



Government of West Bengal  
Office of the Principal  
Nil Ratan Sircar Medical College  
Kolkata – 700014; Phone: 033-2286-0033  
Website: [www.nrsmc.edu.in](http://www.nrsmc.edu.in); e-mail: [principalnrsmc@gmail.com](mailto:principalnrsmc@gmail.com)

Memo No. NMC/STORE/ 1156

Dates: 02.03.2020

**E-TENDER NOTICE (NIT No: 96 / 2019-20) FOR PURCHASE AND INSTALLATION OF  
EQUIPMENTS FOR DIFFERENT DEPARTMENT OF  
NIL RATAN SIRCAR MEDICAL COLLEGE, KOLKATA - 700014.  
(Through Pre-qualification)  
(Submission of Bid through NIC e- tender portal)**

The Principal, Nil Ratan Sircar Medical College, Kolkata – 700014, is going for e-Tender on behalf of the Health & Family Welfare Department, Government of West Bengal for obtaining the rate of equipment as per list from bonafide Manufacturer/Direct Importer/Authorized Distributors. Necessary earnest money to be submitted for participation in the Tender is appended in the table below. Exemption of EMD is applicable to agencies having valid, item specific certificate issued by appropriate authority of Govt. of West Bengal.

1)

Serial No	Name of equipment	Department	Quantity	Earnest Money
1	Microscope with Karyotyping workstation upgradable to fish	BDT Nidan Kendra	01 pc	Rs. 50000.00

2)

Serial No	Name of equipment	Department	Quantity	Earnest Money
1	Tran cranial Magnetic Stimulator	Neurology	01 pc	Rs. 50000.00

3)

Serial No	Name of equipment	Department	Quantity	Earnest Money
1	Wall mounted Virtual touch fully interactive Table	Anatomy	02 pc	Rs. 100000.00

4)

Serial No	Name of equipment	Department	Quantity	Earnest Money
1	Arthroscopic Equipments	Orthopedic	1 pc	Rs. 50000.00

All bidders must complete their technical demonstration of their quoted items within ten (10) days from the date of opening of technical bid to the concern Department.

**1. General Instructions:**

In the event of e-filing, intending bidder may download the tender documents free of cost from the website: <http://wbtenders.gov.in> directly with the help of Digital Signature Certificate or from the Health & Family Welfare Department's website [www.wbhealth.gov.in](http://www.wbhealth.gov.in).

**2. Submission of Bids:**

Both Technical Bid and Financial Bid are to be submitted concurrently duly digitally signed, in the website <http://wbtenders.gov.in>. All papers must be submitted in English language.

**3. Time Schedules:**

The time schedule for obtaining the bid documents, pre bid meetings, registration with the tendering authorities, the submission of bids and other documents etc. will be as per **the list provided in clause no 23** as given below. Bidder are instructed to wait for uploading any corrigendum arising during pre bid meeting, before submitting their bid online

**4. Eligibility for Quoting:**

**Only Manufacturers/direct Importers/Authorized Distributors are eligible for quoting.** The price is to be quoted in Indian Rupees including cost of insurance, packing, forwarding, freight charges, clearing charges and installation of the new instrument and exclusive of GST and other taxes which are to be quoted separately in the BOQ. Agency commission is not permissible.

**5. Submission of Tender:**

The tender is to be submitted in Two Bid System (Technical Bid or Bid A & Financial Bid or Bid B).

**(A) Technical Bid or Bid A:**

**"BID A": PART I**

File containing Technical Bid only - single file with multiple scanned pages containing Statutory and My documents separately.

**(a) STATUTORY** Cover containing the following documents:

(SINGLE FILE MULTIPLE PAGE SCANNED)

Essential Requirements of the Tendering Firm for participation" shall contain all papers related to the essential requirements of the Renderer for participation in the tender viz.

Sl. No.		Page no
1	Duly filled in CHECK LIST in the prescribed format. Page number of documents must be mentioned in the check list before uploading the same.	
2	Application in the prescribed format given in Annexure I	
3	Authorization letter of signatory from Company in Annexure II	
4	Copy of agreement between the manufacturer and the Distributor in Annexure III	
5	No conviction certificate in the form of an Affidavit as per Annexure-IV	
6	A Proof of submission of applicable END	

**(b) NON STATUTORY/MY DOCUMENTS** Cover Containing the following documents:

Essential Requirements of the Tendering Firm for participation” shall contain all papers related to the essential requirements of the Renderer for participation in the tender viz.

