



GOVERNMENT OF ANDHRA PRADESH

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Web Site : <https://tender.approcurement.gov.in>

TENDER DOCUMENT

FOR

Procurement and supply of medical equipment for Up Gradation of PG Seats in existing Medical Colleges in Andhra Pradesh (2 years Rate Contract)

Tender Notice No. : 5.9B/APMSIDC/2024-25, Dt:22.01.2025.

Name of the Agency :
.....
and Address
.....
.....

Implementing Agency :
ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE DEVELOPMENT
CORPORATION
(Formerly APMHIDC)
(AN ENTERPRISE OF GOVT. OF A.P.)
2nd Floor, Plot No:09, survey number: 49, IT Park, Mangalagiri,
Guntur District- 522503.

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INTRODUCTION

- 1.1. The Andhra Pradesh Medical Services & Infrastructure Development Corporation – APMSIDC (formerly APMHIDC) (Tender Inviting Authority) is a fully owned Government of Andhra Pradesh for providing services to the various health care institutions under the Department of Family Welfare and Health. One of the key objectives of the APMSIDC is to act as the central procurement agency for all essential drugs and equipments for all health care institutions (hereinafter referred to as user institutions) under the department. The corporation has also been entrusted with the setting up and running of all kinds of modern Medical and Paramedical or medical based ancillary facilities such as hospitals, pathological labs, diagnostic centres, x-ray/scanning facilities.
- 1.2. Over the last decades, several equipments have been procured and installed in the various health care institutions under the government under different schemes. One of the major problems encountered is the maintenance of the equipments. Site preparation, timely replacement of consumables, calibration of sensitive equipments, up gradation of technology, training to the doctors and paramedical staff- all poses problems. The corporation has been formed by the government to fill in these grey areas and to act as total service providers to the all the government health care institutions. Of course, this mammoth task could be achieved only with the active involvement and support of the manufacturers/dealers of the equipments.
- 1.3. In this tender, the lowest price is the sole criteria for selecting the equipment/supplier. The two-bid system, which is followed, has been designed to eliminate those equipments which do not match the technical specifications, or not having the proven technology and to eliminate firms that do not have the financial or technical capability to supply, install and maintain the equipments. i.e., to provide after sales support for a period of minimum 5 years from the date of installation and to ensure 98 % uptime in performance/operation of the equipment.
- 1.4. The payment to the successful tenders will be settled after obtaining a 'three month performance certificate' from the head of the user institution - three month period is a period of trail run- during which the performance of the equipments will be keenly observed. At the same time, it may be noted that the Corporation is not the agency finalizing the requirements of equipments and their technical specifications. These parameters are finalized by the user institutions and funding agencies and forwarded to the corporation for procurement. On our side, we ensure that the technical specifications are not biased towards a particular equipment/firm, through consultations during the pre-tender meetings with the

prospective tenderers. Amendments in the terms and conditions of the tender documents may be resorted to on the basis of expert advice to see that more than one firm qualifies for the final round. Technology specific specifications/conditions and entertaining direct purchase will be undertaken, if and only if, the user agency certifies the equipment required is of proprietary nature. Since the equipments procured are dealing with precious human life in government hospitals, depended by the poor and downtrodden of the society, it is our endeavor to ensure that most modern, but proven and durable equipments are procured and supplied. The tender documents are prepared after assessing the market to meet such objectives.

- 1.5. Every paisa spend by the corporation is public money and hence accountable. Therefore, after sales service and up-time guarantee on the performance of the equipment purchased by the Corporation have to be given paramount importance. Corporation will be dealing with defaulters in these fronts with a firm hand, which may lead to black listing and recovery of damages. We request our valuable suppliers to avoid such unpleasant situations.
- 1.6. It is also essential while dealing with public money that utmost transparency has to be maintained in the procurements of the corporation. All decisions will be published from time to time on our website www.apmsidc.ap.nic.in. The corporation will not wait for the mandatory 30 days period to provide any information under Right to Information Act and will provide the information within the minimum possible time. The Corporation will uphold the fundamental 'right to be heard' enshrined under the Constitution of India and will take harsh decisions only after providing opportunity for hearing/submission of facts. Tenderers could prefer appeal to the government against all decisions of the corporation.

SECTION - I: INVITATION FOR BIDS (IFB)

GOVERNMENT OF ANDHRA PRADESH

ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE DEVELOPMENT CORPORATION (APMSIDC)

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1. Bids are invited on the e-procurement platform for certain medical equipment as described in the Section V- Schedule of Requirements from the eligible manufacturers/Authorized Distributors. The details of bidding conditions and other terms can be downloaded from the electronic procurement platform of Government of Andhra Pradesh i.e. <https://tender.apecprocurement.gov.in>.
2. Bidders would be required to register on the e-Procurement market place "www.eprocurement.gov.in" and submit their bids online. On registration with the e-Procurement market place they will be provided with a user id and password by the system through which they can submit their bids online.
3. The bidders need to scan and upload the required documents as per the Check list given in Annexure XIV. Such uploaded documents pertaining to technical bid need to be attached to the tender while submitting the bids on line. The attested copies of all these uploaded documents of technical bid, signed undertaking of tenderer should be submitted off line to **Managing Director, APMSIDC, Mangalagiri, Guntur on or before the next day of the last date of submission of bids**. The Corporation will consider only the bids submitted through on-line over the copies of the paper based bids.
4. a) The participating bidder/s will have to pay tender processing fee (non-refundable) **for the amounts specified in the Schedule of Requirements (Section –V), in the form of online only.**

b) **Further the bidder/s shall furnish, as part of it bid, the Bid security for the amounts specified in the Schedule of Requirements (Section –V) to be paid** in the form of crossed Demand Draft drawn in favour of Managing Director, APMSIDC, Guntur along with bids. The bidders should note that the local MSME units are exempted from payment of E.M.D, subject to the production of necessary documentation to that extent by them.

c) Further all the participating bidders have to electronically pay a non-refundable transaction fee to M/s. APTS, the service provider through "Payment Gateway Service on E-Procurement platform", as per the Government Orders placed on the e-procurement website. **As per G.O. Ms. No. 4 Date: 17- 02 -2005 for collection of Corpus fund @ 0.04 % from successful bidders on eProcurement platform through Payment Gateway) (Corpus fund @ 0.04 % shall be charged from successful bidders as per G.O. Ms. No. 4 Date: 17- 02 -2005**

d) APMSIDC will not accept the tenders from blacklisted companies or undependable Suppliers whose past performance with APMSIDC was found poor due to delayed and/or erratic supplies and those with frequent product failures, and also against whom there have been adverse reports of Sub-Standard Quality / Poor Service of Equipment supplies, as defined in the other parts of the Bidding document.

e) “Complaint/s: Any complaints/representation regarding tender will be entertained only after depositing of Rs. 25,000/- in form of Demand Draft in the name of Managing director, APMSIDC, Mangalagiri, Guntur. Subsequently necessary action will be taken by the Managing Director and decision of Managing Director will be binding upon the complainant. If the complaint turns out to be false or invalid the amount will be forfeited. The amount shall be refunded if after scrutiny the complaint is found to be true. No further complaint/representation from the same complainant for the same tender will be entertained. If the complaint or allegation made is found to be false or baseless and without any valid point, the tender inviting authority in its discretion, can prevent / blacklist / declare ineligible, such bidder from participating in its procurement process, either indefinitely or for a stated period of time.”

5. Period of Delivery: **60** Days from the date of receipt of the Notification of Award (Purchase Order) of Contract. The delivery terms include the total time given for supply, installation, testing and training of staff.

Time Limits prescribed

Sl. No	Activity	Time Limit
5.1.1.	Installation & Delivery period	60 days from date of issuance of Supply Order
5.1.2.	Comprehensive warranty period	as specified at section V schedule of requirements against each equipment.
5.1.3.	Frequency of visits to all User Institution concerned during Warranty	One visit every three months (4 visits in a year) for periodic/preventive maintenance and any time for attending repairs/break down calls.
5.1.4	Submission of Performance Security and entering into contract	15 days from the date of issuance of Supply Order
5.1.5	Payment Installments of Price of equipments and ratio	Three Installments and in the ratio 60:30:10
5.1.6	Time for making payments by Tender Inviting Authority	Within 60 days from the date of submission of proper documents
5.1.7.	Maximum time to attend any Repair call	<i>Within 48 hours</i>

5.1.8	Uptime in a year	95%
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6. Bidders eligibility and qualifications: Defined at Clause 13 of Instructions to Bidders (Section II) and Qualification Criteria (Section-VI)

7. Details of Tender Process:

1.	Downloading of documents	From 02.04.2025 to 23.04.2025 up to 02.55 PM
2.	Queries up to	07.04.2025 on or Before 1.00 P.M
2.	Due date for Receipt of tenders	23.04.2025 up to 03.00 P.M
3.	Time and date of opening of technical Bids	23.04.2025@ 03.01 P.M
4.	Time and date of opening of financial bids	Will be intimate later

Note: The dates stipulated above are firm and under no circumstances they will be relaxed unless otherwise extended by an official notification or happen to be Public Holidays. For the assistance in the online submission issues, the bidder may contact the help desk of M/s Vupadhi Techno Services Pvt. Ltd. (e-procurement) at their e-mail address: eprocsupport@vupadhi.com or on the mobile nos. 8645-246370 / 71 / 72 / 73 / 74

8. Procedure for Bid Submission

- a. The Tenderers/Bidders who are desirous of participating in e-procurement shall submit their Technical bids, price bids etc., in the Standard formats prescribed in the Tender documents, displayed at e-procurement market place.
- b. The bidders shall sign on all the statements, documents, certificates, uploaded by them, owning responsibility for their correctness / authenticity.
- c. The hard copies of all the uploaded Technical / Price bid, to be attested by a Gazetted Officer or properly notarized.
- d. The Corporation shall not hold any risk on account of postal delay. Similarly, if any of the certificates, documents, etc., furnished by the tenderer are found to be false / fabricated / bogus, the bidder will be disqualified, **blacklisted for a period of 3 years**, action will be initiated as deemed fit and the EMD will be forfeited.
- e. The Corporation will not hold any risk and responsibility for the loss in transit during uploading of the scanned document, for the invisibility of the scanned document online, and any other problem(s) encountered by the Tenderers while submitting his bids online.

9. Important Instructions to the Bidders:

- 9.1 Quality of Supplied Equipment throughout its life cycle period, timely supplies and prompt maintenance support during the warranty and CMC period without default are being given paramount importance by the Corporation. The Corporation will be dealing with the defaulters with firm hand, which may lead to blacklisting for a specified period in addition to levying penalties.
- 9.2 In case of complaints on the quality and poor maintenance support of the products supplied, bills will be withheld till receipt of Satisfactory reports. Further:
- If one item of any Supplier is found of 'Sub-Standard Quality' during the Contract period, then that particular item will be blacklisted for a period of (3) three years immediately succeeding the Contract year
 - If two items of any Supplier are found of 'Sub-standard Quality' during the Contract period, then Supplier will be blacklisted for a period of (3) three years immediately succeeding the Contract year
- 9.3 The Corporation will blacklist the Supplier, who is declared as 'Undependable for two (2) items or in two (2) instances during the Contract period, for a period of one year immediately succeeding the Contract year apart from taking other penal actions under the Contract.
- 9.4 The decision of the Managing Director, APMSIDC, or any officer authorized by him in respect of the quality of the supplied Equipment and other goods etc., shall be final and binding.
- 9.5 No claims shall be allowed against the APMSIDC in respect of interest on Earnest Money Deposit or on Security Deposit or late payments.
- 9.6 Savings Clause: No suit, prosecution or any legal proceedings shall lie against APMSIDC or any person for anything, which is done in good faith or intended to be done in pursuance of bid.

SECTION - II : INSTRUCTIONS TO BIDDERS

TABLE OF CLAUSES

Clause Number	Topic	Clause Number	Topic
	A. Introduction		D. Submission of Bids
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2	Eligible Bidders	19.	Dead line for submission of Bids
3	Eligible Goods & Services	20	Late Bids
4	Cost of Bidding	21	Modification & Withdrawal of Bids
	B. Bidding Documents		E. Bid Opening & Evaluation
5.	Content of Bidding Document	22.	Opening of Bids
6.	Clarification of Bidding Documents	23	Clarification of Bids.
7	Amendment of Bidding Documents	24	Preliminary Examination.
	C. Preparation of Bids	25.	Conversion to single currency.
8	Language of Bid	26.	Evaluation & comparison of Bids
9	Documents comprising the Bid	27.	Margin of Preference
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11	Bid prices		
12	Bid currencies		F. Award of contract
13	Documents establishing, Bidders Eligibility & qualifications	29	Post qualification
14	Documents establishing goods, eligibility & conformity to bid documents.	30	Award criteria
15	Bid security	31	Purchasers right to vary quantities at time to award
16	Period of validity of Bids	32	Purchasers right to accept any bid or reject any or all bids.
17	Format & signing of Bid Bids.	33.	Notification of award
		34	Signing of contract
		35.	Performance security.
		36.	Fraud and Corruption

A. Introduction

1. Source of funds:

The funds are made available by the State Government of Andhra Pradesh, to the Managing Director, APMSIDC Scheme wise towards the procurement processed under this tender notification.

2. Eligible Bidder

2.1 This invitation for Bids is open to all Manufacturers or their authorized distributors, who fulfill the eligibility criteria mentioned in the Clause 13 and who meet qualification criteria mentioned in the Section VI.

3 Eligible Goods and services

3.1 All goods and ancillary services to be supplied under the contract shall have their origin in eligible source country. The goods shall meet the requirements as specified in the Technical Specifications. And meet the eligibility criteria as given at Clause 14 of ITB.

3.2. For purpose of this clause, "origin" means the place where the goods are mined, grown, or produced or from which the ancillary services are supplied. Goods are produced, through manufacturing processing or substantial and major assembling of components, a commercially recognized product results that is substantially different in basic characteristics or in purpose or utility from its components.

3.3 The origin of goods and services is distinct from the nationality of the Bidder.

4. Cost of bidding.

4.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Managing Director, APMSIDC, Mangalagiri, Guntur here in after referred to as " the purchaser", will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

B. The Bidding Documents

5. Content of Bidding Documents

5.1 In addition to the Invitation for Bids, the bidding documents include:

- (a) Instruction to Bidders;
- (b) General conditions of contract;
- (c) Special conditions of contract;
- (d) Schedule of requirements;
- (e) Technical specifications;
- (f) Bid form and price schedules;
- (g) Bid security form;
- (h) Performance security form.
- (i) Firm Registration/manufacturer license
- (j) Performance statement form.
- (k) Declaration Form
- (l) Check List of the documents uploaded on e-platform as part of the bid

5.2 The bidder is expected to examine all instructions, forms, terms and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or submission of a bid not substantially responsive to the bidding documents in every respect will be at the bidders risk and may result in rejection of its bid.

6. Clarification of bidding documents

6.1 A prospective Bidder requiring any clarification of the bidding documents may notify the purchaser in writing at the purchasers mailing address indicated in the Invitation for bids. The purchaser will respond in writing to any request for clarification of the Bidding documents if the same is received in the first week of the tender notice prescribed by the purchaser. Written copies of the purchaser's response (including an explanation of the query but without identifying the source or inquiry) will be sent to all prospective bidders which have received the bidding documents.

7. Amendment of bidding documents

7.1 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 prospective bidder, modify the bidding documents by amendment.

7.2 The amendment will be notified online.

7.3 In order to afford prospective Bidders reasonable time in which to take the amendment into account in preparing their bid, the purchaser may, at its discretion, extend the deadline for the submission of bids.

C. Preparation of Bids

8. Language of Bid.

- 8.1. The Bid prepared by the Bidder and all correspondence and documents relating to the bid exchanged by the bidder and the purchaser, shall be written in the English language, provided that any printed literature furnished by the Bidder may be written in another language so long as accompanied by an English translation of its pertinent passages in which case, for purposes of interpretation of the bid, the English translation shall govern.

9. Documents comprising the bid

- 9.1 The bid prepared by the bidder shall comprise the following components:

1. Technical Bid:

- (a) A Bid form completed in accordance with clause 10
- (b) Documentary evidence established in accordance with clause 13 that the bidder is eligible to bid and is qualified to perform the contract if its bid is accepted.
- (c) Documentary evidence established in accordance with clause 14 that the goods and ancillary services to be supplied by the Bidder are eligible goods and services confirm to the Bidding Documents; and
- (d) Bid security furnished in accordance with clause 15.

2. The Price Bid completed in accordance with clauses 11 and 12.

10. Bid Form

- 10.1 The Bidder shall complete the bid form provided in the Bidding documents, indicating for the goods to be supplied, brief description of the goods, their country of origin and quantity and other declaration statements.

11. Bid prices.

- 11.1 The Bidder shall indicate on the appropriate price schedule, made available in the e-procurement platform and a model format is also attached to these documents, the unit prices and total bid prices of the goods it proposes to supply under the contract, for each item separately. **The unit prices shall be rounded off to nearest Indian rupee.** The bidder may quote one or more items for which copy of necessary documents, wherever necessary have to be produced along with the bid.

- 11.2. Prices indicated on the price schedule shall be entered separately in the following manner:

- (i) The price of the goods, quoted ex-factory, ex-showroom, ex-warehouse, or off-the-shelf, or delivered, as applicable, including all duties and sales and other

taxes including transportation, installation, commissioning at site and all incidental charges associated with the contract.

- (ii) Cost of 4 years Comprehensive Maintenance Contract as defined in the Clause 18 of the Special Conditions of the Contract.

11.3 The Bidder's separation of the price components in accordance with para 11.2 above will be solely for the purpose of facilitating the comparison of bids by the purchaser and will not in any way limit the purchaser's right to contract on any of the terms offered.

11.4 Fixed Price. Price quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation except for any changes made by the Statute in respect of local taxes. A bid submitted with an adjustable price quotation will be treated as non-responsive and rejected, pursuant to clause 24.

12. Bid currencies.

12.1 Prices shall be quoted in Indian Rupees; Bids quoted other than Indian currency will be rejected.

13. Documents Establishing Bidder's Eligibility and Qualifications.

13.1 Pursuant to clause 9, the bidder shall furnish, as part of its bid, documents establishing the bidder's eligibility to bid and its qualifications to perform the contract if its bid is accepted

13.2 The documentary evidence of the Bidder's eligibility to bid shall establish to the purchaser's satisfaction that the bidder, at the time of submission of the bid, is an eligible bidder as defined under clause 2.

13.3 The documentary evidence of the Bidders qualifications to perform the contract if its bid is accepted, shall establish to the purchaser satisfaction;

- (a) That, in the case of bidder offering to supply goods under the contract which the bidder is manufacture produce, Firm Registration/manufacturer license that the bidder is manufacturer & also Memorandum of Articles. or otherwise produce, the bidder has been duly authorized (as per authorization form in section XII a).

- (b) that, in the case of bidder offering to supply goods under the contract which the bidder did not manufacture or otherwise produce, the bidder has been duly authorized (as per authorization form in section XII b) by the goods manufacturer or producer to supply the goods in India.

- (i) the legal status, place of registration and principle place of business of the company or firm or partnership etc.

- (ii) Details of experience and past performance of the bidder on specified item offered in the bid within the past three years and details of current contracts in hand and other commitments (suggested proforma given in section XI);
- (iii) Copy of the GST Certificate and Details of IT Returns- PAN & TIN copies
- (iv) The details in compliance to the Qualification Criteria (Section VI).

13.4 The check list for the details of documents to be submitted is given at Annexure XIV

14. Documents Establishing Goods Eligibility and conformity to bidding documents.

- 14.1 Pursuant to clause 9 the bidder shall furnish, as part of its bid, documents establishing the eligibility and conformity to the bidding document of all goods and services which the bidder proposes to supply under the contract.
- 14.2 The documentary evidence of the goods and services eligibility shall consist and of statement in the price schedule on the country of origin of the goods and services offered which shall be confirmed by a certificate of origin at the time of shipment.
- 14.3 The documentary evidence of the goods and services conformity to the bidding documents may be in the form of literature, drawings and data, and shall furnish:
 - (a) A detailed description of the goods essential technical and performance characteristics of the goods.
 - (b) A clause-by-clause commentary on the purchaser technical specifications demonstrating the goods and services substantial responsiveness to those specifications or statement of deviations and exceptions of the technical specifications.
- 14.4 For purpose of the commentary to be furnished pursuant to clause 14.3 above, the bidder shall note that standards for workmanship, material and goods, and references to brand names or catalogue numbers designated by the purchaser in its technical specifications are intended to be descriptive only and not restrictive. The bidder may substitute alternative standards, brand name and / or catalogue numbers in its bid, provided that it demonstrates to the purchasers satisfaction that the substitutes are substantially equivalent or superior to those designated in the Technical specifications.

15. Bid security

- 15.1 Pursuant to Clause 9, the Bidder shall furnish, as part of it bid, the Bid security for the amounts specified in the Invitation for Bids (Section -1)
- 15.2 The bid security is required to protect the purchaser against risk of bidders conduct which would warrant the security forfeiture, pursuant to clause 15.7
- 15.3 The bid security shall be in Indian Rupees and shall be in online only.

- 15.4 Any bid not secured in accordance with para 15.1 and 15.3 above will be rejected by the purchaser as non-responsive pursuant to clause 24.
- 15.5 Unsuccessful Bidder's bid security will be discharged/ returned as promptly as possible but not later than 30 days after the expiration of the period of bid validity prescribed by the purchaser pursuant to clause 16.
- 15.6 The successful Bidder's bid security will be discharged upon the Bidders executing the contract, pursuant to clause 34 and furnishing the performance security pursuant to clause 35.
- 15.7 The bid security may be forfeited;
- (a) If a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bid form; or
 - (b) In case of successful Bidder, if the Bidder fails;
 - (i) to sign the contract in accordance with clause 34; or
 - (ii) to furnish performance security in accordance with clause 35.
 - (c) If the Bidder does not accept the corrected amount the Bid will be rejected, and the Bid security may be forfeited.
16. Period of validity of Bids.
- 16.1 Bids shall remain valid for 90 days after the date of bid opening prescribed by the purchaser pursuant to Clause 19.1. A bid valid for shorter period may be rejected by the purchaser as non-responsive.
- 16.2 In exceptional circumstances, the Purchaser may solicit the Bidders consent to an extension of the period of validity the request and the responses thereto shall be made in writing (or by mail). The bid security provided under clause 15 shall also be suitably extended. A bidder may refuse the request without forfeiting its bid security.
17. Format and signing of Bid.
- 17.1 The bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to bind the bidder to the contract. The latter authorization shall be indicated by written power-of-attorney accompanying the bid. All pages of the bid, except for unammended printed literature, shall be initialed by the person or persons signing the bid.

- 17.2 The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors and made by the bidder in which case such corrections shall be initialed by the person or persons signing the bid.

D. Submission of Bids

18. Sealing and Marking of bids.

- 18.1 The bids shall be uploaded (submitted) electronically, as described in the Invitation for Bids (Section –I). The hard copies of the bids in sealed covers must be received by the Purchaser at the address specified above on or before the due date of submission of bids (Section –I).

- 18.2 The Bids shall be addressed to the purchaser at the following address:

The Managing Director, APMSIDC, 2nd Floor, Plot No:09, survey number: 49, IT Park, Mangalagiri, Guntur District- 522503.

- 18.3 The Bids shall bear the name of the invitation for bids (IFB) and Number and also the words "Do not open before 03.00 P.M Hrs on 23-04-2025". The envelopes shall indicate the name and address of the Bidder to enable the bid to be returned unopened in case it declared "late".

- 18.4 If the envelope is not sealed and marked as required by Para 18.2 and 18.3 above, the purchaser will assume no responsibility for the bids misplacement or premature opening.

19. Deadline, for submission of bids.

- 19.1 The Bids (both electronic and Hard copies) must be received by the purchaser, no later than the time and date specified in the Invitation for Bids (Section I). In the event of the specified date for the submission of Bids being declared a holiday for the purchaser, the Bids will be received up to the appointed time on the next working day.

- 19.2 The purchaser may, at its discretion, extend this deadline for submission of bids by amending the bid documents in accordance with clause 7, in which case all rights and obligations of the purchaser and bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

20. Late Bids.

- 20.1 Any bid received by the purchaser after the deadline for submission of bids prescribed by the purchaser, pursuant to clause 19, will be rejected and/ or returned unopened to the Bidder.

21. Modification and Withdrawal of Bids.

21.1 No bid may be modified subsequent to the deadline for submission of bids.

21.2 No bid may be withdrawn 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 Bid form. Withdrawal of bid during this interval may result in the Bidders forfeiture of its bid security , pursuant to Clause 15.7

E. Bid Opening and Evaluation

22. Opening of Bids by Purchaser

- 22.1 The Purchaser/or his authorized representative will download the technical bids on **23-04-2025** at 03.01 PM.
- 22.2 The Financial Bids of the Technically responsive bidder would be downloaded subsequently from the e-platform, once the technical evaluation is completed.

23. Clarification of Bids.

- 23.1 To assist in the examination, evaluation and comparison of bids the purchaser may at his discretion, ask the Bidder for clarification of his bid. The request for clarification and the response shall be in writing and no change in price or substance of the bid shall be sought, offered or permitted.

24. Technical Evaluation (Preliminary Examination and Pre-Qualification)

- 24.1 The purchaser will examine the bids to determine whether they are complete, whether required securities have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.
- 24.2 Prior to the financial evaluation, pursuant to clause 26, the purchaser will determine the responsiveness of each bid to the bidding documents. For purposes of these clauses, a responsive bid is one which conforms to all the terms and conditions of the bidding documents without material deviations. The purchaser's determination of bids responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.
- 24.3 Further the purchaser will determine to his satisfaction whether the Bidder is qualified to satisfactorily perform the contract. The determination will take into account the Bidder's financial, technical and production capabilities. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder pursuant to clause 13 as well as such other information as the purchaser deems necessary and appropriate.
- 24.4 An affirmative determination will be prerequisite for the opening of the financial bids. A negative determination will result in rejection of the Bidder's bid.
- 24.5 A bid determined as not substantially responsive will be rejected by the purchaser.
- 24.6 The Purchaser may waive any minor informality or non-conformity or irregularity in a bid which does not constitute a material deviation, provided such a waiver does not prejudice or affect the relative ranking of any bidder.

24.7 Purchaser and/ or Authorized representative of purchaser can do inspection of manufacturing site/Assessment of manufacturing capacity.

24.8 In case of any discrepancy in documents submitted by the vendor purchaser can ask to produce the original copy of the same

24.9 The Preliminary Evaluations of the bidders are kept available at APMSIDC website <http://msidc.ap.nic.in>

25. Deleted.

26. Evaluation and comparison of Bids.

26.1 The Purchaser will evaluate and compare bids previously determined to be substantially responsive, pursuant to clause 24 for each schedule separately.

26.2 The purchasers evaluation of a bid will take into account; in addition to the bid price (ex-factory/ex-warehouse/off-the-shelf price of the goods offered from within India, such price to include all costs as well as duties and taxes paid or payable on components and raw material incorporated or to be incorporated in the goods, on the finished goods and cost of incidental services required. The following costs to the extent specified:

- a. cost of inland transportation, insurance and other costs within India incidental to the delivery of goods to their final destination;
- b. The comprehensive annual maintenance charges (inclusive of four Preventive Maintenance visits and all distress calls in a year and costs of all spares required during the repairs) for a period mentioned against equipment at section V- (Schedule of requirements) subsequent to free guarantee maintenance period mentioned against equipment at section V- (Schedule of requirements).
- c. the availability in India (Preferably in Andhra Pradesh) of spare parts and after-sales services for the equipment offered in the bid. To this extent the bidders shall give:
 - An undertaking for the uninterrupted supply of adequate spares for at least a period of 7 years shall be furnished.
 - An Undertaking Availability/ establishment of after sales service facility at least in (1) region of Andhra Pradesh to ensure uninterrupted after sales service during warranty period shall be confirmed. The details of service facility available / proposed to be set up shall be furnished with their bid.

27. Deleted

- 28. Contacting the purchaser.
- 28.1 Subject to clause 23, no Bidder shall contact the purchaser on any matter relating to the bid, from the time of the bid opening to the time, the contract is awarded.
- 28.2 Any effort by a Bidder to influence the Purchaser in the purchaser's bid evaluation, bid comparison or contract award decisions may result in rejection of the Bidders bid.

F. Award of Contract

29. Post - Qualification

Not Applicable

30. Award Criteria

- 30.1 Subject to clause 32, the purchaser will award the contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined as the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the contract satisfactorily.

31. Purchaser's right to vary quantities at Time of Award

- 31.1 The purchaser reserves the right, at the time of award of contract to increase or decrease to any extent of the quantity of goods and services specified in the schedule of requirements without any change in price or other terms and conditions.

32. Purchaser's right to accept any Bid and to reject any or all Bids.

- 32.1 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 award of contract, without there by incurring any liabilities to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Purchaser's action.

33. Notification of Award.

- 33.1 Prior to the expiry of the period of the bid validity, the purchaser will notify the successful Bidder in writing by registered letter or cable or telex, duly confirming that the bid has been accepted.
- 33.2 The notification of award will constitute the formation of the contract.
- 33.3 Upon the successful Bidder's furnishing of performance security, pursuant to clause 34, the purchaser will promptly notify each unsuccessful Bidder and will discharge their bid security, pursuant to clause 15.

34. Signing of contract

- 34.1. Within 15 days of receipt of the notification of award the successful Bidder shall sign the contract.

35. Performance security

- 35.1 Within 15 days of the receipt of notification of award from the purchaser, the successful Bidder shall furnish the performance security in accordance with the conditions of contract, in the performance security form provided in the Bidding documents or another form acceptable to the purchaser and signs the agreement.
- 35.2 Failure of the successful Bidder to comply with the requirement of clause 34 shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security, in which event the purchaser may make the award to the next lowest evaluated bidder or call for new bids.

36 Fraud and corruption

- 36.1 It is the purchaser's policy that requires that the bidders, suppliers and contractors and their subcontractor observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the purchaser;

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

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

(ii) "fraudulent practice" is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;

(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;

(iv) "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;

(v) "obstructive practice" is

(aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a 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; or

(bb) acts intended to materially impede the exercise of the purchaser's inspection and audit rights provided for under sub-clause 36.2 (d) below.

36.2 The purchaser may, without prejudice to other terms of the bidding:

(a) will reject a proposal for award if it determines that the bidder considered for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for the contract in question;

(b) will cancel the contract if the purchaser determines at any time that the bidder, supplier and contractors and their sub contractors engaged in corrupt, fraudulent, collusive, or coercive practices.

(c) will sanction a firm or individual, including declaring ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the firm has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for, or in executing, a contract; and

(d) will have the right to inspect the accounts and records of the bidders, supplier, and contractors and their subcontractors and to have them audited by auditors appointed by the Purchaser.

SECTION - III: GENERAL CONDITIONS OF CONTRACT

TABLE OF CLAUSES

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Section III: General Conditions Of Contract

1. Definitions

1.1 In this contract, the following terms shall be interpreted as indicated;

- (a) "The contract" means the agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all the attachments and appendices thereto and all documents incorporated by references therein.
- (b) "The Contract Price" means the price payable to the supplier under the contract for the full and proper performance of its contractual obligations.
- (c) "The Goods" means all the equipment and / or other materials which the supplier is required to supply to the purchaser under the contract.
- (d) "Services" means services ancillary to the supply of the goods, such as transportation, insurance and any other incidental services, such as installation, commissioning, provision of technical assistance, training and other obligations of the supplier covered under the contract.
- (e) "An undependable Supplier/s' under contract means any Supplier who do not accept the purchase order or who delays the supply of required quantities beyond the permitted delays with liquidated damages
- (f) "The Purchaser or Corporation" means the APMSIDC, the purchasing agency
- (g) "The Supplier" means the individual or firm supplying the goods under this contract.
- (h) "The Government" means the Government of Andhra Pradesh or its authorized representatives
- (i) "The Project Site", where applicable means the place or places named in Schedule of Requirements
- (j) "The End-User" means the authorized user of the equipment/the Medical Superintendent/Head of the Department of the concerned specialty.
- (k) "Day" means calendar day
- (l) "Delivery period" means the period applicable up to completion of supply, Installation and testing of the equipment and the training of the staff on the equipment, by the supplier at the Project site and accepted by the Purchaser or its representative

2. Application
 - 2.1. These General conditions shall apply to the extent that they are not superseded by provisions in other parts of the contract.
3. Country of Origin: Deleted.
4. Standards
 - 4.1 The Goods supplied under this contract shall conform to the standards mentioned in the Technical specifications and when no applicable standard is mentioned the authoritative standard appropriate to the goods country of origin shall be followed and such standard shall be the latest issued by the concerned institution.
5. Use of contract documents and Information
 - 5.1 The supplier shall not without the purchaser's prior written consent, disclose the contract or any provision thereof or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the purchaser in connection therewith to any person other than a person employed by the supplier in performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
 - 5.2 The supplier shall not, without the purchasers prior written consent make use of any document or information enumerated in para 5.1 except for purposes of performing the contract.
 - 5.3 Any document other than the contract itself enumerated in para 5.1 shall remain the property of the purchaser and shall be returned (in all copies) to the purchaser on completion of the suppliers performance under the contract if so required by the purchaser.
6. Patent Rights
 - 6.1 The supplier shall indemnify the purchaser against all third party claims of infringement of patent, trademark for industrial design rights arising from use of the goods or any part thereof in India.
7. Performance Security
 - 7.1 Within 15 days after the supplier's receipt of notification of award of the contract, the supplier shall furnish performance security to the purchaser for the amount specified in the special conditions of contract.
 - 7.2 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

- 7.3 The performance security shall be denominated in Indian Rupees and shall be in one of the following forms:
- (a) A bank guarantee [in favour of Managing Director, APMSIDC, Guntur] issued by any scheduled commercial bank located in India acceptable to the purchaser and in the form provided in the Bidding documents or in any other form acceptable to the purchaser: or.
 - (b) A Banker's cheque or Demand Draft in favour of Managing Director, APMSIDC, Guntur.
- 7.4 Fifty percent (50%) of the performance security will be discharged by the Purchaser and returned to the supplier not later than 60 days following the date of completion of the supplier's performance obligations, including any warranty obligations. The balance 50% of the performance security will be retained towards performance security for the maintenance services to be provided for 4 years after the 3 years warranty period and this 50% will be discharged after completion of performance obligations under maintenance services after 7 years.
- 7.5 The supplier shall accordingly; either furnishes a fresh bank guarantee for the 50% value or an extension of bank guarantee for 50% of the value covering the 4 years maintenance period after 3 years warranty period. Only after receipt of the above, the 50% of the performance security will be discharged after the warranty period.
8. Inspections and Tests.
- 8.1 The purchaser or his representatives shall have the right to inspect and / or to test the Goods to confirm their conformity to the contract. The special conditions of contract and / or the Technical specifications shall specify what inspections and tests the purchaser requires and where they are to be conducted. The purchaser shall notify the supplier in writing of the identity of any representatives retained for these purposes.
- 8.2 The inspections and tests may be conducted in the premises of the supplier or its subcontractor(s) at point of delivery and/or at the goods final destination. Where conducted on the premises of the supplier or its subcontractor(s) all reasonable facilities and assistance including access to drawings and production data shall be furnished to the inspectors at no charge to the purchaser.
- 8.3 Should any inspected or tested goods fail to conform to the specifications the purchaser may reject them and the supplier shall either replace the rejected goods or make alternatives necessary to meet specifications, requirements free of cost to the purchaser.
- 8.4 The purchasers right to inspect test and where necessary reject the goods after the goods arrival at site and shall in no way be limited or waived by reason of the

goods having previously been inspected, tested and passed by the purchaser or its representative prior to the goods shipment from the country of origin.

