipment in standard operating condition from the date of Installation.
28. Comprehensive warranty for five years (free repair and replacement of all parts)
29. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
30. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
31. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
32. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
33. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up

to that period, otherwise Company will provide good working standby set for remaining period.

34. Company Item should be US- FDA and European CE approved.
35. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
36. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -22: Electrical Suction Pump

Suction cum irrigation pump high flow rate, oil less low noise (imported) diaphragm pump for simultaneous operation of suction and irrigation with pressure and vacuum gauges and flow regulator.

1. 2 x 2 Ltrs. Polycarbonate jars (Long Type) with overflow safety
2. Noise level of suction apparatus with the range of 55 dB +/- 05 dB
3. Rocker Piston Vacuum Pump with the range of 720 +/- 10 mmHg
4. Anti corrosive and Epoxy Powder Coated Mild Steel Trolley
5. Ideal for Medical / MTP / Surgical procedures
6. Heavy duty HN-65 Castors with brakes
7. Free air displacement 35 ~ 40 LPM
8. Non collapsible Suction Tubing
9. Standard 63 mm Vacuum Gauge
10. Bacterial filter fitted
11. Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS)
12. General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC; EMC-directive.
13. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
14. Power input to be 220-240VAC, 50Hz fitted with Indian plug
15. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
16. User Manual in English
17. Service manual in English
18. List of important spare parts and accessories with their part number and costing
19. Certificate of calibration and inspection.
20. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
21. The job description of the hospital technician and company service engineer should be clearly spelt out

22. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
23. Specify Life of Equipment in standard operating condition from the date of Installation.
24. Comprehensive warranty for five years (free repair and replacement of all parts)
25. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
26. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
27. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
28. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
29. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
30. Company Item should be US- FDA / European CE approved/ ISO approved.
31. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
32. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

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Item No -23: General Orthopaedic Instrument set for 4 OT

Essential Instrument set for open orthopaedic surgery including

1. Retractors
2. 90^{o} – 4 Pieces sponge holders, Bobcock, Ellis, Towel clip, H
3. Glenoid Retractors – 4 Piece,
4. Langen Back -12
5. Homann's retractor -12
6. Devers Retractor - 12
7. C Zenys Retractor - 12
8. Moryes Retractor - 12
9. 2.Periosteum elevator 4mm,5mm,6mm curved & straight
10. 3.Nose pliers - 12
11. 4.Bone cutter - 12
12. 5.Wire Tensioner - 12
13. 6.Bone Hook – all sizes
14. 7.Bone holding clamps, Reduction Clamp – all sizes
15. 8.Screw Driver – 3.5mm , 4.5mm - 12
16. 9.Hammer with wooden handle - 12
17. 10.Plate holding Clamp 3.5mm & 4.5mm - 12
18. 14.Instrument Trolley (2) – Small, Large - 12
19. 15.Sterilization drum - 12
20. 16.Kidney Tray - 12
21. 17. Steel Bowl - 12
22. 18.Towels Clip – Large, Small - 12
23. 19.Sponge Holder - 12
24. B.P. Handle No.3, 4 - 12
25. Tooth Forceps - 12
26. Non Tooth Forceps - 12
27. Artery Forceps - 12
28. Allis Forceps - 12
24. 25.Kocher's Forceps - 12
25. 26.Babcock Forceps - 12
26. Mosquito Artery Forceps - 12
27. Needle Holder - 12
28. 29. Scissors - Fine - 12
    - Mayos - 12
29. Right Angle – 12 Piece
30. Suction Nozle – 12 Piece
31. Long artery Forceps – 12 Piece
32. LangenBech Retractor - – 12 Piece

33. flash Steriliser – 12 Piece
34. Oxygen – Pin connective – 12 Piece
35. Patient trolley – 12 Piece
36. Venti mask – 12 Piece
37. Pulse Oximator– 12 Piece
38. Cap Mask– 12 Piece
39. OT slippers – 12 Piece
40. Liquid soap dispenser – 12 Piece
41. Stools – 12 Piece
42. 43 Large wash basin with two tap connections
43. 44. Bone Nibblers Curved(double Action) 190mm – 12 Piece
44. 45.Bone Nibblers Curved(double Action) 225mm– 12 Piece
45. 46.Bone Nibblers – Angular – 12 Piece
46. (Double Action) 190mm– 12 Piece
47. Bone Nibblers – Angular – 12 Piece
48. (Double Action) 225mm
49. Burns Bone Currette with Fibre Handle Size : 3mm– 12 Piece
50. Burns Bone Currette with Fibre Handle Size : 4mm– 12 Piece
51. Burns Bone Currette with Fibre Handle Size : 5mm– 12 Piece
52. Hohmann Retractor 6mm Wide , Short Narrow Point, 160mm Length – 12 Piece
53. Hohmann Retractor 8mm Wide , Short Narrow Tip, 220mm Length- – 12 Piece
54. Hohmann Retractor 43mm Wide , Narrow Tip, 240mm Length-– 12 Piece
55. Steinman Pin Dia. 3.0mm x Length 175mm– 12 Piece
56. Steinman Pin Dia. 3.5mm x Length 200mm– 12 Piece
57. Steinman Pin Dia. 4.0mm x Length 175mm– 12 Piece
58. Steinman Pin Dia. 5.0mm x Length 200mm– 12 Piece
59. 58.Front Threaded Pin (Shanz Screw) dia. 4.0mm, Length 125mm, Thread 18mm – 12 Piece
60. Front Threaded Pin (Shanz Screw) dia. 4.5mm, Length 200mm,Thread 25mm – 12 Piece
61. Front Threaded Pin (Shanz Screw) dia. 5.0mm, Length 150mm, Thread 25mm – 12 Piece
62. Kirschner Wire with Trocar Tip Dia 1.0mm, Length 100mm– 12 Piece
63. Kirschner Wire with Trocar Tip Dia 2.0mm, Length 150mm-– 12 Piece
64. Kirschner Wire with Trocar Tip Dia 3.0mm, Length 150mm-– 12 Piece
65. Self Retaining Retractor Medium- 250mm Long – 12 Piece
66. Self Retaining Retractor Extra Large- 350mm Long– 12 Piece
67. Specify Life of Equipment in standard operating condition from the date of Installation.
68. Comprehensive warranty for five years (free repair and replacement of all parts)

69. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
70. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
71. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
72. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
73. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
74. Company Item should be US- FDA / European CE approved.
75. Country of origin Certificate , Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
76. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS,BHU.

Item No -24: Nailing Set As per attached list

1. Interlock Nailing sets Tibia, Femur, Humerus, distal femoral ,Proximal femur, Proximal Humerous nail
2. Plating of Tibia, Femur, Humerus, Radius, Ulna, Metacarpal,
3. Clavicle, Calcaneum – Plating set – 2.7,3.5.4.5
4. (Non Locking and Locking Plates set, cannulated, & Non- cannulated screw set)
5. 3. External fixator - Complete set of Ilizarov system
    a. A.O. Tubular Systems
    b. JESS system with clamps
    c. C Clamp
6. D.H.S - One set each
7. 5. D.C.S. - One set each
8. C.C.S. - One set each (4.5mm, 6.5mm)
9. Company Item should be US- FDA & European CE approved.
10. Specify Life of Equipment in standard operating condition from the date of Installation.
11. Comprehensive warranty for five years (free repair and replacement of all parts)
12. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
13. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
14. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
15. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
16. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up

to that period, otherwise Company will provide good working standby set for remaining period.

17. Company Item should be US- FDA / European CE approved.
18. Country of origin Certificate , Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
19. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS,BHU.

Item No -25: Skeletal Traction apparatus Set

a. Steinmann Pins – 1doz.

b. Denham Pins - 1doz.

c. K wires - 1doz. Each of 1.5,2.0,2.5,3.0mm

d. Crutch field Tongs – 1 doz

2. Specify Life of Equipment in standard operating condition from the date of Installation.
3. Comprehensive warranty for five years (free repair and replacement of all parts)
4. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
5. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
6. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
7. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.

8. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
9. Company Item should be US- FDA / European CE approved.
10. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
11. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -26: Power drill system

1. Set Power drill system (modular)
2. Battery Handpiece, modular
3. Power Module (2 per set)
4. Sterile Cover, for Power drill system
5. Lid for Battery Handpiece
6. AO/ASIF Quick Coupling
7. Drill Chuck (Drilling Speed), with Key
8. Attachment for Acetabular and Medullary Reaming,
9. Quick Coupling for Kirschner Wires _ 1.0 to 4.0 mm,
10. Quick Coupling for DHS/DCS® Triple Reamers
11. Screw Attachment, with AO/ASIF Quick Coupling
12. Sagittal Saw Attachment
13. Vario Case, size 1/1, Battery Hand piece,with Insert, without Lid, without Contents
14. Lid (Stainless Steel), size 1/1, for Vario Case
15. Oil Dispenser with 50 ml

Power Tool

16. Battery Handpiece, modular
17. Lid for Battery Handpiece

Charger, battery and accessories for battery

18. Universal Battery Charger II
19. Power Module
20. Sterile Cover

Attachments

21. AO/ASIF Quick Coupling
22. Drill Chuck (drilling speed), with key
23. Drill Chuck (reaming speed), with key
24. Drill Chuck, keyless
25. Attachment for Acetabular and Medullary Reaming
26. Quick Coupling for Kirschner Wires _ 1.0 to 4.0 mm

27. Quick Coupling for DHS/DCS® Triple Reamers
28. Screw Attachment, with AO/ASIF Quick Coupling
    a. Torque Limiter, 1.5 Nm
    b. Torque Limiter, 4.0 Nm
29. Hudson Quick Coupling (drilling speed),
30. Hudson Quick Coupling (reaming speed
31. Trinkle Quick Coupling (drilling speed),
32. Trinkle Quick Coupling (reaming speed),
33. Trinkle Quick Coupling (drilling speed), modified,
34. Trinkle Quick Coupling (reaming speed), modified,
35. Sagittal Saw Attachment,
36. Reciprocating Saw Attachment,
37. Adapter for Radiolucent Drive,
38. Top for Sternum for Reciprocating Saw Attachment
39. Radiolucent Drive
40. Angular Drive Unit for Medullary Reaming
41. Kuentscher Adapter
42. Harris Adapter

Accessories

43. Spare Key for Drill Chuck, clamping range up to _ 6.5 mm
44. Cleaning brush
45. Oil dispenser with oil

Vario Case

46. Vario Case, size 1/1, Battery Handpiece,with Insert, without Lid, without Contents
47. Insert, size 2/3, for Vario Case
48. Vario Case, size 1/2, for Trauma Recon System Battery Handpiece,without Lid, without Contents
49. Lid (Stainless Steel), size 1/1, for Vario Case
50. Lid (Stainless Steel), size 1/2, for Vario Case
51. Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS)
52. General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC;EMC-directive.
53. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
54. Power input to be 220-240VAC, 50Hz fitted with Indian plug
55. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electro cardiograms (OR EQUIVALENT BIS Standard)
56. User Manual in English
57. Service manual in English
58. List of important spare parts and accessories with their part number and costing
59. Certificate of calibration and inspection.
60. Log book with instruction for daily, weekly, monthlyand quarterly maintenance checklist.
61. The job description of the hospital technician andcompany service engineer should be clearly spelt out

62. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as permanufacturer documentation in service/technical
63. manual.
64. Specify Life of Equipment in standard operating condition from the date of Installation.
65. Comprehensive warranty for five years (free repair and replacement of all parts)
66. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
67. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
68. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
69. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
70. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
71. Company Item should be US- FDA / European CE approved.
72. Country of origin Certificate , Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
73. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS,BHU.

Item No -27: Pneumatic tourniquet

1. Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS)
2. General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC; EMC-directive.
3. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
4. Power input to be 220-240VAC, 50Hz fitted with Indian plug
5. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
6. User Manual in English
7. Service manual in English
8. List of important spare parts and accessories with their part number and costing
9. Certificate of calibration and inspection.
10. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
11. The job description of the hospital technician and company service engineer should be clearly spelt out
12. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
13. Specify Life of Equipment in standard operating condition from the date of Installation.
14. Comprehensive warranty for five years (free repair and replacement of all parts)
15. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
16. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
17. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
18. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on

call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.

19. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
20. Company Item should be US- FDA / European CE approved.
21. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
22. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -28: Eschmarch tourniquet

1. Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS)
2. General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC; EMC-directive.
3. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
4. Power input to be 220-240VAC, 50Hz fitted with Indian plug
5. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
6. User Manual in English
7. Service manual in English
8. List of important spare parts and accessories with their part number and costing
9. Certificate of calibration and inspection.
10. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
11. The job description of the hospital technician and company service engineer should be clearly spelt out
12. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
13. Specify Life of Equipment in standard operating condition from the date of Installation.
14. Comprehensive warranty for five years (free repair and replacement of all parts)
15. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years

16. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
17. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
18. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
19. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
20. Company Item should be US- FDA / European CE approved.
21. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
22. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -29: Pulse lavage system

1. Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS)
2. General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC; EMC-directive.
3. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
4. Power input to be 220-240VAC, 50Hz fitted with Indian plug
5. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
6. User Manual in English
7. Service manual in English
8. List of important spare parts and accessories with their part number and costing
9. Certificate of calibration and inspection.
10. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
11. The job description of the hospital technician and company service engineer should be clearly spelt out
12. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
13. Specify Life of Equipment in standard operating condition from the date of Installation.
14. Comprehensive warranty for five years (free repair and replacement of all parts)
15. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
16. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
17. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
18. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.

19. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
20. Company Item should be US- FDA / European CE approved.
21. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
22. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -30: Vacuumed Assisted Closer Device (VAC)

1. Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS)
2. General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC; EMC-directive.
3. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
4. Power input to be 220-240VAC, 50Hz fitted with Indian plug
5. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
6. User Manual in English
7. Service manual in English
8. List of important spare parts and accessories with their part number and costing
9. Certificate of calibration and inspection.
10. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
11. The job description of the hospital technician and company service engineer should be clearly spelt out
12. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
13. Specify Life of Equipment in standard operating condition from the date of Installation.
14. Comprehensive warranty for five years (free repair and replacement of all parts)
15. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
16. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.

17. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
18. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
19. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
20. Company Item should be US- FDA / European CE approved.
21. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
22. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -31: Orthopaedic Surgical Instruments as per List

LC-DCP and DCP Basic Instrument Set, in Aluminium Case		
Sl.No	**Description**	**Qty**
1.	Aluminium Case, red, deep, perforated, without contents	1
2.	Drill Bit, 3.2mm dia., L 145/120mm for quick coupling	3
3.	Drill Bit, 4.5mm dia., L 147/120mm for quick coupling	2
4.	Countersink, large, L 180mm	1
5.	T-Handle with quick coupling, L 80mm	1
6.	Tap for 4.5mm Cortex Screws, L 70/125mm	2
7.	Tap for 6.5mm CancellousBone Screws L 195mm	1
8.	Double Drill Sleeve 4.5/3.2	1
9.	Insert Drill Sleeve 4.5/3.2, L 80mm	1
10.	Double Drill Sleeve 6.5/3.2	1
11. .	Screwdriver Shaft, hexagonal, large, L 100mm	1
12.	Screwdriver, hexagonal, large, with groove, L 240mm	1
13.	Holding Sleeve, large, L 120mm	1
14.	Depth Gauge for 4.5 to 6.5mm Screws	1
15.	Sharp Hook, L 155mm	1
16.	Tension Device, articulated	1
17.	Combination Wrench, 11mm, L 140mm	1
18.	DCP® Drill Sleeve 4.5	1
19.	LC-DCP Drill Sleeve 4.5	1
20.	Universal Drill Sleeve 4.5	1
21.	Bending Template for DCP® 4.5 and LC-DCP 4.5, L 21	1
22.	Bending Template for DCP® 4.5 and LC-DCP 4.5, L	1
23.	Bending Template for DCP® 4.5 and LC-DCP 4.5, L	1
24.	Ratchet Wrench, 11 mm, L 140mm	1
Small Fragment LC-DCP & DCP® Instrument Set, st.steel, in		
25.	Aluminium Case, brown, deep, perforated, without	1
26.	Drill Bit, 2.5mm dia., L 11 0/85mm for quick coupling	2
27.	Drill Bit, 3.5mm dia., L 110/85mm, for quick coupling	2
28.	Countersink Shaft 3.5, L 72mm	1
29.	Tap for 3.5mm Cortex Screws L 50/110mm	2
30.	Tap for 4.0mm Cancellous Bone Screws L 110mm	2
31.	T-Handle with quick coupling, L 80mm	1
32.	Double Drill Sleeve 3.5/2.5	1
33.	Insert Drill Sleeve 3.5/2.5, L 42mm Drill Bit 2.5mm dia.	1
34.	Screwdriver, hexagonal, small, with Holding Sleeve	1
35.	Screwdriver Shaft, hexagonal, small, L 100mm, for quick	1
36.	Screwdriver, hexagonal, small, with groove, L 200mm	1
37.	Holding Sleeve, L 80mm, for nos. 314.070/550/570,	1

38.	Depth Gauge for 2.7mm to 4.0mm Screws	1
39.	Sharp Hook, L 155mm	1
40.	Holding Clip 4.5 - 7.0mm	2
41.	Screw Forceps, self-retaining, L 85mm	1
42.	DCP® Drill Sleeve 3.5 for neutral and load position	1
43.	Bending Iron, slit widths 4.5/2.5mm, L 150mm, for Plates	1
44.	Bending Iron, slit widths 2.5/4.5mm, L 150mm, for Plates	1
45.	Bending Pliers for Plates 2.4 to 4.0, L 230mm	1
46.	Bending Template for DCP® 3.5 and LC-DCP 3.5, L	1
47.	Bending Template for DCP® 3.5 and LC-DCP 3.5, L	1
48.	Wire Bending Pliers, L 155mm	1
49.	Bending Iron, for Kirschner Wires 1.25 to 2.5mm dia., L	1
50.	Reduction Forceps with points, L 130mm	1
51.	Reduction Forceps with points, wide, ratchet lock, L	1
52.	Reduction Forceps, toothed, ratchet lock, L 140mm	1
53.	Bone Holding Forceps, self- centering, speed lock, L	1
54.	Retractor, small, 8mm wide, short narrow tip, L 160mm	2
55.	Periosteal Elevator, round edge, 6mm wide, L 200mm	1
56.	Retractor, 15mm wide, L 160mm	2
57. OHS *I* DCS Instrument set in Aluminium Case		
58.	Alu Case, blue, yellow Lid, perforated, without contents	1
59.	DHS/DCS® Threaded Guide Wire, 2.5mm dia., L	10
60.	DHS® Angled Guide 135^0	1
61.	DHS® Angled Guide 150^0	1
62.	DHS/DCS® Direct Measuring Device	1
63.	DHS/DCS® Wrench for one-step insertion L 230mm	1
64.	DHSIDCS® T-Handle with quick coupling, L 80mm	1
65.	DHS® Triple Reamer	1
66.	DHSIDCS® Impactor for one-step insertion, L 260mm	1
67.	DHSIDCS® Tap, L 220mm	1
68.	DHS/DCS® Centering Sleeve, locking	1
69.	Coupling Screw, cannulated	1
70.	DCS® Angled Guide	1
71.	DCS® Triple Reamer	1
Select LCP Upgrade Instrument Set - Large & Small		
72.	Aluminium case	2
73.	Torque-Limiting Screwdriver, L 25 5mm, for 3.5 mm	1
74.	Drill bit, 3.5mm dia., for metal	2
75.	Extraction Screw, conical, for 4.5/6.5mm Screws	1
76.	Drill Bit, 4.3mm dia., L 221mm	2
77.	Screwdriver Shaft 3.5, self-retaining, L 110mm	1
79.	Threaded LCP Drill Guide for 4.3mm	2
81.	Screw Holding Sleeve for LCP *4.5/5.0*	1

83.	Torque-limiting Attachment for LCP 3.5,	1
85.	Drill bit, 2.5mm dia., for metal	2
87.	Extraction Screw, conical, for PC-Fix	1
89.	Drill Bit, 2.8mm dia., L 165mm for quick	2
91.	Screwdriver Shaft 2.5, L 80mm	1
93.	Screw Holding Sleeve for LCP 3.5	1
95.	Threaded LCP Drill Guide for 2.8mm	2
97.	Handle with Quick Coupling	1
99.	Torque-limiting Attachment for LCP 3.5,	1
101.	Extraction Drill Bit	2
103.	Extraction Screw, conical, for 3.5mm	1
105.	Drill Bit, 2.8mm dia., L 165mm	2
107.	Screwdriver Shaft 2.5mm, L 80mm	1
109.	Screw Holding Sleeve for LCP 3.5	1
110.	Threaded LCP Drill Guide for 2.8mm	2
111.	Guide Sleeve for 1.25mm K-wires	1
112.	Universal Drill Sleeve LCP 3.5	1
113.	Torque-Limiting Screwdriver, for LlSS	1
114.	Extraction Drill Bit	2
115.	Extraction Screw, conical, for *4.5/6.5mm*	1
116.	Drill Bit, 4.3mm dia., L 221mm	2
117.	Screwdriver Shaft 3.5, self-retaining, L \	1
118.	Threaded LCP Drill Guide, for 4.3mm	2
119.	Universal Drill Sleeve LCP *4.5/5.0*	1
120.	Screw Holding Sleeve for LCP *4.5/5.0*	1
121.	Tomofix Guide Sleeve for 2.0mm K-	1
	HCS 0 2.4 mm Instrument Set	
122.	Screw Rack, size *1/2,* for HCS - Headless Compression	1
123.	Insert for Screw Rack Module, for HCS - Headless	1
124.	Tray for Instrument Set, for HCS - Headless Compression	1
125.	Lid for Instrument Tray	1
126.	Handle with Quick Coupling, length 110	1
127.	Screwdriver Shaft, Stardrive®, T8, self-	1
128.	Screw Forceps, self-holding, length 85	1
129.	Double Drill Guide *2.0/1.1*	1
130.	Drill Bit **O** *2.0/1.15* mm, cannulated, length *150/48* mm, 3-	2
131.	Direct Measuring Device for HCS - Headless	1
132.	ScrDriver Shaft T8 cann T8 w/color-	1
133.	Handle for Compression Sleeve, for HCS - Headless	1
134.	Guide Wire **O** 1.1 mm with trocar tip, length 150 mm,	10
135.	Cleaning Brush **O** 1.25 mm, for Cannulated Instruments	1
136.	Cleaning Stylet**O** 1.1 mm, for Cannulated Instruments	1
137.	Compression Sleeve for HCS - Headless Compression	1