Sl. No.	Category	Sub Category	Sub Category Description	Page No
A	Certificates	A1. Certificates	PAN Card of the authorized signatory	
			Professional Tax Registration certificate	
			PUC in respect of the manufacturing unit	
			GST Registration certificate	
B.	COMPANY DETAILS	B1. COMPANY DETAILS 1	Certificate of country of origin	
			Registration with Registrar of Companies	
			Trade License in the name of participating firm	
C.	CREDENTIAL	C1: CREDENTIAL 1	Manufacturing License with validity	
			Import License with validity (for importers)	
		C2 : CREDENTIAL 2	Manufacturer’s guarantee(in case of Distributors and Direct Importer, to be obtained from manufacturer)	
			A declaration in respect of existence of a fully equipped service centre in or around Kolkata in respect of the relevant item.	
		List of purchaser in Govt. Institutions of repute, for last two years		
D.	FINANCIAL INFO	PAYMENT CERTIFICATE 1	Income Tax Returns submitted for the last three years	
		Audited P/L & BALANCE SHEET	P/L & Balance sheet of the last three years	

**BID A”: PART II**

Technical specifications of Instrument (in PDF/Excel format. Must mention Make, Model, exact features of the offered item against each point given in the specification chart). **Improper filling &/or suppression of facts/false statement will lead to disqualification and penalty in the form of permanent black listing.**

**(B) Financial Bid B**

**COVER “B”:** Separate file containing financial document only.

(a) Financial Bid: BOQ in INR (in excel sheet)

The folder marked as “Financial Bid” shall contain ALL INCLUSIVE PRICE in INR only and should include base price along with the cost of allied works and services which are to be undertaken (like installation, commissioning of equipment or PC etc.), cost of insurance, packaging, forwarding, delivery charges, clearing charges of the new instrument to be purchased. **GST and any other applicable tax. should be quoted separately. Five years CAMC rate should also be quoted separately in the template**

for Bill of Quantities (BOQ). However, the L1 will be determined on base price plus admissible taxes only. GST quoted will be directly remitted to Government account as per existing norms of Finance Department.

The tenderers are required to submit the hard copies of Cover A (Transaction document of EMD , General Documents and Technical Specifications) as per schedule described in the time line vide clause 23, preferably by **speed post/ courier**, to the office of the Principal, NRS Medical College, Kolkata. Submission of hard copy of Cover A to the office of the Principal, Nil Ratan Sircar Medical College, Kolkata, is for reference only while examining the technical bid on line and will not be treated as substitute for on line submission. **Submission of hard copy of Bid B is totally prohibited.**

#### **6. Evaluation of Tender:**

During tender evaluation process, "Bid A" will be opened first. Those tenderers who would qualify the Statutory & Non-Statutory requirements on the basis of technical and commercial documents will be identified and "Bid B" i.e. financial bid of only those qualified bidders will be opened. Verification of hard copies of the audited balance sheet and Profit & Loss Accounts of the Tenderers for the last three years will be made if deemed necessary before opening the Financial Bid (Bid B) of the technically qualified bidders. If found suitable on the basis of above pre-qualification, the tenderer quoting the lowest rate, will be considered as successful.

#### **7. Earnest Money:**

The earnest money of the tenderer is liable to be forfeited if the tenderer withdraws his tender as a whole or for any particular item or items at any stage after opening of the tender or fails/refuses to enter into written agreement for any or all of the items of his accepted bid within the time specified when requested to do so or fails to furnish Performance Bank Guarantee within the stipulated time. **EMD should be deposited online in the Pooling Account of Government of West Bengal maintained at ICICI Bank, RN Mukherjee Road Branch in the manner as prescribed in Government Order no. 3975-F(Y) dated 28/07/2016. (Order copy is available at the site-[www.wbfin.nic.in](http://www.wbfin.nic.in))** Hard copy of Bid A should reach the office on or before the stipulated date as mentioned in clause 23.