8.5 Nothing in clause 8 shall in any way release the supplier from any warranty or other obligations under this contract.

9. Packing

9.1 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. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration where appropriated the remoteness of the Goods final destination and the absence of heavy handling facilities at all points in transit.

9.2 The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements, as shall be provided for in the contract and subject to clause 18 and any subsequent instructions ordered by the purchaser.

10. Delivery and Documents

10.1 Delivery of the Goods shall be made by the supplier in accordance with the terms specified by the purchaser in the Notification of Award.

11. Insurance

The goods supplied under the contract shall be fully insured in Indian Rupees against the loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in the special conditions of contract.

12. Transportation

12.1 The supplier is required to deliver the goods to the destinations specified in the contract and the cost thereof shall be included in the contract price.

12.2 The transportation of the Goods after the delivery at the final destination shall be the responsibility of the Purchaser.

13. Incidental services.

13.1 The supplier is required to provide the following services, including additional services, if any, specified in SCC:

(a) Performance of the on-site assembly and start-up of the supplied Goods;

- (b) Furnishing of tools required for assembly and maintenance of the supplied Goods;
 - (c) Furnishing of detailed operations and maintenance manual for each appropriate unit of supplied Goods;
 - (d) Performance of maintenance and repair of the supplied Goods, for a period of 7 years, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and
 - (e) Training of the users and maintenance personnel, in operation, maintenance and repair of the supplied Goods.
- 13.2 Prices charged by the Supplier for incidental services, if not included in the contract price of 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.
14. Spare Parts:
- 14.1 As specified in the special conditions of contract, the supplier may be required to provide the following materials and notifications pertaining to spare parts **manufacturer**:
- (a) Such of spare parts as the purchaser may select to purchase from the supplier providing that this selection shall not relieve the supplier of any warranty obligations under the contract and
 - (b) In the event of termination of production of the spare parts;
 - (i) advance notification to the purchaser of the pending terminating in sufficient time to permit the purchaser to procure needed requirements: and
 - (ii) Following such termination, furnishing at no cost to the purchaser, the blueprints, drawing and specifications of the spare parts, if and when requested.
15. Warranty
- 15.1 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. The supplier further warrants that the goods supplied under this contract shall have no defect arising from design materials or workmanship (except insofar as the design or material is required by the purchasers specifications) or from any act or omission the supplied goods in conditions obtaining in the country of final destination.

- 15.2 This warranty shall remain valid for as specified at section V schedule of requirements against each equipment or any portion thereof as the case may be have been delivered at the final destination indicated in the contract, unless specified otherwise in the special conditions of the contract. The warranty period starts from date of commissioning after installation by the firm.
- 15.3 The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.
- 15.4 Upon receipt of such notice, the supplier shall, with all reasonable speed, repair or replace the defective goods or parts thereof without cost to the purchaser other than, where applicable, the cost of inland delivery of the repaired or replaced goods or parts from the port of entry to the final destination.
- 15.5 If the supplier, having been notified, fails to remedy the defect (s) within a reasonable period, the purchaser may proceed to take such remedial action as may be necessary, at the suppliers risk and expenses and without prejudices to any other right which the purchaser may have against the supplier under the contract.
- 15.6 Site Visits: The successful tenderer shall visit each User Institution as part of preventive maintenance as per the frequency mentioned **under clause 5.1.3** (section-I of IFB) during the warranty period. The tenderer shall attend any number of break down/repair calls as and when informed by the Tender Inviting Authority/User Institution.
- 15.7 During every visit, a copy of the service report/break down call report, duly signed by the custodian of the equipment/head of the health care institution and stamped shall be forwarded by email/fax/post to the APMSIDC office within 10 days from the due date.
- 15.8 A warranty certificate (as per format in **Annexure III**) duly signed and with proper stamp of the institution concerned and also signed by the authorized signatory with the stamp of the successful tenderer shall be submitted to the Tender Inviting Authority for keeping it under safe custody along with the Installation Certificate. A copy of the original warranty papers has to be given to the institution head concerned.
- 15.9 The tenderer shall submit the activities to be carried out during the preventive maintenance visit as per the format in **Annexure IV**.
16. Payment

- 16.1 The method and conditions of payment to be made to supplier under the contract shall be specified in the special conditions
- 16.2 The Suppliers request (s) for payment shall be made to the purchaser in writing accompanied by an invoice describing as appropriate the goods delivered and the services performed and by shipping document, submitted pursuant to clause 10, and upon fulfillment of other obligations stipulated in the contract.
- 16.3 Payments shall be made promptly by the purchaser within sixty (60) days of submission of the invoices / claims by the supplier duly furnishing the certificate specified in the bid document from the competent authority.
- 16.4 Payment shall be made in Indian Rupees.
17. Prices
- 17.1 Prices charged by the supplier for goods delivered and services performed under the contract shall not with the exception of any price adjustments authorized by the special conditions of contract, vary from the prices quoted by the supplier in its bid.
18. Change Orders
- 18.1 The Purchaser may at any time by written orders given to the supplier pursuant to clause 31 , 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 furnishing under the contract are to be specifically manufactured for the purchaser;
 - (b) the method of shipping or packing;
 - (c) the place of delivery; or
 - (d) the services to be provided by the supplier;
- 18.2 If any such changes causes an increase or decrease in the cost of or the time required for the suppliers performance of any part of the work under the contract, whether changed or not changed by the order, an equitable adjustment shall be made in the contract price or delivery schedule or both and the contract shall accordingly be amended. Any claims by the supplier for adjustment under this clause must be asserted within thirty (30) days from the date of the suppliers receipt of the purchasers change order.
19. Contract Amendments
- 19.1 Subject to clause 18, no variation in an modification of the terms of the contract shall be made except by written amendment signed by the parties.
20. Assignment
- 19.2 The supplier shall not assign in whole or in part, its obligations to perform under the contract, except with the purchasers prior written consent.

21. Sub-contracts

- 21.1 The supplier shall notify the purchaser in writing of all subcontracts awarded under the contract if not already specified in his bid. Such notification, in his original bid or later, shall not relieve the supplier from any liability or obligation under the contract.

22. Delays in the supplier's performance

- 22.1 Delivery of the goods and performance of the services shall be made by the supplier in accordance with the time schedule specified by the purchaser in its schedule of requirements.
- 22.2 Any unexcused delay by the supplier in the performance of its delivery obligations shall render the supplier liable for any or all of the following; i.e. forfeiture of its performance security, imposition of liquidation damages and or termination of the contract for default.
- 22.3 If at any time during the performance of the contract, the supplier or its subcontractor (s) should encounter performance of the services the supplier shall promptly notify the purchaser in writing of the fact of the delay its likely duration and its causes. As soon as practicable after receipt of the suppliers notice, the purchaser shall evaluate the situation and may at its discretion extend the suppliers time for performance, in which case the extension shall be ratified by the parties by amendment of the contract.

23. Liquidated Damages

- 23.1 Subject to clause 25, if the supplier fails to deliver any or all of the goods within the time period specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price as liquidated damages, an amount as specified in the SCC for the period of delay, until actual delivery or performance, up to a maximum deduction of **10 percent of the total contract value**. Once the maximum is reached, the purchaser may consider termination of the contract.

24. Termination for Default

- 24.1 The purchaser may, without prejudice to any other remedy for breach of contract by written notice of default sent to the supplier, terminate the contract in whole or part:
- (a) if the supplier fails to deliver any or all of the goods within the time periods specified in the contract or any extension thereof granted by the purchaser pursuant to clause 22; or
 - (b) if the supplier fails to perform any other obligations under the contract.

- 24.2 In the event the purchaser terminates the contract in whole or in part, 24.1 the purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar Goods. However, the supplier shall continue the performance of the contract to the extent not terminated.
25. Force Majeure
- 25.1 Notwithstanding the provisions of clauses 22,23,24, the supplier shall not be liable for forfeiture of its performance security liquidated damages or termination or default, if and to the extent that, its delay in performance or other failure to perform its obligations under the contract is the result of an event of Force Majeure.
- 25.2 For purposes of this clause "Force Majeure" means an event beyond the control of the supplier and not involving the suppliers fault or negligence and not foreseeable. Such events may include but are not limited to, acts of the purchaser either in its sovereign or contractual capacity, wars or revolutions, floods, epidemics, quarantine restrictions and freight embargoes.
- 25.3 If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such conditions 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 practical and shall seek all reasonable alternative means for performance not prevented by the force majeure event.
26. Termination for Insolvency.
- 26.1 The purchaser may at any time terminate the contract by giving written notice to the supplier, if the supplier becomes bankrupt or otherwise insolvent, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the purchaser.
27. Termination for convenience.
- 27.1 The purchaser may by written notice sent to the supplier 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 purchasers convenience the extent to which performance of work under the contract is terminated and the date upon which such termination becomes effective.
- 27.2 The goods that are complete and ready for shipment within 30 days after the suppliers receipt for notice of termination shall be purchased by the purchaser and the contract terms and prices. For the remaining goods the purchaser may elect.
(a) to have completed and delivered at the contract terms and prices; and / or

(b) to cancel the remainder and pay to the supplier and agreed amount for partially completed goods and for materials and parts previously procured by the supplier.

28. Resolution of Disputes

28.1 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.

28.2 If after thirty (30) days from the commencement of such informal negotiations the purchaser and the supplier have been unable to resolve amicably contract dispute, either party may require that the dispute be referred for resolution to the formal mechanisms specified in the special conditions of contract. These mechanisms may include but are not limited to conciliation, mediation by third party justification in an agreed national or international forum and / or international arbitration. The mechanism shall be specified in the special conditions of contract.

29. Governing Language

29.1 The contract shall be written in English language, as specified by the purchaser in the instructions to bidders. Subject to clause 30, English language version of the contract shall govern

30. Applicable law

30.1 The contract shall be interpreted in accordance with the laws of the union of India and the legal jurisdiction is Hyderabad

31. Notices

31.1 Any notices given by one party to the other pursuant to the contract shall be sent in writing and confirmed in writing to the address specified for that purpose in the special conditions of the contract. A notice shall be effective when delivered or on the notices effective date, whichever is later.

32. Taxes and duties

32.1 The rates quoted by the bidder shall be deemed to be inclusive of the sales and other taxes that the bidder will have to pay for the performance of this contract, at the prevailing rates notified by the Government. The purchaser will perform such duties in regard to the deduction of such taxes at source as per applicable law.

SECTION - IV: SPECIAL CONDITIONS OF CONTRACT

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(The corresponding clause number of the General condition is in parenthesis)

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Section IV: Special Conditions of the Contract

1. The following special conditions of contract shall supplement the general Conditions of contract. Whenever there is conflict, the provisions herein shall prevail over those of the general conditions of contract the corresponding clause number of the general conditions in parentheses.
2. Definitions (Clause I)
 - (a) The Purchaser is : The Managing Director, APMSIDC, Mangalagiri, Guntur.
 - (b) The Supplier is : -----
3. Country of origin (Clause 3): All goods and related services to be supplied under the contract / agreement shall have their origin in India or any other country with which India has not banned trade relations.
4. Performance security (Clause 7)
 - 4.1 Performance security is 5% of the contract value and shall be valid up to 60 days after the date of completion of performance obligations including warrant obligations, as applicable.
 - 4.2 Add clause 7.5 to the GCC as the following:

In the event of any contract amendment, the supplier shall within 7 days of receipt of such amendment furnish the amendment to the performance security rendering the same valid for the duration of the contract, as amended for further period of 60 days thereafter
5. Inspection and Tests (clause 8)

The following inspection procedures and tests are required by the Purchaser:

 - 5.1 The Supplier shall get each equipment inspected by a competent authority in manufacturer's works and also provide a guarantee/warranty certificate that the instrument conforms to all specifications contained in the contract.
 - 5.2 The *Purchaser* or its representative may inspect and/or test any or all the equipment to confirm their conformity to the Contract specifications, prior to dispatch from the manufacturer's premises. Such inspection and clearance will not prejudice the right of the consignee to inspect and test the equipment on receipt at destination.
 - 5.3 However, on arrival of the equipments at destinations, the purchaser or its representative shall have the right to inspect and/or test any or all the equipments to confirm their conformity to the contract.

5.4 If the equipment or its performance is not as per specified conditions, deficiency or replace the equipment (s) to the satisfaction of the purchaser's representative.

6. Packing (Clause 9)

The Supplier will be required to mark separate packages for each consignee on three sides with proper paint/indelible ink, the following: i. Name of the contract, ii. Contract No., iii. Country of origin of Goods, iv. Supplier's Name and v. Packing of list reference number

7. Delivery and Documents (Clause 10)

- (i) Three copies of the Supplier invoice showing Goods description, quantity, unit price, total amount;
- (ii) Railway receipt/acknowledgement of receipt of goods from the Consignee
- (iii) Manufacture's/Supplier's Warranty and Factory Test certificate;
- (iv) Acceptance Certificate issued by the End-User
- (v) Inspection Certificate issued by the nominated inspection agency, as applicable

8. Insurance (Clause 11)

- i) For delivery of goods at site, the insurance shall be obtained by the Supplier at his cost for an amount equal to 110% of the value of the goods from "warehouse to warehouse" on "All Risks" basis including war Risks and Strike clauses period in the name of consignee authorized by the purchaser i.e. M.D. APMSIDC. The supplier shall also provide insurance coverage against fire and theft in the name of consignee upto end of the warranty period.
- ii) To submit a copy of insurance document duly attested by the consignee to APMSIDC along with bills for making payment. Otherwise the bills may not be processed.

9. Incidental Services (Clause 13)

No additional services are required to be provided over the services already covered under clause 13 of GCC.

10. Spare parts: (Clause 14)

Add as clause 14.2 to the GCC the following:

Supplier shall carry sufficient inventories to assure ex stock supply of consumables spares such as gaskets, plugs, washers, belts etc., other spare parts and components shall be promptly as possible but, in any case, within (3) days of placement of order.

11. Warranty (Clause 15)

11.1 In partial modification of the provisions, the warranty period shall be as specified at section V schedule of requirements against each equipment, or any portion thereof, as the case may be, have been delivered at site, installed, commissioned, successfully tested and accepted by the Purchaser or its authorized representative

11.2 Substitute Clause 15.4 of the GCC with the following:

Upon receipt of such notice, the Supplier shall within 3 days, repair or replace the defective goods or parts thereof, free of cost at the ultimate destination. The Supplier shall take over the replaced parts/goods at the time of their replacement.

11.3 If the supplier has not done repair/replacement within the time specified above the purchaser will assess the cost of having the repairs/replacements done and the supplier will pay this amount.

11.4 Overall an uptime guarantees of 95% shall be maintained out of total usage period of the equipment by the end users during the warranty period

11.5 All software updates, if any required, should be provided free of cost during Warranty period.

11.6 No conditional warranty like mishandling, manufacturing defects, etc. will be acceptable.

11.7 Warranty as well as Comprehensive Maintenance contract will be inclusive of all accessories and Turnkey work, and it will also cover the following wherever applicable:-

- Any kind of motor.
- Plastic & Glass Parts against any manufacturing defects.
- All kind of sensors.
- All kind of coils, probes and transducers.
- Printers and imagers including laser and thermal printers with all parts.
- UPS including the replacement of batteries.
- Air-conditioners, All kinds of painting, civil, HVAC and electrical work

12 Payment (Clause 16)

12.1 Payment for goods and services shall be made in Indian Rupees as follows:

- a) 60% of the contract value of the supply part after necessary deduction will be paid to the supplier on submission of copy of invoice with original Delivery Challan as proof of supply to destinations duly certified by the Head of the Institution and RTGS details

- b) 30% of payment will be paid on submission of original invoice with stock entries, delivery challan and Installation Certificates (Annexure 1), warranty certificate (Annexure III), copy of insurance document duly attested by the consignee to APMSIDC, calibration, quality assurance certificate test certificate if required as per technical specification after completion of all the performance obligations.
- c) The balance 10% will be paid after three months from the date of installation on submission of performance satisfactory report (Annexure-II), obtained from the Head of the institute or concerned authorities.
- d) In case any difficulty is experienced by the successful tenderer in obtaining three-month performance certificate from any of the User Institution after the installation of the equipment, the same shall be brought to the notice of the Tender Inviting Authority immediately in writing. In such event(s), if the Tender Inviting Authority is convinced, the reasons are beyond the control of the successful tenderer, the Tender Inviting Authority, in case of supply orders placed by it, shall release payments at its discretion. In such case the letter sent to the Tender Inviting Authority shall be submitted along with the invoices while claiming payment.

12.2 If there is a delay in installation of the equipment due to reasons not attributable to the supplier such as non-readiness of site, 60% of the supply part of the contract value will be released against supply and a confirmation letter from the consignee / end user, on submission of original delivery challan & Invoice copy.

12.3 Cost of Comprehensive Maintenance Contract for each year will be paid, at the end of each year by the Purchaser's representatives/hospital authorities, upon submission of the service reports to the extent of the service delivered as per the contract terms.

13. Prices (Clause 17)

Prices payable to the Supplier as stated in the Contract shall not be subject to adjustment during performance of the Contract.

14 Sub-contracts (Clause 21)

Add at the end of sub-clause 21.1 of the GCC the following. "Sub-contract shall be only for bought-out items and sub-assemblies".

15 Liquidated Damages (Clause 23)

15.1 For delays

Substitute Clause 23.1 of the GCC by the following:

Subject to clause 25 of GCC, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated

damages, a sum equivalent to 0.5 percent of the delivered price of the delayed Goods or unperformed Services for each week of delay or part thereof until actual delivery or performance, up to a maximum deduction of **10% of the total Contract value**. Once the maximum deduction is reached, the Purchaser may consider termination of the Contract.

15.2 For Short fall in Equipment Maintenance services

Any major repair intimated by the *Purchaser or the end-user* shall be rectified by the Supplier from the date of intimation within a period of 3 calendar days and repair the equipment to the satisfaction of the Purchaser or the End User. Failing which the Purchaser has a right to levy a penalty on the Supplier a sum of Rs.10,000/- per day of delay, until the equipment is repaired and brought to the normal working condition to the satisfaction of the Purchaser.

16 Resolution of Disputes (Clause 28)

Add as Clauses 28.3 and 28.4 of the GCC the following:

28.3 The dispute resolution mechanism to be applied pursuant to clause 28 of the General Conditions shall be as follows:

- (a) In the case of dispute or difference arising between the Purchaser and a Domestic Supplier relating to any matter arising out of or connected with this agreement, such dispute or difference shall be referred to the award of two Arbitrators, one Arbitrator to be nominated by the Purchaser and the other to be nominated by the Supplier or in the case of the said Arbitrators not agreeing, then at the award of an Umpire to be appointed by the Arbitrators in writing before proceeding with the reference, and in case the Arbitrators cannot agree to the Umpire, he may be nominated by the Arbitration committee of the Indian Council of Arbitration, India. The award of the Arbitrators, and in the event of their not agreeing, of the Umpire appointed by them or by the Arbitration Council of India, India, shall be final and binding on the parties.
- (b) The Indian Arbitration Act 1996, the rules thereunder and any statutory modification or re-enactments thereof, shall apply to the arbitration proceedings.

28.4 The venue of arbitration shall be the place from where the Contract is issued.

17 Notices (Clause 31)

For the purpose of all notices, the following shall be the address of the purchaser and supplier.

Purchaser: The Managing Director, APMSIDC, 2nd Floor, Plot No:09, survey number: 49, IT Park, Mangalagiri, Guntur District- 522503

Supplier: (To be filled in at the time of Contract Signature)

18 Comprehensive Maintenance Contract (CMC)

- a) The Comprehensive Maintenance Contract includes 4 visits in a year preventive maintenance visits and all the distress calls during the year and also include the probable cost of spares required towards the repairs carried out to bring a not working equipment to its normal working condition, during the year.
- b) The supplier shall under take at least one half-yearly preventive maintenance visit and attend to all the break down calls during the year. The payment for the maintenance services will be made at the end of each half-year, upon submission of necessary service reports signed by the end-users.
- c) The Comprehensive Maintenance Contract agreement will be done by APMSIDC/ Hospital authority/ Any Authorized service provider nominated by Govt AP , as per rates given by the vendor in the tender.

19 Actions Against the Misconduct of the Supplier

- 19.1 A Supplier found being supplied similar items with similar tender conditions to any other agency in the country during the validity of the contract with the APMSIDC, at a rate lower than the rate at which they supplied under this tender, the difference amount is liable to be recovered apart from blacklisting the firm for a minimum period of 3 years. The Supplier should furnish undertaking (Annexure-XIII) that they will remit the differential cost, if they quote lower rate than the rate quoted to the APMSIDC to any other agency or department or state, during the period of contract.
- 19.2 Any substandard supplies without meeting the quality specifications made under the contract shall also entail blacklisting of the firm for a minimum period of three years for that particular product.
- 19.3 If the bidder fails to demonstrate on asked to do so, of the products quoted with their bid, without any valid or convincing reason to the satisfaction of the Purchaser, the bids for other items offered against the bid notice will not be considered and he may be debarred for a certain period as decided by the Purchaser.

20 Progress of Supply

Supplier shall intimate progress of supply, in writing, to the Purchaser as under:

- Qty offered for inspection and date;
- Qty. accepted/rejected by inspecting agency and date;
- Qty. dispatched/delivered to consignees and date;
- Qty. where incidental services have been satisfactorily completed with date;
- Quantity where rectification/repair/replacement effected/completed, on receipt of any communication from consignee/Purchaser with date;
- Date of completion of entire Contract including incidental services, if any; and
- Date of receipt of entire payments under the Contract.

SECTION V

SCHEDULE OF REQUIREMENTS AND TECHNICAL SPECIFICATIONS

S. No	Item Name	Qty	Warranty	CMC	EMD	Average Annual Turnover for past 3 years (2021-22, 2022-23, 2023-24)
Paediatric surgery						
1	Coagulation and dissection Electrode	5	3	4	1,125	93,750
2	Instruments for Laparoscopic pyloromyotomy	5	1	-	82,500	68,75,000
3	Laparoscopic instrument set	5	1		45,000	37,50,000
4	Metzenbaum Scissors	5	1	-	75	6,250
5	Micro Mosquito Forceps	5	1	-	75.00	6,250
6	Palpation Probes	5	1	-	675	56,250
7	Telescope 5mm 30 degrees	5	3	4	45,000	37,50,000
8	Telescope 10mm 30 degrees	5	3	4	45,000	37,50,000
9	Trocars	5	3	4	975	81,250
10	HD Pediatric Colonoscopy System	5	3	4	6,72,000	5,60,00,000
Pulmonology						
11	EBUS-Endo Bronchial ultra sound	5	3	4	9,75,000	8,12,50,000
12	Sleep Lab level -II	5	3	4	3,75,000	3,12,50,000
Urology						
13	Circumcision instruments- Adult	5	1	-	3,750	3,12,500
14	Circumcision instruments- Pediatric	5	1	-	3,750	3,12,500
15	Cystoscope – Pediatric	5	3	4	3,75,000	3,12,50,000
16	Liithotripter	5	3	4	90,000	75,00,000
17	Mono polar single stem TURP	5	3	4	67,500	56,25,000
18	Nephroscope - Pediatric	5	3	4	1,12,500	93,75,000

19	OIU Instruments (Optical Internal Urethrotomy)	5	1	-	1,50,000	1,25,00,000
20	Urethrotomes-Pediatric	5	3	4	75,000	62,50,000
21	Urethrotomes-Adult	5	3	4	75,000	62,50,000
22	Vac-machine with disposabled	5	3	4	37,500	31,25,000
23	Vasectomy instruments	10	1	-	7,500	6,25,000
ENT						
24	High speed drill in operation theatre	5	3	4	45,000	37,50,000
25	MICRO LARYNGOSCOPY SET	5	3	4	1,95,000	1,62,50,000
26	Rigid Esophagoscopy set	5	3	4	4,50,000	3,75,00,000
27	Rigid Pediatric Bronchoscopy set	5	3	4	3,00,000	2,50,00,000
28	Simulators for ear, nose surgeries	5	3	4	18,000	15,00,000
29	SINUS ENDOSCOPY SET	5	3	4	2,40,000	2,00,00,000
30	OAE	5	3	4	47,250	39,37,500
31	ENT Head Light With LED	5	3	4	37,500	31,25,000
32	Stroboscope/ High Speed camera	5	3	4	97,500	81,25,000
Pharmacology						
33	Digital Spectrophotometer(10 & 50 mm)	5	3	4	8,850	7,37,500
34	Digital Flame photometer	5	3	4	8,850	7,37,500
35	Pole Climbing Apparatus	5	3	4	2,250	1,87,500
36	Mammalian Heart perfusion assambly	5	3	4	3,750	3,12,500
Forensic department						
37	Autopsy Examination instruments	10	1	-	6,000	5,00,000
38	Autopsy examination table	5	3	4	22,500	18,75,000

39	Bone cutting oscillating Saw	5	3	4	22,500	18,75,000
40	Tissue Bath	5	3	4	9,072	7,56,000
Neurology						
41	4 channel EMG/NCV/EP system	5	3	4	60,000	50,00,000
42	Polysomnography video sleep study system (PSG)	5	3	4	75,000	62,50,000
Neuro Surgery						
43	Carotid Doppler, intra operative Doppler	5	3	4	3,28,800	2,74,00,000
44	Intra operative neuro Monitoring	5	3	4	4,500	3,75,000
45	Guided neuro navigation system for cranial and spinal applications	5	3	4	18,94,200	15,78,50,000
46	Cavitron Ultrasonic surgical aspirator (CUSA)	5	3	4	7,500	6,25,000
47	High speed electrical; craniotomy/Neuro Drill System	5	3	4	2,25,000	1,87,50,000
48	Operative Microscope-neuro	5	3	4	18,00,000	15,00,00,000
49	Stereotactic system	5	3	4	2,250	1,87,500
50	Spine endoscopy	5	3	4	19,09,575	15,91,31,250
51	Neurosurgery instrument set	5	1	-	1,20,000	1,00,00,000
52	Neuro-micro surgical instruments	5	1	-	3,000	2,50,000

Processing fee: The participating bidders will have to pay tender processing fee (non-refundable) of **Rs.29,500/-** in the form of online only.

Note:

1. Bidders who are having any pending court cases / legal disputes against the APMSIDC before any court of law / authority, are not eligible to participate in the tender. In this regard If any ambiguity arise, the decision of tender inviting authority (APMSIDC) is final.
2. All tender unit price will be rounded off to next nearest whole number (if price is Rs. 100.40 it will be 100 Rs. and 100.75 then it will be Rs. 101)
3. For the bidders quoting for more than one item, then bidder must have an average annual turnover equal to the sum of the average annual turnovers mentioned against each equipment. However, a bidder having an average turnover of 10 Crores in the last three financial years and EMD 15 lakhs shall be eligible to bid for any number of equipment
4. To allow the authorized distributors duly obtaining an agreement/ MOU from the Manufacturer for binding on Post Supply Services i.e. Warranty, CMC, AMC etc., and on agreement executed by the authorized distributor with the Corporation. Further an undertaking from Manufacturer to take responsibility in case of authorized distributor's failure in performing the Contractual Obligations also may be obtained. Proforma will be provided.
5. EMD shall be furnished in the form of Demand Draft/BG/Online drawn in favour of Managing Director, APMSIDC, Guntur.
6. All the bidders informed to quote CMC price along with equipment, if not quoted the CMC price then automatically taken as including CMC for quoted price in e-procurement platform.
7. The L1 will be considered on Equipment Cost (Basic Price + Tax)
8. Quoted required reagents prices separately.
9. 2 Years rate contract and expandable up to 1 year with mutual consent.

Technical Specifications

General Information

1. Bidders are requested to offer the equipment as per the specifications attached.
2. For each item of equipment the bidder should include all the cost associated with fixing, cables, connectors, accessories and ancillary items necessary for the satisfactory operation of that item of equipment. Bidders should make the provisions of starter packs for consumables for demonstration and three months of operation period for the supplied equipment.
3. Spare parts list, listing spare likely to be required for (7) years operations shall be attached with the Bid
4. (i) Bidders are requested to provide, referenced by given equipment code and item name, with their tender offer, the following information for all the items of equipment offered.
 - Name of the Manufacturer
 - Brand Name & Model Number
 - Country of Origin(ii) Catalogue, Pamphlet, descriptive literature, spare parts list and technical specifications for each unit of item must be forwarded with the offer.
5. Operating Environment:

Electrical Supply: The Equipment supplied shall be suitable in all respect for use on the local electricity supply of 200- 270 Volts, 50 Cycles. A suitable stabilizer/CVT to be offered as an optional accessory in case of specific Voltage requirement for the supplied Equipment. Resettable over current breaker shall be fitted for protection wherever applicable.

Humidity: The unit shall be capable of operating continuously in ambient temperature of 30°C and relative humidity of around 80%.
7. After Sales Service:

Bidders are requested to confirm in writing in their bid offer the after sales service they would provide, after the expiry of three-year warranty period, for four more years including an estimated cost an annual servicing contract. The maintenance capability of the bidders currently existing in Hyderabad and Andhra Pradesh should also be clearly stated.
8. All items should be of high quality, durable, and suitable for use in a Hospital. The technical specification and standards of each item delivered shall be that currently in use at the time of delivery.

- a) Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450.
 - b) Radiation safety: Safety aspects of radiation dosage leakage should be spelt out and all the X-ray related products should comply with AERB Guidelines for radiation leakage.
- 10 a) The Manufacturer, must have necessary quality certifications for both processes and products such as ISO 9001 (Quality Management System for Organization) and ISO 13485 (Quality Management System for Medical Devices).
- b) Full Quality Assurance System Approval Certificate Management System Certification for Medical Devices and their equivalent International Standards certificates as BIS/ CE/USFDA etc.
11. If the bidder fails to demonstrate any of the products quoted, the bid for that product would be considered as withdrawn and suitable action will be taken as per the Clause 15 of ITB. i.e., forfeiture of the Bid security and also the bidder may be debarred for a certain period as decided by the Managing Director.

Note:

- 1. The bidder should submit the details of spares which are covered or not covered under warranty.
- 2. The above items supply to various Govt. Hospitals in Andhra Pradesh
- 3. Purchase order will be issue minimum qty 1 no or more and to be supplied to all Govt. Hospitals in Andhra Pradesh for a period of 2 years.
- 4. The life span of the equipment to be mentioned by the manufacturer.
- 5. spares and accessories for the quoted model will be available till the life span as mentioned.
- 6. There should be a support of minimum of 10 years for the quoted model (Based on the Life Span) for the equipment which are above 5 lakhs.