CSS 4.Smm Instrument Set in Vario Case		
138.	Drill Bit 01.5 L *110/85* 2flute	1
139.	Drill Bit *03.2/1.75* cann L *1701140* 4flute	2
140.	Countersink-cann 04.5	1
141.	T-Handle w/Quick-Coupl	1
142.	DoubleDrillGuide*4.5/3.2*	1
143.	Parallel-Guide f/Guide-Wires 01.6 adjust	1
144.	Trocar 01.6 04.5	1
145.	DrillSleeve*3.2/1.6 04.5*	1
146.	DrillSleeve*7/3.2 04.5*	1
147.	Protect-Sleeve *9.5/7 04.5*	1
148.	ScrDriver-hex-cann 04.5	1
149.	Hold-Sleeve *fl 314.200*	1
150.	Direct Measur-Device 04.5	1
151.	Clean-Stylet 01.6	1
152.	Hold-Clip f/Washers	1
153.	ScrForceps self-hold L85	1
154.	Lid	1
155.	VarioCaseTM for Instrument Set for Cannulated Screw 0	1
156.	GuideWire 01.6 *with* read-tip w/trocar L 15	10
CSS 6.5mm Instrument Set in Vario Case		
157.	VarioCaseTM for Instrument Set for Cannulated Screws without Lid, without Contents	1
158.	Lid	1
159.	Rack for Cannulated Screws 0 *6.5/7.3* mm	1
160.	Drill Bit 05 cann*L300/250* 3flute	1
161.	Parallel-Guide f/Guide-Wires 02.8 adjust	1
162.	Trocar 02.8	1
163.	Protect-Sleeve *12/8.5*	1
164.	DrillSleeve*8.5/2.8*	1
165.	Protect-Sleeve *15.5/13*	1
166.	ScrDriver-hex-cann 06.5+7.3	1
167.	Hold-Sleeve large	1
168.	Clean-Brush 02.9	1
169.	Hold-Clip f/Washers	1
170.	Clean-Stylet 02.8	1
171.	Direct Measur-Device f/GuideWires 02+2.8	1
172.	ScrForceps self-hold L85	1
173.	GuideWire 02.8 *with* read-tip w/trocar L30	10
Bone Forcep's Range		
174.	Reduc-Forceps w/Points narrow ratchet-lock	1
175.	Reduc-Forceps w/Points wide ratchet-lock	1

176.	Reduc-Forceps w/Points ratchet-lock L 180	1
177.	Reduc-Forceps toothed speed-lock L 170	1
178.	Reduc-Forceps w/Points speed-lock L 130	1
179.	Reduct-Forceps-Iarge w/Points speed-lock	1
180.	Reduc-Forceps toothed speed-lock L 140	1
181.	Reduc-Forceps w/Points ratchet-lock L 160	1
182.	Reduc-Forceps w/Points ratchet-lock L 130	1
183.	Reduc-Forceps toothed ratchet-lock L 140	1
184.	Bone Holding Forceps self-centerspeed-I	1
185.	Bone HOlding Forceps self-center speed-I	1
186.	Bone Holding Forceps self-center speed-I	1
187.	HOld-Forceps flTib-Edge Fragm L210	1
188.	HOld-Forceps w/Ball ratchet-lock L 180	1
189.	Bone-Spreader speed-lock L 140	1
190.	Stag beetle-Forceps ratchet-lock L 120	1
191.	Patella Forceps speed-lock L 175	1
192.	Malleolar Forceps speed-lock L210	1
193.	Reduc-Forceps toothed speed-lock L 170	1
194.	Plate Holding Forceps, size 2	1
195.	Plate Holding Forceps, size 0	1
	General Instrument Set in Aluminium Case	
196.	Alu Case, red, deep, white Lid, perforated, without	1
197.	Bone Hook, sharp, small, L 230mm	1
198.	Bone Hook, sharp, medium, L 230mm	1
199.	Retractor, 8mm wide, short narrow tip, L 220mm	2
200.	Retractor, 18mm wide, short narrow tip, L 235mm	2
201.	Retractor, 24mm wide, long and wide tip, L 270mm	1
202.	Periosteal Elevator, curved shaft, 14mm wide, L 200mm	1
203.	Periosteal Elevator, round edge, 6mm wide, L 200mm	1
204.	Periosteal Elevator, straight shaft, 14mm wide, L 200mm	1
205.	Hammer 500g, L 230mm	1
206.	Chisel Handle, L 185mm	1
208.	Chisel Blade, 10mm wide, thickness 0.9mm, L 81mm	1
209.	Chisel Blade, 16mm wide, thickness 0.9mm, L 81 mm	1
210.	Chisel Blade, 25mm wide, thickness 0.9mm, L 81 mm	1
211.	Gouge, curved, for cancellous bone graft harvest., 1	1
	Chisel and Impactor Set	
212.	Alu Case, blue, white Lid, perforated, without contents	1
213.	Handle with quick coupling, L 150mm	1
214.	Cancellous Bone Impactor, 6.0mm dia., round, L 140mm	1
215.	Cancellous Bone Impactor, 6.0mm dia. flattened, L	1
216.	Cancellous Bone Impactor, 8.0mm dia., round, L 140mm	1

217.	Cancellous Bone Impactor, rectangula 6x16mm, L	1
218.	Cancellous Bone Impactor, rectangular 10x20mm, L	1
219.	Cancellous Bone Impactor, rectangular 10x30mm, L	1
220.	Gouge, curved, 10mm wide, L 140mm	1
221.	Gouge, curved, 15mm wide, L 140mm	1
222.	Chisel, flat, straight, 16mm wide, L 140mm	1
Instruments for damaged screw removal in aluminium case		
223.	Aluminium Case, white, small, perforated, without	1
224.	Hollow Reamer for 3.5/4.0mm Screws	1
225.	Spare Reamer Tube for no. 309.035	1
226.	Extraction Bolt for 3.5/4.0mm Screws	1
227.	Extraction Screw, conical, for 2.7mm, 3.5mm and 4.0mm	1
228.	Hollow Reamer for 4.5mm Screws	1
229.	Spare Reamer Tube for no. 309.450	1
230.	Extraction Bolt for 4.5mm Screws	1
231.	Extraction Screw, conical, for 4.5/6.5mm Screws	1
232.	Hollow Reamer for 5.0/6.0/6.5/7.0mm Screws	1
233.	Spare Reamer Tube for no. 309.065	1
234.	Extraction Bolt, for 5.0/6.0/6.5/7.0mm Screws	1
235.	Aluminium Plate, anodized	1
236.	Sharp Hook, L 155mm	1
237.	Forceps for Screw Removal, L 205mm	1
238.	Gouge, 1 Omm wide, L 205mm	1
239.	T-Handle with quick coupling, L 80mm	1
Wire Instrument Set in Aluminium Case		
240.	Alu Case, white, deep, red Lid, perforated, without	1
241.	Drill Bit, 2.0mm dia., L 1 02/75mm for quick coupling	1
242.	Triple Drill Guide 2.0 with 3 holes, opposite side 1 hole	1
243.	Wire Passer, 45mm bending diameter	1
244.	Wire Passer, 70mm bending diameter	1
245.	Wire Tightenerwith handle and two pegs, L 240mm	1
246.	Holding Forceps for Cerclage Wires, L 170mm	2
247.	Wire Bending Pliers, L 155mm	1
248.	Parallel Pliers, flat nosed, L 160mm	1
249.	Wire Cutter, large, L 220mm	1
250.	Wire Cutter, short, L 175mm	1
251.	Bending Iron, for Kirschner Wires 1.25 to 2.5mm dia., L	1
252.	Wire Mount	4
253.	Cerclage Wire, 1.0mm dia., with eye L 280mm	2
254.	Cerclage Wire, 1.25mm dia., with eye L 280mm	1
255.	Wire Coil, 1.0mm dia., L 10m	1
256.	Wire Coil, 1.25mm dia., L 10m	1
257.	KirschnerWire, 1.0mm dia, with trocar tip, L	1
258.	KirschnerWire, 1.25mm dia., with trocar tip, L	1

259.	Kirschner Wire, 1.6mm dia., with trocar tip, L	1
260.	Kirschner Wire, 2.0mm dia., with trocar tip, L	1
261.	Kirschner Wire, 2.5mm dia., with trocar tip, L	1
Mini Instrument Set in Aluminium Case		
262.	Aluminium Case, brown, deep, perforated, without	1
263.	Drill Bit, 1.1 mm dia., L 60/35mm for quick coupling	2
264.	Reduction Forceps with points, wide, micro handle,	1
265.	Reduction Forceps with points, narrow, micro handle,	1
266.	Drill Bit, 1.5mm dia., L 85/60mm for quick coupling	2
267.	Drill Bit, 2.0mm dia., L 102/75mm for quick coupling	2
268.	Drill Bit, 2.7mm dia., L 1 00/75mm for quick coupling	2
269.	Countersink Shaft 2.7, L 62mm	1
270.	Countersink Shaft 1.5/2.0	1
271.	Handle with mini quick coupling	1
272.	Tap for 1.5mm Cortex Screws, L 50mm	2
273.	Tap for 2.0mm Cortex Screws, L 53mm	2
274.	Tap for 2.7mm Cortex Screws L 100mm	2
275.	Handle with quick coupling, L 110mm	1
276.	Double Drill Sleeve 1.5/1.1	1
277.	Double Drill Sleeve 2.0/1.5	1
278.	Double Drill Sleeve 2.7/2.0	1
279.	Screwdriver Shaft, hexagonal, small, L 100mm, for quick	1
280.	Screwdriver, hexagonal, small, with groove, L 200mm	1
281.	Screwdriver Shaft, hexagonal, with Holding Sleeve	1
282.	Depth Gauge for 2.7mm to 4.0mm Screws	1
283.	Depth Gauge for 1.5mm to 2.0mm Screws	1
284.	Sharp Hook, L 155mm	1
285.	Holding Clip 4.5 - 7.0mm	6
286.	Screw Forceps, self-retaining, L 85mm	1
287.	Bending Iron, L 130mm, for Plates 1.5 and 2.0	1
288.	Bending Pliers for thin Plates 1.5 to 2.7, L 140mm	1
289.	Wire Bending Pliers, L 155mm	1
290.	Wire Cutter, short, L 175mm	1
291.	Bending Iron for Kirschner Wires 0.8 to 1.25mm dia., L	1
292.	Holding Forceps for small Plates, L 135mm	1
293.	Retractor, small, 6mm wide, short narrow tip, L 160mm	1
294.	Retractor, small, 8mm wide, short narrow tip, L 160mm	1
295.	Periosteal Elevator, straight edge, 3mm wide, L 200mm	1
296.	Retractor, 15mm wide, L 160mm	2
Reduction Handles, toothed and rounded, small &large in		
297.	GuideWire 01.6 w/thread-tip w/trocar L41	4
298.	GuideWire 02.8 w/thread-tip w/trocar L30	4
299.	Allen-Key-angled 03.5	1
300.	Combination Wrench 011	1

301.	Reduct-Handle toothed f/Thread-Rod 05	2
302.	Reduct-Handle rounded f/GuideWire 02.8	2
303.	Protect-Sleeve 11 slotted	1
304.	DrillSleeve 11/2.8	1
305.	DrillSleeve 5/1.6	1
306.	DrillSleeve 11/5	1
307.	Tap 05/1.6 cann self-drill L 195 SSt	1
308.	Adjust-Nut f/Thread-Rod 05 SSt	2
309.	Thread-Rod 05 w/self-drill tip L380 SSt	4
310.	Thread-Rod 05/1.6 w/blunt tip cann L335	2
311.	Combination-Clamp clip-on self-hold MR-s	2
312.	Carbon Fibre Rod 011 L250	1
313.	Carbon Fibre Rod 011 L350	1
314.	Insert f/Reduction Handles toothed+round	1
315.	Lid siz 111 w/o Labelling	1
Soft Tissue Spreader Set		
316.	Forceps for Soft Tissue Spreader	1
317.	Retractor for Soft Tissue Spreader, left, length 75 mm	1
318.	Retractor for Soft Tissue Spreader, right, length 75 mm	1
319.	Retractor for Soft Tissue Spreader, left, length 35 mm	1
320.	Retractor for Soft Tissue Spreader, right, length 35 mm	1
321.	Trocar, length 35 mm, for Soft Tissue Spreader	1
322.	Trocar, length 75 mm, for Soft Tissue Spreader	1
323.	Chisel for Extraction of Plates	1
Hohmann Retractor		
324.	Holder for Hohmann Retractor	1
325.	Bone Lever, width 8 mm, 30°, curved, right	1
326.	Bone Lever, width 8 mm, 30°, curved, left	1
327.	Bone Lever, short narrow tip, width 8 mm, length 220	1
328.	Bone Lever, short narrow tip, width 18 mm, length 235	1
329.	Bone Lever, narrow tip, width 70 mm, length 240 mm	1
330.	Bone Lever, narrow tip, width 43 mm, length 240 mm	1
331.	Bone Lever, long blade, width 43 mm, length 235 mm	1
Collinear Reduction Clamp in Vario Case		
332.	Collinear Reduction Clamp Sliding Mechan	1
333.	Combination Wrench 08	1
334.	Pelvic Arm f/Collinear Reduction Clamp	1
335.	Percut-Arm f/Collinear Reduction Clamp	1
336.	BoneHook-shape Arm f/Collinear Reduction	1
337.	LCP Reduct-Attachm f/Collinear Reduction	1
338.	Reduction-Attachm f/Collinear Reduction	1

339.	Combination Wrench 013	1
340.	K-Wire 02.6 w/spade point tip L500	10
341.	Disc spiked f/Reduct-Forceps	1
342.	Insert f/Collinear Reduction Clamp *w/o* C	1
	Periarticular Reduction Forceps	
343.	Bone Lever, long blade, width 43 mm, length 235 mm	1
344.	Bone Lever, with wide tip, width 22 mm, length 250 mm	1
345.	Bone Lever, with long, wide tip, width 24 mm, length	1
346.	Periarticular Reduction Forceps, medium, with pointed	1
347.	Periarticular Reduction Forceps, large, with pointed ball	1
	Trauma Recon System(Battery Operated Drill)	
	Basic	
348.	Battery Handpiece, modular, for Trauma Recon System	2
349.	Power Module, for Trauma Recon System	2
350.	Lid for Battery Hand piece	2
351.	Sterile Cover, for Trauma Recon System	2
352.	Universal Battery Charger II	1
	Attachments	
353.	AO/ASIF Quick Coupling, for Trauma Recon System	1
354.	Drill Chuck (drilling speed), with key, for Trauma Recon	1
355.	Drill Chuck (reaming speed), with key, for Trauma	1
356.	Drill Chuck, keyless, for Trauma Recon System	1
357.	Attachment for Acetabular and Medullary Reaming, for	1
358.	Quick Coupling for Kirschner Wires **O** 1.0 to 4.0 mm,	1
359.	Quick Coupling for DHS/DCS® Triple Reamers, for	1
360.	Screw Attachment, with AO/ASIF Quick Coupling, for	1
361.	Torque Limiter , 1.5 Nm for TRS	1
362.	Torque Limiter , 4.0 Nm for TRS	1
363.	Hudson Quick Coupling (drilling speed), for Trauma	1
364.	Hudson Quick Coupling (reaming speed), for Trauma	1
365.	Trinkle Quick Coupling (drilling speed), for Trauma	1
366.	Trinkle Quick Coupling (reaming speed), for Trauma	1
367.	Trinkle Quick Coupling (drilling speed), modified, for	1
368.	Trinkle Quick Coupling (reaming speed), modified, for	1
369.	Sagittal Saw Attachment, Long, for Trauma Recon	1
371.	Kuentscher Adapter	1
373.	Harris-Adapter	1
374.	Reciprocating Saw Attachment, for Trauma Recon	1
375.	Top f/Sternum f/Reciproc-Saw-Attachm	1

376.	Saw Blade for Reciprocating Saw for Top for Sternum	1
377.		
378.	Adapter for RDL, for TRS	1
379.	Radiolucent Drive	1
	Drill Bits for Radiolucent Drive	
380.	Drill Bit, 2.0mm dia., L *148/122mm*, 3-flute, for no.	1
381.	Drill Bit, 2.5mm dia., L 148/122mm, 3-flute, for no.	1
382.	Drill Bit, 2.7mm dia., L 148/122mm, with centering tip, 3-	1
383.	Drill Bit, 3.2mm dia., L 148/122mm, with centering tip, 3-	1
384.	Drill Bit, 3.5mm dia., L 148/122mm, with centering tip, 3-	1
385.	Drill Bit 03.6 w/center-tip L 148/122 3fl	1
386.	Drill Bit 04 w/center -tip L 148/122 3flut	1
387.	Drill Bit 04.5 w/center-tip L 148/122 3fl	1
388.	Drill Bit, 3.2mm dia., L 106/80mm, with centering tip, 3-	1
389.	Drill Bit 04 w/center-tip L 106/80 3flute	1
	Standard Saw Blades for general traumatology	
390.	Saw Blade 70/49 x 27 x 0.6/0.4 mm, for Oscillating Saw	5
391.	Saw Blade 46/25 x 10 x 0.6/0.4 mm, for Oscillating Saw	**5**
392.	Saw Blade 70/49 x 10 x 0.6/0.4 mm, for Oscillating Saw	**5**
393.	Saw Blade 70/49 x 20 x 0.6/0.4 mm, for Oscillating Saw	**5**
394.	Saw Blade 90/69 x 18 x 1.0/0.8 mm, for Oscillating Saw	**5**
395.	Saw Blade 90/69 x 18 x 1.2/1.0 mm, for Oscillating Saw	**5**
396.	Saw Blade 70/49 x 14 x 0.6/0.4 mm, for Oscillating Saw	**5**
397.	Saw Blade 90/69 x 27 x 0.8/0.6 mm, for Oscillating Saw	**5**
398.	Saw Blade 90/69 x 50 x 0.8/0.6 mm, for Oscillating Saw	**5**
399.	Saw Blade 90/69 x 27 x 1.0/0.8 mm, for Oscillating Saw	**5**
400.	Saw Blade 90/69 x 27 x 1.2/1.0 mm, for Oscillating Saw	**5**
401.	Saw Blade 46/25 x 6.0 x 0.6/0.4 mm, for Oscillating Saw	**5**
402.	Saw Blade 46/25 x 14 x 0.6/0.4 mm, for Oscillating Saw	**5**
	Aggressive Special Saw Blades for total joint	
403.	Saw Blade 111/90 x 12.5 x 0.89 mm, for Oscillating Saw	
404.	Saw Blade 111/90 x 12.5 x 1.19 mm, for Oscillating Saw	**5**
405.	Saw Blade 111/90 x 12.5 x 1.27 mm, for Oscillating Saw	**5**
406.	Saw Blade 111/90 x 12.5 x 1.47 mm, for Oscillating Saw	**5**
407.	Saw Blade 112/91 *12.5*0.9/0.8 AO/ASIF-Co	**5**
408.	Saw Blade 111/90 x 19 - 12.5 x 0.89 mm, for Oscillating	**5**
409.	Saw Blade 111/90 x 19 -12.5 x 1.19 mm, for Oscillating	**5**
410.	Saw Blade 111/90 x 19 - 12.5 x 1.27 mm, for Oscillating	**5**
411.	Saw Blade 111/90 x 19 - 12.5 x 1.37 mm, for Oscillating	**5**
412.	Saw Blade 111/90 x 19 - 12.5 x 1.47 mm, for Oscillating	**5**
413.	Saw Blade 116/95 x 19 x 0.89 mm, for Oscillating Saw	**5**

414.	Saw Blade 116/95 x 19 x 0.90 mm, for Oscillating Saw	**5**
415.	Saw Blade 116/95 x 19 x 1.25 mm, for Oscillating Saw	**5**
416.	Saw Blade 116/95 x 19 x 1.27 mm, for Oscillating Saw	**5**
417.	Saw Blade *116/95* x 19 x 1.37 mm, for Oscillating Saw	**5**
418.	Saw Blade 116/95 x 19 x 1.40 mm, for Oscillating Saw	**5**
419.	Saw Blade 116/95 x 19 x 1.47 mm, for Oscillating Saw	**5**
420.	Saw Blade 116/95 x 25 x 1.47 mm, for Oscillating Saw	**5**
421.	Saw Blade 106/85 x 25 x 1.47 mm, for Oscillating Saw	**5**
422.	Saw Blade 81/60 x 25 x 0.89 mm, for Oscillating Saw	**5**
423.	Saw Blade 81/60 x 25 x 0.9 mm, for Oscillating Saw	**5**
	Reciprocating Saw Blades	
424.	Saw Blade for Reciprocating Saw, 80 x 1.05 mm	**5**
425.	Saw Blade for Reciprocating Saw, 55 x 1.05 mm	**5**
426.	Saw Blade for Reciprocating Saw, 55 x 0.85 mm	**5**
427.	Saw Blade for Reciprocating Saw, 68 x 1.1 mm, toothed	**5**
	Vario Case	
428.	Vario Case, size 1/1, for Trauma Recon System, with 2	1
429.	Lid (Stainless Steel). size 111. for VarioCase	1
430.	Vario Case, size 1/2, for Trauma Recon System Battery	1
431.	Lid (Stainless Steel). size 1/2. for Vario Case	1
432.	Washing Basket, Full Size 1/1, for Trauma Recon System	1
433.	Lid for Washing-Machine Basket for Trauma Recon	1
	Accessories	
434.	Cleaning Brush for TRS	1
	Orthopaedic General Surgical Instruments	
435.	BoneCuretterectangular straight 8	1
436.	Bone-Lever curv*w/15 L375/218*	1
437.	BoneCuretteangloval edge 3.5*5.25 L480	1
438.	CancellousBone-lmpact-straight	1
439.	Rasp round	1
440.	Gouge straight *w/1* 0	1
441.	Gouge curv*w/1* 0	1
442.	Chisel-flat-straight *w/16*	1
443.	Chisel-flat-curved *w/16*	1
444.	Bone Holding Forceps self-center speed-I	1
445.	Bone-Spreader speed-lock L 140	1
446.	Reduc-Forceps toothed speed-lock L240	1
447.	Bone-Spreader softlock*w/5* L 148	1

448.	Bone-Spreader softlock*w/8* L220	1
449.	Periost-Elevstraight shaft straight edg	1
450.	Periost-Elevcurv-shaft straight edge *wl*	1
451.	Hammer 500g	1
452.	Chisel-Handle	1
453.	Chisel Blade *w/1* 0	1
454.	Chisel Blade *w/16*	1
455.	Chisel Blade *w/25*	1
456.	Chisel Blade *w/5*	1
457.	Gouge f/CanceliousBone-Graft straight *wl*	1
458.	Gouge f/CanceliousBone-Graft curv*w/5* L2	1
459.	Osteot*w/5* L 150	1
460.	Sharp Hook L 155	1
461.	Pliers f/Scr-Remov L205	1
462.	BoneHooksharp medium L230	1
463.	Laminectomy-Punch 40^0angl *w/4* L400	1
464.	Rongeurf!Discs*w/4* L400	1
465.	SterlizingT~ay	1
466.	Sterlizing L.id	1
467.	RongeurflDiscs*w/2* L400	1
468.	Rongeur f/Discs *w/6* L400	1
469.	Rongeurcurvangl*w/4*	1
470.	Rongeurcurvopening upwards *w/4*	1
471.	Rongeurcurvangl*w/8*	1
472.	Rongeurcurvopening upwards *w/8*	1
473.	Rongeurf/Discs *w/4* L400	1
474.	CanceliousBone-lmpact 12*12 *L480/250*	1
475.	Laminectomy-Punch 40^0angl *w/4* L400	1
476.	Elevator flEnd-PI *w/15 L480/250*	1
477.	Bone-Lever straight *w/25 L410/250*	1
478.	Bone-Lever curv*w/15 L375/218*	1
479.	Periost-Elevslightly curv-blade straight	1
480.	Periost-Elev slightly curv-blade straight	1
481.	Periost-Elevslightly curv-blade round e	1
482.	USS PedicFeeler L300	1
483.	USS LaminaFeelerL300	1
484.	Compr-Forceps L335 f/PedicScr	1
485.	Spreader Forceps f/PedicScr L330	1
486.	PedicProbe04.8 w/Canevasit Handle L230	1
487.	PedicProbe 03 L230 flScr 04.2	1
488.	CanceliousBone-lmpact 12*12 *L480/250*	1