#### **8. Rate:**

The price is to be quoted in INR only including cost of insurance, entry tax, packaging, forwarding, delivery charges, clearing charges and installation of the new instrument. The basic rate should be furnished inclusive of Transportation Cost, Insurance, Testing Charges, Incidental Charges etc. but excluding GST and any other applicable taxes etc. which should be quoted separately in the template for Bill of Quantities (BOQ).

#### **9. Order & Supply:**

The tendering authority has the liberty to ask for **performance demonstration** of any item during any stage of the tender process, before placing order for supply. In case of dissatisfaction, the authority will have the right to disapprove the offer of L1 bidder and go for the next bidder. Orders for supply of the approved products will be placed with the successful tenderers after execution of agreements and such supply shall have to be made in such installments as may be fixed or spread over the period to be specified in the supply orders to be made in pursuance of the agreements. The equipment is to be transported in such packaging so as to avoid damage to primary package of manufacturer. The successful tenderer will have to supply within the specified time schedule that had been assured at the time of selection as supplier.

**The tendering authority will be at liberty to enhance the quantity of the item tendered up to 40% of the original required quantity. Bidder will have to consider the same while bidding as supply of the enhanced quantity will be mandatory as the original one.**

**10. Withdrawal /Cancellation & Purchase Policy of Tendering Authority:**

The tendering authority reserves the right to withdraw any item from the tender at any stage. The selection of such item, if already made in favour of any tenderer, shall be treated as cancelled. The tendering authority reserves the right to reject or accept any tender or part thereof at any stage or to split any tender without assigning any reason. Withdrawal of tender or any revision after submission of tender by the tenderer will not be allowed.

Purchase will, however be made following the existing purchase policy of the Govt. of West Bengal and its amendment(s) made from time to time. The purchase policy of the State Government as provided in the West Bengal Financial Rules, the policy of price preference in particular incorporated under Notification No. 10500-F dated 19.11.04, 5400-F(Y) Dated 25/06/2012 and subsequent relevant orders should be observed in considering the tenders.

**11. Important Instruction with regard to Submission of Tender:**

The rate should be quoted in Indian Rupees for a particular brand or model (model no. of the offered item only must be mentioned in the appropriate column of the 'Tender Form'. Alternative offer will not be accepted). The tender shall be cancelled for the quotation of item without its brand name, model, model no. etc. Detail information regarding the manufacturer and the item quoted in the 'Tender Form' should be furnished.

**12. Spare Parts:**

The Bidder will undertake that supplies of necessary maintenance equipment and spare parts will be made available for all items/equipment and the complete system for at least five years on a continuing basis. However, this does not relieve the supplier of any warranty obligations under the contract.

**13. Guarantee / Warranty Period:**

i) The machine/Instrument should be covered by free on-site comprehensive Warranty for one year after successful installation. The tenderers must quote for 5 (Five) years' comprehensive on-site AMC of entire system (including all spares & labour) after the date of completion of free warranty period. The CAMC charges for 5 years to be quoted in the BOQ, will however be determined on extant Govt. rules in this regard.

ii.) All faults appearing and their rectification shall be periodically advised to the institute, the period being not more than two weeks.

iii.) Any lacuna or lacunae noticed in the functioning of the installation as a result of any design or other feature shall be rectified by the supplier free of cost within 72 hours of call log.

**14. After Sales Services and Maintenance Contract:**

After sales service must be provided by the supplier, during and after warranty period of the equipment. Selected vendor will remain liable to attract penalty for violation of machine downtime as per agreement. The selected vendor or his authorized servicemen has to attend the machine within 72 hours of Call Log. It is desirable to have a fully equipped service centre in or around Kolkata.

**15. Delivery, Installation and Commissioning**

i. Delivery of the goods at the purchaser's premises shall be completed by the Supplier in accordance with the terms specified by the purchaser.

ii. The installation, testing and commissioning of the proposed system shall be completed in accordance with the order.

iii. All items are to be delivered within six weeks from the date of placement of order.

iv. In case of distributor, the firm should be direct distributor of manufacturing unit. **Sub distributor authorization by distributor will not be accepted at all.**

**16. Penalty Clauses:**

**PENALTY FOR FORMATION OF CARTEL OR FURNISHING OF FRAUDULENT/ MISLEADING DOCUMENTS:** If during the tender process or at any stage during the validity of the tender period, it is found that a tenderer(s) has formed a cartel in what so ever form or name to fix up the rates or suppliers to the detriment of the fairness of the tender process, penal measures shall be initiated. Similar penal measures shall also be initiated against those tenderers who have submitted false/ misleading/ fraudulent documents or made incorrect declarations. The penal measure will be forfeiture of Earnest Money, forfeiture of Performance Bank Guarantee if enlisted as a supplier in addition to any other legal action against the firm.