Technical Specifications:

SL. No.	SUBMITTING EQUIPMENT SPECIFICATION FOR PAEDIATRIC SURGERY DEPARTMENT AS PER REQUEST OF THE DIME/MO APMSIDC, AP
1	COAGULATION AND DISSECTION ELECTRODE
	A. LAPAROSCOPIC HARMONIC SCALPEL WITH ACCESSORIES
	B. LIGASURE WITH ACCESSORIES
	C. DIATHERMY-MONOPOLAR AND BIPOLAR WITH ACCESSORIES
	D. CUSA WITH ACCESSORIES
2	INSTRUMENTS FOR LAPAROSCOPIC PYLOROMYOTOMY
	a. PYLOROTOME, DISTENDABLE, SIZE 3 MM, LENGTH 20 CM
	b. LAP. PYLOROMYOTOMY SPREADER-BENSON
	C. LAP PYLORIC GRASPER, 3 MM, LENGTH: 20CM OR MORE, LEUR LOCK CONNECTOR, DOUBLE ACTION JAWS
3	LAPAROSCOPIC INSTRUMENTS SET
	a. LAPAROSCOPIC CAMERA WITH ACCESSORIES
	1. CAMERA PROCESSOR
	• 2-Dimensional endoscopic video camera in 4K resolution (3840*2160) • Upgradable to 3-Dimensional endoscopic video camera in 4K resolution (3840*2160) • Upgradable Slot to connect link for Video Scopes (Digital Scopes/Chip on tip) like Video Choledochoscope and Gi Scopes. • The system should have facility of 3x Digital Zoom Lens or more.
	• The system should have facility for capturing 4K UHD, HD Stills and FULL HD Videos in External USB drive. • Automatic adjustment of light intensity of light source and controlled from Camera head
	2. 4K CAMERA HEAD
	• Pixels 3840 X 2160 Pixels, AGC: Microprocessor controlled, • Lens: Integrated Zoom Lens / 19 mm, Color Space BT.2020 emulation • Camera Head Should be able to perform both White light and Near infrared application
	3.58 INCH 4K MONITOR
	The monitor should have: Color Space -BT.2020 emulation, Aspect ratio: 16:9, Contrast Ratio: 5000:1, Effective Resolution: 3840 X 2160 Pixels, Max, observation angle: 178° vertical/horizontal, Inputs: 1 x DP 1.2, 2XDVI-D, 1X 12G SDI, Outputs: 1x DVI-D, 12GSDI, CE label according to MDD, class I.
	4. LED LIGHT SOURCE WITH FIBER OPTIC CABLE
	• Should have Lumen >2000 • Lamp life of approx. 30,000 hrs. • 4.8mm Fiber Optic Cable and 300cm Long • Should have touch display which provides an intuitive & user-friendly

	interface that directly displays relevant data - Lamp type: High-performance LEDs, white light LED and near infrared LED, which are active individually or simultaneously. 5. TELESCOPES FOR 20-specified at telescope side heading 6. EQUIPMENT CART - 4 more shelves - Isolation transformer - Counter balance plate
	B. Carbondioxide Cylinders
	C. Grasping Forceps (With Tooth And Rachets), 3 Mm, Rotating With Connector Pin For Unipolar Coagulation, Double Action Jaws, Plastic Handles
	D. Grasping Forceps (Atraumatic and With Rachets), 3 Mm, Rotating with Connector Pin for Unipolar Coagulation, Double Action Jaws, Plastic Handles
	E. Grasping Forceps, Rotating, Dismantling, Insulated, With Connector Pin for Unipolar Coagulation, With Luer-Lock Irrigation Connector, Double Action Jaws, Atraumatic, Fenestrated, Size 3.5 Mm, Length 20 Cm, Plastic Handle, Without Ratchet, With Larger Contact Area & Outer Sheath and Forceps Insert
	f. Grasping Forceps (With Tooth and Rachets), 5 Mm, Rotating with Connector Pin for Unipolar Coagulation, Double Action Jaws, Plastic Handles
	g. Grasping Forceps (Atraumatic and With Rachets), 5 Mm, Rotating with Connector Pin For Unipolar Coagulation, Double Action Jaws, Plastic Handles
	h. Maryland Dissecting Forceps, 3 Mm, Rotating with Connector Pin for Unipolar Coagulation, Double Action Jaws, Plastic Handles
	i. Maryland Dissecting Forceps, 3 Mm, Rotating with Connector Pin For Bipolar Coagulation, Double Action Jaws, Plastic Handles
	j. Maryland Dissecting Forceps, 5 Mm, Rotating with Connector Pin for Unipolar Coagulation, Double Action Jaws, Plastic Handles
	k. Maryland Dissecting Forceps, 5 Mm, Rotating with Connector Pin For Bipolar Coagulation, Double Action Jaws, Plastic Handles
	l. Needle Holder, With Tungsten Carbide Insert, Straight Handle with Ratchet, Size 2 Mm, Length 20 Cm, For Use With Suture Material 7/0, 8/0
	m. Needle Holder, 3 Mm, Length: 31-35 Cm, Left Curved Jaws, Tungsten Carbide Inserts
	n. Needle Holder, With Tungsten Carbide Insert, Straight Handle with Disengage able Ratchet, Jaws Curved to Left, Size 3.5 Mm, Length 20 Cm
	o. Needle Holder, 5 Mm, Length: 31-35 Cm, Left Curved Jaws, Tungsten Carbide Inserts
	p. Modular Needle Holder, 3-3.5 Mm Diameter, Working Length: 300mm Or More
	q. Blakesley Dissecting and Biopsy Forceps, Rotating, Dismantling, Insulated, With Connector Pin for Unipolar Coagulation, With Luer-Lock Adaptor for Cleaning, Single Action Jaws, Size 3,5 Mm, Length 20 Cm, Consisting of Plastic Handle, Without Ratchet; Outer Tube, Insulated & Forceps Insert
	r. Kelly Forceps, 3-3.5mm, Rotating with Connector Pin For Unipolar Coagulation
	s. Two Piece Laparoscopic Autoclavable Right Angled Dissecting and Grasping Forcep, 360 Degree Rotational Sheath, With Connector Pin for Unipolar Coagulation, Size 3.5 Mm, Length 20 Cm, Long, Double Action Jaws, With

	Ergonomic Plastic Handle with Larger Contact Area at The Finger Ring to Avoid Pressure Sores, Can Be Dismantled with The Press of A Button.
	t. Clip Applicator, 10 Mm, Dismantling, Rotating, Length: 33-36 Cm, Metal Handle for Medium and Large Clips
	u. Clip Applicator, 5-5.5mm, Dismantling, Rotating, Length: 33-36 Cm, Metal Handle For Medium And Small Clips
	v. Babcock Grasping Forceps, 3.5 Mm, Both Jaws Opening with Locking Mechanism, Rotatable
	w. Babcock Grasping Forceps, 5 Mm, Both Jaws Opening with Locking Mechanism, Rotatable
	x. Laparoscopic Bowel Holding Forceps 3 Mm Both Jaws Opening with Locking Mechanism, Rotatable
	y. Laparoscopic Bowel Holding Forceps 5 Mm Both Jaws Opening with Locking Mechanism, Rotatable
	z. Laparoscopic Bipolar Scissors, Single and Double Action Jaws 3 Mm
	aa. Laparoscopic Bipolar Scissors, Single and Double Action Jaws 5 Mm
	bb. Laparoscopic Scissors Straight 3 Mm Single and Double Action Jaws
	cc. Laparoscopic Scissors Straight 5 Mm Single and Double Action Jaws
	dd. Laparoscopic Scissors Curved 3 Mm Single and Double Action Jaws
	ee. Laparoscopic Scissors Curved 5 Mm Single and Double Action Jaws
	ff. Coagulation and Dissecting Electrode, L-Shaped, Distal Tip Tapered, With Cm-Marking, With Connector Pin for Unipolar Coagulation, Size 3.5 Mm, Length 36 Cm
	gg. Coagulation and Dissecting Electrode L-Shaped, Insulated, With Connect or Pin for Unipolar Coagulation, Size 3.5 Mm, Length 36 Cm
	hh. Dissecting-Electrode with Exchangeable Electrode L-Tip, Autoclavable, Ergonomic Handling, Size 5 Mm, Length 36 Cm, With Connector Pin for Unipolar Coagulation,
	ii. Hook Electrode, Monopolar, 5 Mm, Distal Extended Insulation, Working Length: 200mm Or More
	jj. Hook Electrode, Bipolar, 5 Mm, Distal Extended Insulation, Working Length: 200mm Or More,
	kk. Nathanson Liver Retractor, Small Surface Area, Diameter 5 Mm
	ll. Suction Irrigation Cannula, 3 Mm, Multiple Openings, Length: 31-36 Cm
	mm. Suction Irrigation Cannula, 5 Mm, Multiple Openings, Length: 31-36 Cm
	nn. Laparoscopic Knot Tier
	oo. Reducing Sleeve, Diameter: 5.5-6mm/3-3.5mm, Working Length: 160 Mm
A	Instrument Accessories
	Seal Bonnet (50/2.6)-Washers For 3.5mm & 3.9mm Trocar
	Seal Bonnet (50/4)-Washers For 6mm Trocars
	Seal Bonnet (50/2.6)-Washers For 3.5mm & 3.9mm Trocar
	Seal Bonnet (50/4)-Washers For 6mm Trocars
	Unipolar Hf Cord With 4mm Banana Plug And Length 300 Cm
	Bipolar Hf Connecting Cable Length 300 Cm, Compatible with All Standard Cauteries
	Reduction Sleeve, Reusable, Instrument Size 3 Mm, Trocar Cannula Size 6 Mm, Color Code: Black Code: Black
	Thread Sleeve, Trocar Size 6 Mm, Color Code: Black

	Plastic Container for Sterilization, Perforated with Transparent Lid for Use Up To 12 With Working Length Up To 38cm, External Dimensions (W*D*H) 530*250*145 Mm
	Wire Tray for Cleaning, Sterilization And Storage Having Dimension 290x60x52mm For Rigid Endoscopes Up to Diameter 5mm and 20cm Length
	Tray, For Cleaning, Sterilization and Storage of Two Rigid Endoscopes and One Light Cable, Including Holder for Adaptors, Silicone Telescope Holders and Lid, External Dimensions (Wxdxh):487 X 125 X 54 Mm, For Rigid Endoscopes with Up To 10 Mm Diameter And 32 Cm Working Length
	Unipolar Hf Cord With 4mm Banana Plug and Length 300 Cm
	Bipolar Hf Connecting Cable Length 300 Cm, Compatible with All Standard Cauteries
	Reduction Sleeve, Reusable, Instrument Size 3 Mm, Trocar Cannula Size 6 Mm, Color Code: Black Code: Black
	Thread Sleeve, Trocar Size 6 Mm, Color Code: Black
	Plastic Container for Sterilization, Suitable for Steam, Gas, And Hydrogen Peroxide (Sterrads) Sterilization and Storage, Perforated, With Lid, External Dimensions (Wxdxh):446 X 90 X 45 Mm, For Use With Two Rigid Endoscopes of Working Length Up To 34cm
	Plastic Container for Sterilization, Perforated with Transparent Lid for Use Up To 12 With Working Length Up To 36cm, External Dimensions (W*D*H) 530*250*145 Mm
	Tray, For Cleaning, Sterilization and Storage of Two Rigid Endoscopes and One Light Cable, Including Holder for Adaptors, Silicone Telescope Holders and Lid, External Dimensions (W x D x H): 487 X 125 X 54 Mm, For Rigid Endoscopes with Up To 10 Mm Diameter And 32 Cm Working Length
	Seal Bonnet 50/2.2-Washers For 2.5mm Trocar
	Tray Including Base Tray + Rack + Lid (23 Inch 10 Inch 5.75 Inch)
4.	METZEMBAUM SCISSORS
	a. Two Piece Laparoscopic Autoclavable Metzenbaum Scissors, Curved Blades, 360 Degree Rotational Sheath, With Connector Pin for Unipolar Coagulation, Size 2 Mm, Length 20 Cm, Long, Double Action Jaws, With Ergonomic Plastic Handle with Larger Contact Area at The Finger Ring to Avoid Pressure Sores
	b. METZENBAUM SCISSORS, 3-3.5 MM, ROTATING WITH CONNECTOR PIN FOR UNIPOLAR COAGULATION, DOUBLE ACTION JAWS, CURVED, SERRATED
	c. STRAIGHT SCISSORS-4", 6", 8",10"
	d. Curved Scissors-4",6",8",10"
	e. Straight Gold Tipped Scissors-4",6"
	f. Curved Gold Tipped Scissors-4", 6"
	g. Iris Scissors-4 Inch
	h. Potts Tenotomy Scissors-4 Inch
	i. Potts Tenotomy Scissors-6 Inch
5.	MICRO MOSQUITO FORCEPS
	A. Curved Mosquitos-Light Weight-4"

	B. Curved Mosquitos-6"
	C. Straight Mosquitos-6"
6.	PALPATION PROBE
	A. Palpation Probe, Dismantling, Without Connector Pin For Unipolar Coagulation, With Luer-Lock Irrigation Connector For Cleaning, Retractable, Double Action Jaws, Size 3.5 Mm, Length 20 Cm Consisting Of Handle; Metal Outer Sheath & Forceps Insert
	B. Palpation Probe, Dismantling, Without Connector Pin For Unipolar Coagulation, With Luer-Lock Irrigation Connector For Cleaning, Retractable, Double Action Jaws, Size 5 Mm, Length 30 Cm Consisting Of Handle; Metal Outer Sheath & Forceps Insert
7.	TELESCOPE 5 mm 30 degrees
	A. Telescope (2mm), 30° Angle Of View, Length: 14-18 Cm, Autoclavable
	B. Telescope (3.3mm), 30° Angle Of View, Length: 25-30 Cm, Autoclavable, Fiber Optic Light Transmission
	C. Telescope (5 Mm)-0 Angle Of View, Working Length: 290-300 Mm, Autoclavable
	D. Telescope 5 Mm-30° Angle of View, Working Length: 250-300 Mm, Autoclavable
8.	Telescope 10mm 30 degrees
	A. Telescope 10 Mm-Angle Of View, Working Length: 290-300 Mm, Autoclavable
	B. Telescope 10 Mm-30° Angle of View, Working Length: 250-300 Mm, Autoclavable
9.	Trocars
	A. Blunt Optical Trocar with Ballon Fixation 5mm with 20 Mm And 100 Mm
	B. Thoracoport Trocar
	C. 2.5mm, Silicon Valve, Stopcock for Insufflation, Pyramidal Tip with Pin Holes Near the Tip, Working Length 4cm
	D. Laparoscopic Trocar With Cannula 3 Mm Valve Seal-Disposable
	E. Trocar (3.5-3.9mm), Pyramidal Tip, Length: 5-6 Cm, Luer-Lock Connector for Insufflation, Silicone Leaflet Valve
	F. Trocar-5.5-6 Mm, Pyramidal Tip, Cannula, Luer-Lock Connector, Length: 5-6 Cm, Automatic/Silicone Leaflet Valve
	G. Trocar, 10-11 Mm, Pyramidal Tip, Cannula, Insufflation Stopcock, Length: 8.5-10 Cm, Automatic/Multifunctional Valve
	H. Trocar Sleeve 5.5-6 Mm, Insufflation, Standard Metal Sleeve
	I. Trocar Sleeve, 10 Mm, Multifunctional Valve with Tap, Oblique Distal Tip, Working Length: 100-105 Mm
	J. Laparoscopic Trocar with Cannula 7 Mm, Valve Seal with 5 Mm Reducer-Reusable
	K. Laparoscopic Trocar with Cannula 7 Mm, Valve Seal with 5 Mm Reducer-Disposable

Technical specifications for HD Pediatric Colonoscopy System

10.High Definition Pediatric Colonoscope:

1. Should have built in HDTV compatible Super CCD/CMOS Camera chip with Close observation capacity up to 3 mm.
2. Should be equipped with auxiliary water jet function for flushing (mucosal cleaning).
3. Should have LCI (Linked Colour imaging) - Image Enhancement Endoscopy facility for localization and H Pylori infection detection.
4. Suitable for BLI/BLI-Bright real time optical chromo endoscopy system.
5. Should have Electronic Zoom function up to 2.0 X.
6. In built scope identification memory chip for monitor display of scope's model no. serial no., white balancing memory, no. of connections/cumulative uses etc.
7. Fully immersible in disinfectant solution (no need to attach water resistant cap) & one touch connectivity.
8. Scope should have advanced force transmission and adaptive bending technology for improved access and scope maneuverability in challenging anatomy.
9. Scope should have Contact free technology.
- Power feed should be through Wireless electrical supply.
- Image Transmission should be through high-speed optical fibre.
- Remote Signal should be Infrared (IR) LED

Field of view	140° or more
Observation range	3.0mm-100mm
Bending capability	Up 210° /Down 160°
	Right 160°/Left 160°
Distal end diameter	9.8 mm or less
Insertion tube diameter	10.7 mm or less
Working channel diameter	3.2 mm or more
Working length	1690 mm or more
Total length	1990 mm or more

High-Definition Colonoscope

1. Should have built in HDTV compatible CMOS/Super CCD with Close observation capacity up to 2 mm.
2. Should have LCI (Linked Colour imaging) Advance Image Enhancement Endoscopy facility or equivalent.
3. Suitable for BLI/BLI-Bright real time optical chromo endoscopy system.
4. Should have Electronic Zoom function up to 2X or more.
5. In built scope identification memory chip for monitor display of scope's model no. serial no., white balancing memory, no. of connections/cumulative uses etc.
6. Should have inbuilt features like Advance force transmission, adaptive bending for ease of insertion.
7. Fully immersible in disinfectant solution (no need to attach water resistant cap) & one touch connectivity
8. Should have Electronic Zoom function up to 2X.
9. Scope should be latest launch in India at the time of quoting the tender.
10. Scope should have Contact free technology.
- Power feed should be through Wireless electrical supply.
- Image Transmission should be through high-speed optical fibre.
- Remote Signal should be Infrared (IR) LED

Field of view	170° or more
Observation range	2.0mm-100mm
Bending capability	Up 180° /Down 180°
	Right 160°/Left 160°
Distal end diameter	12.8 mm or less
Insertion tube diameter	12.8 mm or less
Working channel diameter	3.8 mm or more
Working length	1690 mm or more
Total length	2010 mm or more

Full HD Video Processor Module:

1. Equipped with high resolution HDTV Imaging capacity.
2. Should be compatible with Analog and Digital output with 1920X1080P output.
3. Minimum 2 HDTV image output(HD-SDI/DVI/HDTV) for HD image transfer.
4. Integrated/Separate, light weight and ergonomically designed.
5. Should have Special light function such as FICE/BLI/NBI/I-SCAN OE to see the vascular/mucosal pattern.
6. Should have LCI (Linked Colour imaging) /RDI & TXI – Advance Image Enhancement Endoscopy facility or equivalent.
7. System should support Close focus up to 1.5 mm to get enhanced image for diagnosis.
8. System should have Edge & Structure enhancement.
9. No white balance compulsion would be added advantage.
10. Recording of both still & moving images
11. Portable Memory & USB Slot for image recording with 4 GB internal memory and external USB (8GB) Automatic IRIS control & automatic white balance.
12. Automatic IRIS control & automatic white balance
13. Should be compatible with Optical zoom, Enteroscopy scopes, EUS system for future upgradation.
14. Electronic Zoom up to 2X.
15. System should be compatible and upgradable with AI (Artificial Intelligence) in future.
16. Equipped with memory back up for settings & Lithium battery.

Light Source:

1. Long life Multi LED light source (3 or more LED bulb) with minimum lamp life of 6000 hours, & light intensity equivalent to Xenon 300 watt
2. Backlit front panel indicators.
3. Equipped with automatic light adjustment forced air cooling, regulated air feeding pump and fan with low noise.
4. Compatible for waterproof one touch connector
5. Compact & light weight design weight up to 15 Kg.
6. Integrated/Separate, light weight and ergonomically designed.

Medical Grade Monitor

- 26" or more medical grade monitor compatible with the above quoted system.
1. Screen size 26 inches or more.

2. Medical Grade monitor
3. Full HD display (1920x1080)
4. Compatible picture in picture display with compatible video processor and endoscopes

System should be supplied with below mentioned items-

1. Compatible trolley to mount the system
2. HD Reporting and Reporting Software
3. Computer system with i5 processor, 8GB RAM & 1 TB HDD or higher
4. Laser color printer.

- Company should have good service structure and facility of repairing scopes in India.
- Appropriate recording cables and accessories should be in the scope of vendors only for making it fully functional.

Terms and conditions:

- The system must have standard comprehensive warranty of 3 years and should quote CMC for next 7 years.
- Should be European CE/US FDA certified

Specifications for the Department of Pulmonology

1.EBUS- Endo Bronchial Ultra Sound

Ultrasound Processor

- A. Compact & easily transportable unit with Ultrasound & color Doppler function
- B. Compatible with Electronic & Mechanical probes both preferred
- C. Customizable software upgradation options should be made available to meet the needs of any facility on the same processor
- D. Should be upgradable to i-ELST for future purposes and also Strain histogram should be compatible for future purposes
- E. Should have capabilities to connect radial EBUS probes for accessing peripheral lungs on the same US processor
- F. Should be compatible with 3D display and MPR display
- G. Should quote radial probe having distal diameter of 1.8mm or less and operate at 20 Mhz along with compatible guide sheath kit for sampling of peripheral lesions
- H. Should have the following modes: Color Flow mode, Power Flow Mode, H-Flow mode, PW Mode
- I. THE Modes should be available 1) THE-P mode 2) THE-R mode
- J. Should have radial probe driver unit to connect radial probes for accessing peripheral lungs.
- K. Usable frequency: 5,6,7.5,10 and 12 MHz
- L. Generated frequency range: preferably upto 20 MHz or more
- M. Should have facility to measure distance between two points defined by 4 or more symbols.
- N. GAIN, Contrast, STC functions
- O. Should have S-focus for full range focusing eliminating manual focus adjustment

- P. Keyboard should have large LCD touch panel that allows greater range of functions to be displayed at one time
- Q. Same keyboard should be compatible for both Linear and Radial EBUS
- R. Track pad on keyboard should be available for ease of cleaning

Ultrasonic Bronchofibervideoscope (for EBUS-TBNA)

- A. Thin diameter- transducer for ease of insertion, length of transducer should also be short
- B. Fully immersible in disinfection solution.
- C. US cable should be detachable from the scope and not permanently connected
- D. System should be serviceable in India
- E. Electronic curved linear array scanning
- F. Endoscopy image should be completely visible while insertion (no masking of endo image)
- G. Should have oblique balloon irrigation Port
- H. Should have 4 or more remote switches on scope.

Field of view	:	80 deg – 100 deg
Direction of view	:	10 to 20 degree forward oblique
Depth of field	:	2mm to 50mm
Distal End dia.	:	6.6 mm
Insertion tube dia.	:	6.3 mm
Instrument Channel dia.	:	2.2 mm or more
Working length	:	600 mm to 620 mm
Tip bending range	:	Up 160 Down 70 degree
Ultrasound display modes	:	B mode Colour & Power Flow Modes
Scanning frequency	:	5/6/7.5/10/12 MHz or more range
Scanning range	:	65 degree or more
Contact method	:	Balloon & Direct contact method

2. PSG Screen + Tele (BT) and Camera Compal Polysomnography (STATIONARY) with Digital IR-Videometry

32 Channels

1. "Flow + Snoring (Nasal pressure)	: 01
2. Flow	: 01
3. Snoring	: 01
4. Breathing effort	: 01
5. RIP effort	: 02
6. SpO2	: 01
7. Pulse rate	: 01
8. Plethysmogram	: 01
9. Body position	: 01
10. Movement	: 01
11. CPAP Pressure/Flow/Snoring	: 01
12. ECG (optional Syst./Diast.BP)	: 01
13. PLM left	: 01

14. PLM right	: 01
15. Ambient light	: 01
16. Patient market	: 01
17. EEG/EOG + REF + continuous impedance	: 11
18. EMG	: 02
19. ECG	: 01

Items included:

1. "Basic device PSG screen (on abdomen belt),
2. CPAP pressure sensor + 1 Pack Nasal cannals (10 pcs)
3. CPAP adapter,
4. Thermistor + Retaining clip,
5. Microphone
6. Two PLM electrodes (Periodic Limb movements),
7. Belt set Thorax/Shoulder,
8. Two Inductive effort belts abdomen/thorax size L+MUX adapter,
9. SpO2 Finger clip soft silicone (Adult),
10. Two Li-Ion Accu + Battery charger,
11. 1 GB Flash card + Card reader (USB)
12. PSG (polysomnography) Head box,
13. 15 GRASS Glod plated EEG cup electrodes (10 mm with hole, Cable length: 76 cm)
14. Two Connecting electrodes (30 pcs)
15. 1 Pack Disposable electrodes (30 pcs)
16. EC2 Electrode cream (Self adhesive)
17. NUPREP Abrasive skin prepping gel.
18. Radio transmission module (BT) consisting of integrated transmitter (in the PSG screen) and integrated receiver (in the camera)
19. User manual
20. Software DOMINO (2 licenses) incl. ECG Wavelet.
21. LAN infrared video camera compact
With integrated radio transmission module (BT) "H.264 video stream
Integrated IR illumination
Microphone
Speaker
Resolution 800*600 pixels
Wall or ceiling mount
Power supply
Radio transmission module (BT) consisting of integrated radio transmission receiver (in camera) and integrated radio transmitter (in the SOMNO screen plus) software for synchronized recording editing and archiving *intercom possible with option KOMP46"
22. TITRATION DEVICE
Prisma LAB, Lowenstein Medicals Germany
Modes: CPAP, APAP, AUTO S, ST, AUTO ST, AcSV
Prisma connect, online connecting module, Lowenstein Medicals

1 Description of Function –

- 1.1 Polysomnography and sleep studies are performed to diagnose illness or

syndromes related to sleep

2 Operational Requirements

2.1 Polysomnography systems must have integrated ZRIP driver allows to setup the patient faster and easier by reducing the no. of connection during hook-up.

3. System configuration accessories, spares and consumables

4. Environmental factors

4.1 Shall meet IEC-60601-1-2:2001(Or Equivalent BIS) General Requirements of Safety for electromagnetic Compatibility. or should comply with 89/366/EEC; EMC-directive

4.2 The unit shall be capable of operating continuously in ambient temperature of 20-30 deg C and relative humidity of 30-70%

5. Power Supply

5.1 Power input to be 220-240VAC, 50Hz fitted with Indian plug

5.2 UPS of suitable rating with voltages regulation and spike protection for 60 minutes back up.

6. Standards, Safety and Training

6.1 Should be US FDA approved

6.2 Manufacturer should have ISO certification for quality standards.

6.3 Comprehensive training for lab staff and support services till familiarity with the system.

6.4 Electrical safety conforms to standards for electrical safety IEC 60601-1 (OR Equivalent international/national standard) General requirement for Electrical safety of Medical Equipment.

7. Term and Condition

- 3 Years comprehensive warranty after installation
- CMC for 5 years after completion of 3 years warranty of the equipment, spare parts/ accessories used.
- The company should give the certificate that the model quoted is the latest and not obsolete, and spares will be easily available for next 7 years.

Specifications for the Department of Urology

1.Circumcision Instruments Adult

Kocher's clamp 12" (1 Each)
Mosquito artery forceps 6" (6 Each)
Dunhill artery forceps 7" (2 Each)
Blade handle (Size 3) (1 Each)
Dissecting forceps 4" (1 Each)
Sponge holders 12" (1 Each)

Allis forceps 6" (1 Each)
Needle holder 12" (1 Each)
Suture scissor 7" (1 Each)
Metzenbaun Tissue Scissor 7" (1 Each)
Kidney Dish Medium (1 Each) Gallipot
Medium (1 Each)
Drapder (Centre) (1 Each) Wrappers
(2 Each)
Hand Towels (1 Each)

All items should be SS 304 grade and Brand, CE & Catalogue no. to be printed.

2. Circumcision Pediatric

1. Essential Paediatric Circumcision Instruments

1.1. Scalpel Handle & Blade

- Handle: No. 3 scalpel handle.
- Blade: No. 10, 11, or 15 (smaller sizes preferred for paediatric procedures).

1.2. Haemostats (Artery Forceps)

- Type: Straight or curved Mosquito or Halsted forceps.
- Size: 3.5" – 5" (8–13 cm) (paediatric size).

1.3. Tissue Forceps

- Adson forceps (Toothed or Non-toothed, 4-5") – Used for handling delicate tissue.
- Dressing forceps – Used for holding gauze or sutures.

1.4. Scissors

- Type:
- Metzenbaum scissors (Straight, 4-5") – Fine dissection of tissue.
- Iris scissors (Curved, 4") – For precision cutting.

1.5. Circumcision Clamps & Devices

(a) Gomo Clamp

- Sizes: 1.1 cm, 1.3 cm, 1.45 cm (for different age groups).

(b) Plastbell Device

- Sizes: 1.1 cm, 1.2 cm, 1.3 cm, 1.4 cm, 1.5 cm.
- (c) Mogen Clamp
- Material: Stainless steel.
- 1.6. Needle Holder
- Type: Castroviejo or Webster Needle Holder (4-5").
- All items should be SS 304 grade and Brand, CE & Catalogue no. to be printed.

3. PEDIATRIC CYSTOSCOPE

General Specifications:

1. Outer Diameter:
 - Typically 7 Fr to 15 Fr (French gauge)
 - Common sizes: 7.5 Fr, 8 Fr, 9.5 Fr, 10 Fr, 11 Fr, 12 Fr
2. Working Length:
 - Typically 17–30 cm, depending on the patient's age.
3. Angle of View:
 - 0°, 30°, and 70° (common angles)
 - 0° for straight view, 30° for an oblique view, and 70° for better visualization of the bladder neck and ureteral orifices.
4. Optical System:
 - High-resolution rod lens system
 - Fiber-optic light transmission
 - Wide-angle field of view for improved visualization
5. Working Channel:
 - 1.0 mm to 2.5 mm diameter
6. Sheath System:
 - Single or double sheath system
 - Double sheath allows for continuous irrigation.
7. Light Source Compatibility:
 - Xenon, LED, or halogen light sources
 - Fiber-optic or integrated LED illumination

8. Materials:

- Medical-grade stainless steel
- Autoclavable and sterilizable

4. Pneumatic Lithotripter with Suction

1. Should have Ballistic and Ultrasound energies to be used simultaneously
2. A single foot pedal to operate both or one energy.
3. Separate hand pieces for Ballistic and ultrasound devices
4. Separate probes and Ultrasound devices
5. Facility to integrate both probes when using both the energies simultaneously to fragment large and hard stones
6. Should be able to use the energies independently also
7. Facility to connect the unit to the hospital compressed air supply
8. Should be able to withstand pressures from 3.5 to 5 Bar
9. Facility to connect to the hospital vacuum supply for suction of stone fragments
10. Facility to collect the stone fragments
11. Probes for various applications and scopes
12. The following Ballistic probes should be supplied along with the equipment.
 - a. 0.8 mm, length 605 mm – 2 Nos
 - b. 1 mm, length 605 mm – 4 Nos
 - c. 1.6 mm, length 453 mm – 2 Nos
 - d. 2 mm, length 453 mm – 3 Nos

For future purchases the rate shall be offered in the BOQ separately (Taken for L1 calculation and the quantity taken for evaluation will be mentioned in the BOQ)

13. Should have facility for Flexible ballistic probe for use in ureter and renal pelvis through flexible scopes. The rate to be offered in the BOQ separately, if required orders will be issued separately (Not taken for L1 calculation).

14. Should supply Dual function ultrasound probes: 3.2 mm and 3.6 mm probes one each along with the machine. For fragmentation and suction. Probes should have holes in the distal tip to prevent mucosal suction in to the probe. For future

purchases the rate shall be offered in the BOQ separately (Taken for L1 calculation and the quantity taken for evaluation will be mentioned in the BOQ)

15. Conical tip to prevent entry of larger fragments

16. Should supply the guidance adapters for the Ureteroscopes.

17. Should have safety certificate from a competent authority CE issued by a notified body registered in the European commission / FDA (US) Certificate

4. Monopolar single stem TURP

Key Specifications and Features

1. Resectoscope System

- Type: Monopolar (requires non-conductive irrigation fluid like glycine or sorbitol).
- Sheath Size: 22 Fr – 27 Fr (commonly 24 Fr or 26 Fr).
- Sheath Type: Single-stem design (simpler setup compared to double-stem).
- Working Length: 30–36 cm.

2. Optical System

- Endoscope: 4 mm diameter rod lens system.
- Viewing Angles: 0°, 12°, or 30° (depending on surgeon preference).

3. Electrode Compatibility

- Loop Electrode: Tungsten or platinum wire loop for precise tissue resection.

4. Handle & Working Element

- Ergonomic single-stem design for surgeon comfort.
- Finger-operated cutting activation.
- Spring-loaded working element for smooth electrode movement.

5. Materials

- Stainless steel and autoclavable components.
- Insulated sections to prevent unintended energy transmission.

5. PEDIATRIC NEPHROSCOPE

1. General Specifications

- Outer Diameter: 12 Fr – 18 Fr (commonly 15 Fr or 17 Fr for paediatric use).
- Working Length: 15 cm – 22 cm (shorter than adult nephoscopes).
- Sheath Size: 12 Fr – 18 Fr, allowing for smooth access.
- Optical Angle: 0° or 12° (straight or slightly angled for better visualization).

2. Optical System

- High-resolution rod lens system for superior image clarity.
- Wide-angle field of view for enhanced visualization of the renal pelvis.
- Fiber-optic illumination for bright and clear images.

3. Working Channel

- Size: 5 Fr – 8 Fr working channel for instruments.
- Compatible with:
- Laser fibres (for lithotripsy).
- Forceps, graspers, and baskets (for stone retrieval).
- Irrigation and suction system for better visibility.

4. Light Source Compatibility

- Fiber-optic cable compatibility with xenon, halogen, or LED light sources.