	Cervical Retractor & Distractor System	
489.	Forceps, L 115mm, f/changing the blades	1
490.	Cervical Retractor, transverse, SST/Peek	1
491.	Cervical Retractor, longitudinal, SST/Peek	1
492.	Medial Blade, 15 x 40mm	2
493.	Medial Blade, 15 x 50mm	2
494.	Medial Blade, 15 x 60mm	2
495.	Medial Blade, 15 x 75mm	2
496.	Medial Blade, 23 x 40mm	2
497.	Medial Blade, 23 x 50mm	2
498.	Medial Blade, 23 x 60mm	2
499.	Medial Blade, 23 x 75mm	2
500.	Lateral Blade, 15 x 50mm	2
501.	Lateral Blade, 15 x 60mm	2
502.	Lateral Blade, 15 x 75mm	2
503.	Lateral Blade, 23 x 40mm	2
504.	Lateral Blade, 23 x 50mm	2
505.	Lateral Blade, 23 x 60mm	2
506.	Lateral Blade, 23 x 75mm	2
507.	Lateral Blade, blunt, 15 x 40mm	2
508.	Lateral Blade, blunt, 15 x 50mm	2
509.	Lateral Blade, blunt, 15 x 60mm	2
510.	Lateral Blade, blunt, 15x 75mm	2
511.	Lateral Blade, blunt, 23 x 40mm	2
512.	Lateral Blade, blunt, 23 x 50mm	2
513.	Lateral Blade, blunt, 23 x 60mm	2
514.	Lateral Blade, blunt, 23 x 75mm	2
515.	Vario Case for slim Retractors	1
516.	Vario Case ™ f/Cervical Retractors	1
517.	Vario Case ™ f/Cerv. Retractors and Distractors	1
518.	Cervical Distractor, left, w/adjustable angle	1
519.	Cervical Distractor, right, w/adjustable angle	1
520.	Screwdriver, hexagonal	1
521.	Screw 0 2.7mm f/Cervical Distractor, L 14mm	2
522.	T-Handle w/Quick Coupling	1
523.	Cervical Drill Bit 0 1.8mm, L 132/12mm	1
	Insight Retractor	
524.	Retractor frame, medial/lateral	1
525.	Retractor Handle	2
526.	Retractor frame, cranial/caudal	1
527.	Cranial/caudal blade, left hand, 60 mm	1

528.	Cranial/caudal blade, left hand, 80 mm	1
529.	Cranial/caudal blade, left hand, 100 mm	1
530.	Caudal/caudal blade, right hand 60 mm	1
531.	Caudal/caudal blade, right hand 80 mm	1
532.	Caudal/caudal blade, right hand 100 mm	1
533.	Medial/lateral blade, narrow, 60 mm	2
534.	Medial/lateral blade, narrow, 80 mm	2
535.	Medial/lateral blade, narrow, 100 mm	2
536.	Medial/lateral blade, wide, 60 mm	2
537.	Medial/lateral blade, wide, 80 mm	2
538.	Medial/lateral blade, wide, 100 mm	2
539.	Variocase for Insight Retractor with Lid, with Tr:	1
540.	K-Wire 01.6 w/trocar tip L480 SSt	3
541.	K-Wire 01.6 w/pointed ball tip L480 SSt	3
542.	Dilator 0 1.8/10.0 mm, cannulated, for Guide W	1
543.	Dilator 0100/130 mm, for No. 03.610.001	1
544.	Dilator 013.0/16.0 mm, for No. 03.610.002	1
545.	Dilator 0160/190 mm, for No. 03.610003	1
546.	Vario Case ™ for Dilation Instruments, with Lid, \	1
547.	SynFrame Guiding Tube, for Angled Rod No. 38	1
548.	SynFrame Holding Base, insulated, for OR Tabh	1
549.	Flex Arm	1
550.	Flex Arm - SynFrame Connection	1
551.	Fibre Optic Cable for Light Strip	1
552.	Light Clip, Sterile, for Insight Access Retractor	3
553.	VarioCase" for MIS Support System	1
	MIPI Instruments	
554.	Impactor-Standard Bayoneted	1
555.	Implant Pusher-Bayoneted	1
556.	Endplate Elevator-Bayoneted	1
557.	Box Curette-Left Bayoneted	1
558.	Bone Curette-Straight 5.5Mm Width/Bayoneted	1
559.	Bone Curette-Reverse Angle 5.5Mm Width-Shol	1
560.	Bone Curette-Reverse Angle 5.5Mm Width-Med	1
561.	Dual-Sided Rasp Bayoneted	1
562.	Osteotome-Straight	1
563.	Bone Curette-Reverse Angle 90 Deg/5.5Mm Wil	1
564.	Hoop Curette-Straight Bayoneted	1
565.	45 Deg Angled Rasp-Bayoneted	1
566.	Pituitary Rongeur-Curved 2Mm Width	1

567.	Pituitary Rongeur-Curved 4Mm Width	1
568.	Pituitary Rongeur-Curved 6Mm Width	1
569.	40 Deg Up-Biting Laminectomy Punch 4Mm Wic	1
570.	40 Deg Up-Biting Laminectomy Punch 2Mm Wic	1
571.	90 Deg Up-Biting Laminectomy Punch 4Mm Wic	1
572.	90 Deg Up-Biting Laminectomy Punch 2Mm Wic	1
573.	Blunt Dissector 4Mm Width	1
574.	Blunt Dissector 2Mm Width	1
575.	Pituitary Rongeur-Straight 2Mm Width	1
576.	Pituitary Rongeur-Straight 4Mm Width	1
577.	Pituitary Rongeur-Straight 6Mm Width	1
578.	45 DegAngled Box Curette- Right/Bayoneted	1
579.	45 Deg Angled Box Curette- Left/Bayoneted	1
580.	Impactor-Tall Bayoneted	1
581.	Impactor-Curved/Standard Bayoneted	1
582.	45 Deg Angled Hoop Curette Bayoneted	1
583.	Box Curette-Right Bayoneted	1
584.	VC f/MIPI part 1 w/Lid w/o Cont	1
585.	VC f/MIPI part 2 w/Lid w/o Cont	1
	Synframe	
586.	Vario Case" for SynFrameBasic System (Fixation	2
587.	SynFrame Holding Base, insulated, for OR	4
588.	SynFrame Guiding Tube, for Angled Rod No.	4
589.	SynFrame Angled Rod, for Basic System	4
590.	SynFrame Tube-to-Tube Clamp, for Basic	4
591.	Vario Case" for SynFrame Basic System (Fixation	2
592.	SynFrame Connecting Rod, for Holding Rings Nos.	4
593.	SynFrame Retaining Ring 0 300 mm, two-	2
594.	SynFrame Clamp for Holding Ring No.	12
595.	SynFrame Guide Rod with Ajustable Clamp, for Soft	12
596.	Soft Tissue and Muscle Retractors	12
597.	Dilator 013.0/16.0 mm, for No. 03.610.002	1
598.	Dilator 0160/190 mm, for No. 03.610003	1
599.	Vario Case ™ for Dilation Instruments, with Lid, \	1
600.	SynFrame Guiding Tube, for Angled Rod No. 38	1
601.	SynFrame Holding Base, insulated, for OR Tabh	1
602.	Flex Arm	1
603.	Flex Arm - SynFrame Connection	1
604.	Fibre Optic Cable for Light Strip	1
605.	Light Clip, Sterile, for Insight Access Retractor	3
606.	VarioCase" for MIS Support System	1

	MIPI Instruments	
607.	Impactor-Standard Bayoneted	1
608.	Implant Pusher-Bayoneted	1
609.	Endplate Elevator-Bayoneted	1
610.	Box Curette-Left Bayoneted	1
611.	Bone Curette-Straight 5.5Mm Width/Bayoneted	1
612.	Bone Curette-Reverse Angle 5.5Mm Width-Shol	1
613.	Bone Curette-Reverse Angle 5.5Mm Width-Med	1
614.	Dual-Sided Rasp Bayoneted	1
615.	Osteotome-Straight	1
616.	Bone Curette-Reverse Angle 90 Deg/5.5Mm Wil	1
617.	Hoop Curette-Straight Bayoneted	1
618.	45 Deg Angled Rasp-Bayoneted	1
619.	Pituitary Rongeur-Curved 2Mm Width	1
620.	Pituitary Rongeur-Curved 4Mm Width	1
621.	Pituitary Rongeur-Curved 6Mm Width	1
622.	40 Deg Up-Biting Laminectomy Punch 4Mm Wic	1
623.	40 Deg Up-Biting Laminectomy Punch 2Mm Wic	1
624.	90 Deg Up-Biting Laminectomy Punch 4Mm Wic	1
625.	90 Deg Up-Biting Laminectomy Punch 2Mm Wic	1
626.	Blunt Dissector 4Mm Width	1
627.	Blunt Dissector 2Mm Width	1
628.	Pituitary Rongeur-Straight 2Mm Width	1
629.	Pituitary Rongeur-Straight 4Mm Width	1
630.	Pituitary Rongeur-Straight 6Mm Width	1
631.	45 DegAngled Box Curette- Right/Bayoneted	1
632.	45 Deg Angled Box Curette- Left/Bayoneted	1
633.	Impactor-Tall Bayoneted	1
634.	Impactor-Curved/Standard Bayoneted	1
635.	Impactor-CurvedlTallBayoneted	1
636.	45 Deg Angled Hoop Curette Bayoneted	1
637.	Box Curette-Right Bayoneted	1
638.	VC f/MIPI part 1 w/Lid w/o Cont	1
639.	VC f/MIPI part 2 w/Lid w/o Cont	1
	Synframe	
640.	Vario Case" for SynFrameBasic System (Fixation	2

641.	SynFrame Holding Base, insulated, for OR	4
642.	SynFrame Guiding Tube, for Angled Rod No.	4
643.	SynFrame Angled Rod, for Basic System	4
644.	SynFrame Tube-to-Tube Clamp, for Basic	4
	Radiolucent* Soft *Tissue Retractors	
645.	VARIO Case for SynFrame-L	2
646.	SynFrame Radiolucent Retractor, blunt, Width 25mm,	4
647.	SynFrame Radiolucent Retractor, blunt, Width 25mm,	4
648.	SynFrame Radiolucent Retractor, blunt, Width 25mm,	4
649.	SynFrame Radiolucent Retractor, blunt, Width 25mm,	4
650.	SynFrame Radiolucent Retractor, blunt, Width 25mm,	4
651.	SynFrameRadiolucent Retractor, blunt, Width 25mm, Length 160mm, Aluminium	4
652.	Rod Light-transmitter- Light Source	2
653.	Adoptorfor 387.362,for Storz	2
654.	Adaptor for 387.362,	2
	Wolf *Instruments: Bone Levers (Semi*	
655.	SynFrameBone Lever, Width 8mm, Length	4
656.	SynFrame Bone Lever, Width 8mm, Length	4
657.	SynFrameBone Lever, Width 18mm, Length	4
	Muscle Retractors	
658.	Vario case" for SynFrame Muscle	2
659.	SynFrame Muscle Retractor, radiolucent, width 25 mm,	4
660.	SynFrame Muscle Retractor, radiolucent, width 25 mm,	4
661.	SynFrameMuscle Retractor, radiolucent, width 25 mm,	4
662.	SynFrame Muscle Retractor, radiolucent, width 25 mm, length 100 mm, almunium	4
663.	SynFrameMuscle Retractor, radiolucent, width 25 mm,	4

1. Specify Life of Equipment in standard operating condition from the date of Installation.
2. Comprehensive warranty for five years (free repair and replacement of all parts)
3. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
4. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.

5. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
6. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
7. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
8. Company Item should be US- FDA / European CE approved.
9. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
10. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

5: Department of Anaesthesia & ICU

Technical Specifications for Anaesthesia & ICU Equipments

Item No -32: Recovery Room Trolley

1. Mattress base 3 sectional with x-ray platform, made of high pressure laminate.
2. Frame made up of epoxy powder coated steel.
3. Bumpers at all four corners.
4. Stepless hydraulic height adjustment with foot pedal located on both sides of trolley.
5. Pneumatic stepless adjustment for back section, foot section, trendelenburg& reverse trendelenburg with gas spring.
6. Convertible to chair position.
7. High pressure laminate mattress base is lift able for easy cleaning & disinfection of the x-ray platform.
8. X-ray cassette insertion along entire length and side of the trolley.
9. X-ray can be taken along entire length and width of the trolley.
10. Castors 150mm with central braking system and easy track steering facility.
11. Safe working load 225 kgs.
12. Place for fixing infusion rod at all four corners.
13. Place for fixing B type oxygen cylinder.
14. Confirms to international safety standers such ISO, CE
15. Mattress 80mm antistatic with straps
16. Side rails detachable.
17. Infusion rod adapter
18. Infusion rod height adjustable with self-locking facility.
19. Oxygen bottle holder for "B" type oxygen cylinder.
20. Specify Life of Equipment in standard operating condition from the date of Installation.
21. Comprehensive warranty for five years (free repair and replacement of all parts)
22. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
23. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
24. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.

25. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
26. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
27. Company Item should be US- FDA / European CE approved/ ISO Certified.
28. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
29. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -33: Crash Carts (Resuscitation Trolley)

1. Size - 960 L x 500 W x1545 H mm approx.
2. Trolley with 25 mm Diameter polished SS tubular frame
3. Drawers maximum number possible of adequate size (at least 6) of polished machined bend SS Sheet. They should have corrosion free telescopic channels. Each drawer should have drug labelling slot.
4. Flat surfaces should be stainless steel.
5. Two/three rows of hand out bins of different size &colour to hold different sizes of ampoules/vials of emergency medicine.
6. Light weight plastic box with drawers of different sizes and colours to hold emergency medicines, ambu bag, IV solution , catheters etc. (to be supplied separately).
7. Facility to carry monitor & suction apparatus.
8. Stainless steel saline rod-one.
9. Castor wheels of 12.5 cm diameter – Front two having locking arrangement.

10. Pull lout cardiac massage board above drawers.
11. Oxygen cylinder stand on one side.
12. Whole crash cart should be washable.
13. All the Stainless Steel should be seamless conforming to 304 grade/ 16 gauge and polished finished
14. Specify Life of Equipment in standard operating condition from the date of Installation.
15. Comprehensive warranty for five years (free repair and replacement of all parts)
16. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
17. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
18. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
19. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
20. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
21. Company Item should be US- FDA / European CE approved/ ISO Certified.
22. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
23. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -34:Scoop Stretchers

1. Scoop Stretcher made of lightweight
2. High-impact composite materials.
3. Featuring two hinged.
4. Inter locking pieces that can be used to gently scoop us a patient without having to roll them.
5. Specify Life of Equipment in standard operating condition from the date of Installation.
6. Comprehensive warranty for five years (free repair and replacement of all parts)
7. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
8. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
9. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
10. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
11. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
12. Company Item should be US- FDA / European CE approved/ISO Certified.
13. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
14. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -35: ECG Machine

Equipment Specifications for ECG Machine- 12 Channels

1 ECG Machine is primary equipment to record ECG Signal in various configurations. 12 channels with interpretation are required for recording and analysing the waveforms with special software.
2 The ECG Machine should be able to acquire all 12Leads simultaneously and interpret them
3 Should acquire simultaneous 12 lead ECG for both adult and paediatric patients
4 Should have Real time Colour display of ECG
5 waveforms with signal quality indication for each lead
6 Should have Artefact, AC, and low and high pass
7 Frequency filters.
8 Should have a storage memory of at least 100 ECGs with easy transfer by optional modem and data card.
9 Should have full screen preview of ECG report for quality assessment checks prior to print.
10 Should have interpretation facility of the amplitudes, durations and morphologies of ECG waveforms and associated rhythm for adult and paediatric patients
11 Should have alphanumeric Keyboard for patient data Entry.(virtual or hard keys)
12 Should have High resolution (200 dpix500dpi on 25 mm/sec speed) digital array A4 size printer
13 Should have report formats of 3 x4; 6 x2, Rhythm for up to 12 selected leads; 12 Lead Extended measurements, 1 minute of continuous waveform data for 1 selected lead.
14 Should have battery capacity of at least 30 ECGs or minutes of continuous rhythm recording on single charge
15 Should be able to be connected to HIS /LAN/Wireless LAN(OPTIONAL)
16 Should display ECG on LCD/TFT Display of 640x480 pixel resolution.
17 USB Support (optional) for Storage on external portable memories.
18 Multimode of ECG Storage capability on Floppy(min2), 150 ECG on Internal Flash Memory
19 ECG Machine 12 Leads with Interpretation – 01 , Patient Cable -02
20 Chest Electrodes Adult-(set of six) -02 sets.
21 Chest Electrodes Paediatric-(set of six) -02 sets each of Adult and Paediatrics-Total 4 sets
22 Limb Electrodes(set of 4)- 02 sets of Adult and 02 sets of Paediatrics
23 Thermal Paper A4 Size for 500 patients
24 The unit shall be capable of being stored continuously in ambient temperature of 0 - 50deg C and relative humidity of 15-90%
25 The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%
26 Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS)
27 General Requirements of Safety for Electromagnetic
28 Compatibility. Or should comply with 89/366/EEC;
29 EMC-directive.
30 Power input to be 220-240VAC, 50Hz fitted with Indian plug

31 Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-
32 60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
33 User Manual in English
34 Service manual in English
35 List of important spare parts and accessories with their part number and costing
36 Certificate of calibration and inspection.
37 Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
38 The job description of the hospital technician and company service engineer should be clearly spelt out
39 List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
40 Specify Life of Equipment in standard operating condition from the date of Installation.
41 Comprehensive warranty for five years (free repair and replacement of all parts)
42 AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
43 During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
44 During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
45 In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
46 Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
47 Company Item should be US- FDA / European CE approved.
48 Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
49 A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -36: Portable X-ray machines with integrated CR

1 High frequency microprocessor controlled Portable X Ray system with Computed Radiography system having following features:

2 Compact, lightweight, easily transportable mobile High Frequency X-Ray unit with integrated CR system suitable for bedside x-rays, trauma, Intensive care units, Operations theatres and Radiology department.

3 The unit should be fully counterbalanced and can be positioned to suit different bed heights. The unit should have facility of vertical swing and horizontal rotation of the tube head to ensure X - Ray of any anatomy even within limited space.
4 The unit must have an effective braking system for parking and transport.
5 The exposure release switch should be detachable with a cord of sufficient length (at least 3 m)
6 The unit should have integrated cassette box of size 542 mm (W) x 420 mm(H)
7 The Generator:
8 Microprocessor controlled high frequency / inverter type of high frequency (40 KHz or more) for constant output.
9 It should have power rating of at least 4 kW or more
10 It should have a digital display of mAs and kV.
11 KV range : 40 kv to 100kV or more
12 mA range: 10 mA to 100 mA or more
13 KV selection: 40 kV to 100 kv, selectable in 1 kV steps
14 mAS selection: 0.1 to 250 mAS
15 Exposure time of 10 ms to 5 sec
16 It should have over loading protection.

X-Ray Tube and Collimator:

17 Stationary anode and focal spot size should be less than 2mm.
18 Output of tube should match with that of generator.
19 Light Beam diaphragm Collimator of multi leaf type with auto cut off switch. The light intensity shall be at least 160 lux at 1 mtr distance from focal spot.
20 The unit should operate on single phase power supply and should have plug in facility to any standard Indian wall outlet with automatic adaptation to line voltage 200 to 240 volts, 15 Amp plug.
21 The Systems should be fully safe with respect to

- Over current
- Over Voltage
- Maximum loading of tube

22 The System should be supplied with Computed Radiography system having following features:
23 High resolution CR system should be completely integrated with the main mobile X Ray unit.
24 CR should be mounted on the main Mobile X-Ray unit & the total combined weight of unit should be less than 130 kgs

25 Should have imaging plates fixed to rigid back panel and nothing touching the active area of phosphor plate to ensure superior image quality and durability of the system.
26 Should have comprehensive software with facility of smart search, sort, filter options, full set of annotations, measurement tools and user preferred settings.
27 Gray scale resolution: 16 bits/Pixel source file or more, 65536 shades of Grey
28 Data acquisition process should be True Flat Scan Path
29 Image access time: 40 seconds or less
30 The system should be DICOM & PACS compatible
31 Provision to attach laptop
32 Manufacturer / supplier should have ISO certification.
33 Should be an AERB approved product
34 Essential Accessories: The following essential accessories to be provided with the unit.
35 Online UPS of required capacity, compatible with the unit, to take care of the power failure, for at least 30 Minutes back up for the whole system, the capacity of the UPS should be specified
36 Lateral cassette holder – One.
37 CR compatible Cassettes - one each of size 10" X 12" (25X30cm) and 14" X 17" (35X43cm)
38 Optional accessories: Dry Laser (photo thermo graphic) Printer with 100 Micron printing with Automatic density correction.
39 Should comply with AERB or BIS or ICRP Guidelines for radiation leakage and X-Ray equipment's.
40 Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS)
41 General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC; EMC-directive.
42 The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%
43 Power input to be 220-240VAC, 50Hz fitted with Indian plug
44 Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
45 User Manual in English
46 Service manual in English
47 List of important spare parts and accessories with their part number and costing
48 Certificate of calibration and inspection.
49 Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
50 The job description of the hospital technician and company service engineer should be clearly spelt out
51 List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
52 Specify Life of Equipment in standard operating condition from the date of Installation.
53 Comprehensive warranty for five years (free repair and replacement of all parts)
54 AMC/CMC rate term, for after expiry of Warranty period, for next 5 years

55 During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.

56 During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.

57 In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.

58 Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.

59 Company Item should be US- FDA / European CE approved.

60 Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)

61 A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No – 37: Portable ultrasound with three Probes

A state of art fully digital, compact portable Colour Doppler Ultrasound machine (weight <5 kg) is required with following technical features

1. Unit should be able to give very high image quality with advance technologies like compound imaging with at least 5 sights of lines for better cardiac contrast resolution, tissue differentiation and edge detection, equivalent to high end cart based systems. Please specify the technology.
2. System should be able to support speckle reduction imaging for better tissue differentiation and edge enhancement please specify the technology.
3. The system shall have the ability to enhance tissue margins and improve contrast resolution by reducing artifacts and improving visualization of texture patterns & needle tip within the image, please specify the technology.
4. System should have both online (Read) as well as offline (Write) zoom facility

5. Imaging modes of Real time 2D, Colour Doppler, Pulsed wave Doppler, Continuous wave Doppler, Power Doppler must be available on all cardiac transducers.
6. System must have fast start up to scanning in less than 30 seconds from off condition, for use in critical and emergency situations.
7. System should support transducer technologies like phased array, convex, linear, TEE etc.
8. Cine memory on all modes.
9. The system shall process a dynamic range that is at least 165db. The system must display at a maximum depth of 35 cm.
10. The system must have a dedicated cardiac calculation packages with PISA, TDI calculation packages, vascular calculations package.
11. The unit must be compact, portable and lightweight, weighing less than 5 kg.
12. Unit must be sturdy, resistant to breakage & damage on fall/ hit against the wall or hard surface for out of the hospital use.
13. Flat LCD/ TFT monitor of at least 10 inches with flicker free image.
14. Alphanumeric soft keys keyboard with easy access scans controls, facility to sanitize the system keyboard to avoid cross contamination.
15. The system must have the ability to function by AC/DC or battery power with the same degree of functionality, the battery life (run time) shall be al least 2 (Two) hours, this need to be demonstrated.
16. The system must have archive capability for storage and retrieval of images and clips. data.
17. Data Transfer facility should be available as standard, to transfer images etc. easily onto another system/computer etc.
18. System should posses software for Enhanced Needle Visualization to track the needle clearly at steep angles during the procedures while maintaining striking image quality of the target structures and the surrounding anatomy with simple On/Off functionality. This Facility should be available on both High frequency Linear and Curvilinear probes for superficial as well as deeper blocks.
19. Unit must be sturdy, resistant to breakage & damage on fall/ hit against the wall or hard surface.
20. The system shall support the all DICOM functionality, Storage, Print, and Work List, also ready to connect to PACS.
21. The manufacture shall provide a loaner system in case of failure of system.
22. The equipment should be mountable on trolley & locking mechanism should be inbuilt into the trolley for safety & security of the system.
23. System configured application specific educational video tutorials should be provided as standard with the system.
24. System should have both European CE and US FDA quality certification.