**17. Appeal:**

Appeal against the decision of the Principal, Nil Ratan Sircar Medical College, Kolkata and then to impose such a penalty will lie with Tender Selection Committee. Review against the decision of the Tender Selection Committee (TSC) will lie with Health & F.W. Dept. of the Govt. of W.B. The Special Secretary/Secretary/Principal Secretary will be the appellate authority within the Department of Health & Family Welfare, Government of West Bengal. Before imposing any penalty as per clauses 20, 21 and 22 the concerned supplier may appeal to the authority citing the proper reasons for non- imposing the penalty as stated.

**18. Agreement:**

On a tender being accepted, intimation of acceptance will be forwarded to the tenderer by Principal, Nil Ratan Sircar Medical College, Kolkata. After communication of the same, the tenderer will have to execute agreement in the prescribed form with the Principal, Nil Ratan Sircar Medical College, Kolkata. In case any direct purchasing unit wishes to go for a separate agreement, the head of the purchasing unit must get written permission to that effect from his controlling authority. This present document and the tender forms filled in by the tenderer or copies thereof in so far as they are not inconsistent with these terms & conditions will be incorporated as part of the agreement. Such agreement will be binding on the tenderer.

**19. Validity Period of Agreement:**

The contract period will be for a period 01 (one) years from the date of finalization of tender which can be extended for a further period of 6 months if Tender Selection Committee feels necessary.

**20. Performance Bank Guarantee:**

The performance bank guarantee will be mandatory for all suppliers and will not be waived in any case. The successful tenderers shall be required to furnish the 'Performance Bank Guarantee' from any Nationalized/Scheduled Bank acceptable to Govt. of West Bengal for One year @ 10% of quoted base rate per item for which the tenderer has been selected as supplier. The performance bank guarantee will have to be renewed after completion of Free Warranty period, for additional 5 (Five) years under the paid CAMC period before transfer of the CAMC amount to bidder's account. Mentioning of West Bengal Government Pooling Account for Performance Bank Guarantee No. 000605030134 IFS Code ICIC0000006 MICR 70229002 at ICICI Bank, RN Mukherjee Road Branch, Kolkata on the body of Performance Bank Guarantee is made mandatory vide Finance Department GO No. 2691-F(Y) dated 02/05/2017.

**21. Inspection:** Before submitting the tender, the intending tenderers should thoroughly get acquainted themselves with the proposed supply and installation by local inspection of site and take into consideration the site condition and other criterion for effecting smooth supply. No claim whatsoever will be entertained afterwards.

**22. Payment Terms:**

Payment will be made electronically by Govt. of West Bengal approved system after execution of due supply and successful installation as ordered, subject to :

i. Submission of Performance Bank Guarantee in terms of Clause 20 and subject to penalty clause in terms of Clauses 16.

ii. Supply of the materials as per specification as provided in the tender documents and the catalogue. Supply of the materials must be made within the stipulated period as specified in the work orders.

iii. On being selected, the successful vendors will have to submit one application to the Principal, Nil Ratan Sircar Medical College, Kolkata stating the name of the payee/recipient, Bank account no with IFS code of the payee/recipient for making e-payment. Payment will only be released after satisfactory installation and verification of following items-

1. Supplier's invoice in original
2. Challan and installation certificate
- 3 Any other thing of importance on the discretion of College Authorities

**23. Dates & Information:**

S. No	Items	Dates
1	Date of uploading of N.I.T. Documents (online) from this end.	07.03.2020, 4.00 P.M.
2	Documents download start date (Online)	07.03.2020, 4.00 P.M.
3	Date of hoisting of documents at Departmental Website ( <a href="http://www.wbhealth.gov.in">www.wbhealth.gov.in</a> )	07.03.2020, 4.00 P.M.
4	Date of Pre Bid Meeting and workshop with the intending bidders at the office of the Principal of NRS Medical College	11.03.2020, at 1.00 P.M
5	Bid Submission starting (On line)	12.03.2020 4.00 P.M. onwards
6	Bid Submission closing (On line)	03.04.2020 at 4 P.M.
7	Bid opening technical bid(online) (Bid A)	06.04.2020 at 4.00 P.M.
8	Date of uploading list for Technically Qualified Bidder (online)(Bid A)	07.04.2020 10 A.M. onwards.
9	Date & for opening of Financial Proposal (Bid B) (Online)	To be declared later
10	Date of uploading of list of bidders along with the approved rate	To be declared later.