5. Materials & Sterilization

- Medical-grade stainless steel for durability.
- Autoclavable for effective sterilization and reuse.

6. Optical Internal Urethrotomy (OIU)

1. Key Instruments in an OIU Set

1.1. Urethrotome Sheath

- Size: 18 Fr – 22 Fr (commonly 21 Fr).
- Length: 20–30 cm (varies by patient anatomy).
- Material: Stainless steel, autoclavable.
- Features:
- Outer sheath with continuous irrigation ports for clear visibility.
- Inner sheath to accommodate the working element and optical system.

1.2. Optical System (Endoscope)

- Diameter: 2.9 mm – 4.0 mm
- Angle of View: 0° or 12° for a straight view of the stricture.
- High-resolution rod lens system for clear visualization.
- Fiber-optic illumination (compatible with LED, xenon, or halogen light sources).

1.3. Urethrotome Knife (Cold Knife Blades)

- Types of Blades:
- Straight Knife – Standard for midline incision.
- Sickle Knife – Curved for deep or tough strictures.
- Material: Stainless steel, disposable or reusable.

1.4. Laser Fiber (Alternative to Cold Knife)

- Types: Holmium: YAG or Thulium laser.
- Fiber Size: 200–400 µm (compatible with the working channel).

1.5. Accessories

- Grasping Forceps: For removing debris or small strictures.

7. PEDIATRIC URETHROTOME

1.1. Urethrotome Sheath

- Size: 10 Fr – 15 Fr (commonly 12 Fr – 14 Fr for children).
- Length: 10–20 cm (shorter than adult versions).
- Material: Stainless steel, autoclavable.
- Features:
- Single or double sheath system.
- Continuous irrigation ports for a clear view of the stricture.

1.2. Optical System (Endoscope)

- Diameter: 2.7 mm – 3.5 mm
- Angle of View: 0° or 12° (for straight visualization of the urethra).
- Rod lens system for high-resolution imaging.
- Fiber-optic illumination (compatible with LED, xenon, or halogen light sources).

1.3. Working Element

- Type: Passive (spring-loaded) or active (manual control).
- Function: Holds and moves the urethrotomy knife or laser fiber for cutting.

1.4. Urethrotome Knife (Cold Knife Blades)

- Types:
- Straight Knife – Most commonly used for paediatric strictures.
- Sickle Knife – For deeper incisions.
- Reverse Knife – Allows cutting in the opposite direction.
- Material: Stainless steel, disposable or reusable.

1.5. Laser Fiber (Alternative to Cold Knife)

- Types: Holmium: YAG or Thulium laser (for precise cutting with minimal bleeding).
- Fiber Size: 200–300 µm (smaller size for paediatric use).

1.6. Irrigation System

- Continuous saline irrigation for clear visibility and cooling.
- Port integrated into the sheath for controlled flow.

1.7. Accessories

- Grasping Forceps: For removing debris or fibrotic tissue.

8. ADULT URETHROTOME

1.1. Urethrotome Sheath

- Size: 18 Fr – 27 Fr (commonly 21 Fr – 24 Fr).
- Length: 20–30 cm (longer than paediatric versions).
- Material: Stainless steel, autoclavable.
- Features:
- Single or double sheath system for continuous irrigation.
- Outer sheath for scope insertion and inner sheath for cutting

instruments.

1.2. Optical System (Endoscope)

- Diameter: 2.9 mm – 4.0 mm.
- Angle of View: 0° or 12° (straight view of the urethral stricture).
- Rod lens system for high-resolution imaging.
- Fiber-optic illumination (compatible with LED, xenon, or halogen light

sources).

1.3. Working Element

- Type:
- Passive (spring-loaded) – Automatic movement for controlled cutting.
- Active (manual control) – Surgeon-controlled incision depth.
- Function: Holds and moves the urethrotome knife or laser fibre.

1.4. Urethrotome Knife (Cold Knife Blades)

- Types:
- Straight Knife – Standard for central incisions.
- Sickle Knife – Curved for deep fibrotic strictures.
- Reverse Knife – Allows cutting in the opposite direction.
- Material: Stainless steel, disposable or reusable.

1.5. Laser Fiber (Alternative to Cold Knife)

- Types: Holmium: YAG or Thulium laser (for precise, bloodless cutting).
- Fiber Size: 200–400 µm (compatible with working channel).

1.6. Irrigation System

- Continuous saline irrigation for clear visualization and cooling.
- Integrated irrigation port in the sheath for better fluid control.

1.7. Accessories

- Grasping Forceps: For removing debris or fibrotic tissue.

9. VAC Machine (Negative pressure (Vacuum) assisted wound therapy system)

V.A.C. system Light weight, both power (100-240 V) & battery operated Battery

Type: Lithium , rechargeable Battery Life: approx. 6 hours Therapy Delivery

Modes: Continuous or Intermittent Intensity

Settings: Low, Medium, High

Pressure Settings: -25 mmHg up to -200 mmHg (-3.3 kPa to -26.6 kPa) Canisters
(Prices to be quoted Separately)

a. Charcoal filters

b. Hydrophobic construction

c. Available gel packs

d. All canisters to be supplied with tubing, clamp and connector

e. 500 ml Canister with Gel – 2

f. 500 ml Canister without Gel - 2

g. 1,000 ml Large Canister with Gel - 2

VAC Dressings (Prices to be quoted Separately)

a. Foam silver dressings - 50

b. White foam dressings - 30

c. Foam round dressings - 50

d. Thin dressings - 30

e. Heel dressings - 30

f. Foam hand dressings - 30

Accessories (Prices to be quoted Separately)

a. Adhesive drape (30.5 x 26 cm) - 2

b. Sensate pad with tubing, clamp and connector - 2

c. Instill Pad and Instill Tubing for Instillation Therapy with unique connector and cap - 2

d. Y-connector to connect two or more dressings - 2

e. Tubing Cap to secure end of tubing when not in use - 2

10.Vasectomy Instruments

Sl. No	VASECTOMY SET	Qty
1	FORCEPS, GROSS-MAIER, CVD., 26,5 CM	4
2	TOWEL FORCEPS, BACKHAUS, SHARP, 11 CM	8
3	TOWEL FORCEPS F. PAPER DRAPES, 11.5 CM	4
4	SCALPEL HANDLE, NO. 3, 12 CM	4
5	TC-DISS. SCISSORS, FINE, CVD., 14.5 CM	2
6	IRIS SCISSORS, SH/SH, CVD., 11.5 CM	2
7	OPERATING SCISSORS, SH/BL, STR., 14.5 CM	2
8	DRESSING FORCEPS, SEMKEN, 12.5 CM	2
9	ATR. FORCEPS, DE BAKEY, 2 MM, 16 CM	2
10	Diss. forceps, Semken, 1x2 T.,12.5 cm	2
11	TISSUE FORCEPS, 1X2 T., SLIM, 14.5 CM	2
12	HAEM. FORCEPS, MOSQUITO, CVD., 12 CM	8
13	FORCEPS, PEAN, DELICATE, STR., 14.5 CM	4
14	FORCEPS, MIXTER-BABY, SL. CVD., 13.5 CM	2
15	TC-NEEDLEHOLDER, CRILE- WOOD, 15 CM	2
16	NEEDLE CASE, ROUND, PERF., F. 55-309-65	2
17	BOWL, METAL, H = 55, Ø 128 MM, 0.35 L	2
18	SS Tray, 1/2, 240x251x94 mm	2
19	SS Tray Lid	2
20	Silicon mad	2

1. All Instruments should have a European CE marking certificate 4-digit notify body number or USFDA certificate.
2. The Manufacturer should have ISO 13485 certification.
3. One year replace warranty. should be submitted along with the tender documents.

Specifications for the Department of ENT

1.HIGH SPEED ELECTRICAL ENT DRILL SYSTEM.

1. The Drill should be a versatile powered ENT system, that lets to choose just the power required for various ENT and aesthetic related surgeries
2. The system should suitable for wide variety of procedures ranging from Rhinology, other transnasal procedures, Otology/ Neuro otology / Nasopharyngeal.
3. It should able to connect multiple hand pieces at a time like low-speed Otology drills Up to 16000 RPM and High-speed otology drills Up to 80000 RPM.
4. Must have motor driven by electronic commutation technology i.e., brushless design.
5. Consol should be have an irrigation pump is also integrated into the unit with variable flow control.
6. Must have Single Micro motor for connecting High speed hand pieces, low speed hand pieces and high torque Hand pieces like skull perforation.
7. The control unit must deliver maximum output of 230V and with a maximum torque of 50 N.cm.
8. Consol should be possible to conduct various types of procedures. Control unit with LCD Display Touch Screen, multifunctional foot control, four lineups of motor and extensive attachments.
9. The various parameters should be able to adjust either from touch screen panel or from the multifunction foot switch
10. The torque at the bur end should not be less than 6 N.cm.
11. Must have high speed hand pieces with maximum Speed of 80,000rpm.
12. Must have the motors made of Titanium alloy.
13. Must have malleable slim hand pieces so that curvature can be made anywhere on the stem for a given procedure.
14. Must have additional port in the console.
15. Must have integrated irrigation to cool the burs and blades.
16. Must have all burs and hand pieces recognizable by coding system.
17. Attachments should have tapered design for better visibility under microscope.
18. System should have quick connect but lockable attachments of various sizes

19. Speed of the motor should be controlled both at the panel of the equipment and foot pedal.
 20. The control unit should sense the motor connected to it and thereby providing optimum speed and torque for each hand piece.
 21. Must have reverse rotation functionality.
 22. Hand pieces should allow post operative oil spray.
 23. Must have reverse rotation alarm.
 24. The console should be compatible with motor for bone saw attachment.
 25. Must have complete to upgrade Universal Bur Length Variable Adjustable Exposure lengths of All Standard attachments.
 26. The system shall be manufactured by an US FDA/ CE notified body 4 digit and ISO 13485 certified manufacturer.
 27. The quoted medical device must be registered under CDSCO.
- Attachments and Tools: (Prices to be quote separately)
- Straight ENT Short attachment - 2 Nos
 - Angled ENT Short attachment - 2 Nos
 - Should provide burrs from 2.0mm to 7.0mm cutting & diamond both – 2 each

2. MICRO LARYNGOSCOPY SET

1	Video enabled Laryngoscope Adult size-18cm - 1
2	Video enabled Laryngoscope Adolescent size-17cm - 1
3	Laryngoscope holder and chest support for use with above laryngoscopes - 2
4	Fiber optic light carrier to fit in operating laryngoscopes Adult size - 2
5	Proximal Light Carrier - 2
6	Vapor Suction Tube - 2
7	Straight forward wide angle telescope-4mm 17cm length- 15° angle, 45° angled eyepiece, autoclavable - 1
8	Laryngeal cutting forceps-23 cm 2mm round cupped jaws, straight - 2
9	Laryngeal cutting forceps-23 cm 2mm round cupped jaws, angular upwards -2
10	Laryngeal cutting forceps-23 cm 2mm round cupped jaws, bent to right - 2
11	Laryngeal cutting forceps-23 cm 2mm round cupped jaws, bent to left -2

12	Laryngeal artery forceps with ratchet-23 cm Serrated, straight - 1
13	Laryngeal alligator forceps-23 cm Serrated –straight - 2
14	Laryngeal alligator forceps-23 cm Serrated -bent to right - 1
15	Laryngeal alligator forceps-23 cm Serrated -bent to left - 1
16	Laryngeal scissors-23 cm Straight - 3
17	Laryngeal scissors-23 cm Angular 45° up - 2
18	Laryngeal scissors-23 cm Bent to right - 2
19	Laryngeal scissors-23 cm Bent to left - 2
20	Laryngeal scissors-23 cm Straight, horizontal cutting - 2
21	Laryngeal forceps-23 cm Round cupped jaws 5 mm, straight, double action - 2
22	Laryngeal grasping forceps for arytenoids-23 cm - 1
23	Laryngeal biopsy forceps-23 cm Oval cup shaped jaws - 2
24	Laryngeal needle holder with ratchet - 1
25	Atraumatic vocal cord retractor-23 cm Self retaining with ratchet - 1
26	Arnold vocal cord holding forceps-23 cm Triangular jaws, for right side - 1
27	Arnold vocal cord holding forceps-23 cm Triangular jaws, for left side - 1
28	Laryngeal knife-23cm Straight cutting - 3
29	Laryngeal knife-23cm Sickle shaped, curved -2
30	Laryngeal knife-23cm Round vertical cutting - 2
31	Laryngeal hook-23 cm Blunt - 1
32	Laryngeal hook-23 cm Sharp - 1
33	Laryngeal needle-23 cm Curved to right – 2
34	Laryngeal needle-23 cm Curved to left – 2
35	Laryngeal elevator with suction channel-23 cm – 1
36	Laryngeal knot tier-23 cm- 1
37	Laryngeal hook, blunt with probe end - 2
38	Instrument handle For use with item No 30 to 38 mentioned above - 1
39	Laryngeal suction tube (micro laryngeal) –23 cm Diameter 2 mm - 3
40	Laryngeal suction tube (micro Laryngeal) –23 cm Diameter 3mm - 3
41	Laryngeal insulated canula-25 cm 3 mm O.D. for suction and coagulation - 2
42	Laryngeal cotton wool carrier-25 cm Straight, serrated - 2
43	Bipolar electrode –3 mm, length 26 cm With removable suction tube - 1
44	Cable for bipolar forceps-5 m long – 1

45	Injection Needle, Leus lock, straight - 2
46	Teeth protector one metallic and one silicon (autoclavable) - 1 each
47	Laryngeal Biopsy forceps 3x4mm, 20-25cm – 2

1. Complete system including Telescopes and its accessories should be from same manufacturer for total system compatibility and optimal system performance.
2. System should be BIS Approved/USFDA Approved and European CE certificate with 4 digits notified body.
3. OEM should have ISO 13485:2016 certified service process in India

3. Adult Rigid Esophagoscopy set

1	Roberts Jesberg Esophagoscope Oval Size 12x16 Length 50cm	1
2	Roberts Jesberg Esophagoscope Oval Size 10x14 Length 50cm	1
3	Roberts Jesberg Esophagoscope Oval Size 8x12 Length 50cm	1
4	Straight Forward Telescope 0° diameter 5.5 mm, length 50 cm, autoclavable, fiber optic light transmission incorporated	1
5	Bronchoscope Tube Universal, without distal fiber optic light carrier, for use with proximally insertable prismatic light deflector, length 43 cm, size 8.5, outer diameter 11 to 12 mm, inner diameter 10 to 11 mm	1
6	Bronchoscope Tube Universal, without distal fiber optic light carrier, for use with proximally insertable prismatic light deflector, length 43 cm, size 7.5, outer diameter 10 to 11 mm, inner diameter 9 to 10 mm	1
7	Bronchoscope Tube Universal, without distal fiber optic light carrier, for use with proximally insertable prismatic light deflector, length 43 cm, size 6.5, outer diameter 9 to 10 mm, inner diameter 8 to 9 mm	1
8	Full Lumen Operating Broncho- scope, size 11 mm, modified for application of Poliflex Stents, inner diameter 10.5 mm, distal and with lateral holes and 45° oblique beak, for use with prismatic light deflector, length 43 cm	1
9	Full Lumen Operating Bronchoscope, size 12 mm, length 43 cm, with 32 Fr. working channel for application of bronchial bougies, for use with prismatic light deflector for proximal illumination	1
10	Full Lumen Operating Bronchoscope, size 14 mm, length 43 cm, modified for application of stents, continuous I.D. 13 mm, distal end with lateral holes and 45° oblique beak, for use with prismatic light deflector	1

11	Optical Dilation Tracheoscope, GRONINGEN Model, rigid, O.D. 12 mm, adult size, with depth markings, for dilation of stenoses and tumors in the upper trachea, distal end conical with lateral breathing holes, proximal with oxygen adaption, for use with Straight Forward Telescope length 30 cm, to be supplied with respirator adaptor	1
12	Tracheoscope Tube, length 33 cm, outer diameter 12 mm, inner diameter 11 mm	1
13	Full Lumen Operating Tracheo- scope, modified to application of Polyflex stents, inner diameter 13 mm, distal end with 45° oblique beak, for use with prismatic light deflector, size 14 mm, length 33 cm	1
14	Universal Tracheoscope, size 8.5, outer diameter 11.2 mm, inner diameter 10.5 mm, length 33 cm, for use with proximal insertable Prismatic Light Deflector	1
15	Universal Tracheoscope, size 7.5, outer diameter 10.2 mm, inner diameter 9.5 mm, length 33 cm for use with proximal insertable Prismatic Light Deflector	1
16	Universal Tracheoscope, size 6.5, outer diameter 9.2 mm, inner diameter 8.5 mm, length 33 cm, for use with proximal insertable Prismatic Light Deflector	1
17	Optical Forceps, circular cup, alligator for hard foreign bodies	1
18	Optical Forceps, for peanut and soft foreign bodies with spring- action handle	1
19	Optical Forceps, round cupped jaws for Biopsy, cup diameter 3.3mm	1
20	Optical Forceps, Universal for biopsy, for removing foreign bodies and denatured tissue	1
21	Optical Forceps, for the repositioning and removal of silicone stents or polymer, metal and hybrid stents, incl. cleaning adapter, for use with full lumen bronchoscopes	1
22	Optical Forceps, universal jaw, for biopsy and removal of foreign bodies, incl. cleaning adapter, for use with full lumen bronchoscopes	1
23	Forceps, spoon-shaped, round, for biopsy, with LUER-Lock irrigation connector for cleaning, double action jaws, diameter 5 mm, sheath diameter 2. 5 mm, working length 55 cm	1

24	Forceps, universal, for biopsy and foreign bodies removal, with LUER- Lock irrigation connector for cleaning, double action jaws, width 4 mm, sheath diameter 2.5 mm, working length 55 cm	1
25	Forceps, for peanuts and soft foreign bodies, with LUER- Lock irrigation connector for cleaning, double action jaws, sheath diameter 2.5 mm, working length 50 cm	1
26	Forceps, spoon-shaped, round, for biopsy, with LUER- Lock irrigation connector for cleaning, double action jaws, diameter 5 mm, sheath diameter 2. 5 mm, working length 50 cm	1
27	Forceps, universal, for biopsy and foreign bodies removal, with LUER- Lock irrigation connector for cleaning, double action jaws, sheath diameter 2.5 mm, width 4 mm, working length 50 cm	1
28	Prismatic Light Deflector, autoclavable, with connection fiber optic light cable	3
29	Glass Window Plug	3
30	Rubber Telescope Guide	3
31	Adaptor with sliding glass window plug, sealing cap, notched lens and keyhole opening, movable, for use with Full Lumen Tracheoscopes and Bronchoscopes	3
32	Injection Cannula, for positive pressure assisted ventilation system, O.D. 3.5 mm for use with bronchoscopes and tracheoscopes with LUER-lock	2
33	Instrument Guide, for suction catheter	1
34	Adaptor from bronchoscope to respirator	1
35	Rigid Suction Tube, diameter 4mm, working length 50 cm	1
36	Rigid Suction Tube, diameter 2.5mm, working length 50 cm	1
37	Coagulation Suction Tube, insulated, with connector pin for unipolar coagulation, 4mm diameter, 50 cm length	1
38	Rigid Suction Tube, with thumb control, outer diameter 4 mm, working length 55 cm	1
39	Coagulation Suction Tube, insulated, with connector pin for unipolar coagulation, diameter 3 mm, working length 35 cm	1
40	Unipolar High Frequency Cord	1
	General Comments:	

01	Every instrument from the same manufacturer. US FDA or European CE certificate	1
02	Warranty for Full Set	1 Year

4. RIGID PEDIATRIC BRONCHOSCOPY SET

S. No	Specifications	Qty
1	Straight Forward Telescope 0°, diameter 2.9 mm, length 36 cm, autoclavable, fiber optic light transmission incorporated, color code: green	1
2	Bronchoscope, length 30 cm, size 6	1
3	Bronchoscope, size 4.5, outer diameter 7.3 mm, inner diameter 6.6 mm, length 30 cm	1
4	Bronchoscope, size 4, outer diameter 6.7 mm, inner diameter 6 mm, length 30 cm	1
5	Bronchoscope, size 4, outer diameter 6.7 mm, inner diameter 6 mm, length 26 cm	1
6	Bronchoscope, size 3.5, outer diameter 5.7 mm, inner diameter 5 mm, length 30 cm	1
7	Bronchoscope, size 3.5, outer diameter 5.7 mm, inner diameter 5 mm, length 26 cm	1
8	Bronchoscope, size 3, outer diameter 5 mm, inner diameter 4.3 mm, length 18.5 cm	1
9	Bronchoscope, size 3, outer diameter 5 mm, inner diameter 4.3 mm, length 30 cm	1
10	Bronchoscope, size 2.5, outer diameter 4.2 mm, inner diameter 3.5 mm, length 18.5 cm	1
11	Bronchoscope, size 3.7, outer diameter 6.4 mm, inner diameter 5.7 mm, length 30 cm	1
12	Scissors, straight, single action jaws, sheath diameter 2.5 mm, with cleaning connector, length 35 cm	1
13	Forceps, alligator, for hard foreign bodies, double action jaws, sheath diameter 1.5 mm, working length 35 cm	1
14	Forceps, pointed, serrated, for coins and flat foreign bodies, double- action jaws, sheath diameter 1.5 mm, working length 35 cm	1
15	Forceps, for peanuts and soft foreign bodies, double-action jaws, sheath diameter 1.5 mm, working length 25 cm	1
16	Forceps, for peanuts and soft foreign bodies, double-action jaws, sheath diameter 1.5 mm, working length 35 cm	1
17	Forceps, spoon-shaped, round, for biopsy, double action jaws, diameter 3 mm, sheath diameter 1.5 mm,	1

	workinglength 35 cm	
18	Optical Forceps, with alligator jaws, for controlled grasping of hard foreign bodies, with force-limited handle, incl. cleaning adaptor, for use with Telescope	1
19	Optical Forceps, with KILLIAN bean jaws, for the controlled grasping of peanuts and soft foreign bodies, with force-limited handle, incl. cleaning adaptor, for use with Telescope	1
20	Optical Forceps, spoon-shaped, round, for biopsy, incl. cleaning adaptor, for use with Telescope	1
21	Optical Forceps, universal, for biopsy and foreign bodies removal, incl. cleaning adaptor, for use with Telescope	1
22	Optical Forceps, 2 x 2 teeth, for the controlled grasping of coins and flat foreign bodies, with force-limited handle, incl. cleaning adaptor, for use with Telescope	1
23	Optical Forceps, with alligator jaws, for the controlled grasping of hard foreign bodies, with force-limited handle, incl. cleaning adaptor, for use with Telescope	1
24	Optical Forceps, with KILLIAN bean jaws, for the controlled grasping of peanuts and soft foreign bodies, with force-limited handle, incl. cleaning adaptor, for use with Telescope	1
25	Optical Forceps, VANCOUVER model, with extra delicate jaws, for the controlled grasping of peanuts and soft foreign bodies, with force-limited handle, incl. cleaning adaptor, for use with Telescope	1
26	Optical Forceps, spoon-shaped, round, for biopsy, incl. cleaning adapter, for use with Telescope	1
27	Optical Scissors, for slicing of tissue, incl. cleaning adapter, for use with Telescope	1
28	Miniature Straight Forward Telescope 0°, semirigid, diameter 1.3 mm, length 30.6 cm, autoclavable, fiberoptic light transmission incorporated, color code: green	1
29	Prismatic Light Deflector, autoclavable, with connection to fiber optic light cable	5
30	Optical Forceps, with alligator jaws, for controlled grasping of hard foreign bodies, with force-limited handle, incl. cleaning adaptor, for use with neo-nate bronchoscope	1

31	Optical Forceps, spoon-shaped, round, for biopsy, incl. cleaning adaptor, for use with neo-nate bronchoscope	1
32	Injection Cannula, for positive pressure assisted ventilation system, LUER-Lock, outer diameter 2.7 mm	1
33	Telescope Bridge, for fixed position between telescopes & smaller pediatric bronchoscopes	1
34	Glass Window Plug	1
35	Rubber Telescope Guide, for use with telescopes or optical forceps	1
36	FLUVOG Adaptor, with sliding glass window plug, sealing cap, notched lens and keyhole opening, movable	1
37	Telescope Bridge, for fixed position between Telescope & longer pediatric bronchoscopes	1
38	Telescope Bridge, for fixed position between Telescope & pediatric Bronchoscopes	1
39	Telescope Bridge, for fixed position between Telescope & Bronchoscopes	1
40	Guiding Piece, short, for suction catheter for children and suckling bronchoscope	1
41	Adjustable magnifier, swing-away type, with plug connection, autoclavable	1
42	Adjustable magnifier, swing-away type, with ring adaption, autoclavable	1
43	Forceps, alligator, spoon-shaped, single action jaws, semiflexible, sheath diameter 1 mm, with cleaning connector, working length 35 cm	1
44	Forceps, spoon-shaped, for biopsy, single action jaws, semiflexible, width of jaws 1.2 mm, sheath diameter 1 mm, with cleaning connector, working length 35 cm	1
45	Injection Cannula, for positive pressure assisted ventilation system, LUER-Lock, outer diameter 3.5 mm	1
46	Adaptor, for respirator	1
47	Adapter from bronchoscope to any type of automatic respiration equipment, long model	1
48	Rigid Suction Tube, outer diameter 3 mm, working length 35 cm	1
49	Suction Tube, outer diameter 2 mm, working length 25 cm	1
50	Suction Tube, O.D. 2 mm, working length 35 cm	1

51	Suction Tube, with rubber tip, straight, outer diameter 2 mm, working length 35 cm	1
52	Cotton Carrier, working length 35 cm	1
53	Foreign Body Basket, with ring handle, working length 35 cm	1
54	Sponge Holder, spring handle, working length 35 cm	1
55	Coagulation Suction Tube, insulated, with connector pin for unipolar coagulation, diameter 3 mm, working length 35 cm	1
56	Unipolar High Frequency Cord	1
57	Aspirator and Bronchus Irrigator, with Graduated Container and Stopcock Cone with blower ball	1
58	Suction Tube, Length: 35 cm, diameter: 3 mm, for use with irrigator	1
59	Esophagoscope Tube Size 6 Length 30 Cm	1
60	Esophagoscope Tube Size5 Length 30 Cm	1
61	Esophagoscope Tube Size4Length 30 Cm	1
	General Comments: 1. Every instrument from the same manufacturer. 2. US FDA/European CE certificate 3. It should be compatible with the existing system	1
	Warranty for Full Set-replacement	1 Year

5. Specifications of Simulator for Ear Nose Surgeries

ENT Surgery Simulator

The simulator features should be highly realistic with force feedback, movements of the patient or endoscope should be real time, pre-defined tasks with automatic skills assessment, bleeding and suction, authoring your own cases and tasks, online updates, and a compact setup with a 3D flat panel display.

- System should have wide spectrum of cases
- Should have automatic recording and administration of training results
- Should have objective evaluation of performance (skills assessment)
- System should not be limited to the fixed modules but it should have provision to load CT/CBCT data so that user can create new simulation cases
- Reduced need for cadaveric specimens
- Should have ability to training with own patient cases

Basic Hardware

- System should be table mounted for the ease of working
- The workstation should have the ability to adjust height as per the training requirements
- Should have a 28 Inch, 3D autostereoscopic display. An organic 3D monitor that does

not require any 3D glasses to produce 3D images.

- Working table should have two ergonomic arm rests
- Two force feedback devices whose styluses serve as instruments (e.g. drill, endoscope, suction)
- Should have a space navigator for controlling the viewing direction and magnification
- Should have a keyboard in a drawer and a mouse
- The computer hardware should be placed below the table for the easy operations
- Should have a foot pedal for controlling the drill.

User Interface and Display

- System should have fully graphic user interface
- Should have 3D display of the patient, with 3D glasses for tempo cases
- Should have endoscopic camera view for sinus cases
- Patient may be freely positioned and zoomed in real time, using a space mouse
- System should offer navigation aids for the novice, that may be switched off for the advance users
- Navigation CT with three orthogonal cross-sectional images of the patient at instrument position, with removed tissues marked
- Should have warnings about structures at risk near the instrument (Tempo, Sinus)
- Acoustic facial nerve monitor (Tempo)

Virtual Patient

- Should have below modules

a. Temporal Bone Surgery Module

§ It should enable users for realistic handling of the drill and a suction and ideally suited to gain a thorough understanding of the surgical approaches.

§ Offers a set of predefined training cases of the middle ear, with different anatomy and pathology, including a sclerotic bone and a cholesteatoma.

§ Data offered should be based on high-resolution CT data of real cases.

§ Each case should be done as a left or right ear.

§ Structures at risk such as facial nerve, tympanic chord, semicircular canals, vestibular labyrinth, cochlea, auditory ossicles, carotid artery, sigmoid sinus and dura mater, should be highlighted.

§ An optional support function provides automatic alerts when the trainee is approaching critical structures.

§ Tempo module should provide a number of predefined tasks such as exposure of the sigmoid sinus, the short process of the incus or the facial nerve.

§ Should have an automatic skills assessment system, an immediate and objective feedback of the trainee's performance so that the difficulties can be identified and the trainee can concentrate to overcome on them.

§ An automatic video capture of the session should be available for debriefing.

Instructors may visualize learning curves of individuals and groups to

monitor and compare progress over time.

§ System should enable tutor that they can even define their own tasks and create master preparations, and thus use the simulator as an authoring system.

b. Endoscopic Sinus Surgery Module

§ Module should not only offer the surgery but should also offer the complete orientation of critical structures in the immediate vicinity.

§ Model should allow for realistic handling of the endoscope and a surgical instrument, and is especially suitable for training of orientation based on endoscopic images.

§ Patient and instruments should be modelled in high resolution inside a computer, and visualized on a 3D screen.

§ Cases offered in the module that are based on virtual reality techniques, they present a visual, haptic and auditory experience close to a real intervention.

§ It should provide straight and angular endoscopes, and various cutting instruments such as Blakesley forceps and a debrider.

§ All instruments should be fully functional, and allow for an arbitrary manipulation of mucosa and bone.

§ Structures at risk, such as periorbita, optic nerve, optic chiasm, ethmoidal cells, olfactory bulb and internal carotid artery are included in the underlying model, such that their position can be visualized and dangerous approaches or injuries can be detected.

§ Names of important landmarks such as the uncinate process should be displayed when the endoscope is aiming at them.

§ A virtual surgical navigation system should provide additional cross-sectional CT

images for comprehensive training.

§ Various tasks such as infundibulotomy, ethmoidectomy and sphenoid sinus surgery allow for a problem-based training.

c. My Cases Module

§ User can upload the pre-existing case data at their own will with ease

§ With this module, user can create own training cases from most interesting clinical or research data.

§ To upload the case one should have CT or CBCT data set in standard DICOM format.

§ User should be able to create a 3D bone model and start drilling. This new training case provides the same visuals and haptics as the predefined training cases and it can even bleed.

§ With advanced interactive segmentation tools, user should be able to add various structures at risk to the 3D model, such as the dura mater, the sigmoid

sinus, or the ossicles. These structures should have the same look and feel as in the predefined training cases, such as distinct colors and an alarm in case of an injury.