Transducers to be supplied as standard

1. 6-13 MHz multi-frequency, broadband linear array transducer with Biopsy Guide for vascular, nerve imaging with less than 40 mm size for vascular access, small parts, vascular applications. Higher frequency will be preferred.
2. 2-5 MHz multi-frequency broadband curved array transducer with Biopsy Guide for general purpose & abdominal applications

3. 1-5 MHz multi-frequency, broadband phased array transducer for adult cardiac, abdominal, FAST, imaging

Optional items to be quoted

- High Frequency Linear transducer 6-13 MHz for nerve blocks, vascular access, Vascular Imaging. With small foot print of 25 mm for anaesthesia applications in paediatric patients.
- High Frequency Linear transducer 6-13 MHz , 25 mm broadband Linear array hockey shaped transducer for nerve, vascular access, small parts applications
- 4-8 MHz Phased Array paediatric Echocardiography with PW & CW facility
- B/W Thermal printer
- Carry bag
- Mobile cart with transducer holder and space for printer.

ESSENTIAL REQUIREMENT: The firm must have minimum number of 100 installations of the same model in India, attach list of installations, and also provide performance certificates.

13. Specify Life of Equipment in standard operating condition from the date of Installation.
14. Comprehensive warranty for five years (free repair and replacement of all parts)
15. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
16. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
17. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
18. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
19. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
20. Company Item should be US- FDA / European CE approved.

21. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
22. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -38: Bi-Pap Ventilator

Ventilator-Non Invasive

1. The equipment should be capable to provide non-invasive ventilation to treat spontaneously breathing patients with respiratory insufficiency or chronic respiratory failures.

2. It should be suitable for Adult and Paediatric patients over 15 Kg of body weight.
3. It should use a high performance turbine flow generator preferably dual impeller motor for better pneumatic performance (more flow, faster rise time).
4. It should have a colour LCD monitor.
5. It should have monitoring facility for Tidal Volume, RR, Minute ventilation, I:E ratio & a user friendly format.
6. Should be capable of transfer the data on PC directly or through SD card.
7. Technical Specifications:

A	Operating pressure range (EPAP & IPAP).	2 to 25cm H2O
C	Pressure measurement tolerance	+0.5cm H20 + 4% of the measured reading
D	Row measurement tolerance	+0.1 or 20% of reading whichever is greater
E	S, ST,T,PAC and iVAPS modes	IPAP-.4 to 25cm H20 (measured at the mask) Pressure support: 0 to 23cm H20
F	CPAP mode	4 to 20cm H20 (measured at the mask)
G	Sensitivity settings	Should have minimum 5 trigger & cycle settings.
H	Backup Respiratory rate	5 to 50 BPM adjustable
I	Ti Control Ti Max	0.1 – 4 Sec.
J	Weight	< 1.5 Kg
K	Peak flow capacity	*200 LPM at 20 cm H2O.*

8. Should be provided with a easy to carry travel bag.
9. Accessories: Power cord, Reusable (Autoclavable) FF Mask Adult &Paediatric
10. Should be CE & FDA approved.
11. Optional : Heated Humidifier (easy to fit with the main unit).
12. Upgradeable to SpO2 Module & Data Module.

13. Demonstration of the equipment is a must.
14. Additional function
    - Start-stop-automatic-control
    - Fall asleep-ramp 0-60 min
    - Leakage test 0-90s
    - Date, time and wake-up-function
    - Power failure alarm
    - Leakage alarm
    - Automatic turbine start after power failure
    - Time counters: stand-by, turbine running, filter age, therapy
    - Adjustable time delay.
15. ST-operation -- S: Spontaneous: triggered by respiration
16. (Trigger sensitivity should be adjustable over a range)
17. T: Timed: safety frequency (adjustable)
18. ST: Spontaneous + Timed
19. Safety frequency - 5/min-35/min in 1/min-steps, modes:
20. T and ST
21. Inspiration phase: 20% - 80% of respiration phase
22. Filter system: 3-layers
23. Should be leak compensated.
24. Should have facility to supplement oxygen
25. Technical Specifications for reusable face mask & nasal mask.
26. Reusable face & nasal mask with textured dual flap silicone cushion flap for easy fit. Removable forehead support and pad to match the angle of patient's forehead Stability Selector for easy fit and angle. Ball & Socket headgear attachments. Should be autoclavable.
27. **System Configuration Accessories, spares and consumables**
    - Non Invasive Ventilator-01
    - Humidifier (Optional) - 01
    - Adult and Paediatric autoclavable silicone breathing circuits -02 each
    - Oxygen enrichment arrangements-01
    - Complete set of face mask (all sizes) – 02 each
    - Complete set of nasal mask (all sizes) – 02 each
28. **5 Environmental factors**
29. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
30. The unit shall be capable of being stored continuously in ambient temperature of 0 - 50deg C and relative humidity of 15-90%
31. **Power Supply**
32. Operating power supply- 220Vac , with Power Plug Suitable for Indian Power Point.
33. Reset table over current breaker shall be fitted for protection
34. **Standards, Safety and Training**
35. Manufacturer should have ISO certification for quality standards.
36. **Documentation**
37. Certificate of calibration and inspection from factory.

38. List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.
39. User Manual in English
40. Service manual in English
41. List of important spare parts and accessories with their part number and costing
42. Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.
43. Specify Life of Equipment in standard operating condition from the date of Installation.
44. Comprehensive warranty for five years (free repair and replacement of all parts)
45. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
46. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
47. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
48. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
49. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
50. Company Item should be US- FDA / European CE approved.
51. Country of origin Certificate , Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
52. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS,BHU.

Item No -39: ICU Ventilator

1. Advanced technology ventilator for use in ICU, dedicated for ventilating adult & paediatric patients.
2. Multi microprocessor controlled system with individual selection of various ventilation parameters & PEEP. Rapid trigger response time of 6 milliseconds in all modes for minimum work of breathing.
3. The system should have the facility for both Pressure triggering & Flow triggering.
4. Should have the following modes of ventilation:
5. Volume control / IPPV
6. Assist Control /Pressure Control
7. Pressure support with back-up ventilation
8. CPAP
9. SIMV(Volume Control) + Pressure Support
10. SIMV(Pressure Control) + Pressure Support
11. Pressure Regulated Volume Control (PRVC)
12. Unit should have advanced features like Flow adapted volume control, Late inspiratory recruitment, Inspiratory cycle off. Inbuilt in the Ventilators.

13. Unit Should have backup ventilation

14. The system should have the following parameters:

Tidal Volume:	20 to 2000 ml
CMV Frequency:	5 – 100 breaths / min
SIMV frequency:	2 – 60 breaths / min
Pause time:	0 - 30% of breath cycle time
Pressure level:	0 – (120 – PEEP)
PEEP:	0 – 50 cm H_2O
Trigger flow:	1 – 100%
Trigger Pressure	- 20 – 0 cm H_2O below PEEP
Inspiratory rise time	1 - 20% of breath cycle time
I : E ratio	1 : 10 – 4 : 1

15. Unit should have following audio – visual alarms:

- Airway pressure
- High continuous pressure
- FiO_2
- Expired minute volume
- Apnea
- End expiratory pressure
- Respiratory rate
- Gas failure

16. Battery : Should have built-in battery back-up for one hour

17. Screen size should be 12" or more colour touch screen. It should be possible to display at least three types of waveforms for each breath.
18. Screen should display following waveforms i.e. Flow , Pressure, Volume
19. Should have whole autoclavable expiratory Valve assembly / expiratory Cassette for complete dis-infection capability
20. Should have autoclavable heated wire OR Ultrasonic type flow sensors.
21. Life of Oxygen sensor/cell should be 10 years or to be replaced free of cost for 10 years.
22. Unit should have Suction Support facility ,with out altering the intubated patient data settings.

23. **OPTIONAL ITEM :** Unit should have stand alone Medical grade Compressor of same manufacturer. Ventilator should have the facility to connect directly with the compressed air pipe line in case of failure or vice versa. **Cost of Compressor should be quoted separately.**

24. Specify Life of Equipment in standard operating condition from the date of Installation.
25. Comprehensive warranty for five years (free repair and replacement of all parts)
26. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
27. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
28. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
29. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
30. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up

to that period, otherwise Company will provide good working standby set for remaining period.

31. Company Item should be US- FDA / European CE approved.
32. Country of origin Certificate , Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
33. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS,BHU.
34. Demonstration is must as and when required.

Item No- 40: Intermittent Pneumatic Compression Device

1. Specify Life of Equipment in standard operating condition from the date of Installation.
2. Comprehensive warranty for five years (free repair and replacement of all parts)
3. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
4. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
5. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
6. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
7. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.

8. Company Item should be US- FDA / European CE approved.
9. Country of origin Certificate , Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
10. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS,BHU.

Item No -41: AMBU Bag

Manual RECUSCITATOR Quality Based
Company Item should be US- FDA / European CE approved.
Warrantee : 5 years Comprehensive warranty of unit and its accessories from date of satisfactory installation.

Item No -42: Chest vibration system

1. **Heavy Duty Chest Vibration System**: Stoking combines both horizontal and vertical forces, which produce an effective and comfortable percussion, a mobilization of waste products, An Oscillating Massage's certified.24 Volt brushless motor with internal 24 Volt /150W transformer, Variable frequency control 0-60 Cps Rolling caster stand and accessory tray Physio Kit of 4 application :-Soft Massage , Deep Massage, Trigger Point Relaxation Drainage
2. Specify Life of Equipment in standard operating condition from the date of Installation.
3. Comprehensive warranty for five years (free repair and replacement of all parts)
4. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
5. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
6. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
7. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on

call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.

8. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
9. Company Item should be US- FDA / European CE approved.
10. Country of origin Certificate , Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
11. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS,BHU.

Item No -43: Biphasic Defibrillator with AED

Automated external defibrillator (AED)

1. Description of Function

Defibrillator is required for reviving the heart functions by providing selected quantum of electrical shocks with facility for monitoring vital parameters.

2. Operational Requirements

1) Defibrillator should be Bi- Phasic, light weight and latest model
2) Should monitor vital parameters and display them
3) Should print the ECG on thermal recorders.
4) Should work on Manual and Automated external defibrillation (AED) mode. Manual selection up to 360 J.
5) Should be capable of doing synchronized & a synchronized cardio version
6) Can be operated from mains as well as battery
7) Should have defibrillator testing facility
8) Demonstration of the equipment is a must.

3. Technical Specifications

1) Should be a Low Energy Biphasic defibrillator monitor with Recorder, having capability to arrest all Arrhythmia within a maximum energy of 360 Joules
2) Should monitor ECG through paddles, pads and monitoring electrodes and Defibrillate through pads and paddles.
3) Should have Automatic Lead switching to see patient ECG through paddles or leads
4) Should measure and compensate for chest impedance for a range of 25 to 150 ohms
5) Should have a built in 50mm strip printer/ thermal recorder
6) Should have charging time of less than 3 seconds for maximum energy. Charging indicator should be there.

7) Should have bright electroluminescent display for viewing messages and ECG waveform of 4 seconds AIIMS Bhopal/MC/RC-EMERGENCY MEDICINE DEPARTMENT EQUIPMENT /2013-14/01 Dated : 09.09.2013 Page No. (79)
8) Should have external & internal paddles with paddles contact indicator – for good paddle contact. Single Adult and paediatric paddles should be available.
10) Should have event summary facility for recording and printing at least 250 events and 50 waveforms.
11) Should be capable of printing Reports on Event summary, configuration, self-test, battery capacity etc.
12) Should have facility for self-test check before usage and set up function
13) Should have SP02 and NIBP integrated facility
14) Should be capable of delivering energy in increments of 1-2 joules up to 30J and increments of maximum 50J thereafter.
15) Should have user friendly colour coded operation
4. System Configuration, Accessories, spares and consumables
1) Defibrillator -01
2) Paddles Adult/Paediatric (pair) -01
3) Paddles –Internal (pair) -01
4) Patient cable -02
5) ECG Rolls -50
6) Disposable pads-10 nos.
7) NIBP Cuff Adult medium sized - 02
8) NIBP Cuff Paediatric- 02
9) NIBP Cuff Infants- 02
10) Reusable SPO2 Finger Probe-Adult -02
11) Reusable SPO2 Paediatric Finger Probe - 02
12) Complete set of ECG Leads- 02
5. Environmental factors
1) The unit shall be capable of operating continuously in ambient temperature of 10 -400 °C and relative humidity of 15-90%
2) The unit shall be capable of being stored continuously in ambient temperature of 0 -500 °C and relative humidity of 15-90%. Shall meet IEC-60601-1-2: 2001(Or Equivalent BIS), general Requirements of Safety for Electromagnetic Compatibility.
6. Power Supply
1) Power input to be 220-240VAC, 50Hz. Power cable should be fitted with Indian plug and adapter.
2) Resettable over current breaker shall be fitted for protection
3) Should have a Rechargeable Battery capable of usage for at least 90minutes or 30 discharges.
7. Standards, Safety and Training
1) Should be FDA approved product
2) Manufacturer should have ISO certification for quality standards
3) Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms. (OR EQUIVALENT BIS Standard)
4) Drop

5) Should conform to international test protocols on exposure to shock forces and to vibration forces. The standard should be documented.
6) Should meet IEC 529 Level-2 (IP2X) for enclosure protection solid foreign object ingress.
7) Should meet IEC 529 Level 3 (IP3X) (spraying water) for enclosure protection, water ingress.
8) Should have local service facility. The service provider should have the necessary equipment's recommended by the manufacturer to carry out preventive maintenance
9) Test as per guidelines provided in the service/maintenance manual.
10) Documentation
1) User Manual in English
2) Service manual in English
4) List of important spare parts and accessories not included in the warranty with their part number and costing
5) Certificate of calibration and inspection from factory.
6) Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
7) The job description of the hospital technician and company service engineer should be clearly spelt out
8) List of Equipment's available for providing calibration and routine maintenance support as per manufacturer documentation in service /technical manual.
Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/Para number of original catalogue/datasheet. Any point, if not substantiated with authenticated catalogue/manual, will not be considered.
Must submit user list and performance report within last 5 years from major hospitals
23. Specify Life of Equipment in standard operating condition from the date of Installation.

24. Comprehensive warranty for five years (free repair and replacement of all parts)

25. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years

26. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.

27. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.

28. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.

29. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after

discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.

30. Company Item should be US- FDA / European CE approved.
31. Country of origin Certificate , Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
32. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS,BHU.

Item No -44: Defibrillator with Monitor

1. Defibrillator should be Rectillinear Biphasic waveform.
2. The defibrillator should be lightweight, small size with bright colour display with facility to show 3 waveforms at a time.
3. Should have AED-Mode.
4. It should have facility of external as well as internal defibrillation.
5. Should provide both external & internal defibrillation paddle.
6. Display should have both selected energy and discharge energy.
7. It should have ability to provide verification of the defibrillator charging and discharging without removing paddles from storage wells.
8. It should have provision for energy selection on paddles as well as on front panel.
9. In manual mode the unit should provide energy from 1 – 200 joules
10. It should have real time CPR feedback to measure chest compression rate and depth in real time and both visual and audible feedback is provided.
11. The unit should have external pacing with 40 milli-second pulse width.
12. It should have ability to sense the type of electrode (adult or pediatric) and able to detect missing or dried out electrodes.
13. The defibrillator should have self test and generate report with print.
14. Battery should be lithium ion and should have indicator to show level of energy left.
15. It should have facility to measure SPO2 and NIBP & ETCO2.
16. It should have ability to filter out CPR artifacts and allowing person to see organized rhythms without interrupting chest compression
17. The defibrillator should be US FDA approved.
18. Terms & Conditions
    a. Preventive machine maintenance four times in a year.
    b. Response time for acknowledgment of complaint 30 minutes.
    c. Response time for physical presence within one working day.
    d. Uptime 355 days in a year.
    e. Downtime 48 hours with a penalty of Rs.1000/- every day after downtime
    f. Demonstration of equipment is compulsory.
19. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90% Power input to be 220-240VAC, 50Hz fitted with Indian plug

20. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms (OR EQUIVALENT BIS Standard)
21. User Manual in English
22. Service manual in English
23. List of important spare parts and accessories with their part number and costing
24. Certificate of calibration and inspection.
25. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
26. The job description of the hospital technician and company service engineer should be clearly spelt out
27. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
28. Specify Life of Equipment in standard operating condition from the date of Installation.
29. Comprehensive warranty for five years (free repair and replacement of all parts)
30. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years .
31. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
32. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
33. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
34. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
35. Company Item should be US- FDA / European CE approved.

36. Country of origin Certificate , Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
37. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS,BHU.

Item No -45: Non Invasive Cardiac Support Pump with AED

1. The Cardiac support pump should able to generate chest compression & provide consistent compression with no interruptions.
2. It should be easy to use in both Hospital and Emergency set up mainly during transportation and even on 45 degree elevation
3. It should be battery operated and extremely simple user interface.
4. It should able to achieve uniform load distribution by squeezing entire chest.
5. The Chest compression band should have an ability to do the high quality compression.
6. It should have small LCD backlit screen to show compression modes.
7. It should have ability to automatically size the patient by calculating size, shape and compliance of every patient.
8. The system should be capability to provide both 30:2 (30 compressions and 2 ventilation pause) and continuous compression just by pressing buttons.
9. The system should come with 3 batteries, 1Battery Charger and 3 load distributing band.
10. The battery should be made Li-Ion technology which enable to provide continuous compression of minimum 20 minutes in full charge.
11. The Device should be supplied with an latest advanced AED with following features
12. Energy Settings should confer with Latest AHA/ERC guidelines and maximum energy level should be 200 Joules.
13. The unit must include an LCD that is capable of displaying text prompts,CPR feedback for depth of chest compressions,
14. The unit must be capable of doing automatic internal tests.
15. The unit should include an easily identifiable on/off switch along with CODE READY indicator on the front of the device.
16. The unit should have ability to record data to an internal memory and to upload the same to a computer through wireless mode.
17. The unit should come with Disposable Battery
18. The unit must detect the use of paediatric pads and automatically adjust the arrhythmia analysis processing for a paediatric patient and must invoke specific paediatric Joule settings
19. The unit should have IP55 dust and water ingress rating .
20. Should be compliant with latest AHA 2010 guidelines.
21. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
22. Power input to be 220-240VAC, 50Hz fitted with Indian plug

23. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
24. User Manual in English
25. Service manual in English
26. List of important spare parts and accessories with their part number and costing
27. Certificate of calibration and inspection.
28. Log book with instruction for daily, weekly, monthlyand quarterly maintenance checklist.
29. The job description of the hospital technician andcompany service engineer should be clearly spelt out
30. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
31. Specify Life of Equipment in standard operating condition from the date of Installation.
32. Comprehensive warranty for five years (free repair and replacement of all parts)
33. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
34. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
35. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
36. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
37. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
38. Company Item should be US- FDA/ European CE approved.

39. Country of origin Certificate , Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
40. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS,BHU.

Item No -46: Bed Side Monitors (Five Para)

1. Patient monitor system should be of modular type and capable of monitoring adult, pediatric & neonatal patients.
2. Monitor should have 10.4" display with touch screen
3. Should be capable of 6 traces display.
4. Monitor must be capable of simultaneously monitoring the following parameters which should be present as standard: ECG, NIBP, SpO2, invasive pressures (2), temperatures (2)
5. Should be compatible with 4 channel EEG, SPO2, BIS
6. **Optional quotes for BIS Module, EEG Module and SvO2 Module to be offered**
7. ECG should have capability for 3, 5 and / or 10 lead monitoring and should have built in arrhythmia monitoring on all leads.
8. Inbuilt ST segment analysis and arrhythmia detection for all the leads should be possible.
9. Alarm parameter should flash red in the presence of high priority alarms (e.g. ventricular fibrillation and asystole) and flash yellow in the presence of medium or low priority alarms (e.g. noisy signal, etc.)
10. 24 hours trend data should be displayed.
11. All monitors including central station should have similar user interface for easy usage among all clinicians.
12. Monitor shall provide the capability to interact with alarms at remote bedsides.
13. Monitor shall provide the capability to receive and display real-time waveforms, trended data and alarm status from other bedside or telemetry units on the patient monitoring network.
14. Monitor shall provide the capability enter patient information at the bedside or central monitor.
15. Alarm limit status (ON/OFF) must be indicated on-screen for each parameter and actual parameter alarm settings must be displayed on-screen when alarms are on.
16. Monitor shall permit the optional ability to receive and display information from other patient devices such as ventilators, infusion pumps and other standalone devices.
17. Bed to bed communication between the monitors should be possible with out a central station.
18. Patient monitoring network shall use standard TCP/IP protocol and be capable of residing on hospital's network infra-structure.
19. Should be compatible with HIS and should be HL7 compliant.
20. Monitor should have capability to accommodate remote viewing of real time waveforms through internet. This facility should be quoted as optional
21. Should have CE and US FDA certifications.

22. Accessories and spares
    1. ECG / respiration: 5 lead ECG cable and lead wire set
    2. NIBP: Adult: 1 sizes and Pediatric 1 sizes and neonatal, 1 size per monitor
    3. SPo2 Sensor: Adult sensor with cable, pediatric sensor with cable
    4. Temperature: Skin and nasopharyngeal probes per monitor.
22. The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%
23. Power input to be 220-240VAC, 50Hz fitted with Indian plug
24. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
25. User Manual in English
26. Service manual in English
27. List of important spare parts and accessories with their part number and costing
28. Certificate of calibration and inspection.
29. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
30. The job description of the hospital technician and company service engineer should be clearly spelt out.
31. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technicalManual.
32. Specify Life of Equipment in standard operating condition from the date of Installation.
33. Comprehensive warranty for five years (free repair and replacement of all parts)
34. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
35. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
33. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
34. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
36. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
37. Company Item should be US- FDA / European CE approved.
38. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
39. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, and BHU.