Principal, Nil Ratan Sircar Medical College, Kolkata, reserves the right to change the above schedule in case of any exigencies after putting up a notice in the departmental website and Notice Board of N R S Medical College, Kolkata.



**24. Validity of Tender:**

- i. The tender will remain valid up to 1 (one) year from the date of finalization of tender **which can be extended for a period of 6 months**. Any objection raised by any bidder in this respect will not be entertained. No informal tenderer will be entertained in the bid further.
- ii. During the scrutiny, if it comes to the notice of tender inviting authority that the credential or any other paper found incorrect/ manufactured/ fabricated, that bidder would not be allowed to participate in the tender and that application will be out rightly rejected without any prejudice.
- iii. Prospective bidders must take training from authorized agencies before submission of their bids.
- iv. The Tender Selection Committee reserves the right to cancel the N.I.T. due to unavoidable circumstances and no claim in this respect will be entertained.

**25. NO- CONVICTION CERTIFICATE:**

No conviction certificate in the form of An Affidavit is to be submitted in the prescribed Pro-forma as Annexure-IV attached herewith from Notary Public/ Judicial Magistrate/Executive Magistrate.



Principal  
NRS Medical College  
Kolkata-14

**CHECK LIST (MUST BE PROPERLY FILLED)**

**NOTE: For Non applicability for some documents please mention "NA" in the check list. Must be mention page number in the check list.**

S. No	Item	Pl put tick or NA	Page No.
1	Application submitted in Annexure I		
2	Annexure II (Authorization letter of signatory from the Company)		
3	Annexure III (Copy of agreement between the Manufacturer and the Direct Importer/Distributor)		
4	No conviction certificate in the form of an Affidavit as per Annexure-IV.		
5	Income Tax Returns submitted for the last three Assessment years		
6	GST Registration certificate(not provisional)		
7	PAN Card of the organization and authorized signatory.		
8	Manufacturer's guarantee (in case of Distributors and Direct Importer, to be obtained from manufacturer)		
9	Audited P/L & Balance sheet of last three years		
10	Technical specifications of Instrument (in PDF/Excel format. Must mention Make, Model, exact features of the offered item against each point given in the specification chart).		
11	Trade License in the name of participating firm		
12	PUC in respect of the manufacturing unit(if applicable)		
13	Certificate of country of origin		
14	Registration with Registrar of Companies		
15	Valid Manufacturing License(if applicable)		
16+	Import License with validity (for importers)		
17	List of purchaser in Govt. Institutions of repute, for last two years		
18	A declaration in respect of existence of a fully equipped service centre in or around Kolkata in respect of the relevant item.		
19	A Proof of submission of applicable END		

**ANNEXURE-I**

**APPLICATION FORMAT**

(To be furnished in the Company's official letter pad with full address and contact no etc)

To: The Principal, Nil Ratan Sircar Medical College, Kolkata-700014.

Sub: Tender No.-----Dt.----- (Name of the Item -1)-----2)-----  
-----3)-----4)-----

---) for purchase and installation of equipment for department of ....., Nil Ratan Sircar Medical College, Kolkata-700014.

Ref:-

Sir,

Having examined the pre-qualification & other documents published in the N.I.T, I /we hereby submit all the necessary information and relevant documents for evaluation:

1. That the application is made by me / us on behalf of.....

In the capacity of.....duly authorized to submit the offer. The authorization letter from the Company is attached in Annexure II.

2. We accept the terms and conditions as laid down in the NIT mentioned above and declare that we shall abide by it for throughout the tender period and its extensions, if any.

3. We are offering rate for the following item /items and assured supply to the Health & Family Welfare Department, Government of West Bengal as per Table-1 (Instrument Specification)

4. a. We propose that the order and bill should be raised in our name.