Virtual Instruments

- Instrument movement controlled with force feedback device
- Metal and diamond burs of various shapes and diameters, controlled with foot pedal
- Straight and angular endoscopes, variable angle of view (Sinus)
- Debrider, controlled with foot pedal (Sinus)
- Blakesley forceps, ostrum antrum punch, ethmoid cutter (Sinus)
- Visual, haptic and acoustic feedback

Recording Ability

- Preparations and results are automatically stored and may be recalled by trainee and/or tutor
- Video capture of complete session
- Visualization of learning curves of individuals and groups

Tasks and Skills Assessment

- Pre-defined tasks for selected cases for antrotomy, mastoidectomy (with various subtasks), and open mastoid cavity, with automatic skills assessment based on master preparations (Tempo)
- Should alert when approaching or injuring structures at risk
- Possibility to define own master preparations and tasks

Software Updates

- Should have facility to download the latest software updates as when offered by the company

6.SINUS ENDOSCOPY SET

HOPKINS® Wide Angle Straight Forward Telescope 0°, enlarged view, diameter 4 mm, length 18 cm, autoclavable, fiber optic light transmission incorporated, color code: green
HOPKINS® Wide Angle Forward-Oblique Telescope 30°, enlarged view, diameter 4 mm, length 18 cm, autoclavable, fiber optic light transmission incorporated, color code: red
HOPKINS Wide Angle Forward- Oblique Telescope 45°, enlarged view, diameter 4 mm, length 18 cm, autoclavable. Fiber optic light transmission incorporated. Color code: black
HOPKINS Wide Angle Lateral Telescope 70°, enlarged view, diameter 4 mm, length 18 cm, autoclavable. Fiber optic light transmission incorporated. Color code: yellow
HOPKINS® Straight Forward Telescope 0°, enlarged view, diameter 2.7 mm, length 18 cm, autoclavable, fiber optic light transmission incorporated, color code: green
HOPKINS® Forward-Oblique Telescope 30°, enlarged view, diameter 2.7 mm, length 18 cm, autoclavable, fiber optic light transmission incorporated, color code: red
KUHN-BOLGER Frontal Sinus Curette, 55° curved, oval, forward cutting, length 19 cm
Sickle Knife, pointed, length 19 cm
FREER Elevator, double-ended, semisharp and blunt, length 20 cm
Antrum Curette, oblong, small size, length 19 cm
KUHN-BOLGER Frontal Sinus Curette, 90° curved, oval, forward cutting, length 19 cm
Antrum Curette, forward cutting, small, length 19 cm
Probe, double-ended, maxillary sinus ostium seeker, ball-shaped ends diameter 1.2 and 2 mm, length 19 cm
COTTLE Elevator, double-ended, semisharp and blunt, graduated, length 20 cm
PASQUINI Suction Tube, For frontal sinus with olive and cut-off hole, LUER, outer diameter 2.5 mm, working length 13-15 cm
Bipolar Coagulating Forceps, insulated, bayonet-shaped, blunt, with integrated suction channel, with cut-off hole, tip - 1.4mm length 19 -20cm, for use with bipolar high frequency cord 847000E or 847000 M/W/V
STAMMBERGER Bipolar Suction Forceps, 45° upturned, with suction channel, for bipolar coagulation in paranasal areas, working length 12.5 cm, for use with Bipolar High Frequency Cords 847002 E or 847002 M/V/U

Bipolar High Frequency Cord, for AUTOCON®II400 SCB system (112, 114, 116), Autocon III 400, Valleylab coagulator, with two 2 mm cable sockets for Bipolar Suction Forceps 461010, 461015 and Bipolar Forceps 8615 A/AS, length 450 cm, pin-distance 28,58 mm.
STAMMBERGER Antrum Punch, right side downward and forward cutting, with cleaning connector, working length 10 cm
STAMMBERGER Antrum Punch, left side downward and forward cutting, with cleaning connector, working length 10 cm
STRUYCKEN RHINOFORCE® II Nasal Cutting Forceps, with cleaning connector, working length 13 cm
STAMMBERGER RHINOFORCE® II Antrum Punch, right side backward cutting, with cleaning connector, working length 10 cm
STAMMBERGER RHINOFORCE® II Antrum Punch, left side backward cutting, with cleaning connector, working length 10 cm
HEUWIESER Antrum Grasping Forceps, jaws curved to right, fixed jaw curved 90°, movable jaw backward opening 120°, with cleaning connector, working length 10 cm
BLAKESLEY RHINOFORCE® II Nasal Forceps, straight, size 0, with cleaning connector, working length 13 cm
BLAKESLEY-WILDE RHINOFORCE® II Nasal Forceps, 45° upturned, size 1, with cleaning connector, working length 13 cm
BLAKESLEY-WILDE RHINOFORCE® II Nasal Forceps, 90° upturned, size 1, with cleaning connector, working length 13 cm
STAMMBERGER RHINOFORCE® II Double Spoon Forceps, vertical opening, 65° upturned, spoon diameter 3 mm, with cleaning connector, working length 12 cm
STAMMBERGER RHINOFORCE® II Double Spoon Forceps, horizontal opening, 65° upturned, spoon diameter 3 mm, with cleaning connector, working length 12 cm
Biopsy and Grasping Forceps, vertical opening, malleable sheath end, cupped jaws diameter 4 mm, with cleaning connector, working length 18 cm, to be used for sinoscopy through Trocar 723005 A/B
STAMMBERGER Punch, circular cutting, for sphenoid, ethmoid and choanal atresia, diameter 4.5 mm, with cleaning connector, working length 18 cm, including Cleaning Tool 651050 R
STAMMBERGER Punch, circular cutting, 65° upturned, for frontal sinus recess, diameter 3.5 mm, with cleaning connector, working length 17 cm, including Cleaning Tool 651050 R
RHINOFORCE® II Nasal Scissors, straight, with cleaning connector, working length 13 cm

RHINOFORCE® II Nasal Scissors, curved to right, with cleaning connector, working length 13 cm
RHINOFORCE® II Nasal Scissors, curved to left, with cleaning connector, working length 13 cm
STAMMBERGER RHINOFORCE® II Antrum Punch, small pediatric size, slender, upward backward cutting, with cleaning connector, working length 10 cm
Biopsy and Grasping Forceps with oval cupped jaws 3 x 4 mm, sheath diameter 3 mm, with cleaning connector, working length 15 cm
RHINOFORCE® II Nasal Scissors, cutting blades curved upwards, to cut the anterior part of the middle turbinate in case of narrow nose and to prevent postoperative synechia, with cleaning connector, working length 13 cm
FERRIS-SMITH Nasal Forceps, serrated jaws, working length 11 cm
BLAKESLEY Nasal Forceps, dismantling, stright size 0 working length 11-12 cm
GRUNWALD-HENKE SILCUT Nasal Cutting Forceps, 45° upturned Shape-BLAKESLEY Size 1 with cleaning connector, working length 13-15 cm
Nasal Forceps, 45° upturned, through-cutting, tissue-sparing, BLAKESLEY shape, width 3.5 mm, working length 11 cm
Nasal Forceps, straight, through-cutting, tissue-sparing, BLAKESLEY shape, width 3.5 mm, working length 11 cm
Antrum Cannula, LUER-Lock, straight, malleable, with serrated grip plate, outer diameter 2.5 mm, working length 15 cm
KUHN Frontal Ostium Seeker, double ended, No. 4, both sides curved 90°, tips bent right and left, length 22 cm
KUHN Frontal Ostium Seeker, double endend, No. 5 both sides curved 77°, tips bent right and left, length 22 cm
v. EICKEN Antrum Cannula, LUER-Lock, with cut-off hole, short curve, outer diameter 3 mm, length 12.5 cm
v. EICKEN Antrum Cannula, LUER-Lock, with cut-off hole, short curve, outer diameter 4 mm, length 12.5 cm
KERRISON Punch, detachable, rigid, upbiting 40° forward, size 2 mm, working length 17 cm
Bipolar High Frequency Cord, length 300 cm, for AUTOCON® II 400 SCB systems (111, 113, 115, 122, 125), AUTOCON® II 200, AUTOCON® II 80, KARL STORZ Coagulator 26021 B/C/D, 860021 B/C/D, 27810 B/C/D, 28810 B/C/D, AUTOCON® systems (50, 200, 350), Erbe-Coagulator, T and ICC series and KARL STORZ

bipolar coagulation forceps
UNIT and Camera head
The system should have the Full HD Resolution -1920 X1080 - Internal Medical grade recorder for Capturing Full HD Videos and Full HD Stills with storage capability internal of 50 GB or External Medical grade recorder should be provided from the same manufacturer - System should have facility of controlling the recording device from the camera head. - Video Scopes can be connected to the same. - The camera system should be able to provide with 1080 P lines for HD resolution image <u>Technical Specifications:</u> Image sensor: CMOS AGC: Microprocessor controller Control buttons: 3 (2 of them freely programmable) Input: Keyboard input for character generator. Power Supply:- 100-240 VAC 50/60 Hz High Definition Medical Grade Monitor
The monitor should have: HDTV display in original 16: 9 format. 1080 p/ 50 & 1080 p/60 displays possible. LED crystal display. Max. Resolution of 1920X1080. Screen diagonal – 27inches Desk top with pedestal. Accessories External 24VDC Power Supply, Mains Cord, Pedestal.
Certified to : EN 60601-1, protection class IPX 1
LED Light Source with Fiber optic cable
Color Temperatures 6400K
Inbuilt or external
Light Outlets – 1
Light Intensity Adjustment: - Continuously adjustable manually and automatically by cameras video output signal.
Should be supplied with Diameter 4.8mm, Length 250cm.

"1. Complete system including Telescopes and its accessories should be from same manufacturer for total system compatibility and optimal system performance.
2. System should be BIS Approved/USFDA Approved and European CE certificate with 4 digits notified body.
3. OEM should have ISO 13485:2016 certified service process in India."
<u>ALL the above equipment's should be from Same manufacturer.</u>
1. Complete system including Telescopes and its accessories should be from same manufacturer for total system compatibility and optimal system performance.
2. System should be BIS Approved/USFDA Approved/ European CE certificate with 4 digits notified body.
3. OEM should have ISO 13485:2016 certified service process in India.

7.OAE System

DPOAE: 2KHz ,3KHz ,4khz and 5KHz @ 65/55 dB

TEOAE: 1.5KHz to 4KHz @ 80dB Pe SPL

Handheld Unit with W x D x H: 2.8 in x 1.3 in x 7 in

CE & USFDA Certification.

Display Color OLED display

User Input: 4-button operation

Connecters: Micro-USB for charging and communication HDMI for probe

Communication to PC: Micro-USB

Should have grip on both the sides of the device in order to hold the device properly Probe Connector: HDMI Probe design Integrated microphone and receivers in probe head, Calibration data stored on probe

Cable length: Min 40" Microphone Noise -13 dB SPL @ 1kHz (1 Hz bandwidth)

Ear tips : Single use disposable Ear tips of all and probe tubes

Data Test memory: 250 tests on unit

Patient names: Patient names on unit

(optional) Graphic Display: Bar graph, value graph Results : Pass, Refer, Noisy, No Seal, Fit Err

Data Manager Display: Patient records, graphic and tabular results

Results Transfer: From Equipment to Data Manager/Software and must be upgradable to support own cloud storage of the manufacturer in the future. Report Export: PDF, RTF, Image Files

Power

Battery: 3.6 V rechargeable lithium ion

Battery Life: 20 hours on time

Charge Time: 4 hours to 100 %

Accessories Standard: Hand-held unit, Probe, Micro USB Charging cable for Charger, Database software and micro USB connector, disposable ear tip kit and tubes, User Manual, Quick Guide, Calibration Certificate

8. ENT Head Light With LED

- i. The quoted model should have “USFDA (510K/CFG/PMA)” OR “EU-CE certified where the EU- CE certificate should be issued from a notified body having notified body number”. (OR Class 1 declaration)
 - ii. The manufacturer of the quoted product should have “EN ISO 13485 certificate issued from a notified body” OR “ICMED 13485 (with or without plus) certificate issued from certification bodies.
- (a) Technical Specification:
- 1) Light source should have 10W LED or better with BRIGHT white light Illumination.
 - 2) Light Intensity should be 2,60,000 Lux
 - 3) Colour Rendering Index (CRI) should be 90 or better.
 - 4) Colour temperature 4,500°K or better.
 - 5) LED life should be 80,000 hours or more.
 - 6) Battery Back up– 3.50 hours or more
 - 7) Battery service life: see above, depends on model; infinite with 4-bay charger
 - 8) USB charging time: 6.5 hours
 - 9) 4-bay charging time: 10 hours; charge up to two sets at a time
 - 10) Adjustability: full beam angle adjustability, left-to-right swivel, increased spot size range
 - 11) Spot quality: crisp, circular beam of homogenous light
 - 12) At 450mm distance the diameter of light should be at least 190mm
 - 13) The Headlight should be truly wireless
 - 14) unit should be CE/USFDA/BIS and ISO13485 for the manufacture.

7. Stroboscope

S. No	Specification
1	High definition Camera System
	The system should have the maximum Resolution of 1920 X 1080 pixels, progressive scan and the consistent use of 16: 9 formats · Internal Medical grade recorder for Capturing FULL HD Videos and HD Stills with storage capability of 50GB internally and 500 GB externally. · 18 inch or more touch screen for Play back of Recorded Videos and Controlling the features of camera system. · System should have facility of controlling the light source and recording device from the camera head. · Video Scopes can be connected to the same. · Should be compatible with single use flexible scopes in addition to rigid and flexible scopes. <u>Technical Specifications:</u> Image sensor: CMOS Pixels 1920 x 1080 AGC: Microprocessor controller Control buttons: 3 (2 of them freely programmable) Input: Keyboard input for character generator. Power Supply: 100-240 VAC 50/60 Hz
3	High-Definition Medical Grade Monitor
	The monitor should have: HDTV display in original 16: 9 formats. 1080 p/ 50 & 1080 p/60 displays possible. LED crystal display. Max. Resolution of 1920X1080. Screen diagonal – 18 inches or more Either inbuilt or external
4	LED Light Source with Fiber optic cable
	· Color Temperatures 6400K · Inbuilt or external · Light Outlets – 1 · Light Intensity Adjustment :- Continuously adjustable manually and automatically by cameras video output signal.

	Should be supplied with Diameter 4.8mm, Length 300cm.
5	Rigid Stroboscopy Solution
	Compatible Rigid Telescopes with following features. Strobo-Laryngoscope, with integrated lateral telescope 70°, oval sheath, 7.2 x 9.3 mm, working length 17 cm, autoclavable, fiber optic light transmission incorporated, color code: yellow. Tele-Laryngo-Pharyngoscope, with integrated lateral telescope 90°, diameter 5.8 mm, length 20 cm, autoclavable, fiber optic light transmission incorporated, color code: blue. Tele-Laryngo-Pharyngoscope, with Lateral Telescope 90°, magnification 4x, focusing, ø 10 mm, working length 15 cm, autoclavable, fiber optic light transmission incorporated, color code: blue Footswitch with USB port and integrated activation key for stroboscopy function (plug & play), for use with system along with microphone. Trolley - Indian
	<u>ALL the above equipment's should be from Same manufacturer USFDA & CE approved from notified body.</u>

Specification for the Department of Pharmacology

1. Digital Flame Photometer

- Should have the capability to measure Na, K, Ca, and Li with an appropriate filter system.
- Should have a digital display for direct readings of concentrations.
- Sensitivity: Na-0.5 ppm, K-0.5 ppm, Ca-1.0 ppm, Li -0.5 ppm.
- Should have an automatic gas ignition system for safe operation.
- Should support both LPG and compressed air as fuel sources.
- Should have a built-in calibration facility with standard solutions.
- Should have a sample aspiration rate of at least 3-5 mL per minute.
- Should have a linearity range of at least 0-100 ppm for Na and K.
- Should be supplied with necessary accessories, including filters, standard solutions, and a compressor.
- Should have an RS-232/USB port for data transfer and software compatibility for analysis.
- The unit should have CE/USFDA/BIS certified.
- ISO13485 for the manufacture.
- 3 Years warranty and 4 years CMC.

2. Pole Climbing Apparatus

- ▶ Should be designed for evaluating neuropharmacological effects in rodents.
- ▶ Should have a pole height of at least 50 cm and a diameter suitable for small rodents (rat/mice).
- ▶ Should include an inbuilt shock grid with adjustable shock intensity (0-100V).
- ▶ Should have a digital timer with an accuracy of at least 0.1 seconds for latency measurement.
- ▶ Should include a sound stimulus system for conditioned response studies. -
- ▶ Should have a transparent enclosure to ensure clear visibility of the test subject.
- ▶ Should be user-friendly with an easy-to-clean surface and corrosion-resistant materials.
- ▶ Should be powered by a stable electrical supply (230V, 50Hz).
- ▶ The unit should have CE/USFDA/BIS certified.
- ▶ ISO1345 for the manufacture.
- ▶ 3 Years warranty and 4 years CMC.

3. Spectrophotometer

- ▶ Should have a wavelength range of at least 190-1100 nm.
- ▶ Should include a monochromator with high-resolution optics for accurate readings.
- ▶ Should have a spectral bandwidth of 1-2 nm.
- ▶ Should have a digital display for absorbance, transmittance, and concentration readings.
- ▶ Should have a scanning speed of at least 3000 nm/min.
- ▶ Should have an automatic wavelength selection and calibration feature.
- ▶ Should have a sample compartment compatible with both cuvettes (1 cm path length) and micro-volume cells.
- ▶ Should support multiple measurement modes including absorbance, transmittance, and kinetics.
- ▶ Should include software for data processing and transfer via USB or RS-232.
- ▶ Should be supplied with at least 4 quartz cuvettes and 4 glass cuvettes.
- ▶ The unit should have CE/USFDA/BIS certified.
- ▶ ISO1345 for the manufacture.
- ▶ 3 Years warranty and 4 years CMC.

4. Mammalian Heart Perfusion Assembly

- ▶ Should be designed for Langendorff's isolated heart perfusion experiments.
- ▶ Should include a thermostatically controlled water bath with a temperature range of 25-45°C.
- ▶ Should have a peristaltic or gravity-fed perfusion system with an adjustable flow rate.
- ▶ Should include a reservoir for perfusion solution with an appropriate capacity (500-1000 mL).
- ▶ Should have a heart chamber made of transparent material for clear observation.
- ▶ Should include a force transducer for contractility measurement.
- ▶ Should have an oxygenation system for aeration of the perfusion fluid.
- ▶ Should have digital recording capability for heart rate and pressure monitoring.

- Should be compatible with standard physiological solutions (e.g., Krebs-Henseleit buffer).
- Should be supplied with all necessary tubing, connectors, and accessories for setup.
- The unit should have CE/USFDA/BIS certified.
- ISO1345 for the manufacture.
- 3 Years warranty and 4 years CMC.

Specification for the Department of Forensic

1.AUTOPSY EXAMINATION INSTRUMENTS

Basic Cutting Instruments

1. Scalpels

Description Used for precise incisions and dissections

Specifications.

- Blade material: Stainless steel.
- Blade types: Disposable or reusable, straight or curved.
- Common sizes: No. 10, 11, 20.

2 Postmortem Knife

• Description: Heavier and larger than a standard surgical knife. used for deep tissue cutting.

Specifications:

- Blade length: 6-8 inches.
- Blade shape: Straight or curved.
- Handle: Ergonomic grip.

3. Bone Saw

• Description: For cutting through bones, particularly the skull and ribs.

Specifications:

- Types: Manual (oscillating) or powered (electric).
- Blade: Serrated stainless steel.
- Speed (for powered saws): Adjustable settings.

4. Rib Shears

• Description: Designed to cut through rib cages with minimal effort.

• Specifications:

- Blade type: Double-bladed or single-bladed.
- Handle: Spring-loaded or standard.

Dissection Tools

5. Forceps

• Description: For grasping and manipulating tissues.

Specifications

- Material Stainless steel
- Types Straight or curved, toothed or non-toothed
- Length. 5-8 inches

6. Scissors

Description: Used for cutting tissues or organs.

Specifications

- Types: Metzenbaum scissors (for delicate tissues), Mayo scissors (for heavier tissues).

- Blade: Straight or curved.
- Length: 6-9 inches.

Bone and Joint Instruments

7. Chisel and Mallet

- Description: For opening the skull or splitting bones.
- Specifications:
 - Chisel: Stainless steel, flat or beveled edge.
 - Mallet: Rubber or steel head with an ergonomic grip.

8. Skull Breaker

Description: A specialized instrument to remove the cranial vault.

Specifications:

- Material: High-grade stainless steel.
- Design: Tapered or blunt ends.

9. Spinal Cord Cutter

- Description: For severing the spinal cord during autopsies.
- Specifications:
 - Blade material: High-strength stainless steel.
 - Handle: Non-slip grip.

Measuring and Sampling Tools

10. Measuring Tapes and Scales

Description: Used for measuring the dimensions of wounds or organs

Specifications:

- Material: Flexible, non-elastic (plastic or steel)
- Length: Typically 60-120 cm

11. Needles and Syringes

Description: For collecting fluid samples like blood or vitreous humour

Specifications:

- Needle gauge: 18-21 G.
- Syringe volume: 5-50 ml.

12. Calipers

Description: For measuring bone thickness and other dimensions.

Specifications:

- Material: Stainless steel.
- Measurement range: Up to 12 inches.

Specimen Collection Tools

13. Tissue Forceps

Description: For collecting and handling tissue samples.

Specifications:

- Length: 6-8 inches.
- Material: Stainless steel.

14. Autopsy Needle

Description: For suturing the body after an autopsy.

Specifications:

- Needle size: 6-8 inches.
- Suture material: Non-absorbable, like nylon.

15. Fluid Collection Containers

Description: Used to store blood, bile, or other fluids.

Specifications:

- Material: **Glass** or high-density plastic.
- Volume: 50 ml to 1L.

Miscellaneous Tools

16. Brain Knife

Description: long blade for precise cutting of the brain.

Specifications:

- Length: 10-12 inches.
- Blade: Thin, flat, stainless steel.

17. Probes

Description: Used to trace wounds or pathways.

Specifications:

- Material: Stainless steel.
- Shape: Straight or curved.

18. Buckets and Trays

Description: For collecting organs or fluids.

Specifications:

- Material: Stainless steel or plastic.
- Capacity: 5-10 Liters.

19. Magnifying Glass

Description: Used for detailed examination of small tissues or wounds.

Specifications:

- Magnification: 2x-10x.
- Diameter: 4-6 inches.

20. Suction Apparatus

Description: For removing fluids during dissection.

Specifications:

- Suction power: Adjustable (50-200 mm 11g).
- Hose material: Flexible PVC or silicone.

2. AUTOPSY EXAMINATION TABLE

An advanced autopsy table is an essential fixture in medical colleges and forensic labs for conducting postmortem examinations. These tables are designed with sophisticated features to ensure hygiene, safety, durability and ease of use Here are the key specifications of advanced autopsy tables suitable for medical colleges.

1. Construction Material

- Material: High-grade stainless steel (AISI 304 or 316) for durability. Corrosion resistance and easy cleaning.
- surface Finish: Polished or brushed finish to prevent bacterial growth and ensure smooth cleaning

2. Dimensions

- Table Size: Standard dimensions:
 - o Length: 2,400 mm (approx. 8 feet).
 - o Width: 750-900 mm (approx. 2.5-3 feet).
 - o Height: Adjustable between 750 mm to 1,000 mm (hydraulic or electric adjustments).
- Weight Capacity: At least 250-300 kg.

3. Drainage System

- Sink: Integrated deep sink with a sloped surface for efficient fluid drainage.
 - Drain Outlet: 2-inch diameter, connected to plumbing for easy discharge of fluids.
 - Overflow Protection: Overflow drainage system to prevent spillage.
4. Ventilation and Odor Control
 - Ventilation: Built-in downdraft or overhead suction system to control fumes and odours.
 - Airflow: Adjustable ventilation rate (e.g., 200-500 cubic meters per hour).
 - Connection: Compatible with centralized air extraction systems.
 5. Autopsy Features
 - Cutting Board: Detachable polyethylene or similar high-strength, non-porous material.
 - Head Rest: Adjustable headrest for positioning the cadaver.
 - Perforations: Perforated tabletop design to facilitate fluid drainage while ensuring stability
 6. Mobility and Adjustability
 - Height Adjustment: Hydraulic or electric height adjustment for ergonomic operation.
 - Mechanism: Electrically or manually controlled table tilt for easy drainage and positioning
 - Wheels: Heavy-duty casters with locking mechanism for mobility and stability.
 7. Integrated Water Supply
 - Taps: Hot and cold-water mixer taps with a flexible hose for washing.
 - Water Pressure: Adjustable flow rate for precise control.
 - Spray Gun: Handheld spray gun for efficient cleaning.
 8. Lighting and Instrument Storage
 - Lighting: Overhead LED lights with adjustable intensity for better visibility.
 - Storage: Integrated drawers or shelves for storing instruments and supplies.
 9. Electrical Features
 - Power Supply: 220-240 V, 50/60 Hz (customizable for regional standards).
 - Control Panel: Digital or analog control panel for height adjustment, lighting, and ventilation.
 - Safety: Electrical insulation and waterproof design to prevent accidents.
 10. Safety and Hygiene
 - Anti-Slip Surface: Textured tabletop to prevent cadaver slippage.
 - Sterilization: Easy-to-clean surfaces and compatibility with chemical disinfectants.
 - Waste Disposal: Integrated waste bins or shredders for tissue disposal.
 11. Optional Features
 - X-ray Compatibility: Radiolucent tabletop section for imaging without moving the body.
 - Body Lifting System: Integrated lift mechanism for loading and positioning cadavers.
 - Camera Mounts: For recording autopsy procedures for educational purposes.

Compliance Standards

- Meets international safety and hygiene standards, such as
 - o CE certification (for electrical components).
 - o ISO 9001 or ISO 13485 standards for medical equipment

3. BONE CUTTING OSCILLATING SAW

A bone-cutting oscillating saw is a specialized tool used during autopsies to efficiently and safely cut through bone, particularly the skull. Below are the detailed specifications suitable for such a saw, especially for use in medical colleges or forensic labs:

1. Power Source

- Type: Electric or battery-operated.
- Voltage: 110-240 V (for electric saws) with options for universal power input.
- Battery Life: For cordless models, a rechargeable lithium-ion battery with a runtime of 60-90 minutes per charge.
- Backup Options: Spare battery or dual power option (electric and battery).

2. Oscillation Mechanism

- Speed: Adjustable oscillation speeds ranging from 10,000 to 20,000 oscillations per minute for precision cutting.
- Amplitude: Short oscillation length to reduce vibration and ensure controlled cuts.
- Motor Type: Brushless DC motor for reduced noise, longevity, and consistent performance.

3. Cutting Blade

- Material: Stainless steel or tungsten carbide for durability and sharpness.
- Blade Size:
 - Length: 50-100 mm.
 - Thickness: 1.5-2 mm.

- Blade Type: Replaceable, bi-directional blades for skull cutting.
- " Sterilization: Autoclavable for easy disinfection.

4. Ergonomic Design

- Handle: Non-slip, ergonomic grip with anti-vibration features to reduce hand fatigue
- Weight: Lightweight (1.5-3 kg) for ease of use during prolonged procedures
- Design: Compact and balanced for precise maneuvering in confined areas.

5. Noise and Vibration

- Noise Level: Below 70 dB for operator comfort.
- Vibration: Minimal vibration due to advanced dampening technology, enhancing accuracy and safety.

6. Safety Features

- Safety Lock: Integrated switch lock to prevent accidental activation.
- Overheating Protection: Thermal cutoff feature to prevent motor damage during prolonged use.
- Blade Guard: Retractable guard to protect surrounding tissue and operator.

7. Cleaning and Sterilization

- Material: Corrosion-resistant housing for easy cleaning.
- Disassembly: Detachable components for thorough cleaning and maintenance.
- Compatibility: Autoclavable parts and splash-proof design.

8. Accessories

- Blade Types: Comes with multiple blade options for different types of cuts (fine, coarse).
- Storage Case: Rigid, sterilizable case for safe transport and storage.
- Power Cord Length: Minimum 2.5 meters for flexibility (for electric models).
- Charger: Fast-charging adapter for cordless models.

9. Compliance Standards

- Certifications: CE, ISO 13485, or FDA-approved for medical use.
- Standards: Compliance with medical device regulations for safety and performance.

10. Additional Features

- * **Integrated** LED light for improved visibility in poorly lit areas
- Torque Adjustment: Variable torque settings for cutting different bone densities.
- Warranty: At least 1-2 years warranty for parts and motor.

Typical uses

- Cutting through the skull cap during craniotomy in autopsies.
- precision bone cutting for forensic investigations.

TECHNICAL SPECIFICATION

4. TISSUE BATH

A tissue bath for autopsy use is a specialized apparatus designed for soaking, storing, or tissues during or after dissection. It is commonly used in medical colleges, pathology labs, and forensic facilities for tissue preservation and hydration. Below are detailed specifications for a tissue bath suitable for autopsy applications:

1. Construction and Material
 - Material: High-grade stainless steel (AISI 304 or 316) for corrosion resistance and durability.
 - inner Coating: Optional non-reactive coating (e.g., Teflon or polypropylene) for use with chemical solutions.
 - Surface Finish: Polished or matte finish for easy cleaning and resistance to staining.
 - Capacity: Available in various sizes, typically 5-30 liters, depending on the intended use and tissue volume.
2. Dimensions
 - Standard Sizes:
 - Small: 500 mm x 300 mm x 200 mm (Lx Wx H).
 - Large: 1000 mm x 500 mm x 300 mm (Lx Wx H).
 - Depth: Minimum depth of 150 mm to accommodate larger tissue specimens or organs.
3. Temperature Control
 - Temperature Range: Adjustable from room temperature to 60°C (or higher for specialized applications).
 - Heating Mechanism: Embedded heating elements for uniform temperature distribution.
 - Thermostat: Digital thermostat with an accuracy of ±1°C for precise control.
 - Insulation: double wall construction with thermal insulation to maintain consistent temperature and energy efficiency
4. Circulation system
 - water circulation built in pump for continuous water flow to ensure uniform heating or cooling
 - Filtration replaceable filter system to remove debris and maintain water quality
5. Lid and cover
 - Lid Material: Transport acrylic or Stainless-steel lid with an airtight seal to minimize evaporation and contamination.
 - Design: removable or hinged lid with handles for ease of use.
6. Safety features
 - Overflow protection: Built-in Overflow outlet to prevent spillage.
 - Drainage system: integrated drain valve for quick and efficient liquid removal
 - Overheating Protection: Automatic cutoff to prevent overheating
 - Non-slip Base: Rubberized or textured base to ensure stability during use.
7. Compatibility
 - Chemical Resistance: Compatible with common tissue preservation chemicals (e.g., formalin, saline).
 - pH Range: Resistant to acidic and basic solutions typically used in pathology.
8. Additional Features
 - Agitation system: Optional gentle agitation for improved mixing of solutions and better tissue penetration.
 - Portability: Handles or wheels for easy movement in the autopsy room

- Measurement Markings: Graduated volume markings inside the bath for precise solution preparation
- 9. Control panel
 - Type: Digital or analog control panel.
 - Features
 - Temperature Display
 - Timer with adjustable intervals (up to 24 hours)
 - Start/stop functionality for circulation and heating
- 10. Compliance Standards
 - Certifications ISO 9001, CE, or equivalent standards for laboratory equipment
 - Electrical Compliance: Meets safety standards (e.g., IEC 61010-1) for laboratory equipment
- 11 Personal Accessories
 - Specimen Trays: Perforated or mesh trays for holding tissues
 - Chemical Dispenser: Integrated dispenser for precise addition of preservation fluids
 - pH Monitor: For continuous monitoring of solution acidity.
 - UV sterilization: Built-in UV lamp for sterilizing the bath.

Specification for the Department of Neurology

1. SPECIFICATIONS 4 Channel EMG /NCV/EP System

Technical Specifications

Channels 4
 Sensitivity : 0.1, 0.2, 0.5, 1, 2, 5, 10, 20, 50, 100, 200, 500 uv/ div : 1, 2, 3, 5mv / div. High Cut: Selectable at 100, 200, 500 Hz : 1KHz
 Low Cut : Selectable at 2, 20, 30, 100, 200, 500 HZ, 1KHz
 CMRR : >100 db
 Input Impedance : >100 M ohm (common mode)
 Noise : < 2uV peak to peak (10 Hz to 10 KHz)
 A/D converter : 4 bit analog digital conversion

EMG

- Real time data storage & review facilities at different sweep speed & sensitivity.
- Needle & Surface EMG
- Recruitment, Intertional Spontaneous, Turn/ Amplitude & Polyphasic analysis.
- Motor unit Potential Analysis.
- Botox Needle EMG Compatible

NERVE CONDUCTION STUDIES

- Motor Nerve Conduction Studies.
- Sensory Nerve Conduction Studies
- Blink Reflex
- H-Reflex
- F-Waves
- Repetitive Stimulation/Myasthenia/Decrement

EVOKED POTENTIALS

- Visual Evoked Potential
- Auditory Evoked Potential

- Somatosensory Evoked Potential
- P-300, MLR, LLR.SSR (Sympathetic Skin Response)

FEATURES

- Operating System Window-10/11.
- The equipment should be operated with 220V/240V.50Hz
- Automakers for automatic measurement of latency
- Amplitude, area, and velocity calculations.
- Adjustable sensitivity parameters.
- Split Screen facility for display multiple screen at the same time.
- Marker & Comment facilities on print.
- The built in Nerve Muscle directory on line report generation.
- The system is User's friendly provision of foot switches for single, Repetitive, Record and from Console Unit.
- Comprehensive auto report generation.
- Coloured & Black Prints Out.
- Facility for LED Goggles stimulation.
- The stimulator should have option to operate from board as well as from foot.
- Archiving facility of coping to 3.5, 1.44 MB floppy disc drive and hard disk.

Standard Accessories:

1. Surface Disc Electrodes	- 20 Nos.
2. Sensory Ring Electrodes	- 08 Nos.
3. EMG Needle connector	- 01 No.
4. EMG Needle	- 02 Nos.
5. Electrical Stimulator	- 01 No.
6. BAER head phones	- 01 No.
7. Foot Switch	- 01 No.
8. Ground Wire	- 03 No.
9. Conductive paste & Gel	- 05 Nos.
10. Measuring tape	- 01 No.
11. CPU interface cable	- 01 No.
12. Sticking tape roll	- 05 No.
13. Screw driver.	- 01 No.
14. Software Backup on CD	- 01 No.

Computer Hardware compatible to

1. CPU - Processor i3, 8 GB RAM, 500 GB HDD, DVD R/w or better
2. Monitor - 19.5" or more
3. Printer - Windows supporting Inkjet Colour Printer.
4. Operating System: Window 10 or better

Certificates & Warranty

1. The unit should have Notified 4 digit CE/USFDA/BIS.
2. ISO1345 form notified body for the manufacture.
3. 3 Years warranty and 4 years CMC.

2.Polysomnography Video Sleep Study System

Parameters:-

EEG21 Channels.

EOG..... 02 Channels.

EMG..... 02 Channel.

EKG.....01 Channel.

PLM..... 01 Channel

Abdominal Effort...01 Channel SPO2 01

Channel.

Pulse01 Channel.

Chest Respiration....01 Channel. Air Flow

..... 01 Channel.

Snoring..... 01 Channel.

Body Position 01 Channel

Nocturnal Penile Tumescence....01 No.