Item No -47: Modular Monitors (Patient Monitor System)

1. Patient monitor system should be of modular type and capable of monitoring adult, pediatric& neonatal patients.
2. Monitor should have 19" independent flat panel display with touch screen
3. Module rack / housing should be independent and shall be able to be placed near to the patient.
4. Should be capable of 8 traces display.
5. Monitor must be capable of simultaneously monitoring the following parameters which should be present as standard: ECG, NIBP, SpO2, invasive pressures (4), temperatures (2),Cardiac Output
6. Should be compatible with 4 channel EEG, SvO2, BIS
7. **Optional quotes for BIS Module, EEG Module and SvO2 Module to be offered**
8. ECG should have capability for 3, 5 and / or 10 lead monitoring and should have built in arrhythmia monitoring on all leads.
9. Inbuilt ST segment analysis and arrhythmia detection for all the leads should be possible.
10. Haemodynamic and drug dose calculations should be available.
11. Arrhythmia should be grouped based on classifications – and should show no of arrhythmias occurred.
12. Respiration should be available with Cardio Vascular Artifact filter.
13. Alarm parameter should flash red in the presence of high priority alarms (e.g. ventricular fibrillation and asystole) and flash yellow in the presence of medium or low priority alarms (e.g. noisy signal, etc.)
14. 24 hours trend data should be displayed.
15. All monitors including central station should have similar user interface for easy usage among all clinicians.
16. Monitor shall provide the capability to interact with alarms at remote bedsides.
17. Monitor shall provide the capability to receive and display real-time waveforms, trended data and alarm status from other bedside or telemetry units on the patient monitoring network.
18. Monitor shall provide the capability enter patient information at the bedside or central monitor.
19. Alarm limit status (ON/OFF) must be indicated on-screen for each parameter and actual parameter alarm settings must be displayed on-screen when alarms are on.
20. Monitor shall permit the optional ability to receive and display information from other patient devices such as ventilators, infusion pumps and other standalone devices.
21. Bed to bed communication between the monitors should be possible without a central station.
22. Patient monitoring network shall use standard TCP/IP protocol and be capable of residing on hospital's network infra-structure.
23. Power input to be 220-240VAC, 50Hz fitted with Indian plug
24. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
25. User Manual in English
26. Service manual in English

27. List of important spare parts and accessories with their part number and costing
28. Certificate of calibration and inspection.
29. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
30. The job description of the hospital technician and company service engineer should be clearly spelt out
31. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical
32. Manual.
33. Specify Life of Equipment in standard operating condition from the date of Installation.
34. Comprehensive warranty for five years (free repair and replacement of all parts)
35. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
36. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.

35. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
36. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
37. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
38. Company Item should be US- FDA / European CE approved.
39. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
40. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, and BHU.

Item No -48: Central Station

(Central Monitoring Station for Multi Para Monitor)

1 System should have minimum 16 beds capability.
2 Central station should have 19" colour display touch screen.
3 Should have drug dose and hemodynamic calculation.
4 It should have possible to view information such as vital sign , alarm status, arrhythmia analysis, trended parameter, patient data etc., for any selected bed from the central station.
5 Should have separate computer keyboard and 4 channel thermal array recorder.
6 Should have default alarm limits and customizable parameter settings.
7 Central station should have full bed review capability.
8 Central station should be able to configure as a bedside monitor if required.
9 Should have 24 hours trends.
10 Should have capability for HL7 interface. Should be capable of monitoring telemetry modules.
11 All system should have CE and US FDA certifications.
12 Should be supplied with a online suitable UPS.
13 NOTE: Price of Multipara Monitor and Central Monitoring Station should be quoted seprately.
14 The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%
15 Power input to be 220-240VAC, 50Hz fitted with Indian plug
16 Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
17 User Manual in English
18 Service manual in English
19 List of important spare parts and accessories with their part number and costing
20 Certificate of calibration and inspection.
21 Log book with instruction for daily, weekly, monthlyand quarterly maintenance checklist.
22 The job description of the hospital technician andcompany service engineer should be clearly spelt out
23 List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as permanufacturer documentation in service/technical manual.
24 Specify Life of Equipment in standard operating condition from the date of Installation.
25 Comprehensive warranty for five years (free repair and replacement of all parts)
26 AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
27 During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
28 During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to

Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.

29 In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.

30 Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.

31 Company Item should be US- FDA / European CE approved.

32 Country of origin Certificate , Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)

33 A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS,BHU.

Item No -49: NIBP Monitor

1. Should monitor NIBP & Pulse Rate
2. Should use Oscillometric technique with linear deflation for NIBP measurement
3. Should have LED digital display for Systolic BP, Diastolic BP, Pulse Rate & Time of Measurement.
4. The monitor should have an integrated cuff arm with arm support for correct positioning of the patient's arm for BP measurement.
5. The Cuff should automatically adjust to the size of the patient's arm.
6. The main body and cuff arm cover should have antibacterial coating for multiple usage and hygiene.
7. The Cuff cover should be detachable & washable.
8. The monitor should announce the measured values on completion of measurement.
9. Should have volume control switch for increase/decrease of sound announcement
10. Should have an inbuilt thermal printer.
11. Should have option for Patient Card reader for storing patient history.
12. Should have RS 232 port for data transfer to computer using external options.
13. Monitor should give printout of systolic BP, dia systolic BP, mean pressure, Pulse, along with date and time.
14. Should be portable and easy to use
15. Should meet international quality directives such as CE & IEC 60601-1, IEC60601-1-1
16. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%

17. Power input to be 220-240VAC, 50Hz fitted with Indian plug
18. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
19. User Manual in English
20. Service manual in English
21. List of important spare parts and accessories with their part number and costing
22. Certificate of calibration and inspection.
23. Log book with instruction for daily, weekly, monthlyand quarterly maintenance checklist.
24. The job description of the hospital technician andcompany service engineer should be clearly spelt out
25. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as permanufacturer documentation in service/technical manual.
26. Specify Life of Equipment in standard operating condition from the date of Installation.
27. Comprehensive warranty for five years (free repair and replacement of all parts)
28. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
29. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
30. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
31. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
32. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
33. Company Item should be US- FDA / European CE approved.
34. Country of origin Certificate , Shipment details and Original Bill to be provided by

Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)

35. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS,BHU.

Item No -50: Minimally invasive cardiac output monitoring

1 The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%
2 Power input to be 220-240VAC, 50Hz fitted with Indian plug
3 Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
4 User Manual in English
5 Service manual in English
6 List of important spare parts and accessories with their part number and costing
7 Certificate of calibration and inspection.
8 Log book with instruction for daily, weekly, monthlyand quarterly maintenance checklist.
9 The job description of the hospital technician andcompany service engineer should be clearly spelt out
10 List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as permanufacturer documentation in service/technicalmanual.
11 Life of Equipment in standard operating condition from the date of Installation.
12 Comprehensive warranty for five years (free repair and replacement of all parts)
13 AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
14 During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
15 During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
16 In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
17 Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after

discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.

18 Company Item should be US- FDA / European CE approved.

19 Country of origin Certificate , Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)

20 A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS,BHU.

Item No -51: Syringe infusion pumps

1 Should have three kinds of modes: Rate Mode, Time Mode, and Body Weight Mode.
2 Should have unique door free structure: Avoiding problem of pump stock and fluid leakage.
3 Microprocessor Controlled Syringe Infusion Pump
4 Bottom loading syringe technique
5 Delivery Range 0.1 ml/hr to 99.9 ml/hr
6 Syringes Of Sizes 20 ml, 50 ml & 60 ml can be used
7 Delivery Volume Pre selection 1 to 999.9 ml
8 Delivery Precision +/- 2%
9 BOLUS FUNCTION :-
10 On Line Bolus

11 One Touch Bolus

12 Bolus Delivery rate 800 ml/hr

13 Automatic bolus reduction system during occlusion

14 Battery Type NiCd, rechargeable AA size
15 Battery Operating Time approx. 20 hours during delivery rate < 10 ml/hr
16 Alternatively 4x1.5V alkaline batteries and can work for >80 hrs at delivery < 10 ml/hr.
17 Vertically stackable upto 3 pumps for easy transportation &optmum space management
18 Online changing of delivery rate possible
19 Varaibleocculusion pressure
20 Standby function
21 pump can retain data when disconnected from patient in this mode

22 ALARM SYSTEMS :

- Occlusion Pressure Alarm
- 3 min pre- alarm
- Syringe empty alarm
- Syringe incorrectly place

- Volume Infused alarm

23 Battery Charge Low alarm (3 min pre-alarm)
24 Internal Function Alarm
25 Drive disengaged alarm
26 Safety Classification :
27 Type CF – protected against defibrillation
28 Protection class II
29 (IP 22) Splash Proof
30 Up gradable to Fluid management system
31 The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%
32 Power input to be 220-240VAC, 50Hz fitted with Indian plug
33 Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
34 User Manual in English
35 Service manual in English
36 List of important spare parts and accessories with their part number and costing
37 Certificate of calibration and inspection.
38 Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
39 The job description of the hospital technician and company service engineer should be clearly spelt out
40 List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
41 Specify Life of Equipment in standard operating condition from the date of Installation.
42 Comprehensive warranty for five years (free repair and replacement of all parts)
43 AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
44 During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
45 During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
46 In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.

47 Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.

48 Company Item should be US- FDA / European CE approved.

49 Country of origin Certificate , Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)

50 A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS,BHU.

Item No -52: Rapid infusion pumps

1. The equipment should have Roller type Peristaltic pump /Volumetric pump technology for delivery of IV fluids and blood/blood products ranging between 2.5 ml to 750 ml per minute.
2. The Equipment should have high levels of safety from air embolism by integrating at least two ultrasonic air detection sensors.
3. Heating process should be done by an electromagnetic induction heating system.
4. The Equipment should have two infra –red temperature sensors for accurate delivery of fluids at 37ºC.
5. The equipment should have the facility to automatically purge air for removal of any out- gassed air to prevent it from entering the patient line. No manual process should be involved.
6. The equipment should have operator controlled Bolus infusion key for rapid response in critical situations.
7. The equipment should have a line pressure control sensor for restriction of flow in case of line occlusion immediately and stop the delivery of fluids for patient safety.
8. The Equipment should have a recirculate mode for pre – warming of fluids during transport.
9. The Equipment should have an interactive on-board display system which displays information about the rate of infusion , total volume infused , real temperature of fluids, line pressure etc.
10. The equipment should have an internal rechargeable battery backup.
11. Consumables should be universal for all flow rates ranging between 2.5 ml to 750 ml per minute.
12. Guarantee/ warrantee for 60 months from the date of installation.
13. The principals/ supplier firm /vendor should have a 24 Hours. Service center facility based at Delhi/NCR.
14. The Principals must give a certificate that if the supplier/ vendor is changed during the course of guarantee/ warrantee period, the principals would be responsible for the upkeep/ maintenance of the quote/ supplied equipment, besides honoring all the terms and conditions of CMC/AMC in letter and spirit.

15. Spares/ Consumables should be available for a period of at least eight years after expiry of the guarantee/ warrantee period.
16. Performance certificates from satisfied customers from Central Govt. /State Govt. /reputed private hospitals must be appended in respect of the quoted equipment.
17. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
18. Power input to be 220-240VAC, 50Hz fitted with Indian plug
19. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms (OR EQUIVALENT BIS Standard)
20. User Manual in English
21. Service manual in English
22. List of important spare parts and accessories with their part number and costing
23. Certificate of calibration and inspection.
24. Log book with instruction for daily, weekly, monthlyand quarterly maintenance checklist.
25. The job description of the hospital technician andcompany service engineer should be clearly spelt out
26. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation service/ technical manual.
27. Specify Life of Equipment in standard operating condition from the date of Installation.
28. Comprehensive warranty for five years (free repair and replacement of all parts)
29. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
30. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
31. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
32. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
33. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that

period, otherwise Company will provide good working standby set for remaining period.

34. Company Item should be US- FDA / European CE approved.
35. Country of origin Certificate , Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
36. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS,BHU.

Item No-53: Ripple mattresses (to prevent pressure sores)

1. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
2. Power input to be 220-240VAC, 50Hz fitted with Indian plug
3. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
4. User Manual in English
5. Service manual in English
6. List of important spare parts and accessories with their part number and costing
7. Certificate of calibration and inspection.
8. Log book with instruction for daily, weekly, monthlyand quarterly maintenance checklist.
9. The job description of the hospital technician andcompany service engineer should be clearly spelt out
10. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as permanufacturer documentation in service/technicalmanual.
11. Specify Life of Equipment in standard operating condition from the date of Installation.
12. Comprehensive warranty for five years (free repair and replacement of all parts)
13. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
14. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
15. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.

16. Company Item should be US- FDA / European CE approved.
17. Country of origin Certificate , Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
18. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS,BHU.

Item No -54: Patient Warming system
(For intra operative application Operation system- Adult)

1. Should be suitable for intra-operative applications.
2. Should consist of active warming arm-cum-shoulder section, pair of leg segments and abdominal segment to cover the entire body.
3. Should be based on semiconductor polymer foil for precise warming of entire patient body during & after surgery.
4. Size

Abdominal Segment	:	(40-45) cm x (85-90) cm
Arm & Shoulder Section	:	(170-175) cm x (30-35) cm
Leg Segment	:	(40-45) cm X (85-90) cm

5. Control unit should be capable of warming minimum four segments at a time.
6. Control unit should have Color TFT touch screen for easy operation.
7. Control unit should have touch screen display to select & display temperature of all segments at a time.
8. Control unit should automatically detect the number of segments which are connected to the unit and display the same on the screen.
9. Should offer precise digital temperature control with selectable temperature range of 37 to 40º C in steps of 0.1ºC
10. Arm cum shoulder segment should be divided in two sections capable of being switched ON or OFF independently depending upon the nature of surgery and condition of patient.
11. Should have facility to measure & display the real time core body temperature of the patient continuously on the screen.
12. Should also have on screen graphical display of patient body temperature for the entire duration of surgery.
13. Should have facility to independently adjust the temperature of individual segment.
14. Should have a provision to connect whole body blanket, pediatric size blanket, jelly based warming mattress / pad to the same control unit for future requirement.
15. Should have safety features such as Automatic check, Precise temperature control between warming system and patient, Auto stop on detecting any problem
16. Should have non latex anti-bacterially coated, blood and fluid Resistant, washable and replaceable covers
17. The control unit should be light weight and small in size, easily attachable to IV rod/OT table with fixing claw.
18. Should have low energy consumption and noiseless operation
19. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%

20. Power input to be 220-240VAC, 50Hz fitted with Indian plug
21. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
22. User Manual in English
23. Service manual in English
24. List of important spare parts and accessories with their part number and costing
25. Certificate of calibration and inspection.
26. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
27. The job description of the hospital technician and company service engineer should be clearly spelt out
28. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
29. Specify Life of Equipment in standard operating condition from the date of Installation.
30. Comprehensive warranty for five years (free repair and replacement of all parts)
31. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
32. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
33. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
34. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
35. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
36. Company Item should be US- FDA / European CE approved.
37. Country of origin Certificate , Shipment details and Original Bill to be provided by

Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)

38. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS,BHU.

Item No -55: Patient warming system
(For Recovery Area, Recovery system- Adult)

1. Suitable for pre-operative and post-operative applications
2. Should be supplied with reusable active warming blanket with cover 1 no., made of semiconductor polymer foil.

   Size of the Blanket Length : (200-210) cm
   Width (130-135) cm
3. Control unit should be capable of warming up to four blankets at a time with same control unit.
4. Control unit should be easy to operate Colour LCD touch screen to select & display temperature
5. Should offer precise digital temperature control with selectable temperature range of 37 to 40º C in steps of 0.1ºC
6. Should have facility to measure & display the real time core body temperature of the patient continuously on the screen.
7. Should also have on screen graphical display of patient body temperature for the entire duration.
8. Should have facility to independently adjust the temperature of individual blanket.
9. Should also have provision to connect and warm intra operative blanket/ paediatric size blankets jelly based warming mattress at a time for future requirement.
10. Control unit should automatically detect the number of blankets which are connected to the unit and display the same on the screen.
11. Should have safety features such as Automatic check, Precise temperature control between warming system and patient, Auto stop on detecting any problem
12. Should have non latex anti-bacterially coated, blood and fluid Resistant, washable and replaceable covers
13. The control unit should be light weight, small in size and easily attachable to IV rod/OT table with fixing claw.
14. Should have low energy consumption and noiseless operation
15. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
16. Power input to be 220-240VAC, 50Hz fitted with Indian plug
17. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms (OR EQUIVALENT BIS Standard)
18. User Manual in English
19. Service manual in English
20. List of important spare parts and accessories with their part number and costing
21. Certificate of calibration and inspection.

22. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
23. The job description of the hospital technician and company service engineer should be clearly spelt out
24. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
25. Specify Life of Equipment in standard operating condition from the date of Installation.
26. Comprehensive warranty for five years (free repair and replacement of all parts)
27. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
28. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
29. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
30. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
31. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
32. Company Item should be US- FDA / European CE approved.
33. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
34. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -56: Patient Positioning System

1. Patient Positioning System
    a. Should consist of vacuum pad filled with plastic beads capable of taking any shape as per positioning needs.
    b. Should be easy to use using vacuum line / vacuum pump.
    c. Should be supplied with manual Vacuum Pump
2. Should provide quick stable and comfortable patient positioning during all kind of surgeries without forcing the patient into a strained position.
3. Should mould firmly to shape of the patient body providing uniform support to all body parts and preventing pressure injuries.
4. Should facilitate manoeuvring patients arm and legs without needing to change position of the system.
    a. Positioning pad should be made up of soft latex free PVC fabric
    b. Should be radiolucent and easy to disinfect using common liquid disinfectants.
    c. Should be supplied complete with Pads in 7 different shape and sizes
5. U Shape (40 X 30 cm) - For Head immobilization and Neck Support
6. T-Shape with flaps (85 X 70 cm) - – For Back Support
7. Small, with U-shape cut-out (45 x 50 cm) - - For Thyroid Position
8. Medium, with U-shape cut-out (70 X 90 cm) - – For Kidney Position
9. Large, with U-shape cut-out – (95 X 90 cm) - For Frog Leg Position
10. Extra-Large, with U-shape cut-out – (115 X 90 cm) - For Lateral Position and Shoulder Access
11. Large rectangle – (75 X 190 cm)- For Full body support
12. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
13. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms (OR EQUIVALENT BIS Standard)
14. User Manual in English
15. Service manual in English
16. List of important spare parts and accessories with their part number and costing
17. Certificate of calibration and inspection.
18. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
19. The job description of the hospital technician and company service engineer should be clearly spelt out
20. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
21. Specify Life of Equipment in standard operating condition from the date of Installation.
22. Comprehensive warranty for five years (free repair and replacement of all parts)
23. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
24. During warranty /AMC period - Unit has to be repaired within 48 hour or to be

replaced by other unit till it is being repaired.

25. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
26. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
27. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
28. Company Item should be US- FDA / European CE approved.
29. Country of origin Certificate , Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
30. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS,BHU.

Item No -57: Patient Transfer System - Slide Model

1. Should have flat sheet design with pull straps for optimum supports for safe & smooth patient transfer To & From OT Table, Beds, Trolley, Stretcher without need for lifting the patient
2. Should be made up of long – life, low friction fabric and should be suitable for even heavy patient transfer.
3. Should be washable.
4. Patient transfer sheet for lateral transfer and safe repositioning of patient.
5. Easy to put in place & remove from underneath the patient.
6. Should be supplied with following
7. Slide sheet - Size 725mm X2000mm - 1No.
8. Slide sheet - Size 725mm X1725mm - 1No
9. Transfer Roll – Size1960mm Ø 433mm – 1No
10. Pull straps – 650mm (L) – 08No.
11. The unit shall be capable of operating continuously in ambient temperature of 10 -

40deg C and relative humidity of 15-90%

12. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms (OR EQUIVALENT BIS Standard)
13. User Manual in English
14. Service manual in English
15. List of important spare parts and accessories with their part number and costing
16. Certificate of calibration and inspection.
17. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
18. The job description of the hospital technician and company service engineer should be clearly spelt out
19. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
20. Specify Life of Equipment in standard operating condition from the date of Installation.
21. Comprehensive warranty for five years (free repair and replacement of all parts)
22. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
23. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
24. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
25. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
26. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
27. Company Item should be US- FDA / European CE approved.
28. Country of origin Certificate, Shipment details and Original Bill to be provided by

Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)

29. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -58: Electrically operated Thermal Blankets (Whole body warmers)

1. Should be specifically designed for intra-operative applications.
2. Should be convenient to be used in any position of the patient including lithotomy position.
3. Warming mattress should consist of the following parts and dimensions:
4. Arm-cum-shoulder section - (170-175 cms) x (28-32cms)
5. Pair of leg segments - (40-45) cm X (85-90) cm
6. Abdominal segment to cover the entire body - (40-45) cm x (85-90)
7. Control unit should be capable of warming minimum four segments at a time.
8. Should be based on semiconductor polymer foil for precise warming of entire patient body
9. Control display unit should have touch screen to select parameters:-
    a) Colour LCD
    b) Display temperature of different segment at a time
10. Control unit should automatically detect the number of segments which are connected to the unit and display the same on the screen.
11. Should offer precise digital temperature control with selectable temperature range of 36 to 42º C in steps of 0.1ºC
12. Arm cum shoulder segment should be divided in two sections capable of being switched ON or OFF independently depending upon the nature of surgery and condition of patient.
13. Should have facility to measure & display the real time core body temperature of the patient continuously on the screen.
14. Should also have on screen graphical display of patient body temperature for the entire duration of surgery.
15. Should have facility to independently adjust the temperature of individual segment.
16. Should have safety features such as Automatic check, Auto stop of detecting any problem
17. Should have non latex anti-bacterially coated, blood and fluid Resistant covers
18. Mattress covers should be washable and replaceable.
19. The control unit should be light weight not more than 4 kg, and easily attachable to IV rod/OT table with fixing claw.
20. Should have noiseless operation

    Terms & Conditions
21. Preventive machine maintenance four times in a year.
22. Response time for acknowledgment of complaint 30 minutes.
23. Response time for physical presence within one working day.
24. Uptime 355 days in a year.

25. Downtime 48 hours with a penalty of Rs.1000/- every day after downtime
26. Demonstration of equipment is compulsory.
27. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
28. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms .(OR EQUIVALENT BIS Standard)
29. User Manual in English
30. Service manual in English
31. List of important spare parts and accessories with their part number and costing
32. Certificate of calibration and inspection.
33. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
34. The job description of the hospital technician and company service engineer should be clearly spelt out
35. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
36. Company Item should be US- FDA / European CE approved.
37. Specify Life of Equipment in standard operating condition from the date of Installation.
38. Comprehensive warranty for five years (free repair and replacement of all parts)
39. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
40. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
30. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
31. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
32. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that

period, otherwise Company will provide good working standby set for remaining period.

33. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
34. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -59: Blood Warming System

1. Required for **warming Blood** before transfusion to a patient

2. Should be able to warm fluid/blood to a temperature range of 37-40 C
3. Should be able to maintain the temperature up to a blood/fluid flow rate of 5 L/hour
4. Should have digital temperature display of fluid/blood
5. Should have an in-built water tank to warm the infused fluid/blood
6. Should have warm water connection till the patient end of the tubing to maintain the temperature of the infused fluid
7. Should have audible and visual alarms for tubing disconnection, low water and over-temperature
8. Should be possible to use the same equipment in both adults and children
9. Should be portable and compatible with infusion pumps
10. Should be quoted with 100 disposable, non-pyrogenic tubing's for fluid/blood infusion
11. The financial bid must include cost of all spares, accessories, consumables, etc. If an item is not quoted, it will be assumed that the company will provide it free of cost during the five years of comprehensive warranty. However, five year of comprehensive warranty will include all accessories and spares, the only exception being disposable warming tubing.
12. The firm should quote charges of CMC from 6th to 10th year.
13. Demonstration of the quoted model is essential, failing which the quotation will be rejected.
14. Warming cabinet for Intravenous fluids for operation theatre.
15. Should be made of high quality stainless steel to ensure long trouble free life time.
16. Should be provided with transparent Double insulating safety glass to enable to observe stored items from outside.
17. Should have well insulated door and cabinet for silent & low power consumption.
18. Cabinet should be provided with lockable wheel.
19. Dimensions to be around Height: 640 ± 20 mm ; Width 550 ± 20 mm ;Depth: 500 ± 20 mm
20. Warming Temperature range from 35° to 50 °.
21. Provision for at least 4 shelves and 1 drawers having a capacity for at least 5 bottle's (I.V. fluid) per shelves.
22. Should be from a reputed manufacturer with CE/US FDA+ certification for the quoted product.
23. Built- in safety features provide added Protection.

24. Operating set-point at 41°C.
25. Audible and visible system alarms if fluid temperature exceeds 42°C.
26. Audible and visible under temperature alarm. Secondary alarm systems provide fall-safe back-up.
27. Preventive machine maintenance four times in a year.
28. Response time for acknowledgment of complaint 30 minutes.
29. Response time for physical presence within one working day.
30. Uptime 355 days in a year.
31. Downtime 48 hours with a penalty of Rs.1000/- every day after downtime
32. Demonstration of equipment is compulsory.
33. The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%
34. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms (OR EQUIVALENT BIS Standard)
35. User Manual in English
36. Service manual in English
37. List of important spare parts and accessories with their part number and costing
38. Certificate of calibration and inspection.
39. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
40. The job description of the hospital technician and company service engineer should be clearly spelt out
41. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
42. Specify Life of Equipment in standard operating condition from the date of Installation.
43. Comprehensive warranty for five years (free repair and replacement of all parts)
44. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
45. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
46. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
47. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
48. Certificate for insuring availability of Spare Parts and services, by Principle Company,

for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.

49. Company Item should be US- FDA / European CE approved.
50. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
51. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -60: IV Fluid Warmer

1. Required for **warming fluids** before transfusion to a patient
2. Should be able to warm fluid/blood to a temperature range of 37-40 C
3. Should be able to maintain the temperature up to a blood/fluid flow rate of 5 L/hour
4. Should have digital temperature display of fluid/blood
5. Should have an in-built water tank to warm the infused fluid/blood
6. Should have warm water connection till the patient end of the tubing to maintain the temperature of the infused fluid
7. Should have audible and visual alarms for tubing disconnection, low water and over-temperature
8. Should be possible to use the same equipment in both adults and children
9. Should be portable and compatible with infusion pumps
10. Should be quoted with 100 disposable, non-pyrogenic tubing's for fluid/blood infusion
11. The financial bid must include cost of all spares, accessories, consumables, etc. If an item is not quoted, it will be assumed that the company will provide it free of cost during the five years of comprehensive warranty. However, five year of comprehensive warranty will include all accessories and spares, the only exception being disposable warming tubing.
12. Demonstration of the quoted model is essential, failing which the quotation will be rejected.
13. Specifications:-

- Warming cabinet for Intravenous fluids for operation theatre.
- Should be made of high quality stainless steel to ensure long trouble free life time.
- Should be provided with transparent Double insulating safety glass to enable to observe stored items from outside.
- Should have well insulated door and cabinet for silent & low power consumption.
- Cabinet should be provided with lockable wheel.
- Dimensions to be around Height: 640 ± 20 mm ; Width 550 ± 20 mm ;Depth: 500 ± 20 mm
- Warming Temperature range from 35° to 50 °.

- Provision for at least 4 shelves and 1 drawer having a capacity for at least 5 bottles' (I.V. fluid) per shelves.

14. Preventive machine maintenance four times in a year.
15. Response time for acknowledgment of complaint 30 minutes.
16. Response time for physical presence within one working day.
17. Uptime 355 days in a year.
18. Downtime 48 hours with a penalty of Rs.1000/- every day after downtime
19. Demonstration of equipment is compulsory.
20. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
21. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms (OR EQUIVALENT BIS Standard)
22. User Manual in English
23. Service manual in English
24. List of important spare parts and accessories with their part number and costing
25. Certificate of calibration and inspection.
26. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
27. The job description of the hospital technician and company service engineer should be clearly spelt out
28. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
29. Company Item should be US- FDA / European CE approved.
30. Specify Life of Equipment in standard operating condition from the date of Installation.
31. Comprehensive warranty for five years (free repair and replacement of all parts)
32. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
33. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.

1. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
2. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts

for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.

34. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
35. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
36. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -61: Electric suction machines

Suction cum irrigation pump high flow rate, oil less low noise (imported) diaphragm pump for simultaneous operation of suction and irrigation with pressure and vacuum gauges and flow regulator.

1. 2 x 2 Ltrs. Polycarbonate jars (Long Type) with overflow safety
2. Noise level of suction apparatus with the range of 55 dB +/- 05 dB
3. Rocker Piston Vacuum Pump with the range of 720 +/- 10 mmHg
4. Anti corrosive and Epoxy Powder Coated Mild Steel Trolley
5. Ideal for Medical / MTP / Surgical procedures
6. Heavy duty HN-65 Castors with brakes
7. Free air displacement 35 ~ 40 LPM
8. Non collapsible Suction Tubing
9. Standard 63 mm Vacuum Gauge
10. Bacterial filter fitted
11. Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS)
12. General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC;EMC-directive.
13. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
14. Power input to be 220-240VAC, 50Hz fitted with Indian plug
15. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms (OR EQUIVALENT BIS Standard)
16. User Manual in English
17. Service manual in English
18. List of important spare parts and accessories with their part number and costing

19. Certificate of calibration and inspection.
20. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
21. The job description of the hospital technician and company service engineer should be clearly spelt out
22. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
23. Specify Life of Equipment in standard operating condition from the date of Installation.
24. Comprehensive warranty for five years (free repair and replacement of all parts)
25. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
26. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
27. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
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29. Company Item should be US- FDA / European CE approved/ISO Certified..
30. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
31. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No-62: Resuscitation kits
(Laryngoscopes, Ambu bag, LMA, Tracheotomy set etc)

1. Company Item should be US- FDA & European CE approved.
2. Specify Life of Equipment in standard operating condition from the date of Installation.
3. Comprehensive warranty for five years (free repair and replacement of all parts)
4. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
5. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
6. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period, otherwise Company will provide good working standby set for remaining period.
7. Company Item should be US- FDA / European CE approved.
8. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation. (In case of Equipment is imported from other Country.)
9. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -63: Flexible Fiber Optics Laryngoscope Adult

Flexible Laryngoscope:

1. Field of view : 75 degree
2. Depth of Field : 3-50mm
3. Diopter : +2-8 Dptr.
4. Angulations (Up/Down) : 130 Degree
   - : 130 Degree
5. Rigid Distal Width : 0 3.4 mm
6. Insertion Tube Width : 0 3. Mm
7. Working Length (mm) : 0 300mm

8. Total Length (mm) : 535mm

9. With all standard set of accessories.

10. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
11. Power input to be 220-240VAC, 50Hz fitted with Indian plug
12. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms (OR EQUIVALENT BIS Standard)
13. User Manual in English
14. Service manual in English
15. List of important spare parts and accessories with their part number and costing
16. Certificate of calibration and inspection.
17. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
18. The job description of the hospital technician and company service engineer should be clearly spelt out
19. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
20. Specify Life of Equipment in standard operating condition from the date of Installation.
21. Comprehensive warranty for five years (free repair and replacement of all parts)
22. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
23. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
24. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
25. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
26. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that

period, otherwise Company will provide good working standby set for remaining period.

27. Company Item should be US- FDA / European CE approved.
28. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
29. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -64: Flexible Fiber Optics Laryngoscope Paediatric

Flexible Laryngoscope:

1. Field of view : 75 degree
2. Depth of Field : 3-50mm
3. Diopter : +2-8 Dptr.
4. Angulations (Up/Down) : 130 Degree
   - : 130 Degree
5. Rigid Distal Width : 0 3.4 mm
6. Insertion Tube Width : 0 3. Mm
7. Working Length (mm) : 0 300mm
8. Total Length (mm) : 535mm
9. With all standard set of accessories.
10. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
11. Power input to be 220-240VAC, 50Hz fitted with Indian plug
12. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms (OR EQUIVALENT BIS Standard)
13. User Manual in English
14. Service manual in English
15. List of important spare parts and accessories with their part number and costing
16. Certificate of calibration and inspection.
17. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
18. The job description of the hospital technician and company service engineer should be clearly spelt out
19. List of Equipment's available for providing calibration and routine Preventive

Maintenance Support. as per manufacturer documentation in service/technical manual.

20. Specify Life of Equipment in standard operating condition from the date of Installation.
21. Comprehensive warranty for five years (free repair and replacement of all parts)
22. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
23. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
24. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
25. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
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27. Company Item should be US- FDA / European CE approved.
28. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
29. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -65: Dialysis Machine with SLED

1. Unit should be capable to perform Acetate and Bi-carb Dialysis.
2. Unit should be capable to perform Na+ Profiling, UF profiling, HCo3 Bicarbonat profiling and should have open programming where maximum patients can hav individual profiling instead of fixed.
3. The Unit should have LCD touch screen panel and latest technology and ease c operations. and inclusion of icons and removal or hide of icons. Only necessary icons ca be chosen by technician.
4. Unit should be sleek, user friendly interface and should not weight more than 65 kgs.
5. Unit should be facilitated to view the flow diagram of the hydraulic circuit and functio of each part by technician in case of failure of machine to report to company for less tim of rectification.
6. The unit should not be linked to laptop or computer for diagnosis of fault to avoid th patient problem under dialysis treatment in room.
7. The Unit should have facilities for Chemical like Sodium Hypo, Bleach 5%, Plain hea and citric acid 50% with heat disinfection and consumption per use should be less tha 40ml.
8. The Unit should have dialysis flow between 300-700ml/min and should be able to adju every 1ml/min.
9. Unit should have safety feature with continuous monitoring of UF pumps and Solenoi valves during treatment for the safety of patient.
10. The Unit should have NIBPM with UFR co-relation to stop UF anytime as and when b Blood pressure limits sets range as per patient and should stop blood pump and UF to g stabilize the BP. Should have less than 16 seconds inflation and reduced pressing time t give less pressure on patient.
11. The Unit should have KUF display on screen during dialysis to check the usage c dialyzer in real time.
12. The Unit should have battery backup facility for blood pump.
13. The Unit should have cartridge type dialysate filter for pure dialysate water. The filte should be replaced by drain function and without fluid leakage and should have minimu capacity to perform 130 treatment of dialysis.
14. The Unit should have patient data storage of minimum 12 patients to start dialys instantly by technician within machine and not by external computer or uploading.
15. Unit should have disinfections Auto Programme off facility to facilate technician time.
16. The Unit should have saving of electricity feature for screen and response sensor and lif should not be less than 70,000 hours in good conditions except spoiled due to electrica fire, water or any major reasons.
17. The unit should have unique feature of doing the adult and paediatric dialysis an should have composite alarms with blood tube detection and not with blood chambers fo small paediatric blood tubing.
18. The unit should have safety features like Air detector, Blood detector, Tube detecto Blood leak alarm, TMP auto forecast, Air and blood mixed foam detection and remova by key, the treatment progress screen and record of data of every 15 to 30 minutes to no by technician.
19. The unit should have minimum open 8 UF Profile programming and 8 open Tota Conductivity/ Na profiling and should not be closed programmes and also internme

programming intervals of four hours or minimum 20 minutes.

20. The unit should have inbuilt facility to detect software with diagram with on/off facilit by user and not be linked to laptop or computer for diagnosis of fault to avoid the patier treatment time loss of several days and long procedures for detecting fault by engineers.
21. The Unit should be facilitated to view the flow diagram of the hydraulic circuit an function of each part by technician in case of failure of machine to report to company fo less time of rectification.
22. The unit should have unique feature of doing the adult and paediatric dialysis and shoul have composite alarms with blood tube detection and not with blood chambers for sma paediatric blood tubing's and also in the case of adult dialysis treatment.
23. The unit should have safety features like Air detector, Blood detector, Tube detecto Blood leak alarm, dialysate pressure, TMP auto forecast, Air and blood mixed foa detection and removal by key, the treatment progress screen and record of data of ever 15 to 30 minutes to note by technician.
24. Machine and treatment history data is must to evaluate the life cycle cost and life usage o hours by administration for maintenance after expiry of warranty.
25. The unit should have Auto Priming mode, priming assist Mode for new technician o user, disconnect Mode, automatic blood collection assist to re- infuse blood aft treatment for new user or new technician.
26. The system should meet Association for the Advancement of Medical Instrumentatio haemodialysis water quality standard. Monitoring should be done for the same at lea twice a year.

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27. Preventive machine maintenance four times in a year.
28. Response time for acknowledgment of complaint 30 minutes.
29. Response time for physical presence within one working day.
30. Uptime 355 days in a year.
31. Downtime 48 hours with a penalty of Rs.1000/- every day after downtime.
32. The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%
33. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms (OR EQUIVALENT BIS Standard)
34. User Manual in English
35. Service manual in English
36. List of important spare parts and accessories with their part number and costing
37. Certificate of calibration and inspection.
38. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
39. The job description of the hospital technician and company service engineer should be clearly spelt out
40. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
41. Specify Life of Equipment in standard operating condition from the date of Installation.
42. Comprehensive warranty for five years (free repair and replacement of all parts)

43. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
44. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
45. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
46. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
47. Certificate for insuring availability of Spare Parts and services, by Principle Company, fo the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that period otherwise Company will provide good working standby set for remaining period.
48. Company Item should be US- FDA / European CE approved.
49. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Importe from other Country.)
50. A certificate to be issued by Principal Company showing that equipment is brand new an brought for Trauma Centre, IMS, BHU.

Item No -66: CRRT Equipment

1. **Technical Specifications of CRRT Equipment** :
2. **APPLICATIONS:-**The machine is dedicated to the fully automated practice of a complete range of continuous renal replacement and fluid management therapies.
3. The machine is a fully automatic integrated unit, and able to perform the following therapies:
    a. GENERAL FEATURES :
        i. S.C.U.F - Slow Continuous Ultra Filtration.
        ii. C.V.V.H - Continuous Veno-Venous Haemofiltration
        iii. C.V.V.H.D - Continuous Veno-Venous Haemodialysis
        iv. C.V.V.H.D.F - Continuous Veno-Venous Hemodiafiltration
        v. T.P.E - Therapeutic Plasma Exchange
    b. The machine is user friendly and has automated functions which include:
4. A large colour TFT-LCD touch screen and smart software for easy operator guidance.
5. Step-by-step instructions with graphical instructions on screen for easy setup.

a. Graphical User Interface
b. Keyboard function keys are provided.
c. An enlarged and high resolution colour screen for dialysis data display:-
    i. High resolution LCD colour display.
    ii. Its brightness is adjustable adaptively to the illumination of the environment.

6. The system must be user friendly. The system must with the following features:
    a. On-screen user guidance with step-by-step screen instructions.
    b. Integrated help function.
    c. Auto-priming of the filter, extracorporeal blood and fluids are highly preferred so that therapy performing by non-specialized nursing staff is possible.
    d. Flexible disposable with cassette system and filter.
    e. Self testing of alarms and functions after priming and every 2 hours to ensure the patient's safety
    f. Rapid and automatic priming procedure
7. The system should contain four pumps to control the flow rates of Blood, Filtrate, Substitute and Dialysate.
8. Continuous and precise fluid balance management using 4 dedicated (independent) weighing devices monitoring Pre-Blood pump, Replacement pump, Dialysate pump and Effluent pump.
9. Recording of patients' treatment history up to 90 hours.
10. Total filtrate volume, replacement solution volume, dialysate volume, pre-blood solution volume and elapsed time are shown and updated on treatment history screen in an orderly fashion for ease of recording and patient safety.
11. Continuous information of all parameters displayed on one screen including **graphical display of pressure monitoring** such as filter differential pressure and TMP (trans-membrane pressure).
12. System comes with the following :
    a. Option for **recirculation mode.**
    b. Option to change syringe to enable heparin syringe change or enable anti-coagulation.
    c. Option to **change therapy** without the need to change disposable set.
    d. Option to upgrade software.
13. **Pre-connected** filter together with the tubing set (the choice of membrane of the filter used with this system should be made from Acrylonitrile69 (**AN69**) which has been proven to remove inflammatory molecules e.g. IL-6 effectively)
14. Should operate with a **low extracorporeal blood volume** which is equal or less than 152ml (93ml for Paediatric) in order to improve patient tolerance without affecting patient's haemodynamic stability and limited blood loss.
15. **Build-in dosage calculator.**
    a. Able to provide additional tool to support operator on the dosage prescription.
    b. This helps in easy management with built-in calculator aid in providing up-to date details on treatment efficiency. Source: Dr.Ronco&Bellomo, Lancet 2000.
16. **TECHNICAL REQUIREMENTS:**
    a. The system is equipped with **four (4) separate pumps** for the following functions:

b. Blood Pump;
c. Dialysate pump;
d. Effluent pump;
e. Replacement pump
f. Flow Rate ***(With clinical paper proven that the delivered and prescribed setting is always lower than 2%)***
    i. Blood pump flow rate ranges between 10ml to 450ml/min with accuracy of ±10% of the set rate.
    ii. Replacement solution flow rate ranges between 0 ml to 8000ml/hr*.
    iii. Dialysate flow rate ranges between 0 ml to 8000 ml/hr*.
    iv. Pre-blood infusion pump flow rate between 0 ml to 8000 ml/hr*.
    v. Filtrate or Effluent flow rate ranges between 0 ml to 10,000 ml/hr.

17. ***Replacement + Dialysate + PBP + Pt Fluid Removal. ≤ 10,000 ml/ hour.***

18. Equipped with **four (4) independent weighing scales** which allows the user to use different composition of fluids for each scale in order to ensure precision and accuracy in delivering the fluids :
    a. Pre-Blood pump Scale;
    b. Replacement Scale;
    c. Dialysate Scale;
    d. Effluent Scale.
    e. Equipped with five (5) independent pressure sensors :
    f. Pre Filter pressure sensor;
    g. Effluent pressure sensor;
    h. Blood access pressure sensor;
    i. Blood return pressure sensor;
    j. Fifth pressure sensor port for future therapy e.g. couple filtration.
    k. Equipped with **2 pinch valves** for the pre and post dilution capability using the same treatment set.
    l. For CVVHDF modalities, machine should have the flexibility to use lactate based dialysate solution and bicarbonate solution simultaneously.
    m. Alarms **(audio and visual)** and safety system includes:
        i. Bag change information;
        ii. Pre alarm on filter clotting;
        iii. Venous pressure measurement;
        iv. Ultrasound air detector;
        v. Blood leak detector;
    n. Equipped with the capabilities for connectivity and information technology: computer interface (RS232) which allows via modern connection for Remote troubleshooting; Ethernet connection with ICU network* ; PCMCIA slot with data card to store treatment data that can be downloaded into PC*.

19. ****To be developed***
    a. Pressure monitoring range:
        i. Access line: (-) 250 mmHg to (+) 300mmHg.
        ii. Return line: (-) 50 mmHg to (+) 350mmHg
        iii. Pre filter line: (-) 50mmHg to (+) 450 mmHg
        iv. Effluent line: (-) 350 mmHg to (+) 400 mmHg.

20. The system should include (integrated) infusion pump for continuous or bolus anticoagulation.
    a. Syringe type for heparin pump is calibrated with 10ml to 50ml.
    b. **Optional blood warmer** *(can also be used as fluid warmer)*

21. The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
22. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms (OR EQUIVALENT BIS Standard)
23. User Manual in English
24. Service manual in English
25. List of important spare parts and accessories with their part number and costing
26. Certificate of calibration and inspection.
27. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
28. The job description of the hospital technician and company service engineer should be clearly spelt out
29. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
30. Specify Life of Equipment in standard operating condition from the date of Installation.
31. Comprehensive warranty for five years (free repair and replacement of all parts)
32. AMC/CMC rate term, for after expiry of Warranty period, for next 5 years
33. During warranty /AMC period - Unit has to be repaired within 48 hour or to be replaced by other unit till it is being repaired.
34. During Warranty / AMC Period three preventive Maintenance at the time interval of four months to be carried out by company and duly signed service report to be submitted to Trauma Centre and. In case of failure in providing preventive service, Warranty/ AMC will be extended automatically for further four months for each failure in preventive maintenance, any number of breakdown calls to be attended by company.
35. In case of equipment is not under Warranty/ AMC then also it is liability of supplier company to provide service and spare parts for said Life period of equipment at on call basis within 72 working hrs. On Call service charge for particular equipment to be mentioned at the time of filling Tender.
36. Certificate for insuring availability of Spare Parts and services, by Principle Company, for the said life period of the Equipment, from the date of Installation, even after discontinuation of model, Company will provide spare part and services up to that

period, otherwise Company will provide good working standby set for remaining period.

37. Company Item should be US- FDA / European CE approved.
38. Country of origin Certificate, Shipment details and Original Bill to be provided by Principle Company at the time of Delivery/ Installation.(In case of Equipment is Imported from other Country.)
39. A certificate to be issued by Principal Company showing that equipment is brand new and brought for Trauma Centre, IMS, BHU.

Item No -67: Ambulatory Blood Pressure Monitor

1. Monitor must be validated by BHS
2. ABMP must be lightweight less than 260g
3. Monitor must take less than 4 AA batteries
4. Must be able to programme at least 6 time intervals
5. Must have Windows XP compatible software.
6. Monitor shall be able to measure down to 30mmhg for diastole
7. ABMP must be able to interface to computer using a serial or USB cable
8. Software must be able to email report as a pdf .
9. Software must allow easy selection section of data to be for analysis
10. Should have FDA certification
11. At least 5 sizes of cuff must be available for use with ABMP
12. Software will have inbuilt security with easily accessible log of users.
13. Software must be able to analyze data over 48hrs
14. The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%
15. Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements and IEC-60601-2-25 Safety of Electrocardiograms (OR EQUIVALENT BIS Standard)
16. User Manual in English
17. Service manual in English
18. List of important spare parts and accessories with their part number and costing
19. Certificate of calibration and inspection.
20. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
21. The job description of the hospital technician and company service engineer should be clearly spelt out
22. List of Equipment's available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.

23. Specify Life of Equipment in standard operating condition from the date of Installation.
24. Comprehensive warranty for five years (free repair and replacement of all parts)
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PART 3 – Contract

Section VII. General Conditions of Contract

Table of Clauses

Section VII. General Conditions of Contract

1. Definitions

1.1 The following words and expressions shall have the meanings hereby assigned to them:

(a) "University" means Banaras Hindu University established under Banaras Hindu University Act 1915 .