For liaoing, we have appointed M/S ..... having its office at ..... (Address, contact no and e mail address) as C&F agent /Liasoner /Contact person/..... Others (strike out whichever is not applicable) as per clause ..... of the NIT

b. The agreement between ourselves and the distributor/C&F/Liasoner & other documents as prescribed is attached in annexure III

5. In the event of being selected, supply will be made within the stipulated period excepting the condition which is beyond our control.

6. We understand that:

(a) Tender Selection Committee/ H&FW Dept can amend the scope & value of the contract bid under this project.

(b) Tender Selection Committee/ H&FW Dept reserves the right to reject any application without assigning any reason.

Date :-

Signature of applicant including title  
and capacity in which application is made.

Contact details -

Mobile:

E mail ID:

**Annexure II**

Authorization letter in favour of the applicant (other than Managing Director/ Proprietor) –  
from the competent authority.

FORMAT

(To be furnished in the Company's official letter pad with full address and contact no, E mail  
Address etc)

(TO WHOM IT MAY CONCERN)

This is to certify that Mr./Mrs. ....(Name),  
an employee of this Organisation as ..... (Official  
Designation) is hereby authorized to submit tender online , Vide NIT  
No....., Dated..... on behalf of the Organisation.

Signature of the  
competent authority with Seal

.....  
(Signature of the Authorized Person)

Signature of Mr./Mrs. ....  
.....is hereby attested.

## **Annexure- III**

- a. Copy of agreement between the Manufacturer and the Direct Importer/Distributor in Annexure -III

**ANNEXURE-IV**  
Draft Affidavit Proforma

I, Sri/Smt. ....  
The Managing Director/Proprietor (etc.) of the Firm.  
..... (Name of the firm)  
At (address).....  
P.O... ..  
P.S.....Dist.....  
do hereby solemnly affirm and declare as follows:

- a. That I am not under conviction of any offence making myself liable to be disqualified to supply of Surgical Equipments/Instruments etc. to any Govt. or Govt. undertaking Organization /Institution in the State of West Bengal or other State or States.
- b. My Firm has not been blacklisted at present as a whole or for any item/ items as quoted in this tender by any Govt. or Govt. undertaking Organization /Institution in the State of West Bengal or other State or States in India.
- c. That no case is pending against me or against my Firm in any criminal court of law in connection with the supply of Surgical/hospital equipment/Instruments to the Govt. or Govt. undertaking Organization / Institution in the State of West Bengal or other State or States ( If any case is pending, pl state the details ).
- d. *That, I declare that the item or items quoted by me confirms the specification given in the NIT document or higher standard relating to the specification is provided.*
- e. The duly authenticated Technical Data Sheet is uploaded conforming to the prescribed standard.
- f. That, I also declare that if any information subsequently found incorrect or false will it automatically render the tender submitted by me cancelled and make me liable for penal/legal action as per law of the country.
- g. That I do further affirm that the statements made by me in this tender are true to the best of my knowledge and belief and all the documents attached are genuine & correct.


Deponent

## MICROSCOPE WITH KARYOTYPING WORKSTATION UPGRADABLE TO FISH:-

- Microscope Stand:** Z-focus drive with coarse step of 25 mm with adjustment limit stopper, high sensitivity focus knob with minimum adjustment gradation 1µm and Removable Six position nosepiece.
- Observation Tube:** Trinocular Observation tube with 100% light path in the camera as well as in the observation tube.
- Mechanical Stage:** Ceramic quoted co axial stage with right hand low drive control with dual glass slide holder
- Condenser:** Swing-out with built-in Iris Diaphragm (NA 0.9)
- Eyepieces:** Paired Widefield Eyepieces of 10X with FN: 22 or better, focusable & adjustable diopter setting.
- Illumination:** Light preset switch for constant voltage of light and light intensity LED indicator with Eco switch for automatic switch of light if the system is not in use. 12V 100W transmitted Halogen illumination with built-in-Koehler illumination with built in filter (LBD,ND6,ND25),With Infinity corrected Optical system(UIS2)
- Objectives:** High resolution Universal Plan Achromatic objective 10X, Universal Plan Semi Achromat 40x & 100x/1.3(oil).
- CCD Camera:** Chip Size - 2/3", 4096 grey scale CCD Camera, Progressive scan, Interline Transfer, RS644 12 bits digital output. Spatial Resolution: 12 Bit, 1280 x 1024 pixels. With binning (switchable to) 640 x 512 pixels and S/N ratio improve by 4 with interface board and software. Sensitivity: Approx 0.04 lux (for 25msec exposure time) Exposure time range from 2 - 10,000 msec. S/N Ratio: ≥ 63dB, Pixel size 6.7µm x 6.7µm. Single output: 21 Megapixel/sec. C Mount Adapter: 0.63x Magnification.