Video monitoring should have following features:-

FEATURES:-

- Complete Patient data along with Video can be stored on CD, which can be viewed on any other computer
- On live audio recording.
- Facility to smooth scrolling of EEG data with Patient movements at same speed as in acquisition.
- Complete patient questionnaire before and after sleep study .
- In built word processor for Patient reporting .
- On line display of heart rate, RDI and sleep stages.
- On line printing of complete analysis of user selectable time.
- On line split screen to view data at different sweep speed.
- Automatic restart of test even on complete shut down.

AUTOMATIC MARKING PROVISION:-

- Apneas & Hypopneas : (obstructive central or mixed apneas)_
- Arousals, Desturation, Pulse Rate
- Spike detection sleep stages scoring
- Sleep spindles –K- Complexes-Arousal-REM.

Specifications for the Department of Neuro Surgery

FOLLOWING REPORTS ARE PRINTED AFTER the test is completed

- sleep stages : S1,S2,S3,S4, REM, Wake time.
- Oxygen Destruction, HR Variatin, Body Position.
- Limb movement, snoring, summary report.

The System should Comprises of the following items

- | | |
|---------------------------------|-----------|
| - Body Position Transducer | - 01 No. |
| - SPO2 Probe | - 01 No. |
| - Limb Movement Sensor | - 01 No. |
| - Snoring Senor | - 01 No. |
| - Mike for Room Audio Recording | - 01 No. |
| - Respiration Belt Thoracic | - 01 No. |
| - Respiration Belt Abdomen | - 01 No. |
| - Nasal Flow Probe | - 01 No. |
| - EMG Surface Electrodes | - 10 Nos. |
| - EKG Limb Electrodes | - 04 Nos. |
| - EOG Surface Electrodes | - 06 Nos. |
| - EEG Disc Electrodes | - 25 Nos. |
| - 10-20 Conductive Paste | - 02 Nos. |
| - Earthing wire | - 01 No. |
| - USB Cable | - 01 No. |

Computer Hardware: Core i7 Processor or Higher 8 GB RAM,
1 TB Hard Disk. CD/DVD/ Combo drive.

Monitor : 21" colored Monitor supporting 1280 /1024
resolution Printer : Inkjet colored.

Trolley : with flexible arm stand card.

Certificates & Warranty

- 1.The unit should have Notified 4 digit CE/USFDA/BIS.
- 2.ISO 1345 form notified body for the manufacture.
- 3.3 Years warranty and 4 years CMC.

Specification of the Department of Neuro Surgery

1.CAROTID DOPPLER, INTRA OPERATIVE DOPPLER

1. Should have 8MHz bidirectional, 10MHz, 20MHz probes
2. Should have LCD Color display with waveform of numerical parameters, pulsatility index, resistance parameter, systolic to diastolic ratio
3. Should be able to perform arterial and venous examinations
4. ABI cuff set with manometer.
5. ISO 13485 and US FDA/CE/BIS.
6. Inbuilt battery with 9V Alkaline rechargeable battery

2.INTRA-OPERATIVE NEURO-MONITORING

1. Should have Amplifier with at least 32 recording channels with the option to upgrade up to 48 channels.
2. Should have provision to upgrade the system for Micro Electrode Recording software and hard ware System.
3. Stimulation and recording boxes should have color coding for ease of use and connectivity.
4. Should have monitoring capability of EMG (Electromyograph), CMAP (Continuous Muscle Action Potential), NAP (Nerve Action Potential), MEP (Motor Evoked Potential), SSEP (Somato- Sensory Evoked Potential), AEP (Auditory Evoked Potential), VEP (Visual Evoked Potential), TOF (Train of four), EEG (Electroencephalograph), PUSEP (Phase-reversal SEP), Spine.
5. The Notebook should have at least Intel® i5-6440HQ, 8GB RAM, 500GB, 1920x1080, Windows 7, 1xUSB 2.0, 2xUSB 3.0, 1xLAN, 1xCOM, 1xDisplay port, 1xAudio.
6. Should have Amplifier Bandwidth in the range of 0.5Hz-5 kHz.
7. Should have maximum input noise level of $\leq 1.5\mu\text{VEFF}$ (30Hz-2.5 kHz).
8. Should have impedance measurement simultaneously on all input channels possible.
9. Should have Constant current stimulator, charge balanced.
10. Should have Controlled discharge stimulation pulse for optimizing the stimulation artifact reduction during recording of corticobulbar MEPs and D-waves.
11. Should have at least 12+1 channels for Stimulation (in which 1 channel is dedicated for DNS).
12. Should have minimum of 0.05mA and a maximum of 5mA current range for DNS and for other stimulation channels with a maximum of 25mA for probe stimulation.
13. Should have 0.2mA to 250mA current stimulation for MEPs.
14. Should have stimulation pulses in the range of 1-9 pulses.

15. Should have stimulation frequency in the range of 0.2 – 450Hz.
16. Should have pulse width of 60µs - 1500µs.
17. Should have External Stimulator trigger via Foot/Hand switch or TTL trigger (at least available for EMG).
18. Should have at least two stimulators can be in use at the same time and all the stimulation outputs could be controlled separately.
19. Both the Referential amplifier (for recording EEG/SEP/AEP/VEP) and differential recording (for recording EMG/MEP) should be available with the system.
20. Future upgrades in hardware and software should be modular and automated within minutes, without further installations, possible.
21. Should have automatic storage of all recorded responses.
22. Should have pre-installed templates for different applications and easy programming of user defined measurement programs.
23. Measurement programs should be editable at any time during the measurement.
24. Should have both hardware and software mute function to reduce HF artifacts.
25. Should have simultaneous video and audio integration of up to four external sources.
26. Should be capable of generating the patient report with all recorded measurements and patient details in a PDF/word format which could be accessible at any time.
27. Should have complete range of accessories for recording and stimulation for all application fields.
28. Should be supplied with:
 - a. Suction stimulation Probe – 3 no's
 - b. Monopolar stimulation probe Reusable – 1 no's
 - c. Bipolar stimulation probe Reusable – 1 no's
 - d. Subdermal needle electrodes Reusable – 20 no's
 - e. Surface electrodes – 36 no's
 - f. Corkscrew electrodes – 60 no's
 - g. Surgeon mini screen for control from sterile field optional;
 - h. Laryngeal electrode Select 6 – 7 mm – 5no's
 - i. Laryngeal electrode Select 7 – 9 mm – 5n's
 - j. Goggles for VEP 1 set
 - k. AEP insert earphones 1 set

29. Should have possibility to record the whole screen including video and audio signal and storage on to the PC or to the network.
30. Must be European 4 digit CE or US FDA approved.
31. The supplier need to provide the individual prices of all reusable and disposable consumables required for operation of the system.
32. Should have 3 year warranty

3. GUIDED NEURONAVIGATION SYSTEM FOR CRANIAL and SPINAL APPLICATIONS:

General System Specifications:

- The System should be easy to set up, user friendly, intuitive and should work with Windows/Unix/Linux operating system environment.
- Navigation software should be based on 64-bit processing architecture for improved performance and reliability.
- The system should have passive IR based Optical pattern recognition Tracking technology.
- The Surgeon Monitor should be high resolution (1920X1080) with a viewable size of 27" widescreen or higher.
- Transfer exams to the Navigation system via PACS, DICOM, USB storage device, or CD/DVD
- The system must have dynamic referencing so that registration is not lost even if camera or patient moves.
- The system should be single/Dual cart for optimal use of OT space.
- The system must be mobile to transfer easily between surgical theaters by a single person.
- System should have a minimum 16GB of RAM and 1TB of M.2 solid-state drive for faster performance.
- The system must support 220V power supply.
- Future updation on all the software supplied along with the system should be done free of cost for 5 years.
- Warranty: 3 Years on the complete system. No extra cost of 3D tracking consumables should be charged during warranty period (if any) for all the cases done during warranty period considering 200 cases/ year
- The system must include technical documentation.

- The system should come with compact handheld smart wireless controller to control the navigation system workflow either from a distance or from inside the sterile field.
- The navigation system and Cranial and Spine softwares should have CE/FDA/BIS/ CDSCO Approval
- The system should have High Definition video output option.
- The system should have screenshot storage function for documentation purpose.
- The system should have inbuilt high definition screen recording function. It should record HD video of the surgical workflow & navigation instrument positioning during the case as seen on the navigation monitor for later review, support & educational purposes.
- The system should have remote support feature enabled, to be able to give immediate support over internet anywhere in India in case of emergency during complex procedure.

Mobile planning station:

- Should provide mobile planning station (High performance Laptop) with full navigation preplanning capabilities and should be portable to be able to carry and use in any place.

Cranial Application:

- Should have user-friendly cranial application software.
- It should support various image sequences of CT & MRI, navigation compatible images.
- Should have facility for fiducial less & fiducial based registration.
- The navigation system should have point as well as surface registration.
- It should have universal instrument adapter tracking system for tracking custom OT instruments like suction, drill, cusa etc
- The system should include a frameless (Stereotactic Frame less) biopsy system.
- Biopsy needle has to be supplied along with the system.
- The system should have sterile and unsterile trackers for frame-based registration.
- It should be able to navigate biopsy needle in real time during biopsy procedure.
- The system should have 3D graphics capability and software capability to merge various modalities of CT & MRI images.
- The navigation software should be able to correlate with pre-operative MR, CT, MRA, CTA, and PET Images. These images should have view side by side or overlaid.
- Virtual Tool tip extension should be available up to 100mm.
- Proper training OT technical staff by the company person.

- All the instruments should be autoclavable.
- The software must not limit the number of instruments to use during surgery.
- Should have audio feedback during registration.
- The system should allow easy patient registration in both supine & prone position.
- The system should display of planned trajectory pathway in target and probe eye view along with Guidance view.
- The system should be controlled for sterile workflow from the sterile field by wireless remote.

Pin less Cranial and Skull base Application:

- The system should support Pin less cranial, ENT and skull base navigation procedures with passive IR optical/EM tracking based navigation instruments.
- Navigated Shunt placement tool should be provided.
- Should supports FESS, lateral, and anterior skull base procedures.
- Should have feature to do Trans nasal cases without fixing patient on head pin.
- All the instruments along with tracking accessories should be autoclavable.
- The system must have dynamic referencing so that registration is not lost even if camera or patient moves.
- Should support Pinless pediatric procedures
- Should be able to calibrate and navigate suction, debrider, and other required instruments.

Spine 3D Application:

- Should have user-friendly Spine application software.
- It should support CT navigation compatible images.
- It should support the fusion and use of MRI scan for 3D spine procedures
- Should have facility for fiducial less registration.
- The navigation system should have point as well as surface registration.
- Should have unique perspective view to see 3-D image of patient anatomy.
- Should have options of preplanning for custom registration points and screws simulation.
- Should have audio feedback during registration.
- Easy & fast registration process.
- System should have capability to work with screw implants from any company.
- The software have the capability to fuse axial, sagittal & coronal image sets of different modalities.
- Should have pre-calibrated instrument like AWL, pedicle feeler, Pedicle finder for

Lumbar, Thoracic and Cervical levels and should have possibility to navigate conventional instruments.

- Should minimize the exposure of x-ray radiation to patient and OR staff.
- System should have capability to integrate any 3D C-Arms/Intro-op CT Scanners. Any license required for such should be included in the system.
- At least 2 installations with any 3D C-Arm/ O-Arm should be there in India.

Spine Fluoro Application:

- Should have user-friendly Spine application software.
- Should minimize the exposure of x-ray radiation to patient and OR staff.
- Should have the capability of Intraoperative screw planning & positioning.
- Should have automatic registration process after taking C-arm shots.
- System should have capability to work with screw implants from any company.
- System should have capability to integrate with all C-arms (including flat panel 2D C- Arms).
- Should have pre-calibrated instrument like AWL, pedicle feeler, Pedicle finder for Lumbar, Thoracic and Cervical levels and should have possibility to navigate conventional instruments.
- Should take minimum time to initialize the system, fix tracker and acquire fluoroscopic images.
- Should have the capability of acquisition of images.
- Should have the capability of Image display selection.
- Should have the capability of custom tools Calibration.
- System should have ability to navigate screw while navigating screwdriver during screw placement.
- Should Support MIS cases and navigation instruments for MIS cases has to be supplied.

Certification:

- Should have CE/US FDA and ISO 13485 .

4.Cavitron Ultrasonic Surgical Aspirator (CUSA)

Should be one versatile system for exceptional control of soft tissue and fine bone dissection in close proximity to delicate anatomic structures.

Should be able to delivers precise fragmentation, irrigation and aspiration simultaneously in one hand piece.

Console:

- Should be compact and minimum space requirement, easy to setup and operate
- The aspiration, suction & irrigation should be controlled by single switch operation.
- Touch screen interface with wide screen
- Operator control: Full Touch panel for aspiration, suction & irrigation.
- Irrigation flow : 3 to 15 ml/min
- Irrigation Pump : Peristaltic pump technology
- Should have once click irrigation cassette for irrigation set up
- Must have FLUSH mode to clear the surgical site from the tip with flow of irrigation.
- Automatically recognizes hand pieces for easy set-up.
- Automatically recognizes cutting accessories for bone and tissue
- Should have Pulse control technology to manage the resection of complex tissue
- Suction, irrigation and ultrasonic functions can be used alone or simultaneously.
- Console should be provided with various safety alarms like excessive heat on hand piece, incorrect installation, excessive pressure on tip of hand piece, abnormal oscillation function.
- System should be capable of priming by itself at the beginning to avoid tip damage.
- Weight of console should be less than 20 Kg
- Single Pedal Foot Switch Cord . Must have option of wireless foot pedal if required
- Must have option to connect hand controller for controlling the function from non-sterile area
- Should have option to save surgeon profile as per the preferred setting for different surgeries
- Should have Video out receptacle for the connection of a computer monitor , video projector or digital television
- Should automatically defaults to recommended tip settings because of RFID Technology

Handpiece:

- Universal handpiece for soft tissue & bone dissection having various compatible tips from soft tissue to bone to transsphenoidal length.
- Lightweight, ergonomic design provides superb tactile feedback and requires no external cooling
- 25kHz Universal Handpiece
- 17 types of specialty tips should be attachable
- Frangible tip covers for improved visualization and access
- Integrated RFID technology

Tips:

- Soft tissue tips with standard, micro diameter, large diameter options
- Titanium
- Tip is packaged with a corresponding irrigation sleeve
- Should be used with irrigation sleeve that should be
 - Frangible
 - Provides proper irrigation flow
 - Protects surrounding tissue (patient and surgeon)
- Super long tip for transsphenoidal access and resection
- V shape Tip end/Barracuda tip
 - To provides mechanical cutting along with ultrasonic cavitation
 - Ideal for difficult fibrotic lesions. ie. Meningioma
 - Two sizes, tip diameter should be available available
- Ring Curette Tip
 - Designed to carve out rubbery/slippery meningiomas
- Ultrasonic cutting tips for spine procedures
- Longitudinal Torsional tip
 - Effectively address soft tissue and fine bone dissection by coupling longitudinal oscillation and torsional vibration makes it possible to emulsify bone with no grabbing or kicking due to the non rotational reciprocating motion
- Broad knife tip with cutting width of 1.4 mm for osteotomies

The System should have CART with the below accessories

- Step Torque Wrench
- Cleaning Wire
- Sterilization Tray
- Disposable Tubing Set
- Disposable Suction Canister

3 years warranty and 4 years CMC

All the consumables and attachments prices to be quoted for reference.

Standards and Safety:-

- Manufacturers/Suppliers should have ISO 13485 certificate to Quality Standards.
- System should have US FDA/ European CE notified body.

5.High Speed Electrical Craniotomy/Neuro Drill System

a) Neuro Drill

It should have:

- a. Maintenance free, D.C Brushless motor
- b. Maximum Drill Handpiece Speed 75000 rpm, Torque: Up to 5.45 in/oz
- c. Accepts all Straight & Angled Handpiece Attachments
- d. Snap-lock Assembly/ Disassembly of all attachments
- e. Electronic torque feedback software compatibility with console for improving the tactile feedback
- f. Unique motor design ensuring low heat generation during long procedures
- g. Sterilizable through Steam, ETO and Flash Autoclavable
- h. FDA approved

b) Electric Controller

It should have:

- a. Should have touch screen display control for incorporating multifunction into systems
- b. Should have interactive icons represents system components and functions
- c. Outputs should represent in digital figures
- d. Weight should be under 5 kg, Supply 220- 240V only 50-60Hz
- e. Should be able to identify different hand pieces with display on console
- f. Should have function of controlling brightness, contrast and alarm volumes on the console
- g. Torque sensing feedback capability
- h. Should be programmable as per surgeon preference
- i. Should have option for plugging minimum 2 footswitches at a time and should function independently at the same time.
- j. Should have an inbuilt torque mapping (ID touch software) feature for different applications.

I.D. Touch software is your opportunity to regulate drill response and performance to deliver the precise tactile feel you want.

c) Footswitch

It should have:

- a. Should have fully programmable dual/single pedal footswitch as user need
- b. User should be able to control following functions via footswitch
 - a. Forward
 - b. Reverse
 - c. Oscillation
 - d. Switch over to high/ low speed
 - e. Increase or decrease speed
 - f. increase decrease irrigation flow rate

d) Attachments :

Cranial/Spine
attachment

HD attachment

- a. 7 CM Straight attachment
 - b. 12 CM Angled attachment
 - c. 14CM Straight Attachment
 - d. 20CM Straight Attachment
 - e. Fixed or Steering DuraGuard (Small,Medium & Large) ((12mm,16mm & 25mm)
 - f. Perforator Chuck
 - g. 7 cm , 12cm, 14 cm , 17cm and 20 cm attachment must be compatible with any size or length of bur. There should not be different length/head size burs for different size of attachments
1. 9 cm straight and angled attachment for heavy duty work in spine and metal cutting
 2. 14 cm straight and angled attachment for heavy duty work in spine and metal cutting

e) Cutting Accessories :

f)

- a. Diamond Bur (1mm to 6mm)-5no
- b. Extra Coarse diamond Bur (3mm to 5mm)-5nos
- c. Fluted Bur or cutting bur (2mm to 6mm)-5nos
- d. Acorn Bur (3mm to 6mm)-5nos
- e. Neuro (Match head) bur (2mm to 5mm)-5nos
- f. Straight router for suture hole -5nos
- g. Routers for Craniotome (Head dia : 1.5mm,2.3mm & 3.0mm)- Qty: 10 each
- h. Perforator bit : - Qty: 10

The system should be USFDA/CE 4 digit certified manufacturer.

The system should have 3 years warranty with the drive motor and handpieces. All the console, Handpieces, and accessories along with attachments to be quoted separately for reference.

6. Operating Microscope –Neuro

1. Working distance:

200-615 mm or better, continuously variable through motorized multifocal lens, activated through Handgrips and through control panel. Manually adjustable override.

2. Magnification range: The system must offer flat apochromatic optics with 22x or better magnification

3. Focusing:

Motorized via multifocal lens activated through Hand grips & Touch screen control panel. Manually adjustable override. The system must provide automatic focusing

4. Eyepieces:

Pair of high eyes point wide field push-in eyepieces 12.5x magnification with eye guards and magnetic locks, diopter setting from -8D to +5D, also suitable for spectacles wearers

5. Light Source:

300W Xenon illumination with integrated 300W Xenon back-up with fast action lamp Change over.

6. Illumination Field Diameter:

Should have built in automatic zoom-synchronized illumination field diameter, with manual override and reset feature.

7. Automated illumination control:

Should have Automated Illumination. Brightness control should be linked to working distance. Illumination also can be controlled by hand switch or foot switch.

8. Autofocus Region:

It should be possible to select Large / Medium / Small region of interest for focusing through inbuilt optimized focusing algorithm.

9. Binocular tube:

Binocular tube for main Surgeon has to be foldable tube must be available that can be stretched & folded, providing a comfortable working position during surgery. Providing additional 50% detail magnification. Allowing for proper positioning of both eye level and arm positions.

10. Balancing:

The system must provide a one touch automatic balancing of all system axes without any manual

Interaction or axis adjustments.

11. Beam Splitter: Integrated Beam Splitter (not Visible from outside / separate attachment)

12. Camera: Fully Integrated 4K HD Video Camera (Camera not Visible from outside) So that maximum resolution will display & record.

13. Display:

Full HD Medical grade touch screen display system attached with the microscope system. (No External Monitor / detachable monitor will be acceptable). The HD display should also provide option for image rotation where the camera image is rotated 180° per click. The display should show the number of videos and images taken and start / stop of the video recording.

14. Recording & storage facility:

Full HD inbuilt video recording system with integrated HDD of at least 1TB.

15. HD Video-In:

Microscope should have Video-In facility to display and simultaneously record (1920x1080resolution) endoscopic and other external live videos in Picture-in-Picture mode on microscope display monitor.

16.Depth of Field:

Activates the depth of field for either High depth of field with less light and lower image resolution Or Low depth of field with lighter and higher image resolution.

17. Stereo co observer:

Should have stereo co observation attachment for side assistant and the attachment should not move in case the head is tilted in forward or backward direction by the main surgeon.

The microscope must offer integrated 360° rotatable tube, for better ergonomic observation. Binocular should have PD adjustment knob with range of 55mm to 75mm.

Binocular should have movement lock in any angle.

18.Face-to-Face attachment: system must have face-to-face Stereo-bridge with tiltable tube 0-180°, 2x eyepieces and rotatable adapter Supports assistance in Spine surgery

19. XY Movement:

For precise positioning of the microscope, the system must offer a motorized XY movement, providing in any (even horizontal) position of the optical axis a correct XY movement.

20. Auto Draping:

Draping of the system must be facilitated by an automatic air vacuum/ Auto Drape.

21. Damping Correction:

System should have robotic control active vibration damping mechanism to avoid disturbing vibrations.

22. Fluorescence Filter:

Microscope should have integrated tumor fluorescence.

Navigation interface should be available

23. Certifications:

ISO 13485 Notified body for manufacture and US FDA/notified body CE for the unit.

7. Stereotactic System:

1. Stereotactic system should be compatible for CT and MRI.
2. The head ring should accommodate all head sizes.
3. System should be provided with a Phantom calibration device for checking mechanical accuracy of the coordinates in real time.
4. It should have X, Y, Z coordinates with Vernier scale.
5. The system should be provided with Localiser frame compatible with CT and MRI.
6. It should have Arc and Ring angles clearly marked.
7. The system should be provided with 2 different sized head posts for anterior and posterior
8. The system should be provided with different sized head pins (50 nos.)
9. It should have compatible adapter for any suitable stereotactic instruments.
10. It should have an accessory/tool to show electrode position while using C-ARM.
11. It should be provided with Side cutting biopsy needle – 5 Nos and Hematoma evacuator – 2 nos.
12. The accuracy of the system should be within 0.5mm
13. The system should be provided with Scale and Stopper for measuring the length of the instruments.

14. The system should be included with sterilization boxes for all sterilizable units.
15. The stereotactic frame should be provided with a universal table attachment to attach the frame to 3-pin or 4 pin fixator available in the hospital.
16. The stereotactic system should be provided with twist drills of 3mm/4 mm with guide. – 2Sets
17. The system should be compatible with any Microdrive available in the market.
18. The system should also have an adapter compatible to any RF Lesion electrodes for Stereotaxy available in the market.
19. The system should be provided with a self-explanatory Instruction Manual.
20. Software:
 - i. The software to be provided in a workstation/laptop which should have the provision to read the DICOM images from CT, MRI and PETCT using CD or USB.
 - ii. Software should be provided with planning software for Biopsy and DBS.
 - iii. The software shall have CT and MRI fusion for planning in functional surgeries.
 - iv. Software should be able to place the entry point and target point virtually.
 - v. Software should be able to provide the dynamic information about the changes that occur along the trajectory.
 - vi. Target and trajectories should be able to be seen in Axial, Sagittal and coronal planes simultaneously or individually.
 - vii. The software should allow virtual simulation of multiple trajectories preoperatively to choose the right path without affecting the critical structures.
 - viii. Software should allow to plan multiple targets.
 - ix. The final report should have Arc angle, Ring angle and X, Y, Z coordinates with one decimal point.
 - x. Any software support & upgradation will be free of cost till the warranty period.
21. Warranty: 3 years of comprehensive warranty on the entire system
22. the system should have 4 digit notified body CE/US FDA and ISO 13485 for manufacture.

8. Spine Endoscopy Technical Specification

Full Endoscopic Lumbar Interlaminar, Transforaminal & Extraforaminal Decompression

Set

1. Endoscope – Spine

- Endoscope with Rod lens should have outer diameter 6.8 -7 mm with inbuilt Channel dia of 4-4.2mm & irrigation channel 1.2-1.4mm with direction of view 25 degree with total length 320-325mm & working length 205-210mm to be used for transforaminal & extraforaminal decompression of Lumbar spine.
- Endoscope with Rod lens should have outer diameter 6.8 -7 mm with inbuilt Channel dia of 4-4.2mm & irrigation channel 1.2-1.4mm with direction of view 25 degree with total length 275-300mm & working length 160-170 mm to be used for interlaminar decompression of Lumbar spine.

2. Endoscopic Spine Access instruments

- Dilator set should have inner diameter of 1.3 mm with outer diameter 6.9-7 mm with total length of 230-240 mm for single stage dilation.
- Working Cannula should have inner diameter of 7 mm & outer dia of 7.9-8.2 mm with total length 180-190 mm having distal end with graduated elevation tip.
- Working Cannula should have inner diameter of 7 mm & outer dia of 7.9-8.2 mm with total length 115-125 mm having distal end with graduated elevation tip.
- Extension Sleeve should have inner diameter of 7 mm & outer diameter of 8-8.2 mm with total length 150-160 mm.
- Reusable flushing attachment for working Sleeve of dia 7.9-8.1 mm.

3. Endoscopic Spine Working instruments.

- Reusable Rongeur with irrigation connection having outer dia of 2.9 mm to 3.1 mm with Working length 355 mm -365 mm & Total length 455 mm -465 mm.
- Reusable Rongeur with irrigation connection having outer dia of 2.9 mm to 3.1 mm with Working length 285 mm -295 mm & Total length 385 mm - 390 mm.
- Reusable Curved upward Rongeur with irrigation connection having outer dia of 2.4 mm –
2.6 mm with Working length 355 mm - 365 mm & Total length 455 mm -460 mm.

- Reusable Punch with irrigation connection having outer dia of 2.5- 2.7 mm with Working length 350 mm -370 mm & Total length 455mm - 465 mm.
- Reusable Punch with irrigation connection having outer dia of 2.5- 2.7 mm with Working length 285 mm -295 mm & Total length 385-390 mm.
- Reusable upward curved Punch with irrigation connection having outer dia of 2.4- 2.6 mm with Working length 355-365 mm & Total length 455-460 mm.
- Reusable dismantling Sheath tube Punch with irrigation connection having outer dia of 3.9 mm — 4.1 mm with WL 355 mm -365 mm & Total length 445-455 mm.
- Kerrison detachable Handle
- Kerrison sheath having outer dia 3mm – 4mm with working Length 290-300mm & 50 degree
- Reusable atraumatic Dissector having outer dia of 2.4-2.6 mm with WL 345-355 mm.
- Reusable atraumatic Dissector having outer dia of 3-3.1 mm with WL 345-355 mm.
- Reusable atraumatic Dissector having outer dia of 4-4.1 mm with WL 345-355 mm.
- Reusable Annulotome with dia 2.5- 3 mm with working length 345-355 mm.
- Reusable Face miller with dia 3.5- 4.1 mm with working length 340-350 mm.
- Reusable Exploring hook with dia 2.4- 2.6 mm with working length 285-295 mm.

Puncture Needle Set

- Puncture needle with dia 17G (OD 1.5mm) with length 250-255mm.

4. Sterilization Instrument Basket

- Sterilization basket

5. Radiofrequency Surgical Ablation System

- Radiofrequency Surgical Ablation System should have following features - RF machine should work on 4-4.2 MHZ frequency for effective Monopolar/Bipolar application.
- RF System should have Monopolar & Bipolar mode for versatile usage in Spine Surgery. There should be 2 Monopolar Cutting modes (CUT1/ CUT2) & 2 Monopolar coagulation modes (CONTACT/ SPRAY) for precise cutting & coagulation. Additionally, should have Auto start function for bipolar modes.
- It should have Bipolar Cutting modes (BICUT1/ BICUT2) & 2 Bipolar coagulation modes
(STANDARD/ PRECISE)

- It should have Neutral electrode monitoring through Split neutral plate permanently via skin resistance.
- RF Console should work with 4 pre-setted programs.
- RF Console should deliver Maximum Power output of 100W on Monopolar Cut & 80W on Bipolar Cut mode. Also, should deliver power of 80W on Bipolar Cut & Coagulation mode.
- Monopolar function should control through footswitch or hand-controlled RF probe & bipolar function should controlled through Footswitch or Auto start mode.
- Foot switch should have two pedals for Cutting & Coagulation with inbuilt 4m connecting Cable.
- RF Console should be Microprocessor controlled device with safety management with foil keys control buttons with numeric display. It should have acoustic & optical alarm system in case of any error.
- RF Console should have Medical device directive 93/42/EEC & CE certified & should take automatic storage of last user settings.

Bipolar RF Instruments

- Bipolar RF instrument should have sheath tube dia of 2.4-2.6 mm with length 275-285 mm.
- Bipolar RF instrument should have sheath tube dia of 2.4-2.6 mm with length 345-355 mm. Tip controlled Single use flexible RF electrode bipolar of dia 2.5 mm.

Bipolar RF connection Cable with total length 2.9-3.1 m Endoscopically: Motor unit

6. Shaver System – to remove the bones Endoscopically: Motor Unit

- Device control and adjustment of all functions and user settings via washable and disinfect able touchscreen user guidance.
- Free definition and storage of all user data's (speed, torque, tools) for different users by pressing a key.
- Automatic instrument and tool identification while connecting to the controller device (RFID)
 - Predefinition of all parameters.
- Memory function - data storage of number of applications and time of use for all reusable shaver blades and burrs.
- Simultaneous connection of 2 hand pieces.

- Universal plugs for all connecting cables of hand pieces.
- Microprocessor controlled safety management.
- Supply voltage in VAC should be 100-230V.
- Supply frequency in Hz. Should be 50/60.
- Measurements - BxHxT in mm should be 330 x 155 x 390.

Foot Switch

- Two pedals for main adjustments -Oscillation, right/ left direction, speed adjustments, blade toggling)

High-Speed – Shaver hand piece

- Motorized hand piece for arthroscopic operations incl. adjustable suction valve, connection of shaver blades and burrs D2 to 8mm, optionally use via hand control button or foot switch, including connecting cable.
- Range of speed should be 10-16000rpm.
- Rotatable shaver blades and burrs (ca.270°) within the hand piece.

Burrs

- Oval Burrs reusable with lateral protection outer diameter 3mm - 4 mm and working length 345mm - 355 mm.
- Round Burrs reusable without protection outer diameter 3mm - 4 mm and working length 345 mm — 355 mm.
- Diamond Round Burrs reusable without protection outer diameter 3 mm – 4 mm and working length 345 mm - 355 mm.

7. Stenosis Full- endoscopic Interlaminar decompression

Endoscope – Spine

- Endoscope with Rod lens should have diameter 9.3 -9.5 mm with inbuilt working Channel dia of 5.5-5.7mm with direction of view 20 degree & working length 175-180 mm to be used for Interlaminar decompression of Lumbar spine.

Access instruments

- Dilator set should have outer diameter 9.3-9.5mm with total length of 230-240mm for single stage dilation.

- Working Cannula should have inner diameter of 9.5mm & outer dia of 10.4-10.6 mm with total length 110-125 mm having distal end with graduated elevation tip.
 - Reusable flushing attachment for working Sleeve of dia 10.4—10.6 mm.
- Working Instruments
- Reusable Kerrison Punch having dia 5.5x 4.5mm with working length 370-390 mm & Total length 460-470 mm.
 - Reusable Rongeur with irrigation connection having outer dia of 3.8 to 4.2 mm with working length 280-300 mm & Total length 380-390 mm.
 - Reusable Punch with irrigation connection having outer dia of 2.8-3.2mm with working length 280-300 mm & Total length 380-390 mm.

Sterilization instrument basket

- Sterilization basket

Burrs

- Oval Burrs reusable with lateral protection for extraction of bony structures outer diameter 5 mm - 6 mm and working length 280 mm — 300 mm.
 - Round Burrs reusable for extraction of bony structures with outer diameter 5 mm – 6 mm and working length 280 mm — 300 mm.
 - Round Diamond Burrs reusable for extraction of boy structures with outer diameter 5 mm – 6 mm and working length 280 mm — 300 mm.
8. Full 4K/UHD High Resolution Camera System

All-In-1 Housing/ Integrated Console

- Integrated Camera console (All-in-one Housing) with LED Light Source, Camera Controller, Image Management System with inbuilt Storage & also Wi-Fi Router for Live Streaming.
- Applied part type CF (Cardiac Floating) and also defibrillation proof.
- Console has white balance button.
- provide with Intuitive tablet (Documentation Tablet) for user interface with System.
 - 4K/UHD Capable with the resolution 3840 x 2160p and 10-bit colour gamut with 1.073 billion True Colours.