(b) "Contract" means the Contract Agreement entered into between the Purchaser and the Supplier, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein.

(c) "Contract Documents" means the documents listed in the Contract Agreement, including any amendments thereto.

(d) "Contract Price" means the price payable to the Supplier as specified in the Contract Agreement, subject to such additions and adjustments thereto or deductions therefrom, as may be made pursuant to the Contract.

(e) "Day" means calendar day.

(f) "Completion" means the fulfillment of the Related Services by the Supplier in accordance with the terms and conditions set forth in the Contract.

(g) "GCC" means the General Conditions of Contract.

(h) "Goods" means all of the commodities, raw material, machinery and equipment, and/or other materials that the Supplier is required to supply to the Purchaser under the Contract.

(i) "The Project Site," term where applicable, means the place of work named in the Special Conditions of Contract (SCC**)**.

(j) "Purchaser" means Banaras Hindu University, institute, faculty, department and other entities of the University competent for purchasing Goods and Services, as specified in the SCC**.**

(k) "Related Services" means the services incidental to the supply of the goods, such as insurance, installation, training and initial maintenance and other such

obligations of the Supplier under the Contract.

(l) "SCC" means the Special Conditions of Contract.

(m) "Subcontractor" means any person, private or government entity, or a combination of the above, to whom any part of the Goods to be supplied or execution of any part of the Related Services is subcontracted by the Supplier.

(n) "Supplier" means the person, private or government entity, or a combination of the above, whose bid to perform the Contract has been accepted by the Purchaser and is named as such in the Contract Agreement.

(o) "The Project Site," where applicable, means the place named in the SCC.

2. Contract Documents

2.1 Subject to the order of precedence set forth in the Contract Agreement, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, and mutually explanatory. The Contract Agreement shall be read as a whole.

3. Corrupt and Fraudulent Practices

3.1 The University requires compliance with its policy against the corrupt and fraudulent practices as set forth Section- V.

3.2 The Purchaser requires the Supplier to disclose any commissions or fees that may have been paid or are to be paid to agents or any other party with respect to the bidding process or execution of the Contract. The information disclosed must include the name and address of the agent or other party, the amount and currency, and the purpose of the commission, gratuity or fee.

4. Interpretation

4.1 Unless the context requires otherwise, singular means plural and vice versa.

4.2 The Contract constitutes the entire agreement between the Purchaser and the Supplier and supersedes all communications, negotiations and agreements (whether written or oral) of the parties with respect thereto made prior to the date of Contract.

4.3 Amendment

No amendment or other variation of the Contract shall be valid unless it is reduced to writing, dated, expressly refers to the Contract, and is signed by the duly authorized representative of

each party thereto.

4.4 Nonwaiver

(a) Subject to GCC Sub-Clause 4.5(b) below, no relaxation, forbearance, delay, or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect, or restrict the rights of that party under the Contract, neither shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.

(b) Any waiver of a party's rights, powers, or remedies under the Contract must be in writing, dated, and signed by an authorized representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.

4.5 Severability

If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

5. Language

5.1 The Contract as well as all correspondence and documents relating to the Contract exchanged by the Supplier and the Purchaser, shall be written in the language specified in the SCC. Supporting documents and printed literature that are part of the Contract may be in any language provided they are accompanied by an accurate translation of the relevant passages in the language specified**,** in which case, for purposes of interpretation of the Contract, such translation shall govern.

5.2 The Supplier shall bear all costs of translation to the governing language and all risks of the accuracy of such translation, for documents provided by the Supplier.

6. Joint Venture, Consortium or Association

6.1 If the Supplier is a joint venture, consortium, or association, all of the parties shall be jointly and severally liable to the Purchaser for the fulfillment of the provisions of the Contract and shall designate one party to act as a leader with authority to bind the joint venture, consortium, or association. The composition or the constitution of the joint venture, consortium, or association shall not be altered without the prior consent of the Purchaser.

7. Eligibility

7.1 The Bidder should not have been declared insolvent by the competent court.

7.2 The Bidder should not be disqualified for contract under the law of the land.

7.3 The Bidder should not be adjudged defaulter of Tax Payment under Income Tax Law or any other Law for the time being in-force.

7.4 The Supplier and its Subcontractors shall have the nationality of an eligible country. A Supplier or Subcontractor shall be deemed to have the nationality of a country if it is a citizen or constituted, incorporated, or registered, and operates in conformity with the provisions of the laws of that country. Nationality must be disclosed by the supplier

7.5 All Goods and Related Services to be supplied under the Contract shall have their origin in Eligible Countries. For the purpose of this Clause, origin means the country where the goods have been grown, mined, cultivated, produced, manufactured, or processed; or through manufacture, processing, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its components.

8. Notices

8.1 Any notice given by one party to the other pursuant to the Contract shall be in writing to the address specified in the **SCC.** The term "in writing" means communicated in written form with proof of receipt.

8.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

9. Governing Law

9.1 The Contract shall be governed by and interpreted in accordance with the laws of India, unless otherwise specified in the SCC**.**

9.2 Throughout the execution of the Contract, the Contractor shall comply with the import of goods and services prohibitions in India when

(a) as a matter of law or official regulations, India prohibits commercial relations with that country; or

(b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, India prohibits any import of goods from that country or any payments to any country, person, or entity in that country.

10 Settlement of Disputes

10.1 The Purchaser and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

10.2 If the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser or the Supplier may give notice to the other party of its intention to settle the issue by arbitration, as hereinafter provided, as to the matter in dispute, no arbitration in respect of the matter be commenced unless such notice is given in accordance with this Clause for the final settlement of the matter. Arbitration may be commenced prior to or after delivery of the Goods under the Contract.

10.3 All questions, disputes and differences arising shall be referred by the Vice-Chancellor, Banaras Hindu University to the sole arbitrator for arbitration under the provision of the Arbitrations and Conciliation Act, 1996.

11 Obligations During Arbitrations

11.1 Notwithstanding any reference to arbitration in Clause 10,

(a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and

(b) the Purchaser shall pay any amount due to the Supplier.

12. Scope of Supply

12.1 The Goods and Related Services to be supplied shall be as specified in the Schedule of Requirements.

13. Delivery and Documents

13.1 Subject to GCC Sub-Clause 33.1, the Delivery of the Goods and Completion of the Related Services shall be in accordance with the Delivery and Completion Schedule specified in the Schedule of Requirements. The details of shipping and other documents to be furnished by the Supplier are specified in the SCC.

14. Supplier's Responsibilities

14.1 The Supplier shall supply all the Goods and Related Services included in the Scope of Supply in accordance with GCC Clause 12, and the Delivery and Completion Schedule, as per GCC Clause 13.

15 Contract Price

15.1 Prices charged by the Supplier for the Goods supplied and the

Related Services performed under the Contract shall not vary from the prices quoted by the Supplier in its bid, with the exception of any price adjustments authorized in the SCC**.**

16. Terms of Payment

16.1 Ordinarily, payments for services rendered or supplies made shall be released only after the services have been rendered or supplies appropriate to the requirement made. However in following cases advance payments may be made if specified in SCC**:**

(i) Advance payment demanded by firms holding maintenance contracts for servicing of Air-conditioners, computers, other costly equipment, etc.

(ii) Advance payment demanded by firms against fabrication contracts, turnkey contracts etc.

Such advance payment should not exceed the following limits :-

(i) Thirty percent of the contract value to private firms;

(ii) Forty percent of the contract value to a State or central Government agency or a Public Sector Undertaking; or

(iii)In case of maintenance contract, the amount should not exceed the amount payable for six months under the contract.

16.2 The Supplier's request for payment shall be made to the Purchaser in writing, accompanied by invoices describing, as appropriate, the Goods delivered and Related Services performed, and by the documents submitted pursuant to GCC Clause 13 and upon fulfillment of all other obligations stipulated in the Contract.

16.3 Payments shall be made promptly by the Purchaser, within ninety (90) days after submission of an invoice or request for payment by the Supplier, and after the Purchaser has accepted it.

16.4 The currencies in which payment shall be made to the supplier under this contract shall be Indian currency unless otherwise agreed.

17. Taxes and Duties

17.1 For goods manufactured outside India, the Supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside India.

17.2 For goods Manufactured within India, the Supplier shall be

entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods to the Purchaser.

17.3 If any tax exemptions, reductions, allowances or privileges may be available to the Supplier in India, the Purchaser shall use its best efforts to enable the Supplier to benefit from any such tax savings to the maximum allowable extent or country or origin, the supplies shall provide benefit from any such tax sowing to the purchaser.

18. Performance Security

18.1 If required as specified in the SCC, the Supplier shall, within twenty-one (21) days of the notification of contract award, provide a performance security for the performance of the Contract in the amount specified in the SCC.

18.2 The proceeds of the Performance Security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.

18.3 As specified in the SCC, the Performance Security, if required, shall be denominated in the currency (ies) of the Contract or in a freely convertible currency acceptable to the Purchaser; and shall be in one of the format stipulated by the Purchaser in the SCC, or in another format acceptable to the Purchaser.

18.4 Performance security should remain valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier including warranty obligation.

18.5 Bid security shall be refunded to the successful bidder within 30 days of receipt of performance security.

19. Copyright

19.1 The copyright in all drawings, documents, and other materials containing data and information furnished to the Purchaser by the Supplier herein shall remain vested in the Supplier, or, if they are furnished to the Purchaser directly or through the Supplier by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party

20. Confidential Information

20.1 The Purchaser and the Supplier shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any documents, data, or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following completion or termination of the Contract. Notwithstanding the above, the Supplier may furnish to its Subcontractor such

documents, data, and other information it receives from the Purchaser to the extent required for the Subcontractor to perform its work under the Contract, in which event the Supplier shall obtain from such Subcontractor an undertaking of confidentiality similar to that imposed on the Supplier under GCC Clause 20.

20.2 The Purchaser shall not use such documents, data, and other information received from the Supplier for any purposes unrelated to the contract. Similarly, the Supplier shall not use such documents, data, and other information received from the Purchaser for any purpose other than the performance of the Contract.

20.3 The obligation of a party under GCC Sub-Clauses 20.1 and 20.2 above, however, shall not apply to information that:

(a) now or hereafter enters the public domain through no fault of that party;

(b) can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party; or

(c) otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality.

20.4 The above provisions of GCC Clause 20 shall not in any way modify any undertaking of confidentiality given by either of the parties hereto prior to the date of the Contract in respect of the Supply or any part thereof.

20.5 The provisions of GCC Clause 20 shall survive completion or termination, for whatever reason, of the Contract.

21. Subcontracting

21.1 The Supplier shall notify the Purchaser in writing of all subcontracts awarded under the Contract if not already specified in the bid. Such notification, in the original bid or later on shall not relieve the Supplier from any of its obligations, duties, responsibilities, or liability under the Contract.

21.2 Subcontracts shall comply with the provisions of GCC Clauses 3 and 7.

22. Specifications and Standards

22.1 Technical Specifications and Drawings

(a) The Goods and Related Services supplied under this Contract shall conform to the technical specifications and standards mentioned in Section-VI, Schedule of Requirements and, when no applicable standard is

mentioned, the standard shall be equivalent or superior to the official standards whose application is appropriate to the Goods' country of origin or India.

(b) Wherever references are made in the Contract to codes and standards in accordance with which it shall be executed, the edition or the revised version of such codes and standards shall be those specified in the Schedule of Requirements. During Contract execution, any changes in any such codes and standards shall be applied only after approval by the Purchaser and shall be treated in accordance with GCC Clause 33.

23. Packing and Documents

23.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. During transit, the packing shall be sufficient to withstand, without limitation, rough handling and exposure to extreme temperatures, salt and precipitation, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.

23.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified in the SCC, and in any other instructions ordered by the Purchaser.

24. Insurance

24.1 Unless otherwise specified in the SCC, the Goods supplied under the Contract shall be fully insured—in a freely convertible currency from an eligible country—against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery, in accordance with the applicable Incoterms or in the manner specified in the SCC.

25. Transportation and Incidental Services

25.1 The Supplier is required under the Contract to transport the Goods to a specified place of final destination within India, defined as the Project Site, transport to such place of destination in India, including insurance and storage, as shall be specified in the Contract, shall be arranged by the Supplier, and related costs shall be included in the Contract Price"; or any other agreed upon trade terms (specify the respective responsibilities of the Purchaser and the Supplier)

25.2 The Supplier may be required to provide any or all of the following services, including additional services, if any,

specified in SCC:

(a) performance or supervision of on-site assembly and/or start-up of the supplied Goods;

(b) furnishing of tools required for assembly and/or maintenance of the supplied Goods;

(c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods;

(d) performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and

(e) training of the Purchaser's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.

25.3 Prices charged by the Supplier for incidental services, if not included in the Contract Price for the Goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services otherwise shall be at the cost of suppliers.

26. Inspections and Tests

26.1 The Supplier shall at its own expense and at no cost to the Purchaser carry out all such tests and/or inspections of the Goods and Related Services as are specified in the SCC.

26.2 The inspections and tests may be conducted on the premises of the Supplier or its Subcontractor, at point of delivery, and/or at the Goods' final destination, or in another place in India as specified in the SCC. Subject to GCC Sub-Clause 26.3, if conducted on the premises of the Supplier or its Subcontractor, all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Purchaser.

26.3 The Purchaser or its designated representative shall be entitled to attend the tests and/or inspections referred to in GCC Sub-Clause 26.2, provided that the Purchaser bear all of its own costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.

26.4 Whenever the Supplier is ready to carry out any such test and inspection, it shall give a reasonable advance notice, including the place and time, to the Purchaser. The Supplier shall obtain

from any relevant third party or manufacturer any necessary permission or consent to enable the Purchaser or its designated representative to attend the test and/or inspection.

26.5 The Purchaser may require the Supplier to carry out any test and/or inspection not required by the Contract but deemed necessary to verify that the characteristics and performance of the Goods comply with the technical specifications codes and standards under the Contract, provided that the Supplier's reasonable costs and expenses incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impedes the progress of manufacturing and/or the Supplier's performance of its other obligations under the Contract, due allowance will be made in respect of the Delivery Dates and Completion Dates and the other obligations so affected.

26.6 The Supplier shall provide the Purchaser with a report of the results of any such test and/or inspection.

26.7 The Purchaser may reject any Goods or any part thereof that fail to pass any test and/or inspection or do not conform to the specifications. The Supplier, if permitted by the purchaser, shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to the Purchaser, and shall repeat the test and/or inspection, at no cost to the Purchaser, upon giving a notice pursuant to GCC Sub-Clause 26.4.

26.8 The Supplier agrees that neither the execution of a test and/or inspection of the Goods or any part thereof, nor the attendance by the Purchaser or its representative, nor the issue of any report pursuant to GCC Sub-Clause 26.6, shall absolve the Supplier from any warranties or other obligations under the Contract.

27. Liquidated Damages

27.1 Except as provided under GCC Clause 32, if the Supplier fails to deliver any or all of the Goods by the Date(s) of delivery or perform the Related Services within the period specified in the Contract, the Purchaser may without prejudice to all its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in the SCC of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage specified in those SCC. Once the maximum is reached, the Purchaser may terminate the Contract

pursuant to GCC Clause 35.

28. Warranty

28.1 The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.

28.2 Subject to Sub-Clause 22.1(b) of GCC, the Supplier further warrants that the Goods shall be free from defects arising from any act or omission of the Supplier or arising from design, materials, and workmanship, under normal use in the conditions prevailing in India.

28.3 Unless otherwise specified in the SCC, the warranty shall remain valid for twelve (12) months after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the SCC, or warranty period mentioned by supplier whichever period concludes later unless mutually agreed.

28.4 The Purchaser shall give notice to the Supplier stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Purchaser shall afford all reasonable opportunity for the Supplier to inspect such defects.

28.5 Upon receipt of such notice, the Supplier shall, within the period specified in the SCC, expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Purchaser.

28.6 If having been notified, the Supplier fails to remedy the defect within the period specified in the **SCC;** the Purchaser may proceed to take within a reasonable period such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

29. Patent Indemnity

29.1 The Supplier shall, subject to the Purchaser's compliance with GCC Sub-Clause 29.2, indemnify and hold harmless the Purchaser and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Purchaser may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered.

29.2 If any proceedings are brought or any claim is made against the Purchaser arising out of the matters referred to in GCC Sub-Clause 29.1, the Purchaser shall promptly give the Supplier a notice thereof, and the Supplier may at its own expense and in the Purchaser's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

29.3 The Purchaser shall, at the Supplier's request, afford all available assistance to the Supplier in conducting such proceedings or claim, and shall be reimbursed by the Supplier for all reasonable expenses incurred in so doing.

30. Force Majeure

30.1 For purposes of this Clause, "Force Majeure" means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be limited to, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

30.2 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably possible, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

30.3 The Supplier shall not be liable for forfeiture of its Performance Security, liquidated damages, or termination for default if and to the extent that it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

31. Change Orders and Contract Amendments

31.1 The Purchaser may at any time order the Supplier through notice in accordance GCC Clause 8, to make changes within the general scope of the Contract in any one or more of the following:

(a) drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
(b) the method of shipment or packing;
(c) the place of delivery; and
(d) the Related Services to be provided by the Supplier.

31.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any

provisions under the Contract, an equitable adjustment shall be made in the Contract Price or in the Delivery/Completion Schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this Clause must be asserted within twenty-eight (28) days from the date of the Supplier's receipt of the Purchaser's change order.

31.3 Prices to be charged by the Supplier for any Related Services that might be needed but which were not included in the Contract shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.

31.4 Subject to the above, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

32. Extensions of Time

32.1 If at any time during performance of the Contract, the Supplier or its subcontractors should encounter conditions impeding timely delivery of the Goods or completion of Related Services pursuant to GCC Clause 13, the Supplier shall promptly notify the Purchaser in writing of the delay, its likely duration, and its cause. As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the Supplier's time for performance, in which case the extension shall be ratified by the parties by amendment of the Contract.

32.2 Except in case of Force Majeure, as provided under GCC Clause 32, a delay by the Supplier in the performance of its Delivery and Completion obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GCC Clause 26, unless an extension of time is agreed upon, pursuant to GCC Sub-Clause 34.1.

33. Termination

33.1 Termination for Default

(a) The Purchaser, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate the Contract in whole or in part:

(i) if the Supplier fails to deliver any or all of the Goods within the period specified in the Contract, or within any extension thereof granted by the Purchaser pursuant to GCC Clause 35;

(ii) if the Supplier fails to perform any other obligation under the Contract; or

(iii) if the Supplier, in the judgment of the Purchaser has engaged in fraud and corruption, as defined in GCC Clause 3, in competing for or in executing the Contract.

(b) In the event the Purchaser terminates the Contract in whole or in part, pursuant to GCC Clause 33.1(a), the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Related Services similar to those undelivered or not performed, and the Supplier shall be liable to the Purchaser for any additional costs for such similar Goods or Related Services. However, the Supplier shall continue performance of the Contract to the extent not terminated.

33.2 Termination for Insolvency.

(a) The Purchaser may at any time terminate the Contract by giving notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In such event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to the Purchaser.

33.3 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.

34. Assignment

34.1 Neither the Purchaser nor the Supplier shall assign, in whole or in part, their obligations under this Contract, except with prior written consent of the other party.

Section VIII. Special Conditions of Contract

The following Special Conditions of Contract (SCC) shall supplement and / or amend the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

GCC Clause Ref. No.	SCC
GCC 1.1(i)	The Purchaser's country is: **India.**
GCC 1.1(k)	The Purchaser is: **The Director, Institute of Medical Sciences, Banaras Hindu University, Varanasi-221005**
GCC 1.1 (j)	The Project Site(s)/Final Destination(s) is/are: **The Director, Institute of Medical Sciences, BHU, Varanasi-221005**
GCC 5.1	The language shall be: **Hindi or English**
GCC 8.1	For notices, the Purchaser's address shall be: Attention : **Prof. R.G. Singh** Street Address : **Office of Director, IMS** **Banaras Hindu University** Floor/ Room number : City : **Varanasi** ZIP Code : **221005** Country : **India** Telephone : **91-542-2367568** **91-542-6703248** **91-542-2309450** Facsimile number : **91-542-2367568** Electronic mail address: **directorims@gmail.com**
GCC 9.1	The governing law shall be **the law of India.**

GCC 10.2	The rules of procedure for arbitration proceedings pursuant to GCC Clause 10.2 shall be as follows: ***Contracts with Supplier for arbitral proceeding*** In the case of a dispute between the Purchaser and a Supplier, the dispute shall be referred to adjudication or arbitration in accordance with the laws of India by the arbitrator appointed by vice-chancellor, BHU, unless otherwise agreed.
GCC 13.1	Details of Shipping and other Documents to be furnished by the Supplier are : (i) An airway bill (ii) Insurance Certificate, (iii) Manufacturer's or Supplier's Warranty Certificate, (iv) Inspection Certificate issued by nominated inspection agency, (v) Supplier's factory shipping details etc The above documents shall be received by the Purchaser before arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses.
GCC 15.1	The prices charged for the Goods supplied and the related Services performed **shall not** be adjustable.
GCC 16.1	***Sample provision*** GCC 16.1—The method and conditions of payment to be made to the Supplier under this Contract shall be as follows: **Payment for Goods supplied from abroad:** Payment of foreign currency portion shall be made in Indian Rupees in the following manner: (i) **On Shipment:** Ninety (90%) percent of the Contract Price of the Goods shipped shall be paid through irrevocable confirmed letter of credit opened in favor of the Supplier in a bank in its country, upon receiving equipment in good condition and documents specified in GCC Clause 13.1 under Section-VII. (iii) **On Acceptance:** Remaining (10%) percent of the Contract Price of Equipment received shall be paid within **thirty (30) days** of receipt of the equipment upon submission of claim supported by the acceptance certificate issued by the Purchaser by bank draft/wire transfer. Payment of local currency portion shall be made in **Indian Rupees** within **thirty (30) days** of presentation of claim supported by a certificate from the Purchaser declaring that the Goods have been

	delivered and that all other contracted Services have been performed. **Payment for Goods and Services supplied from within India:** Payment for Goods and Services supplied from within India shall be made in **Indian Rupees**, as follows: (i) **On Delivery & Acceptance:** Hundred (100%) percent of the Contract Price shall be paid on receipt of the Goods in good conditions and acceptance certificate for satisfactory installation and functioning.
GCC 18.1	A Performance Security **shall be required @ 5% of contract price.**
GCC 18.3	If required, the Performance Security shall be in the form of : **Bank Guarantee** If required, the Performance security shall be denominated in **Indian Rupees.**
GCC 23.2	The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract.
GCC 24.1	The insurance coverage shall be as specified in the **Incoterms**. If not in accordance with **Incoterms**, insurance shall be as follows: **NA**
GCC 25.1	Responsibility for transportation of the Goods shall be as specified in the **Incoterms**. If not in accordance with **Incoterms**, responsibility for transportations shall be as follows: **NA**
GCC 25.2	Incidental services to be provided are: Selected services covered under GCC Clause 25.2 and/or other should be specified with the desired features. The price quoted in the bid price or agreed with the selected Supplier shall be included in the Contract Price.
GCC 26.1	The inspections and tests shall be: Equipment should be installed at site by designated engineer of the firm. Demonstration should be made to the satisfaction of the P.I. At least four free visits should be made by the engineer during the first year after installation to clarify and rectify any doubts or problems as may be faced by the user.