### 1) KARYOTYPING SOFTWARE

- Karyotyping Software for G-, Q-, R- Banding Techniques.
- Automatic exposure and contrast controls for image capturing.
- User definable ROI for enhanced sizing of chromosome spreads.
- Multi color display to validate correct segmentation and tool for cutting adjunct or overlap chromosomes.
- Fully dynamic karyotype table with no limit to the number of chromosomes and markers.
- ISCN: Updated ISCN to 2005 for 300, 550, 700 & 850 Band Resolutions
- Ability to automatically generate Band-Per-Haploid-Set resolution.
- User definable karyotype table capability to change the distance and height between homologous chromosomes.
- Fast Semi-Automatic Counting of Chromosomes.
- Multiple Undo for any operation.
- Zoom 1000% in Metaphase as well as Karyotype table.

  
Prof. Dr. Tuphan Kanti Dolal  
DM, MD, DNB, FICP  
Head of the Department  
Department of Haematology  
NRSMC & H, Kolkata-700014

- Compare same case or multiple case chromosomes (All 22 pairs + X / Y metaphases and/or karyotype).
- Single window with Multiple Image Gallery for up to 24 Images (combined Karyotype & Metaphase image including report generation).
- Single window Icon for Karyotyping, CGH, FISH & SKY analysis.
- Fully upgradeable for Multi-Species (Mouse, Rat, Hamster etc)
- Network: Full network connectivity.

**Computer:** Compatible latest branded computer with 4GB Ram, 500GB HDD with high speed processor suitable for the Karyotyping software, 19 inch TFT screen with suitable Color laser printer.

#### **Future upgradation provision**

**Reflected Light Fluorescence:** 100 watt reflected light mercury for fluorescence observation with 8 or more position filter turret. With Fluorescence filters  
 a) Single DAPI Exciter Filter, b) Single Green Exciter Filter, c) Single Orange Exciter Filter, e) Spectrum Aqua Filter Block,  
 d) Triple Exciter Filter for DAPI/Spectrum Green/Spectrum Orange.

#### **2) FISH SOFTWARE**

Automated FISH Capture and Analysis software with automatic Z-axis control for auto-focus, z-stacking and 3D data export with integrated karyotyping module and Manual counting utility for scoring of cells, integrated karyotyping module with FISH software. Full dynamic karyotyping support with unique band enhancement for fluorescent signals. Chromosome compare across all sample types, combining banding, FISH, CGH.

- Flexible, user-friendly, quantitative FISH imaging software.
- Automatic Z-axis control for auto focus, z-stacking and 3D data export on a manual microscope.
- Automatic exposure controls and image enhancement for image capturing.
- User-defined image capture region.
- Integrated karyotyping module with FISH Software.
- Band enhancement for fluorescent signals.
- Support for inverted counterstains with probe signals.

  
 29/11/2019

(Prof.) Dr. Tuphan Kanti Dotal  
 DM, MD, DNB, FICP  
 Head of the Department  
 Department of Haematology  
 NRSMC & H, Kolkata-700014



## Trans Cranial Magnetic Stimulation System

- Compact System having built in TFT 8,4" Interactive Color Display for easy user interface. Overall weight of the system should not exceed 30 Kg.
- System should have Up to **100Hz** of Stimulation Frequency
- System should have Two Channels MEP Module from the same manufacturer.
- System should have Footswitch Trigger Input
- System should have Dedicated Trolley with Coil's Arm Support, Retractable Draw and Printer Shelf
- System should have PC Interface for Protocol Management

### Characteristics

- System should have **Monophasic, Biphasic and Sinusoidal Waveforms**
- System should have **Burst and Theta Burst Stimulation**
- System should have **Double Stimulation Function (BI Option)**
- The system must be upgradable to add Neuro-Navigation with features like MRI Import with automatic classification of scalp, white matter and gray matter volumes for 3D image creation - High spatial resolution optic tracking system for accurate stimulation of the planned part of the brain.