- 4K Outputs: - Display Port (DP) or Quad 3G-SDI, and HD Outputs:- DVi or 3G-SDI. DVI Input for Secondary Source recording.
- 3-5 no's of USB Connection options for accessory use (Printers, Pen drives, iPad, etc).
- Able to connect at least 2 nos. of 4K Monitor and 4 nos. of HD Monitors.
- Software based system and also support software upgrades (new features and performance upgrades).
- Work on LINUX embedded OS.
- Should be a closed system for data protection while transferring or retrieving the surgery.
- The Picture-in-Picture (PiP) functionality of video input is available.
- Surgical display (Heads-up display) on the monitor showing current values for pump, shaver, RF and insufflator settings.
- System support Password-protected access to camera live stream and captured images with streaming codec H.264 (MPEG4) at 30Hz.
- Able to do audio streaming.
- Able to chat with accessed users during live streaming (IP based remote access).
- Have RS 232 isolated connector option and RJ45 for Ethernet connection.
- Power Supply: 100-240 V, 50-60 Hz.
- Power Consumption – 174W • Appliance/Protection Class: I
- Ingress protection class: IPX0 • Operating Temperature: 10-35°C.

4K Camera Head

- Image Sensor: CMOS Technology.
- The imaging Scanning Pattern is Progressive.
- Aspect Ratio: Capable of displaying wide screen 16:9 format.
- Overall Resolution: 3840 x 2160p.
- Image refresh rate nearly 59.94 Hx (vertical scan).
- Digital zoom: 1.5x
- Signal to Noise Ratio (SNR): >52Db.
- Provided with fixed (integrated) coupler with focal length 19 - 20mm or zoom coupler focal length 14-29mm.

- Colour Depth: 10bit (1.073 Billion Colours).
- 2 camera head buttons with 19 programmable functions incl. white balance at beginning of case.
- The camera head Housing made of Titanium.
- The camera head is Autoclavable with at least 2000 autoclaving cycles.
- Inbuilt zoom facility available regardless of telescope used.
- Water and disinfectant proof (IPX7).
- Applied part type CF for applications near the heart.
- Appliance/Protection class: I
- Provided with autoclaving case from the parent company only.

4K High-Definition Monitor

- Screen technology: TFT AM LCD / IPS-Pro technology / LED backlight
- LCD active panel size (diagonal): 32" / 813 mm
- LCD pixel resolution: 3840 x 2160
- Aspect ratio: 16:9
- Pixel pitch: 0.1845 mm
- Color support: 1073 million (10 bit)
- Color gamut: Native (close to DCI-P3)
- Viewing angle (horizontally): 178°
- Viewing angle (vertically): 178°
- Brightness: $\geq 350 \text{ cd/m}^2$ typ.
- Contrast: $\geq 1350:1$ typ.
- Response time: white->black 9 ms
- Panel protection: antireflective glass
- Video Input: 2x DP 1.1 or 1x DP 1.2; 1x DVI; 1x 3G-SDI; Fiber MNA Decoder (optional)
- Video Output: 1x DP 1.2; 1x 3G-SDI Loop through
- Picture-in-Picture
- Failover mode
- Power: 24 V DC / 10 A

- Power supply: 100 – 250 V AC / 47 – 63 Hz
- Mounting: VESA 100, 200 x 100
- MDR class: I, IP21

Light Source

- Technology: LED (cold light source).
- Guaranteed lifespan: 30,000 operating hours.
- Power consumption: 94.5W max (light output equivalent to approx. 400 W Xenon).
- Light output/light flux: 1,800 lumens (typical).
- Color temperature 5,500 – 8,500 K nominal range.
- Automatic light output control functionality for producing synchronized pulse

width modulated.

- Have Light guide port turret of the mentioned light cable standards: ACMI™ Standard, Storz™, Wolf™, and Olympus™ light cable options.
- Light source button “On/Standby” (ready to use in < 1 sec.).
- User interface: CCU (standby button), camera buttons or Controller UI.
- The system provided with Universal fibre optic cable with adapters. Not less than 5mm

thick and 270-275 cm long 1.3.

Image Management System

- Image capture in both 4K & HD quality in the console with no external device support.
- Video record in both SD & HD quality in the console with no external device support.
- System has 128 GB 4K video 2-4MB/min SSD internal & with external storage through

USB Ports.

- Options to annotate photos at the end of case.
- Convert Images into PDF.
- Direct transfer of still images and videos to the iPad® or USB during the procedure.
- Export of images and videos to the iPad® camera roll or Pen drive.
- Images: adjust brightness, contrast & saturation; annotation (circle or arrow)

with text on

iPad.

- Automatic or manual export: USB, iPad®, File server, PACS (DICOM).

System Controller/Documentation Tablet

- Touch screen tablet controller and documentation device with wired or wireless connection with the system.
- A part of the closed system thereby providing data protection.
 - Able to perform mentioned functions:- add Facility profile with specific settings, Surgeon- profile with specific settings, Procedure profile with specific settings, planning of case, patient details before the surgery, Camera head button functions, allow or disallow live streaming of live surgery, control the values of accessory equipment (Shaver, RF, Pump, Insufflator etc), adjusting the vision settings, annotation of the images post-surgery, transferring of data in external devices through USB Ports, etc.
 - In case of device failure, the standby controller/tablet display the same information of the original tablet.

9. Fluid Management System

Intuitive touchscreen control

- Presets: 4 (Shoulder, Knee, Small Joint, Hip)
- Flowrate: ≥ 1500 ml/min automatically adjusted
- Max. Flowrate setting: adjustable from 50% to 100% (increments of 10%)
- Pressure setting: 10 – 120 (increments of 5).
- Real time flow rate monitoring
- Estimated fluid usage information
- Shaver interface with Synergy Resection Shaver
- Shaver Boost functionality: automated pressure increase when shaver is utilized; 0 to 50% (10% increment steps)
- Lavage mode – increases pressure when utilized
- Lavage setting: adjustable 0 to 50% pressure increase (5% increment steps) for max. 2 minutes

- Tubing options: One piece tubing or 2 piece tubing (day tubing + patient-end tubing)
- Foot pedal control: Lavage
- Remote control: Lavage, Pressure increase, Pressure decrease, Shaver suction setting, Run/Stop
- Heads-up display of parameters on main monitor in combination with Synergy camera platform
- Overpressure control: 300 mmHg $\pm$ 5
- Water protection class: IP22
- AC input: 100-240 V, 50/60 Hz, 1.5A Max/100VAC, 0.7A Max/240VAC
- Noise level: < 58dB
- Applied part type: BF
- Medical device directive: Class IIa
- Medical device according to 93/42/EEC
- Protection against electric shock according to IEC 60601-1: Class I
- EMC certification according to EN 60601-1-2

Irrigation Tube set Spike

- Reusable irrigation tube set spike compatible with the fluid management system.

Note: All the units along with sub unit & Instruments prices to be quoted separately for further reference.

All the units should be compactable and should have US FDA/4 digit CE from notified body.

9.Neurosurgery Instrument Set

For Surgical instruments, the manufacturer must design them to be fit for their intended use not only in design, manufacture and surface finish, but also by selecting adequate materials.

- * Surgical instruments should be made of only stainless steel(hardened, non- rusting) can meet the tough requirements in terms of elasticity, tenacity, rigidity, blade characteristics, resistance to wear and maximum corrosion resistance. Supporting evidence need to be enclosed.
- * The Brand Name, CE mark along with catalogue should be mentioned on each instrument.
- * Instruments should be offered as per mentioned specification in tender.
- * For Technical Evaluation live demo of instruments mandatory strictly no dry demo/catalogues.
- * All Instruments should have Three years replacement warranty from the date of satisfactory installation.
- * Company should have ISO 13485 & Notified CE marking.
- * Each set and each item's price to be mentioned separately.

Instruments Set for Spine Surgery		
Sl.NO.	Description	Required Qty
1	DeBakey Atraumatic Vascular forceps 20cm 2.0mm	1
2	Gruenwald bayonet forceps 19.5cm serrated	2
3	Mayo scissor straight 14.5 cm with micro serrated cutting edge and with golden screw for identification	1
4	Ligature Scissors 18.0cm curved with micro serration and tungsten carbide edges	1
5	Mayo scissors curved 14.5cm with Seamless, homogenous junction of tungsten carbide and Micro serration and with golden screw for identification	1
6	Metzenbaum scissors curved 18cm - with Micro Serration and with golden screw for identification	1
7	Metzenbaum scissors curved 20cm - with Micro Serration and with golden screw for identification	1
8	Mayo hegar Needle Holders 16cm with TC Insert	2
9	Micro slim needle holder 20cm serrated with TC insert	1
10	Mayo hegar Needle Holders 20cm with TC Insert	1
11	Caspar Rongeurs 15.5cm 3x14mm straight	1
12	Caspar Rongeurs 15.5cm 5x14mm straight	1

13	Caspar Rongeurs 15.5cm 3x14mm 30° angle downward	1
14	Caspar Rongeurs 15.5cm 3x14mm 30° angle upward	1
15	Ruskin Liston bone forceps 18cm curved	1
16	Leksell bone Rongeurs 3mm 24.5cm	1
17	Leksell bone Rongeurs 5mm 24.5cm	1
18	Liston Stille bone forceps 28cm curved	1
19	Ruskin bone Rongeurs 5mm curved 24cm	1
20	Smith Petersen bone Rongeurs curved 24cm	1
21	Penfield dissector double ended fig 1 17.5cm	1
22	Penfield dissector double ended fig 2 20cm	1
23	Penfield dissector double ended fig 3 19.5cm	1
24	Penfield dissector fig 4 20.5cm	1
25	Penfield dissector double ended fig 5 29cm	1
26	wire extraction pliers serr 17cm	1
27	Gillies dura and skin hook small 3mm 19cm	2
28	bone tamper Ø 7mm 16cm	1
29	Lempert sharp curette 21cm fig 3/0	1
30	Lempert sharp curette 21cm fig 0	1
31	Lempert sharp curette 21cm fig 1	1
32	Lempert sharp curette 21cm fig 2	1
33	Lambotte osteotome straight 4mm 24cm	1
34	Lambotte osteotome straight 8mm 24cm	1
35	Lambotte osteotome straight 10mm 24cm	1
36	Lambotte osteotome straight 12mm 24cm	1
37	Lambotte osteotome straight 15mm 24cm	1
38	Hoehn elevator 15mm 19cm semi sharp	1
39	raspatory 13mm 28cm	1
40	Lambotte raspatory 15mm 22cm	1
41	raspatory 3mm 18.5cm with propylux handle	1
42	Love nerve root retractor 19cm straight 6mm	1
43	Love nerve root retractor 16cm angle 45° 6mm	1
44	Love nerve root retractor 10cm angle 90° 6mm	1
45	Kerrison Rongeurs Semi- Detachable, Ejector and autoclavable Silicon Handle 20cm 2mm 40° up nf we	1
46	Kerrison Rongeurs Semi- Detachable, Ejector and autoclavable Silicon Handle 20cm 3mm 40° up nf we	1

47	Kerrison Rongeurs Semi- Detachable, Ejector and autoclavable Silicon Handle 20cm 4mm 40° up nf we	1
48	Kerrison Rongeurs Semi- Detachable, Ejector and autoclavable Silicon Handle 20cm 5mm 40° up nf we	1
49	Bard Parker scalpel handle no 3 stand 12.5cm	1
50	Bard Parker scalpel handle no 3L long 21cm	1
51	Bard Parker handle no 4 stand 13.5cm	1
52	Bard Parker scalpel handle no 7 long 16.5cm	1
53	dressing forceps 14.5cm medium	1
54	dressing forceps 20.0cm medium	2
55	tissue forceps 14.5cm 1x2 tooth medium	2
56	tissue forceps 20.0cm 1x2 tooth medium	1
57	Backhaus Towel securing clamp 15.5cm	12
58	Halsted Mosquito forceps 12.5cm straight	4
59	Halsted Mosquito forceps 12.5cm curved	6
60	Halsted Mosquito forceps 14.0cm straight	4
61	Halsted Mosquito forceps 14.0cm curved	6
62	Rochester Ochsner Hemostatic forceps 1x2 tooth 20cm straight	2
63	Rochester Ochsner Hemostatic forceps 1x2 tooth 20cm curved	2
64	Allis tissue grasping forceps 15cm 4x5 tooth	4
65	Allis tissue grasping forceps 19cm 5x6 tooth	2
66	Foerster sponge forceps 21cm straight	2
67	Bergmann (Hibbs) mallet Ø 40mm 540g 22.5cm	1
68	ruler stainless steel 30cm	1
69	Frazier suction cannula 8 Fr angle 18cm	1
70	Frazier suction cannula 10 Fr angle 18cm	1
71	Frazier suction cannula 12 Fr angle 18cm	1
72	Weitlaner Beckmann retractor sharp 21.0cm	1
73	Adson Anderson retractor angle sharp 19cm	2
74	Weitlaner Wullstein retractor blunt 13cm	2
75	Adson retractor straight blunt 20cm	2
76	Langenbeck Kocher retractor 7x30mm 21cm	2
77	Langenbeck Kocher retractor 20x45mm 21cm	2
78	Langenbeck Kocher retractor 10x40mm 21cm	2
79	Sterilization wire baskets for containers, made of stainless steel, stackable, 510x255x70mm	1

80	Aluminium Sterilization Container, complete: Botton silver, Colour of lid: silver, incl. paper filter. Extremely effective drying phase of the container interior, silicone sealings ensure long-term sterility, coloured lids and identification labels for better organization- 590x290x100mm with EN 285: 2008 and validated acc to ISO 17665 Part1:2010	1
81	Silicon mats for the fixation of delicate and very delicate instruments, 6mm (distance between naps) 460x240mm	1
	B) Anterior cervical retractor system	
1	Side Load ring handle retractor w double hinge	1
2	titanium blade 3 tooth 40x24x15mm	2
3	titanium blade 3 tooth 50x24x30mm	2
4	titanium blade 3 tooth 60x24x20mm	2
5	titanium blade 3 tooth 70x24x30mm	2
6	titanium blade 3 tooth 30x24x10mm	2
7	titanium blade 3 tooth 35x24x15mm	2
8	instraight tray with lid for Spread-iT blades 1/2	1
	c) Distraction device for cervical spine	
1	drill sleeve f 57.55.14	1
2	drill sleeve for 57.55.15	1
3	vertebral distract device f sinistral access (left)	1
4	vertebral distract device f dexter access (right)	1
5	drill Ø 1.7x13mm 14.5cm	1
6	screwdriver 20cm f distraction screws	1
7	distraction screw 14mm	2
8	Aluminium Sterilization Container, complete: Botton silver, Colour of lid: silver, incl. paper filter. Extremely effective drying phase of the container interior, silicone sealings ensure long-term sterility, coloured lids and identification labels for better organization- 290x290x100mm with EN 285: 2008 and validated acc to ISO 17665 Part1:2010	1
9	Sterilization wire baskets for containers, made of stainless steel, stackable, 240x255x50mm	1
10	Silicon mats for the fixation of delicate and very delicate instruments, 6mm (distance between naps) 240x220mm	1
	Piccolino Retractor with Holding arm	
1	Speculum for counter-retractor · 50 mm	1
2	Speculum for counter-retractor · 55 mm	1
3	Speculum for counter-retractor · 60 mm	1

4	Piccolino counter retr w conn f holding arm	1
5	hold arm variable large	1
6	MAPN adapter w quick-lock f holding arm	1
7	ball joint clamp	1
8	Medial blade 50x12mm aluminium	1
9	Medial blade 55x12mm aluminium	1
10	Medial blade 60x12mm aluminium	1
11	Piccolino Bay-blade 50mm 12mm lateral/conical	1
12	Piccolino Bay-blade 55mm 12mm lateral/conical	1
13	Piccolino Bay-blade 60mm 12mm lateral/conical	1
14	Aluminium Sterilization Container, complete: Botton silver, Colour of lid: silver, incl. paper filter. Extremely effective drying phase of the container interior, silicone sealings ensure long-term sterility, coloured lids and identification labels for better organization- 290x290x100mm with EN 285: 2008 and validated acc to ISO 17665 Part1:2010	1
15	Sterilization wire baskets for containers, made of stainless steel, stackable, 240x255x50mm	1
16	Silicon mats for the fixation of delicate and very delicate instruments, 6mm (distance between naps) 240x220mm	1
	Cervicalino Retractor with Holding arm	
1	Cervicalino side-load retr 0° f Bay-Blades w 2 hold arm conn	1
2	hold arm variable large	1
3	MAPN adapter w quick-lock f holding arm	1
4	ball joint clamp	1
5	hdl w quick-lock f MICRODISC-XS a MAPN	1
6	side-load bay-blade holder 57.12.06	1
7	Bay-blade cervical 45mm	2
8	Bay-blade cervical 50mm	2
9	Bay-blade cervical 55mm	2
	F) Spread-iT Retractor	
1	titanium retractor with out blades	1
2	connect for titanium blade w look	2
3	titanium blade 3 tooth 60x24x20mm	2
4	titanium blade 3 tooth 70x24x30mm	4
5	titanium blade 3 tooth 90x24x50mm	2
6	titanium blade circular 6mm 62mm	1
7	titanium blade circular 6mm 72mm	1

8	Aluminium Sterilization Container, complete: Bottom silver, Colour of lid: gold, incl. paper filter. Extremely effective drying phase of the container interior, silicone sealings ensure long-term sterility, coloured lids and identification labels for better organization- 300x135x47mm with EN 285: 2008 and validated acc to ISO 17665 Part1:2010	1
9	Silicon mats for the fixation of delicate and very delicate instruments, 8mm (distance between naps) 275x125mm	1
	G) Kerrison rongeurs & disc forceps for lumbar surgery	
1	Cushing Rongeurs Rongeurs with Semi- Detachable autoclavable Silicon Handle for high working comfort 18cm 2x10mm downward jaw plain	1
2	Love Gruenwald Rongeurs with Semi- Detachable autoclavable Silicon Handle for high working comfort 18cm 3x10mm straight jaw plain	1
3	Love Gruenwald Rongeurs with Semi- Detachable autoclavable Silicon Handle for high working comfort 18cm 3x10mm upward jaw plain	1
4	Love Gruenwald Rongeurs with Semi- Detachable autoclavable Silicon Handle for high working comfort 18cm 3x10mm downward jaw plain	1
5	Caspar Rongeurs 15.5cm 4x14mm straight	1
6	Caspar Rongeurs 15.5cm 5x14mm straight	1
7	Caspar Rongeurs 15.5cm 4x14mm 30° angle upward	1
8	Caspar Rongeurs 15.5cm 4x14mm 30° angle downward	1
9	Caspar Rongeurs 18.5cm 2x12mm straight jaw fenestrated serrated	1
10	Caspar Rongeurs 18.5cm 3x12mm straight jaw fenestrated serrated	1
11	Caspar Rongeurs 18.5cm 4x14mm straight jaw fenestrated serrated	1
12	Caspar Rongeurs 18.5cm 3x12mm 30° angle upward gef gez	1
13	Caspar Rongeurs 18.5cm 4x14mm 30° angle upward jaw fenestrated serrated	1
14	Caspar Rongeurs 18.5cm 3x12mm 30° angle downward	1
15	Caspar Rongeurs 18.5cm 4x14mm 30° angle downward	1
16	Kerrison rong Semi- Detachable, and autoclavable Silicon Handle 18cm 1mm 40° upward narrow footplate with ejector	2
17	Kerrison Rongeurs Semi- Detachable, Ejector and autoclavable Silicon Handle 20cm 2mm 40° up nf we	2
18	Kerrison Rongeurs Semi- Detachable, Ejector and autoclavable Silicon Handle 20cm 3mm 40° up nf we	2
19	Kerrison Rongeurs Semi- Detachable, Ejector and autoclavable Silicon Handle 20cm 4mm 40° up nf we	2
20	Kerrison Rongeurs Semi- Detachable, Ejector and autoclavable Silicon Handle 20cm 5mm 40° up nf we	2

21	Kerrison Rongeurs Semi- Detachable, Ejector and autoclavable Silicon Handle 18cm cervical 1mm 40° up nf we	2
22	Kerrison Rongeurs Semi- Detachable, Ejector and autoclavable Silicon Handle 18cm cervical 2mm 40° up nf we	2
23	Kerrison Rongeurs Semi- Detachable, Ejector and autoclavable Silicon Handle 18cm cervical 3mm 40° up nf we	2
24	Kerrison Rongeurs Semi- Detachable, Ejector and autoclavable Silicon Handle 18cm cervical 4mm 40° up nf we	2
25	Ceramic Coated Kerrison rong Semi- Detachable, and autoclavable Silicon Handle, high surface hardness and non-dazzling surface 17cm bayonet 2mm jaw width, 40° upward narrow footplate with ejector	2
26	Ceramic Coated Kerrison rong Semi- Detachable, and autoclavable Silicon Handle, high surface hardness and non-dazzling surface 17cm bayonet 3mm jaw width, 40° upward narrow footplate with ejector	2
27	Kerrison Rongeurs Semi- Detachable, Ejector and autoclavable Silicon Handle 18cm cervical 2mm 90° up nf we	2
28	Kerrison Rongeurs Semi- Detachable, Ejector and autoclavable Silicon Handle 18cm cervical 3mm 90° up nf we	2
29	Kerrison rong Semi- Detachable and autoclavable Silicon Handle, 20cm, 2mm jaw, 40° upward, ultrathin-footplate with ejector, curved tip	1
30	Kerrison rong Semi- Detachable and autoclavable Silicon Handle, 20cm, 3mm jaw, 40° upward, ultrathin-footplate with ejector, curved tip	1
	H) Bipolar Non-stick Forceps with Cable	
1	Bipolar non-stick bayonet forceps 20cm 2.0mm straight with less exposure of cauterization tip	3
2	Bipolar non-stick bayonet forceps 22cm 2.0mm straight with less exposure of cauterization tip	3
3	Bipolar non-stick bayonet forceps 15cm 1.0mm straight with less exposure of cauterization tip	1
4	Bipolar non-stick bayonet forceps 11cm 0.25mm straight with less exposure of cauterization tip	1
5	Bipolar non-stick bayonet forceps 11cm 0.6mm straight with less exposure of cauterization tip	1
6	cable bipolar Ø4mm 4m	2
	I) Power regulated Ergonomic Non-clogging suction	
1	Power regulated Ergonomic Non-clogging suction cannula handle	1

2	Power regulated Ergonomic Non-clogging adapter for disposable suction cannulas w plug-in connection	1
3	Power regulated Ergonomic Non-clogging cannula 1.5x55mm malleable	1
4	Power regulated Ergonomic Non-clogging cannula 1.5x90mm malleable	1
5	Power regulated Ergonomic Non-clogging cannula 1.5x110mm malleable	1
6	Power regulated Ergonomic Non-clogging cannula 2.0x55mm malleable	1
7	Power regulated Ergonomic Non-clogging cannula 2.0x90mm malleable	1
8	Power regulated Ergonomic Non-clogging cannula 2.0x110mm malleable	1
9	Sterilization tray 203x114x30mm with holding device for 12 instruments	1

10. NEURO-MICRO SURGICAL INSTRUMENTS

	Instruments set for Cranial Surgery	
Sl.NO.	Description	Required Qty
	Craniotomy Set	
1	Micro Adson tissue fcps 12cm 1x2 tooth	1
2	Micro Adson dress fcps 12cm serr	1
3	Gruenwald bay fcps 19.5cm serr	1
4	Mayo scrs str 14.5cm with Micro Serration	1
5	Mayo scrs cvd 17.0cm with Micro Serration	1
6	Mayo stille scrs str 15cm with Micro Serration	1
7	Mayo Stille scissors straight 17cm	1
8	Metzenbaum slim scissors curved 14cm with Seamless, homogenous junction of tungsten carbide and micro serration and with golden screw for identification	1
9	Metzenbaum slim scissors curved 18cm with Seamless, homogenous junction of tungsten carbide and Micro serrated cutting edge and with golden screw for identification	1
10	Lexer scissors curved 16cm with mico serrated cutting edge and with golden screw for identification	1
11	Schmieden (Taylor) Scrs	1
12	Crile Wood (DeBakey) needle holder 15cm with	1

	TC insert	
13	Crile Wood (DeBakey) needle holder 18cm with TC insert	1
14	Crile Wood (DeBakey) needle holder 20cm with TC insert	1
15	Halsted Mosquito fcps 12.5cm str	12
16	Halsted Mosquito fcps 12.5cm cvd	24
17	Spencer Wells hemost fcps 16cm cvd	12
18	Rochester Pean hemost fcps 16cm str	24
19	Rochester Pean hemost fcps 16cm cvd	24
20	Wire plate cutting pliers 17.5cm with TC insert	1
21	Beyer bone rong cvd 18cm	1
22	Ruskin bone rong 5mm cvd 18cm	1
23	Zaufal Jansen bone rong 5mm cvd 18cm	1
24	Stille Luer bone rong cvd 23cm	1
25	Kerrison Rongeurs Semi- Detachable, Ejector and autoclavable Silicon Handle 18cm 1mm 40° up nf we	2
26	Kerrison Rongeurs Semi- Detachable, Ejector and autoclavable Silicon Handle 18cm 2mm 40° up nf we	2
27	Kerrison rong Semi- Detachable, and autoclavable Silicon Handle 20cm cervical use only 1mm 40° upward narrow footplate with ejector	1
28	Kerrison rong Semi- Detachable, and autoclavable Silicon Handle 20cm cervical use only 2mm 40° upward narrow footplate with ejector	1
29	Raney scalp clip blue single-use p/20x10	1
30	Raney scalp clip fcps 16cm f 57.85.01	1
31	Joseph raspatory 4mm 16.5cm	1
32	raspatory 6mm 18.5cm with Plastic handle (autoclavable)	1
33	Langenbeck raspatory 15mm 19cm	1
34	Yasargil galea hook 31cm	2
35	Ruskin Liston bone fcps 18cm cvd	1

36	Adson drill guide fcps 15cm	1
37	Olivecrona spatula 11+13mm str 18cm	1
38	Olivecrona spatula 15+18mm str 18cm	1
39	Olivecrona spatula 18+22mm str 18cm	1
40	De Martel (Bailey) wire saw guide 33cm	2
41	Gigli (Olivecrona) wire saw 50cm p/5	5
42	Gigli (Olivecrona) wire saw 40cm p/5	5
43	Gigli wire saw hdl solid p/2	2
44	Bard Parker handle no 3 stand 12.5cm	1
45	Bard Parker handle no 4 stand 13.5cm	1
46	Bard Parker handle no 7 long 16.5cm	1
47	Bard Parker handle no 3L long 21cm	1
48	dress fcps 14.5cm med	1
49	dress fcps 20.0cm med	1
50	tissue fcps 14.5cm 1x2 tooth med	1
51	tissue fcps 18.0cm 1x2 tooth med	1
52	tissue fcps 20.0cm 1x2 tooth med	1
53	tissue fcps 16.0cm 1x2 tooth med	1
54	Hudson Ewald dress fcps 12.5cm	1
55	Adson dress fcps 12cm serr	1
56	Adson HM dress fcps 12cm	1
57	Adson tissue fcps 12cm 1x2 tooth smooth	1
58	Backhaus Towel securing clamp 10.5cm	12

59	Allis grasp fcps 15cm 4x5 tooth	4
60	Foerster sponge fcps 24cm str	2
61	Langenbeck Kocher retr 7x30mm 21cm	2
62	Langenbeck Kocher retr 10x40mm 21cm	2
63	Volkman retr 3t semish 13mm 22cm	2
64	Weitlaner Beckmann retr sh 14.5cm	1
65	Weitlaner retr 3x4 tooth semi sh 16.5cm	1
66	Weitlaner retr 3x4 tooth semi sh 13.0cm	1
67	Adson Anderson retr ang sh 19cm	1
68	Frazier (Fergusson) suction cannula 6 Fr angle 18cm	4
69	Frazier (Fergusson) suction cannula 8 Fr angle 18cm	1
70	Frazier (Fergusson) suction cannula 10 Fr angle 18cm	1
71	Frazier (Fergusson) suction cannula 12 Fr angle 18cm	1
72	Penfield dissector d/e fig 1 17.5cm	1
73	Penfield dissector d/e fig 2 20cm	1
74	Penfield dissector d/e fig 3 19.5cm	1
75	Penfield dissector fig 4 20.5cm	1
76	Frazier needle Ø 2mm 10cm grad in cm	2
77	Dandy hemost fcps 14cm cvd sideways	24
78	ruler stainless steel 30cm	1
79	Sterilization wire baskets for containers, made of stainless steel, stackable, 510x255x50mm	1
80	Sterilization wire baskets for containers, made of stainless steel, stackable, 510x255x70mm	1

81	Aluminium Sterilization Container, complete: Bottom silver, Colour of lid: silver, incl. paper filter. Extremely effective drying phase of the container interior, silicone sealings ensure long-term sterility, coloured lids and identification labels for better organization-590x290x150mm with EN 285: 2008 and validated acc to ISO 17665 Part1:2010	1
82	Silicon mats for the fixation of delicate and very delicate instruments, 6mm (distance between naps) 460x240mm	2
	B) Burr Hole set / SHUNT SET	
1	Gerald tissue fcps str 17.5cm 1x2 tooth	1
2	Micro Adson tissue fcps 12cm 1x2 tooth	1
3	Micro Adson dress fcps 12cm serr	1
4	Gruenwald bay fcps 19.5cm serr	1
5	Halsted Mosquito fcps 12.5cm str	4
6	Halsted Mosquito fcps 12.5cm cvd	6
7	Crile Baby hemost fcps 14cm cvd	6
8	Crafoord (Coller) hemost fcps 20cm cvd	2
9	Mayo scrs str 14.5cm with Micro Serration	1
10	Metzenbaum slim scissors curved 14cm with Seamless, homogenous junction of tungsten carbide and micro serration and with golden screw for identification	1
11	Reynolds (Jameson) scissors curved 16cm with micro serration and with golden screw for identification	1
12	Baby Crile Wood (DeBakey) Needle Holders 15cm with TC Insert	1
13	Mayo hegar Needle Holders 18cm with TC Insert	1
14	Freer elevator sh/bl 19cm 5mm	1

15	Beyer bone rong cvd 18cm	1
16	Bard Parker handle no 3 stand 12.5cm	1
17	Bard Parker handle no 4 stand 13.5cm	1
18	Bard Parker handle no 7 long 16.5cm	1
19	dress fcps 14.5cm med	1
20	tissue fcps 14.5cm 1x2 tooth stand	1
21	Backhaus Towel securing clamp 10.5cm	10
22	Allis grasp fcps 15cm 4x5 tooth	4
23	Rochester Ochsner hemost fcps 1x2 tooth 20cm cvd	2
24	Dandy hemost fcps 14cm cvd sideways	12
25	Lambotte raspatory 10mm 22cm	1
26	Farabeuf raspatory 12mm str 15cm	1
27	Adson elevator 6mm bl 17cm slight cvd	1
28	Senn Miller retr d/e sh 16cm	2
29	Penfield dissector d/e fig 1 17.5cm	1
30	Penfield dissector d/e fig 2 20cm	1
31	Penfield dissector d/e fig 3 19.5cm	1
32	Penfield dissector fig 4 20.5cm	1
33	Mollison retr 4x4 tooth sh 15.5cm	1
34	Adson Anderson retr ang sh 19cm	1
35	Weitlaner Beckmann retr sh 21.0cm	1
36	Frazier suct cann 6 Fr ang 18cm	1
37	Frazier suct cann 8 Fr ang 18cm	1

38	Frazier needle Ø 2mm 10cm grad in cm	1
39	Foerster sponge fcps 24cm str	2
40	Sterilization wire baskets for containers, made of stainless steel, stackable, 510x255x70mm	1
41	Aluminium Sterilization Container, complete: Botton silver, Colour of lid: silver, incl. paper filter. Extremely effective drying phase of the container interior, silicone sealings ensure long-term sterility, coloured lids and identification labels for better organization-590x290x100mm with EN 285: 2008 and validated acc to ISO 17665 Part1:2010	1
42	Silicon mats for the fixation of delicate and very delicate instruments, 6mm (distance between naps) 460x240mm	1
	C) Burr Hole hudson brace with Accessories	
1	brace only f 57.60.00	1
2	extension piece only f 57.60.00	1
3	burr Ø 9mm	1
4	burr Ø 14mm	1
5	spherical burr Ø 16mm	1
6	burr Ø 9mm	1
7	Cushing perforator drill Ø 14mm	1
8	McKenzie helicoid drill Ø 13mm	1
9	Aluminium Sterilization Container, complete: Botton silver, Colour of lid: silver, incl. paper filter. Extremely effective drying phase of the container interior, silicone sealings ensure long-term sterility, coloured lids and identification labels for better organization-290x290x100mm with EN 285: 2008 and validated acc to ISO 17665 Part1:2010	1
10	Sterilization wire baskets for containers, made of stainless steel, stackable, 240x255x50mm	1

11	Silicon mats for the fixation of delicate and very delicate instruments, 6mm (distance between naps) 240x220mm	1
	D) Neuro Micro instruments set	
1	Yasargil micro scrs bay 20cm cvd	2
2	Yasargil micro scrs bay 23cm str	2
3	Yasargil micro scrs bay 23cm cvd	2
4	Yasargil micro scrs bay 20cm str	2
5	Yasargil micro scrs bay 16cm str	2
6	Yasargil micro scrs bay 23cm cvd	2
7	Yasargil micro scrs bay 20cm cvd	2
8	Yasargil micro fcps bay 0.6mm 22cm bl	1
9	Yasargil micro fcps bay 0.9mm 22cm bl	1
10	Yasargil micro fcps bay 20cm bl	1
11	Yasargil micro fcps bay 20cm sh	1
12	Yasargil micro fcps bay 20cm bl	1
13	Yasargil grasp fcps Ø 3mm 22cm serr	1
14	Yasargil grasp fcps Ø 5mm 22cm serr	1
15	Yasargil grasp fcps Ø 3mm 22cm	1
16	Yasargil grasp fcps Ø 5mm 22cm	1
17	Yasargil micro nh bay 23cm str	1
18	Yasargil micro nh bay 23cm cvd	1
19	Yasargil micro nh bay 20cm str	1
	Aluminium Sterilization Container, complete: Botton silver, Colour of lid: silver, incl. paper filter.	