GCC 26.2	The Inspections and tests shall be conducted at the Department where the equipment is installed. For the rest please refer to GCC 26.1.
GCC 27.1	The liquidated damage shall be: **1**% per week
GCC 27.1	The maximum amount of liquidated damages shall be: **10**%
GCC 28.3	The period of validity of the Warranty shall be as per technical specification or at least a minimum of 12 months if not specified, from date of acceptance/ satisfactory installation of the equipment. For purposes of the Warranty, the place(s) of final destination(s) shall be the Department where the equipment is installed. The Supplier shall, in addition, comply with the performance and/or consumption guarantees specified under the Contract **(if any).** If, for reasons attributable to the Supplier, these guarantees are not attained in whole or in part, the Supplier shall, at its discretion, either: (a) make such changes, modifications, and/or additions to the Goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance tests in accordance with SCC 4,**or** (b) pay liquidated damages to the Purchaser with respect to the failure to meet the contractual guarantees. The rate of these liquidated damages shall be **1% per week** of actual value of the equipment (maximum 10%).
GCC 28.5	The period for repair or replacement shall be: **60 days**

Part 4 -Bidding Forms and Contract Forms

Section IX: Bidding Forms

Table of Forms

(i) TENDER FORM

(Techno commercial un-priced Bid)

(On the letter head of the firm submitting the bid)

Tender No…….

To

The _____

_____

_____

Dear Sir,

1. I/We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders*;*

2. I/We meet the eligibility requirements and have no conflict of interest ;

3. I/We have not been suspended nor declared ineligible in India;

4. I/We offer to supply in conformity with the Bidding Documents and in accordance with the Delivery Schedules specified in the Schedule of Requirements the following Goods: **[*insert a brief description of the Goods and Related Services*]**;

5. I/We offer to supply the items as listed in the schedule to this tender hereto/portion thereof as you may specify in the acceptance of Tender at the price given in the said Schedule and agree to hold this offer open for a period of 90 days from the date of opening of the tender.
6. I/we shall be bound by a communication of acceptance issued by you.

7. I/We have understood the Instruction to bidders and Conditions of Contract in the form as enclosed with the invitation to the tender and have thoroughly examined the specifications quoted in the Schedule hereto and am/are fully aware of the nature of the goods required and my/our offer is to supply the goods strictly in accordance with the specifications and requirements.

8. A crossed Bank Draft in favor of the Registrar, BHU for Rs. (Rupees…….…….only) as Earnest Money is enclosed. The Draft is drawn on …… …… ……..Bank payable at Varanasi

9. The following have been added to form part of this tender.

(a) Samples of items quoted for, as per instructions provided in the schedule of requirement.
(b) Schedule of requirements, quoting the make only duly signed and stamped.(without indicating price)
(c) Income Tax clearance certificate.
(d) Copy of last audited balance sheet.
(e) Copy of Valid Central/State sales tax registration certificate.
(f) Copy of relevant major purchase orders valuing mare than Rs. 20000/- executed during last two years for Govt. Depts., PSUs & Central Autonomous bodies..
(g) Proof of manufacturing Unit, dealership certificate/general order suppliers.
(h) Statement of deviations from financial terms & conditions, if any.
(i) Any other enclosure. (Please give details)

10. We undertake to execute all orders which have been placed to meet emergent requirements on priority basis.

11. Certified that the bidder is:

a) A sole proprietorship firm and the person signing the bid document is the sole proprietor/constituted attorney of the sole proprietor,

Or

b) A partnership firm, and the person signing the bid document is a partner of the firm and he has authority to refer to arbitration disputes concerning the business of the partnership by virtue of the partnership agreement/by virtue of general power of attorney.

Or

c) A company and the person signing the document is the constituted attorney.

(NOTE: Delete whatever is not applicable. All corrections/deletions should invariable be duly attested by the person authorized to sign the bid document).

12. We do hereby undertake that, until a formal notification of award, this bid, together with your written acceptance thereof shall constitute a binding contract between us.

13. If our bid is accepted, we commit to obtain a performance security in accordance with the Bidding Documents;

14. We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process, other than alternative bids submitted;

15. We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in any type of fraud and corruption

Name of the Bidder***** **[insert complete name of person signing the Bid]**

Name of the person duly authorized to sign the Bid on behalf of the Bidder****** **[insert complete name of person duly authorized to sign the Bid]**

Title of the person signing the Bid **[insert complete title of the person signing the Bid]**

Signature of the person named above [**insert signature of person whose name and capacity are shown above**]

Date signed **[insert date of signing]** day of **[insert month]**, **[insert year]**
*****: In the case of the Bid submitted by joint venture specify the name of the Joint Venture as Bidder

**: Person signing the Bid shall have the power of attorney given by the Bidder to be attached with the Bid Schedules.

Yours faithfully,

(Signature of bidder)

Dated this day of _____

Address:……

……..

……..……..

Telephone No. :_____

FAX_____

E-mail_____

Company seal

(ii) TENDER FORM

(Priced Bid)

(On the letter head of the firm submitting the bid document)

To,

The _____

_____

_____

Ref: Tender No……Dated: …….……..…….

Sir,

Having examined the bidding documents and having submitted the techno commercial unpriced bid for the same, we, the undersigned, hereby submit the priced bid for supply of goods and services as per the schedule of requirements and in conformity with the said bidding documents.

1. We hereby offer to supply the Goods/Services at the prices and rates mentioned in the enclosed schedule of requirement.

2. We do hereby undertake that, in the event of acceptance of our bid, the supply of Goods/Services shall be made as stipulated in the schedule of requirement and that we shall perform all the incidental services.

3. The prices quoted are inclusive of all charges net F.O.R University. We enclose herewith the complete Financial Bid as required by you. This includes:
    a. Price Schedule(Bill of Quantity- BOQ).
    b. Statement of deviations from financial terms and conditions.

4. We agree to abide by our offer for a period of **90 days** from the date fixed for opening of the bid documents and that we shall remain bound by a communication of acceptance within that time.

5. We have carefully read and understood the terms and conditions of the bid document and we do hereby undertake to supply as per these terms and conditions. The Financial Deviations are only those mentioned in the statement of deviations from financial terms and conditions.

6. We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract: **[insert complete name of each**

Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]

Name of Recipient	Address	Reason	Amount

(If none has been paid or is to be paid, indicate "none.")

7. We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed; and
8. We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

Certified that the bidder is:
A sole proprietorship firm and the person signing the bid document is the sole proprietor/ constituted attorney of sole proprietor,
Or
A partnership firm, and the person signing the bid document is a partner of the firm and he has authority to refer to arbitration disputes concerning the business of the partnership by virtue of the partnership agreement/by virtue of general power of attorney,
Or
A company and the person signing the bid document is the constituted attorney.

(NOTE: Delete whatever is not applicable. All corrections/deletions should invariably be duly attested by the person authorized to sign the bid document.)

We do hereby undertake that, until a formal notification of award, this bid, together with your written acceptance thereof, shall constitute a binding contract between us.

Dated this day of_____
Signature of Bidder_____
Details of enclosures_____
Full Address: _____
_____
_____
Telephone No. _____
Mobile No. : _____
Fax No. : _____
E-mail : _____

COMPANY SEAL

Bidder Information Form

[The Bidder shall fill in this Form in accordance with the instructions indicated below. No alterations to its format shall be permitted and no substitutions shall be accepted.]

Date: *[insert date (as day, month and year) of Bid Submission*]
ADVT. No.: *[insert number of bidding process]*
Alternative No.: *[insert identification No if this is a Bid for an alternative]*
Page _____ of_ _____ pages

1. Bidder's Name *[insert Bidder's legal name]*
2. In case of JV, legal name of each member : *[insert legal name of each member in JV]*
3. Bidder's actual or intended country of registration: *[insert actual or intended country of registration]*
4. Bidder's year of registration: *[insert Bidder's year of registration]*
5. Bidder's Address in country of registration: *[insert Bidder's legal address in country of registration]*
6. Bidder's Authorized Representative Information Name: *[insert Authorized Representative's name]* Address: *[insert Authorized Representative's Address]* Telephone/Fax numbers: *[insert Authorized Representative's telephone/fax numbers]* Email Address: *[insert Authorized Representative's email address]*
7. Attached are copies of original documents of *[check the box(es) of the attached original documents]* ☐ Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above,. ☐ In case of JV, letter of intent to form JV or JV agreement,. ☐ In case of Government-owned enterprise or institution, documents establishing: • Legal and financial autonomy • Operation under commercial law • Establishing that the Bidder is not dependent agency of the Purchaser 2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

Manufacturer's Authorization

*[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer. The Bidder shall include it in its bid, if so indicated in the **BDS**.]*

Date: *[insert date (as day, month and year) of Bid Submission]*
ADVT. No.: *[insert number of bidding process]*
Alternative No.: *[insert identification No if this is a Bid for an alternative]*

To: *[insert complete name of Purchaser]*

WHEREAS

We *[insert complete name of Manufacturer]*, who are official manufacturers of *[insert type of goods manufactured]*, having factories at [insert full address of Manufacturer's factories], do hereby authorize *[insert complete name of Bidder]* to submit a bid the purpose of which is to provide the following Goods, manufactured by us *[insert name and or brief description of the Goods]*, and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clause 28 of the General Conditions of Contract, with respect to the Goods offered by the above firm.

Signed: *[insert signature(s) of authorized representative(s) of the Manufacturer]*

Name: *[insert complete name(s) of authorized representative(s) of the Manufacturer]*

Title: *[insert title]*

Dated on _____ day of _____, _____ *[insert date of signing]*

Section X. Contract Forms

This Section contains forms which, once completed, will form part of the Contract. The forms for Performance Security and Advance Payment Security, when required, shall only be completed by the successful Bidder after contract award.

Table of Forms

TENDER ACCEPTANCE LETTER

(To be given on Company Letter Head)

Date:

_____
_____
_____
_____
_____

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No._____

Name of Tender/ Work: -

_____
_____
_____
_____
_____

Dear Sir,

1. I/We have downloaded/ obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely:

_____
_____

as per your advertisement, given in the above mentioned website(s).

2. I/We hereby certify that I/We have read the entire terms and conditions of the tender documents from Page No. _____ to _____ (including all documents like section(s), schedules(s) etc.,), which form part of the contract agreement and I/we shall abide hereby by the terms/conditions/ clauses contained therein.

3. The corrigendum(s) issued from time to time by your department/ organisation too have also been taken into consideration, while submitting this acceptance letter.

4. I/We hereby unconditionally accept the tender conditions of above mentioned tender document(s)/ corrigendum(s) in its totality/entirety.

5. In case any provisions of this tender are found violated, then your department/organisation shall without prejudice to any other right or remedy be at liberty to reject this tender/bid including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully,

(Signature of the Bidder, with Official Seal)

Contract Agreement

[The successful Bidder shall fill in this form in accordance with the instructions indicated]

THIS AGREEMENT made

the *[insert:* ***number*** *]* day of *[insert:* ***month*** *], [insert:* ***year*** *]*.

BETWEEN

(1) *[insert complete name of Purchaser]*, a *[insert description of type of legal entity, for example, an agency of the Ministry of .... of the Government of { insert name of Country of Purchaser }, or corporation incorporated under the laws of { insert name of Country of Purchaser }]* and having its principal place of business at *[insert address of Purchaser]* (hereinafter called "the Purchaser"), of the one part, and

(2) *[insert name of Supplier]*, a corporation incorporated under the laws of *[insert: country of Supplier]* and having its principal place of business at *[insert: address of Supplier]* (hereinafter called "the Supplier"), of the other part :

WHEREAS the Purchaser invited bids for certain Goods and ancillary services, viz., *[insert brief description of Goods and Services]* and has accepted a Bid by the Supplier for the supply of those Goods and Services

The Purchaser and the Supplier agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.

2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other contract documents.

   (a) the Letter of Acceptance

   (b) the Tender Forms

   (c) the Addenda Nos._____ (if any)

   (d) Special Conditions of Contract

   (e) General Conditions of Contract

   (f) the Specification (including Schedule of Requirements and Technical Specifications)

   (g) the completed Schedules (including Price Schedules(BOQ))

(h) any other document listed in GCC as forming part of the Contract

3. In consideration of the payments to be made by the Purchaser to the Supplier as specified in this Agreement, the Supplier hereby covenants with the Purchaser to provide the Goods and Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.

4. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Goods and Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of *[insert the name of the Contract governing law country]* on the day, month and year indicated above.

For and on behalf of the Purchaser

Signed: *[insert signature]*
in the capacity of *[insert title or other appropriate designation]*
in the presence of *[insert identification of official witness]*

For and on behalf of the Supplier

Signed: *[insert signature of authorized representative(s) of the Supplier]*
in the capacity of *[insert title or other appropriate designation]*
in the presence of *[insert identification of official witness]*

Performance Security

Option 1: (Bank Guarantee)

[The bank, as requested by the successful Bidder, shall fill in this form in accordance with the instructions indicated]

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: *[insert name and Address of Purchaser]*

Date: _ *[Insert date of issue]*

PERFORMANCE GUARANTEE No.: *[Insert guarantee reference number]*

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that _ *[insert name of Supplier, which in the case of a joint venture shall be the name of the joint venture]* (hereinafter called "the Applicant") has entered into Contract No. *[insert reference number of the contract]* dated *[insert date]* with the Beneficiary, for the supply of _ *[insert name of contract and brief description of Goods and related Services]* (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of *[insert amount in figures]* (_____) *[insert amount in words]*,[1] such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Applicant is in breach of its obligation(s) under the Contract, without the Beneficiary needing to prove or to show grounds for your demand or the sum specified therein.

This guarantee shall expire, no later than the …. Day of ……, 2… [2], and any demand for payment under it must be received by us at this office indicated above on or before that date.

---

[1] *The Guarantor shall insert an amount representing the percentage of the Accepted Contract Amount specified in the Letter of Acceptance, and denominated either in the currency(ies) of the Contract or a freely convertible currency acceptable to the Beneficiary.*

[2] *Insert the date twenty-eight days after the expected completion date as described in GC Clause 18.4. The Purchaser should note that in the event of an extension of this date for completion of the Contract, the Purchaser would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Purchaser might consider adding the following text to the form, at the end of the penultimate*

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under Article 15(a) is hereby excluded.

_____

[signature(s)]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months][one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

Option 2: Performance Bond

By this Bond *[insert name of Principal]* as Principal (hereinafter called "the Supplier") and *[insert name of Surety]* as Surety (hereinafter called "the Surety"), are held and firmly bound unto *[insert name of Purchaser]* as Obligee (hereinafter called "the Supplier") in the amount of *[insert amount in words and figures]*, for the payment of which sum well and truly to be made in the types and proportions of currencies in which the Contract Price is payable, the Supplier and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Contractor has entered into a written Agreement with the Purchaser dated the _____ day of _____, 20 ____, for *[name of contract and brief description of Goods and related Services]* in accordance with the documents, plans, specifications, and amendments thereto, which to the extent herein provided for, are by reference made part hereof and are hereinafter referred to as the Contract.

NOW, THEREFORE, the Condition of this Obligation is such that, if the Supplier shall promptly and faithfully perform the said Contract (including any amendments thereto), then this obligation shall be null and void; otherwise, it shall remain in full force and effect. Whenever the Supplier shall be, and declared by the Purchaser to be, in default under the Contract, the Purchaser having performed the Purchaser's obligations thereunder, the Surety may promptly remedy the default, or shall promptly:

(1) complete the Contract in accordance with its terms and conditions; or

(2) obtain a Bid or bids from qualified Bidders for submission to the Purchaser for completing the Contract in accordance with its terms and conditions, and upon determination by the Purchaser and the Surety of the lowest responsive Bidder, arrange for a Contract between such Bidder and Purchaser and make available as work progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the Balance of the Contract Price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "Balance of the Contract Price," as used in this paragraph, shall mean the total amount payable by Purchaser to Supplier under the Contract, less the amount properly paid by Purchaser to Contractor; or

(3) pay the Purchaser the amount required by Purchaser to complete the Contract in accordance with its terms and conditions up to a total not exceeding the amount of this Bond.

The Surety shall not be liable for a greater sum than the specified penalty of this Bond.

Any suit under this Bond must be instituted before the expiration of one year from the date of the issuing of the Taking-Over Certificate.

No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Purchaser named herein or the heirs, executors, administrators, successors, and assigns of the Purchaser.

In testimony whereof, the Supplier has hereunto set his hand and affixed his seal, and the Surety has caused these presents to be sealed with his corporate seal duly attested by the signature of his legal representative, this _____ day of _____ 20 ___.

SIGNED ON _____ on behalf of _____

By _____ in the capacity of _____

In the presence of _____

SIGNED ON _____ on behalf of _____

By _____ in the capacity of _____

In the presence of _____

Advance Payment Security

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: *[Insert name and Address of Purchaser]*

Date: *[Insert date of issue]*

ADVANCE PAYMENT GUARANTEE No.: *[Insert guarantee reference number]*

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that *[insert name of Supplier, which in the case of a joint venture shall be the name of the joint venture]* (hereinafter called "the Applicant") has entered into Contract No. *[insert reference number of the contract]* dated *[insert date]* with the Beneficiary, for the execution of *[insert name of contract and brief description of Goods and related Services]* (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum *[insert amount in figures]* () *[insert amount in words]* is to be made against an advance payment guarantee.

At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of *[insert amount in figures]* (_____) *[insert amount in words]*[1] upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating either that the Applicant:

(a) has used the advance payment for purposes other than toward delivery of Goods; or

(b) has failed to repay the advance payment in accordance with the Contract conditions, specifying the amount which the Applicant has failed to repay.

[1] *The Guarantor shall insert an amount representing the amount of the advance payment and denominated either in the currency(ies) of the advance payment as specified in the Contract, or in a freely convertible currency acceptable to the Purchaser.*

A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the advance payment referred to above has been credited to the Applicant on its account number *[insert number]* at *[insert name and address of Applicant's bank]*.

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Applicant as specified in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that ninety (90) percent of the Accepted Contract Amount, has been certified for payment, or on the *[insert day]* day of *[insert month]*, 2 *[insert year]*, whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No.758, except that the supporting statement under Article 15(a) is hereby excluded.

.

_____
[signature(s)]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

INVITATION FOR BIDS
Notice Inviting Tender (NIT)

BANARAS HINDU UNIVERSITY
OFFICE OF DIRECTOR
INSTITUTE OF MEDICAL SCIENCES
VARANASI-221005

e-Procurement Notice

Ref: **BHU/FPA/N-3/2014/** **Dated: 28-02-2014**

Online tenders are hereby invited in **two cover system** from reputed **manufacturer/ authorized representative of a manufacture/whole sale dealer/importer** for supply of :-

Item No	Name of Equipment	Units
	Department of Neurosurgery	
1.	Craniotomy Set	1
2.	Laminectomy Set	1
3.	Leyla Self retaining brain retractor set	1
4.	High frequency surgical diathermy	2
5.	Xenon operating head light	1
6.	Mayfield skull clamp set	1
7.	Wilson spinal frame (Radiolucent)	1
8.	Shunt Surgery Set	1
	Department of Plastic Surgery	
9.	Total performance system power tool with saws, driver and burrs	1
10.	Electronic Tourniquet	1
11.	Magnifying Loupes	2
12.	Microsurgery set containing micro instruments and vascular clamps	1
13.	Nerve Stimulator-mapper-locator	1
14.	Surgical Cautery	1
15.	Micro motor set with accessories – bits, punches, burrs	1
16.	Maxillofacial mini plating set	2
17.	Vascular Doppler	1
18.	Surgical instruments Set As per attached list of Plastic surgery	
	Department of General Surgery	
19.	Electro Surgical Unit (Diathermy)	2
20.	Surgical Instruments Set As per attached list	2

		Department of Orthopaedic	
	21.	Diathermy	4
	22.	Electrical Suction Pump	4
	23.	General Orthopaedic Instrument set for 4 OT, as per attached list	12set
	24.	Nailing Set As per attached list	1set
	25.	Skeletal Traction apparatus Set As per attached list	4set
	26.	Power drill system	2
	27.	Pneumatic tourniquet	4
	28.	Eschmarch tourniquet	4
	29.	Pulse lavage system	2
	30.	Vacuumed Assisted Closure Device (VAC)	3
	31.	Orthopaedic Surgical Instruments Set As per attached list	
		Department of Anaesthesia & ICU of Trauma Centre	
	32.	Recovery Room Trolley	4
	33.	Crash Carts (Resuscitation Trolley)	4
	34.	Scoop Stretchers	10
	35.	ECG Machine	4
	36.	Portable X-ray machines with integrated CR	1
	37.	Portable ultrasound with three Probes	2
	38.	Bi-Pap Ventilator	2
	39.	ICU Ventilator	10
	40.	Intermittent Pneumatic Compression Device	10
	41.	AMBU bag	10
	42.	Chest vibration system	2
	43.	Biphasic Defibrillator with AED	2
	44.	Defibrillator with Monitor	5
	45.	Non Invasive Cardiac Support Pump with AED	1
	46.	Bed Side Monitors (Five Para)	40
	47.	Modular Monitors	32
	48.	Central Station	2
	49.	NIBP Monitor	2
	50.	Minimally invasive cardiac output monitoring	1
	51.	Syringe infusion pumps	100
	52.	Rapid infusion pumps	2
	53.	Ripple mattresses (to prevent pressure sores)	20
	54.	Patient Warming system for intra operative application Operation system- Adult	7
	55.	Patient Warming system for Recovery Area Recovery system- Adult	4
	56.	Patient Positioning System	2

57.	Patient Transfer System - Slide Model	10
58.	Electrically operated thermal blankets	8
59.	Blood Warming System	2
60.	IV Fluid Warmer	6
61.	Electric suction machines	4
62.	Resuscitation kits (laryngoscopes, Ambu bag, LMA, Tracheostomy set, etc.)	2 set
63.	Flexible Fiber Optics Laryngoscope Adult	1
64.	Flexible Fiber Optics Laryngoscope Paediatric	1
65.	Dialysis Machine with SLED	1
66.	CRRT	1
67.	Ambulatory Blood Pressure Monitor	2

Bidders can download complete set of bidding documents from e- procurement Platform https://eprocure.gov.in/eprocure/app from 01-03-2014 onwards. Bidders need to submit the bids online for the interested items by uploading all the required documents through https://eprocure.gov.in/eprocure/app.

Last Date/ Time for receipt of bids through e-procurement is: 21-03-2014 upto 04:00PM. (Server time). Late bids shall not be accepted.

For further details regarding Tender Notification & Specifications please visit website: https://eprocure.gov.in/eprocure/app and www.bhu.ac.in.

CRITICAL DATE SHEET

Published Date	**01-03-2014 (11:00 AM)**
Bid Document Download Start Date	**01-03-2014 (11:00 AM)**
Clarification Start Date	**01-03-2014 (11:00 AM)**
Clarification End Date	**06-03-2014 (04:00 PM)**
Pre bid meeting	**NA**
Bid Submission Start Date	**07-03-2014 (04:00 PM)**
Bid Document Download End Date	**21-03-2014 (04:00 PM)**
Bid Submission End Date	**21-03-2014 (04:00 PM)**
Bid Opening Date	**24-03-2014 (11:00 AM)**

sd/

(Registrar)