20	Extremely effective drying phase of the container interior, silicone sealings ensure long-term sterility, coloured lids and identification labels for better organization-290x290x100mm with EN 285: 2008 and validated acc to ISO 17665 Part1:2010	1
21	Sterilization wire baskets for containers, made of stainless steel, stackable, 240x255x50mm	1
22	Silicon mats for the fixation of delicate and very delicate instruments, 6mm (distance between naps) 240x220mm	1
	E) Rhoton Micro Dissector set	
1	Rhoton micro hook 2mm bl 90° 19cm	1
2	Rhoton micro hook 2mm 90° semi sh 19cm	1
3	Rhoton micro hook 3mm 45° semi sh 19cm	1
4	Krayenbühl hook 3.0mm 18.5cm	1
5	Rhoton micro raspatory Ø 2mm 19cm	1
6	Rhoton micro raspatory Ø 3mm 19cm	1
7	Yasargil raspatory 18.5cm 1mm ang	1
8	Yasargil raspatory 18.5cm 4mm ang	1
9	Rhoton micro dissector 1.0mm 19cm	1
10	Rhoton micro dissector 1.5mm 19cm	1
11	Rhoton micro dissector 2.0mm 19cm	1
12	Rhoton micro dissector 2.8mm 19cm	1
13	Rhoton bone curette 1x2mm 19cm	1
14	Rhoton bone curette 1x2mm 45° 19cm	1
15	Rhoton micro needle semi sh 19cm	1
16	Sterilization tray 280x170x55mm with silicone mat	1

	F) Leyla Retractor set	
1	Holding arm (rigid), two parts	1
	Coupling head für maximum 5 fl exible tension arms	1
	Table fixation with ball joint	1
2	Leyla flex arm only	2
3	Riechert spatula holder only	2
4	support f round hdl instr	2
5	Olivecrona spatula 7+9mm straight 18cm	2
6	Olivecrona spatula 11+13mm str 18cm	2
7	spatula mall 14mm 20cm	2
8	spatula mall 17mm 20cm	2
9	Sterilization wire baskets for containers, made of stainless steel, stackable, 510x255x70mm	1
10	Aluminium Sterilization Container, complete: Botton silver, Colour of lid: silver, incl. paper filter. Extremely effective drying phase of the container interior, silicone sealings ensure long-term sterility, coloured lids and identification labels for better organization-590x290x100mm with EN 285: 2008 and validated acc to ISO 17665 Part1:2010	1
11	Silicon mats for the fixation of delicate and very delicate instruments, 6mm (distance between naps) 460x240mm	1
	G) Carotid Artery Ligation Set	
1	operating scissors straight 14.5cm sharp/blunt	1
2	Mayo scissors straight 17.0cm with mico serrated cutting edge and with golden screw for identification	1
3	Metzenbaum scissors curved 18cm - with Micro Serration and with golden screw for identification	1

4	Adson tissue fcps 12cm 1x2 tooth smooth	2
5	Cushing dress fcps 17cm serr	1
6	Hegemann Diethrich Vascular scissors 18cm 45°	1
7	micro forceps lightweight round handled diamond Ø 1mm straight 21cm	1
8	probe with eye 14.5cm	1
9	Crile Wood (DeBakey) needle holder 15cm with TC insert	2
10	Halsted Mosquito fcps 12.5cm str	6
11	Halsted Mosquito fcps 12.5cm cvd	6
12	micro hook 1.5mm bl 90° 23cm	2
13	Mixter fcps 19cm 90° cvd	1
14	Mixter fcps 25cm 90° cvd	1
15	Lemmon vasc spatula 3mm 17cm slight cvd	1
16	Watson Cheyne dissector/probe d/e 18cm	1
17	Lemmon vasc spatula 3mm 17cm slight cvd	1
18	Davis dissector d/e 4/5mm 24.5cm	1
19	DeBakey atraumatic vasc fcps 20cm 1.5mm	1
20	DeBakey atraumatic vasc fcps 20cm 2.0mm	1
21	Freer raspatory sh/sh 5mm 19cm	1
22	DeBakey atraumatic Husfeldt vascular clamp 17.5cm	1
23	Javid vasc clamp 16cm	1
24	Javid vasc clamp 19cm	1
25	Bard Parker handle no 7 long 16.5cm	1

26	Bard Parker handle no 4 stand 13.5cm	1
27	dress fcps 14.5cm med	1
28	tissue fcps 14.5cm 1x2 tooth stand	1
29	Frazier suct cann 8 Fr ang 18cm	1
30	Backhaus Towel securing clamp 10.5cm	6
31	Foerster sponge fcps 24cm str	2
32	Cushing vein hook 10mm 20cm	2
33	Volkman retr 3t bl 13mm 20cm	2
34	Richardson retr 20x25mm 24cm	2
35	Jansen retr 3x3t bl 10cm	1
36	Weitlaner retr 3x4 tooth sh 16.5cm	1
37	fistula probe fine Ø 1.0mm 14.5cm	1
38	Allis grasp fcps 15cm 4x5 tooth	2
39	d/e probe Ø 2.0mm 20.0cm	1
40	Rankin Crile hemost fcps 16cm str	6
41	Sterilization wire baskets for containers, made of stainless steel, stackable, 510x255x70mm	1
42	Aluminium Sterilization Container, complete: Botton silver, Colour of lid: silver, incl. paper filter. Extremely effective drying phase of the container interior, silicone sealings ensure long-term sterility, coloured lids and identification labels for better organization-590x290x100mm with EN 285: 2008 and validated acc to ISO 17665 Part1:2010	1
43	Silicon mats for the fixation of delicate and very delicate instruments, 6mm (distance between naps) 460x240mm	1
	H) Micro instruments for Anastomosis	

1	micro scissors 15cm blade 9mm str	1
2	micro scrs 15cm blade 9mm cvd	1
3	Blue Anodized micro 2000 scissors straight 15cm	1
4	micro scrs cvd 16cm	1
5	micro 2000 fcps str 10.5cm sh 0.2mm	1
6	micro 2000 fcps rd hdl 15cm str sh	1
7	micro nh 0.4mm str 15cm w/o catch	1
8	micro nh 0.4mm cvd 15cm w/o catch	1
9	micro nh 0.4mm str 15cm w catch diamond coated	1
10	micro nh 0.4mm cvd 15cm w catch diamond coated	1
11	Acland single clamp 11mm A p/2	1
12	Acland single clamp 11mm V p/2	1
13	Acland single clamp 14mm A p/2	1
14	Acland single clamp 14mm V p/2	1
15	Acland double clamp approximator 11mm V	1
16	Acland double clamp approximator 17mm V	1
17	needle case Ø 65mm	1
18	vessel spreader 11cm	1
19	Acland appl fcps 11cm	1
20	Sterilization tray 280x170x55mm with silicone mat	1
	I) Bipolar Non-stick Forceps with Cable	
1	Bipolar non-stick bayonet forceps 20cm 0.6mm straight with less exposure of cauterization tip	2

2	Bipolar non-stick bayonet forceps 20cm 1.0mm straight with less exposure of cauterization tip	2
3	Bipolar non-stick bayonet forceps 20cm 1.3mm straight with less exposure of cauterization tip	2
4	Bipolar non-stick bayonet forceps 22cm 0.6mm straight with less exposure of cauterization tip	2
5	Bipolar non-stick bayonet 22cm 1.0mm straight with less exposure of cauterization tip	2
6	Bipolar non-stick bayonet forceps 22cm 1.3mm straight with less exposure of cauterization tip	1
7	cable bipolar Ø4mm 4m	5
8	Aluminium Sterilization Container, complete: Bottom silver, Colour of lid: gold, incl. paper filter. Extremely effective drying phase of the container interior, silicone sealings ensure long-term sterility, coloured lids and identification labels for better organization-300x135x47mm with EN 285: 2008 and validated acc to ISO 17665 Part1:2010	1
9	Silicon mats for the fixation of delicate and very delicate instruments, 3mm (distance between naps) 275x125mm	1

SECTION – VI

PRE - QUALIFICATION CRITERIA

(Referred to in clause 13.3 of ITB)

I. Terms of Qualification for Equipment:

The Authorized Distributor or manufacturer should have supplied similar equipment as specified in the schedule of requirements to any Indian Institutions, up to the following quantity in any one of the last three financial years and completed the supplies within the stipulated delivery period. The Supplied units should be in working condition without any adverse remarks for the last two years as on the date of bid notification.

- (a). at least equal of the quantity offered or 25, whichever is lowest, if the tender quantity is ≤ 49 (or)
- (b). at least 50% of the quantity offered or 70, whichever is lowest, if the tender quantity is between 50 and 199
- (c). at least 35% of the quantity offered or 125, whichever is lowest, if the tender quantity is between 200 and 499
- (d). at least 25% of the quantity offered, if the tender quantity is > 500

- The bidder should furnish the information on past supplies and satisfactory performance in the proforma given under Section XI- Format B1, duly attested by the Bid signatory
- Performance statement along with required PO copies and its corresponding end user's satisfactory performance certificate Section XI. The documentary proof will be a certificate from the consignee/end user with cross-reference of order no. and date in the certificate along with a notarized certification authenticating the correctness of the information furnished.
- Bidders shall invariably furnish documentary evidence (End-user Certificate) in support of the satisfactory operation of the equipment as specified or a CA/Statutory auditor Certificate to that extent as per the format provided in the Section XI- Format B2
- The Bidder shall have an Avg. annual turnover in the last three financial years of not less than the amount specified against each item in the Schedule of the Requirements and also to have a positive net worth as per the latest Annual Accounts.
- Towards the above, the bidder should furnish data as per the Format (B3) given in Section- XI, to support that he has the financial capacity to perform the contract. Further the bidder as to submit the corresponding Balance Sheets and Profit and Loss Accounts for verification

- a) The Manufacturer, must have necessary quality certifications for both processes and products such as ISO 9001 (Quality Management System for Organization) and ISO 13485 (Quality Management System for Medical Devices).
- b) Full Quality Assurance System Approval certificate Management System Certification for Medical Devices and their equivalent International Standards certificates as BIS/CE/USFDA etc.

II. Terms of Disqualification:

1. The Bidders who has withdrawn their bids in any of the previous tenders of APMSIDC
2. A bidder who is placed on the black-list by either APMSIDC or by any other State /Central government's department or organization for the product offered with his bid in the last 3 years
3. A bidder who is placed on the black-list by either APMSIDC or by any other State / Central government's department or organization in the last 3 years
4. A bidder who is currently blacklisted / debarred either by APMSIDC or by any State Government or Central Government Department or Organization
5. The bidder who has been declared as 'undependable supplier' for two (2) items or in two (2) instances in the last one year by the APMSIDC and
6. The bidders against whom there have been reports of substandard Equipment and/or service are liable for disqualification.
7. In past performance documents related to Trading will not be considered

Note: In all the above cases, the disqualification cut-off date will be till the contract is signed

- ## III. Not with standing anything stated above, the purchaser reserves the right to assess the Bidders capabilities and capacity to perform the contract should circumstances warrant such an assessment in the overall interest of the purchaser deciding on award.

SECTION – VII (A): BID FORM

(Name and Address of Purchaser)

Date_____

To
The Managing Director,
APMSIDC, Mangalagiri, Guntur.

Contract No._____

Gentlemen:

Having examined the Bidding Documents including Addenda No. _____ the receipt of which is hereby duly acknowledged, we, the under-signed, offer to supply and deliver _____ (Description of Goods and Services) in conformity with the said Bidding Documents for the sum as given in the Price Bid (electronically) or such other sums as may be ascertained in accordance with the schedule of prices furnished and made part of this bid.

We undertake, if our bid is accepted, to commence delivery within 60 (Number) days and to complete delivery of all the items and perform incidental services as specified in the contract within 60 (Number) days calculated from the date of receipt of your Notification of Award/Letter of credit.

If our bid is accepted we will obtain the guarantee of a bank in a sum not exceeding 5% of the Contract price for the due performance of the Contract

We agree to abide by this bid for a period of 90 (Number) days from the date fixed for bid opening under Clause 22 of the Instruction to Bidders and shall remain binding upon us and may be accepted at any time before the expiration of that period.

We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in India like “The Prevention of Corruption Act 1988”

Until a formal contract is prepared and executed, this bid, together with your written acceptance thereof and your notification of award shall constitute a binding contract between us.

We understand that you are not bound to accept the lowest or any bid you may receive.

Dated this _____ day of _____

Signature: _____

(in the Capacity of) : _____

Duly Authorized to sign bid for and on behalf of

Section VII (B) - Model PRICE Schedules (available on e-procurement Platform)

Information Technology Electro. (P)
<https://tenders.eprocurement.gov.in/viewItemFormatX.html#>

Current Tender Details

Tender ID: 1236	IPB Number / Tender Notice Number: 1.14PMGSDC/2016-17, Dated: 07.05.2016
Tender Category: PRODUCTS	Tender Evaluation Type: L1/MS
Tender Type: OGS	Estimated Contract Value: 0
Tender Opening Date: 17/05/2016 05:15 PM	Bid Submission Closing Date: 01/06/2016 05:15 PM

Schedule Details

Schedule Name: Miscellaneous	Schedule Description: Different items
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Item Details

Item Code: Surg001	Item Name: GRAM STAINING KIT
Item Description: As per tender document	Item Specification: As per tender document

Add / Edit Cost Component Details

ID	Component Name	Type	Percentage / Amount
B001	CST	--SELECT--	--SELECT--
B002	Customs Duty	--SELECT--	--SELECT--
B003	Discount	--SELECT--	--SELECT--
B004	Entry Tax	--SELECT--	--SELECT--
B005	Excise Duty Including Cess	--SELECT--	--SELECT--
B006	Freight Charges	--SELECT--	--SELECT--
B007	Insurance Charges	--SELECT--	--SELECT--
B008	Other Charges, if any	--SELECT--	--SELECT--
B009	Packaging & Forwarding Charges	--SELECT--	--SELECT--
B010	VAT	--SELECT--	--SELECT--

Remarks

Total KIT Quantity	Offered Quantity (A)	Brand/Make/Model	Basic price Unit (INR) (B)	Basic price Unit (in Words)	Total Cost Component Unit (INR) (C)	Landed Price Per Unit (B+C)

SECTION – VIII
Bid Security Form

To

The Managing Director
APMSIDC, Mangalagiri, Guntur.

Whereas _____
(hereinafter called "the Bidder" has submitted its bid dated _____ for
the supply of _____ (hereinafter called
"the Bid")

KNOW ALL MEN by these presents that WE _____
of _____ having our registered office
at _____ (hereinafter called the Bank") are bound unto

_____ (hereinafter called "the purchaser") in the sum of _____ for which
payment will and truly to be made to the said purchaser, the Bank binds itself, its
successors and assigns by these presents. Sealed with the common Seal of the
said Bank this _____ day of _____.

THE CONDITIONS of this obligation are:

If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder
on the Bid form; or

If the Bidder, having been notified of the acceptance of its bid by the Purchaser
during the
period of bid validity:

- Fails or refuses to execute the contract form if required
- Fails or refuses to furnish the performance security, in accordance with the
Instruction to Bidders
- Does not accept the correction of the bid price pursuant to Clause 15.7(c).

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

This guarantee will remain in force up to and including 45 days after the period of
the bid validity, and any demand in respect thereof should reach the Bank not later
than the above date i.e., upto _____.

.....

....(Signature of the Bank)

SECTION – IX: CONTRACT FORM

THIS AGREEMENT made the _____ day of _____
between _____ (Name of Purchaser) of
_____ (Country of Purchaser) (hereinafter "the Purchaser")
of one part and _____ (Name of the
Supplier) of _____ (City and Country of Supplier)
(hereinafter "the Supplier") of the other part.

WHEREAS the Purchaser is desirous that certain Goods and ancillary services should be provided by the supplier, viz, _____ (Brief description of Goods and Services) and has accepted a bid by the supply of Goods and services in the sum of _____
(Contract price in Words and Figures) (hereinafter "the Contract Price").

NOW THIC AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the conditions of Contract referred to;
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:
 - (a) The Technical and Price bid of the Supplier
 - (b) The approved Technical Specifications,
 - (c) The General Conditions of Contract,
 - (d) The Special Conditions of Contract, and
 - (e) The Purchaser's Notification of Award.
3. In consideration of the payments to be made by the purchaser to the Supplier as hereinafter mentioned, 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 provision 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.
5. Brief particulars of goods and services which shall be supplied/provided by the Supplier are as under.

SL NO.	BRIEF DESCRIPTION TO GOODS & SERVICES	QUANTITY TO BE SUPPLIED	UNIT PRICE	DELIVERY TERMS

TOTAL VALUE:

DELIVERY SCHEDULE:

IN WITNESS whereof the parties here to have caused this Agreement to be executed in accordance with their respective laws the day and year first above written.

Signed, Sealed and Delivered by the

Said _____ (For the Purchaser)

in the presence of _____

Signed, sealed and Delivered by the

Said _____ (For the supplier)

In the presence of _____

SECTION- X: PERFORMANCE SECURITY FORM

To

The Managing Director
APMSIDC,
Mangalagiri, Guntur.

WHEREAS _____ (Name of the Supplier)
hereinafter called "the Supplier" has undertaken, in pursuance of Contract No.
_____ dated _____ to supply _____
(Description of Goods and Services) hereinafter called "the Contract".

AND WHEREAS it has been stipulated by you in the said contract that the Supplier shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with the Supplier's performance obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the Supplier a Guarantee:

THEREFORE WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up to a total of _____
(Amount of the Guarantee in Words and Figures) and we under take to pay you, upon your first written demand declaring the Supplier to be in default under the Contract and without cavil or argument, any sum or sums within the limit of _____ (Amount of Guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the _____ day of _____.

Signature and seal of Guarantors

Date _____

Address _____

SECTION XI

FORMAT B1: PROFORMA FOR PERFORMANCE (for a period of last three years)

(Please see Section VI: Qualification Criteria)

Bid No. _____ Date of Opening _____ Time _____ Hours

Name of the Firm _____

Order placed by _____ (Full address of Purchaser)	Order No	Date	Description of Item	Quantity of ordered Items.	Value of order	Date of completion of delivery		Remarks indicating reasons for late delivery, if any	Has the Supplier received full payment towards the supplies made
						Purchase terms	Actual		
1	2	3	4	5	6	7	8	9	10

Signature and seal of the Bid Signatory

SECTION XI

FORMAT B2

CA (STATUTORY AUDITOR) CERTIFICATE

(Please see Section VI: Qualification Criteria)

Certificate from the Statutory Auditor

This is to certify that (name of the Bidder) is a “**Manufacturer/Authorized Distributor**” of the required items offered under the Bid. The Bidder had supplied the quantities shown in the past performance statement and also completed the respective supplies within the stipulated delivery period/s.

Further it is certified that the previously supplied equipment are reported to be in working condition without any adverse remarks from the respective users and some are working for more than two year as per the records as on the date of this Tender notification.

The bidder has previous experience in maintenance and repairs of equipment for _____ years and has qualified service staff working with him”.

Name of Authorized Signatory(CA):

Designation:

Name of firm:

(Signature of the Authorized Signatory)

Seal of the Firm

SECTION XI

B3- FINANCIAL CAPACITY OF THE MANUFACTURER

A. Details of Annual Turnover for Preceding 3 Years.

	Year 1 (2021-22)	Year 2 (2022-23)	Year 3 (2023-24)	Average Annual Turnover
Turn Over (In Rs. Crores)				

B. Details of Net Worth

	Year1 (Last Financial Year i.e. as on 31 st March 2024)
Paid up Capital (Rs. Cr)	
(Add) Free Reserves (Rs. Cr)	
Total Net Worth (Rs. Cr)	
 (Signature of Bid Signatory) Seal of the Firm	
Certificate from the Statutory Auditor This is to certify that(name of the Bidder) has an average annual turnover (in the last three financial years) and Net Worth (in the last financial year) as shown above Name of Authorized Signatory (CA): Designation: Name of firm: (Signature of the Authorized Signatory) Seal of the Firm	

SECTION XI

B3-A FINANCIAL CAPACITY OF THE DISTRIBUTOR

A. Details of Annual Turnover for Preceding 3 Years.

	Year 1 (2021-22)	Year 2 (2022-23)	Year 3 (2023-24)	Average Annual Turnover
Turn Over (In Rs. Crores)				

B. Details of Net Worth

	Year1 (Last Financial Year i.e. as on 31 st March 2024)
Paid up Capital (Rs. Cr)	
(Add) Free Reserves (Rs. Cr)	
Total Net Worth (Rs. Cr)	
_____ (Signature of Bid Signatory) Seal of the Firm	
Certificate from the Statutory Auditor This is to certify that(name of the Bidder) has an average annual turnover (in the last three financial years) and Net Worth (in the last financial year) as shown above Name of Authorized Signatory (CA): Designation: Name of firm: (Signature of the Authorized Signatory) Seal of the Firm	

SECTION – XII -A

(Please see Clause 13.3(a) of Instructions to Bidders)
(to be submitted by manufacturers)

MANUFACTURER'S AUTHORIZATION FORM

No. _____ dated _____

To
The Managing Director
APMSIDC, Mangalagiri, Guntur.
Dear Sir,

Tender Notice No. _____

We _____ who are established and reputable manufacturers of _____ having factories at _____ and _____ do hereby authorize M/s. _____ (Name and address of Agents) to bid, negotiate and conclude the contract with you against Tender Notice No. _____ for the above goods manufactured by us.

No company or firm or individual other than M/s. _____ are authorized to bid, negotiate and conclude the contract in regard to this business against this specific Tender Notice.

We hereby declare that we are willing to provide guarantee/warranty and after sales service during the period of comprehensive warranty/CMC/AMC as per the above tender.

We also hereby declare that we have the capacity to manufacture and supply, install and commission the quantity of the equipments tendered within the stipulated time.

We hereby extend our full guarantee and warranty as per Clause 15 of the General Conditions of Contract and read with the Clause 10 of Special Conditions of Contract, for the Goods offered for supply against this invitation for bid by the above firm.

Yours faithfully,

(Name) for and on behalf of M/s.

(Name of manufacturers)

Note: This letter of authority is on the letterhead of the manufacturing concern and should be signed by a person competent and having the power of attorney to bind the manufacturer.

SECTION – XII -B

(Please see Clause 13.3(a) of Instructions to Bidders)
(to be submitted by Authorized Distributors)

MANUFACTURER'S AUTHORIZATION FORM

No. _____ dated _____

To
The Managing Director
APMSIDC, Mangalagiri, Guntur.
Dear Sir,

Tender Notice No. _____

We _____ who are established and reputable manufacturers of _____ having factories at _____ and _____ do hereby authorize M/s. _____ (Name and address of Agents) to bid, negotiate and conclude the contract with you against Tender Notice No. _____ for the above goods manufactured by us.

No company or firm or individual other than M/s. _____ are authorized to bid, negotiate and conclude the contract in regard to this business against this specific Tender Notice.

We also hereby undertake to provide full guarantee/warranty/CMC/AMC as agreed by the tenderer in the event the tenderer is changed as the dealers or the tenderer fails to provide satisfactory after sales and service during such period of comprehensive warranty/CMC/AMC and to supply all the spares/ reagents during the said period.

We also hereby declare that we have the capacity to manufacture and supply, install and commission the quantity of the equipments tendered within the stipulated time.

We hereby extend our full guarantee and warranty as per Clause 15 of the General Conditions of Contract and read with the Clause 10 of Special Conditions of Contract, for the Goods offered for supply against this invitation for bid by the above firm.

Yours faithfully,
(Name) for and on behalf of M/s.

(Name of manufacturers)

Note: This letter of authority is on the letterhead of the manufacturing concern and should be signed by a person competent and having the power of attorney to bind the manufacturer.

SECTION - XIII

DECLARATION FORM

I / We having Our
..... office at read and
understood the terms and conditions contained in the bidding documents under this
notification for bid and offer our bids unconditional, to the extent not stated at any
other part of our bid.

We will not quote or supply the equipment/furniture similar to the ones offered
under this bid notification to any agency or organization in the country, at the rate
lower than the rate quoted in this present tender.

If we found quoting lower rate than the rate quoted to the APMSIDC, to any
other agency in the country during the validity of the present contract, we will remit
the differential cost to the APMSIDC, unconditionally.

Signature :

Date :

Name of the
Firm and address :

SECTION XIV

Check List of Documents to be Uploaded as part of the Bid and Notes to Bidders

I. Documents with the Technical Bid

Sl. No	Document Description	Documents to be submitted
1	Process Fee 29,500/-	Online
2	EMD	Online & Offline
3	Bid Form Section VII-A	Online & Offline
4	List of items offered with Make and Model details without prices	Online & Offline
5	Manufacturers Authorization, wherever required	Online & Offline
6	Past Performance Details Format B1 along with supporting documents	Online & Offline
7	End-User Certificates or CA Certificate as per Format B2	Online & Offline
8	Financial Capability Details Format B3 for Manufacturer	Online & Offline
9	Financial Capability Details Format B3-A Distributor	Online & Offline
10	Details and proof of After-Sales Service facilities	Online & Offline
11	Letter of authorization to sign the bids	Online & Offline
12	Clause-by-clause commentary on technical specifications	Online & Offline
13	Technical and Commercial deviations statements	Online & Offline
14	Copy of the GST Certificate and Details of IT Returns- (Last 3 years), PAN and GST copies.	Online & Offline
15	The Manufacturer, must have necessary quality certifications for both processes and products such as ISO 9001 (Quality Management System for Organization) and ISO 13485 (Quality Management System for Medical Devices).	Online & Offline
16	Full Quality Assurance System Approval Certificate Management System Certification for Medical Devices and their equivalent International Standards certificates (BIS/CE/USFDA/AERB etc)	Online & Offline
17	Memorandum of Articles	Online & Offline
18	All the uploaded Technical bid, to be attested by a Gazette Officer or properly notarized or self attested	Online & Offline
19	General Information about the tenderer	Online & Offline
20	Declaration form	Online & Offline

Sl. No	Document Description	Documents to be submitted
21	DPIIT approval (If applicable)	Online & Offline

II. Financial (Price) Bid in the format available with the e-procurement platform

- Please note that the Bidder runs the risk of his bid being rejected if the price schedule contains any conditions.

Notes to Bidders

1. Upload the documents in ZIP format with suitable description as defined above.
2. The scanned documents shall be legible failing which they will not be considered.
3. Sign on all statements, documents, certificates uploaded owning responsibility for their correctness / authenticity.
4. All the statements copies of the certificates, documents etc., enclosed to the Technical bid shall be given page numbers on the right corner of each certificate
5. The tenderer is subjected to be blacklisted and the EMD forfeited if he is found to have mislead or furnished false information in the forms / statements / certificates submitted in proof of qualification requirements or record of performance (Please see Corrupt and Fraudulent Practices Clause)
6. All the Bidders are requested to quote with single option only, for the each item offered and please note that bids with multiple options, for any one or all of the items offered, will be rejected by the purchaser as Non-responsive.

(On Firm letter Head)

Annexure - I

ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE
DEVELOPMENT CORPORATION (APMSIDC)

INSTALLATION CERTIFICATE

*(to be filed jointly by the Tenderer, head of user institution &
Representative of the Tender Inviting Authority
individually for every equipment)*

HOSP CODE/ Hospital Name:				
Equipment Details				
EQPT CODE/ Name of the equipment:		Purchase Order No:		
Make / Manufacturer		Purchase Order Date:		
Model		Purchase Amount		
Serial no.		Project Name		
Location / Department				
Installation Start Date		Completed Date.		
Comprehensive Warranty Start Date		Comprehensive Warranty End Date:		
Preventive Maintenance Schedule (Specify Year & Month)				
YEAR	Visit 1	Visit 2	Visit 3	Visit 4
Contact Details				
SUP.CODE / Name of the Supplier				
Name of Service Engineer		Mobile No.		
Service Centre Manager's name		Mobile No.		
Service center address				
Accessories supplied				
Sl. No.	Item	Qty.	Serial No.	Remarks
To be filled by Institution				
Whether the sticker affixed on all the key components of the equipment or on a conspicuous place in the installed room/storage area?				YES / NO (tick one)

Whether a digital Photograph of the installed equipment taken after affixing the sticker in the presence of the hospital personnel?		YES / NO	
Whether the Demonstration of the equipment with accessories on the technical specification/key features was conducted to the satisfaction at the time of installation?		YES / NO	
Whether training was conducted to the satisfaction at the time of installation?		YES / NO	
Short supply items, if any			
Remarks of hospital authorities			
Recommend to release payment YES ☐ NO ☐		The equipment is working satisfactorily YES ☐ NO ☐	
The equipment was installed and handed over on <i>(Installation date to be filled in by the Head of the institution or by the end user)</i>			
Name of Service Engr.		Sign.	
Name of End User & Department Mobile No.		Sign.	
Name of Bio Medical Engr. & Organization		Sign.	
Signature of the Superintendent. Mobile No.		Sign. & Seal	
Date: Seal of supplier:		Date: Hospital Seal:	

Note: The installation report shall be submitted in a single sheet printed back to back and shall be submitted individually for each equipment installed.

On Consignee letter Head

Dt: _____

**ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE
DEVELOPMENT CORPORATION (APMSIDC)
THREE MONTHS PERFORMANCE CERTIFICATE**
(to be filed by the head of user institution individually for every equipment)

HOSP CODE / Hospital Name:				
SUP.CODE / Name of the Supplier				
Equipment Details				
EQPT CODE /Name of the equipment:			Purchase Order No:	
Make / Manufacturer			Purchase Order Date:	
Model			Purchase Amount	
Serial no.			Project Name	
Date of Installation			Location / Department	
Whether Equipment working satisfactorily without any problem for one month?				YES ☐ NO ☐
If No, provide details of equipment failure in the first month <i>(attach additional details if any in a separate sheet)</i>				
BREAK DOWN DETAILS				
Break down Reported Date	Attended date	Rectified date	Attended by	Details of beak down / service
Present status of the equipment		Working satisfactorily ☐ Not working satisfactorily ☐		
Recommended to settle the final payment			YES ☐ NO ☐	
Recommend for trial run for one more month			YES ☐ NO ☐	
Performance of accessories supplied				
Further Training		Required ☐ Not required ☐		
Remarks of hospital authorities				
Three month performance certificate was issued on <i>(date to be filed in by the Head of the institution or by the end user)</i>				

Name of End User & Department		Sign.	
Signature of the Superintendent.		Sign. & Seal	
Date: Seal of supplier:	Date: Hospital Seal :		

ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE
DEVELOPMENT CORPORATION (APMSIDC)

WARRANTY CERTIFICATE

*(to be filled jointly by the Tenderer, head of user institution &
Representative of the Tender Inviting Authority individually
for every equipment)*

Date:

APMSIDC Supply order No:dated.....

The equipment *(Equipment Name)*

Model No bearing serial no was

installed successfully at *(Institution*

Name) is offered with a comprehensive warranty for a period of Years

starting from to including all the

following accessories;

Sl. No	Name of the accessory	Manufacturer's name	Equipment Serial No.	Qty

Name of the Supplier: Signature: Seal:	Name of the Supdt. / End User: Signature: Seal:
--	---

ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE
DEVELOPMENT CORPORATION (APMSIDC)

PREVENTIVE MAINTENANCE CHECK LIST

Equipment Name.

Sl. No.	Activities carried out during Preventive Maintenance visit	Visit 1	Visit 2	Visit 3	Visit 4
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					

Annexure-V

ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE
DEVELOPMENT CORPORATION (APMSIDC)

CALIBRATION CHECK LIST

Equipment Name

Model.

Sl. No.	Parameters to be calibrated	Frequency of calibration required
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		

Annexure-VI

ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE
DEVELOPMENT CORPORATION (APMSIDC)

List of Spare Part

Equipment Name:

Make:

Model

Sl. No.	Spare name	Cost (inclusive of all charges)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		

Signature :

Date :

Name of the
Firm and address :

Annexure-VII

ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE
DEVELOPMENT CORPORATION (APMSIDC)
GENERAL INFORMATION ABOUT THE TENDERER

Name of the Tenderer

Registered
address of the
firm

State:

District

Telephone. No.

Fax. No.

Email.

3	Address			
	State		District	
	Telephone No.		Fax	
	Email		Website	

Type of Firm (Please ☐ relevant box)

4	Private Ltd.	☐	Public Ltd.	☐	Proprietorship	☐
	Partnership	☐	Society	☐	Others, specify	☐
	Registration No. & Date of Registration.					
Nature of Bussiness (			-lease ☐ relevant box)			
5	Original Equipment Manufacturer		☐	Authorized Dealer /Representative		☐
	Direct Importer		☐	Others, specify.		☐

SERVICE CENTRE DETAILS

TOLL FREE NUMBER, IF ANY			
Sl. No	Name and address of the service center (s)	Contact Details	
1		Telephone No:	
		Fax No:	
		Email ID.	
		Name of the Service Engr.	
		Mobile No.	
2		Telephone No:	
		Fax No:	
		Email ID.	
		Name of the Service Engr.	
		Mobile No.	
3		Telephone No:	
		Fax No:	
		Email ID.	
		Name of the Service Engr.	
		Mobile No.	