### Compliance / Regulatory Standards:-

The quoted model must be US FDA and European CE compliant, Certificates to be enclosed with the bids. The manufacturer must be ISO- 13485 Certified.


Each System **MUST** include one each of the following :

- Main unit with 2 channel MEP module
- Dedicated Trolley with Coil's Arm Support and Printer Shelf
- Circular 90mm Integrated Controls and Display
- Butterfly 120° 90mm Integrated Controls and Display
- Butterfly 70mm, Air Cooled
- Butterfly 70mm, Placebo Air Cooled
- Consumable if any for at least 10 patients and separate prices for the consumable should be enclosed with the bids.

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MD(Med), DNB (Med), DM (Neuro), DNB (Neuro)  
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## TECHNICAL SPECIFICATION FOR Virtual Anatomy and Visualization table

S.N.	Tender Technical Specification
<b>Technical Specification of PACS Based Virtual Anatomy and Visualization</b>	
1	Virtual Dissection Table with single or more monitor screen more than 60", ultra thin with capacitive touch screen and group learning.
2	The table should have adjustable height to accommodate students / teachers of different Programmable table position and free selectable tilting board position up to 90 degree.
3	It should contain a fully labeled interactive body atlas, 3D models anatomy education functionally like rotating, zoom in and out identification of individual structure with clinical application of that structure and the ability to do a layer by layer dissection structures.
4	Should have complete anatomical educational curriculum.
5	Should offer cadaver based 3D models with ability to identify, dissect any part Going through the whole layers.
6	Should be able to slice cadaver in transverse, sagittal and coronal planes and 3D model with the sectional anatomy in these planes and with radiological images Ray and ultrasound.
7	Should have an inbuilt picture archiving and communication system (PACS ) workstation for 3D medical imaging and the ability to connect through LAN to domain or DICOM base.
8	In order for students to be able to learn using localised cases it should allow import on CT & MRI data and automatically reconstruct and visualised 3D model from Realtime.
9	Should allow for multi planner 3D reconstruction from CT/MRI data
10	Manual or semi automatic bone segmentation should be possible.
11	The visualization system should be able to import and view any DICOM image.
12	It should have all typical 2D tools used by the radiologist.
13	Should be able to annotate 2d & 3d images.
14	Body structures should freely rotated in all three access (X,Y,Z).
15	The work station should offer connectivity to an internet cloud platform data, Anatomical CT and MR library- allowing professors and students to access Cases save their work and share their cases with other users .
16	It should contain educational portal with access to other cases preferred by specialist world
17	IT Should be possible to connect the table to any LCD projector.
18	Should be possible to access data from any desktop, Laptop, tablet , smart phone.
19	Service center must be locally available.

  
 Professor / 24/201  
 Department of Anatomy  
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## **Specification:**

### **1. Knee scorpion:**

- A. The lowest profile suture passing device with jaw available at 3.2mm, allows the passage of 0 and 2-0 FibreWire suture in tight recesses of the knee.
- B. The one handed , ergonomically designed suture passer allows passing suture through tissue and capturing in one simple pass, eliminating the need for the extra steps of suture retrieval and suture shutting



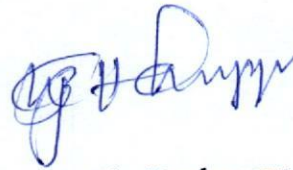
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Specification:

**2. Quick pass suture lasso:**

- A. A disposable suture passing colour coded device with 1.8mm tip and slim 3.8mm shaft preloaded with nitinol wire loop
- B. Plastic wheel is required to advance and retract the loop and it has to be available in 25,30,45,90 degree with right and left combination.



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## Specification:

### **3. Full HD 3-Chip CMOS/4K Endoscopic camera control unit**

The system should be high definition, with progressive scan and CMOS/ 4K technology, 3-Chip- endoscopic video camera.

- It should have pure digital signal with high definition of 1920x1080p/ 4K resolution and progressive scan technology both on camera head and console.
- Should have 9 or more dedicated surgical speciality settings and customizable color and brightness settings for cross specialty usage of system.
- Should have an intuitive touch screen LCD/LED interface on CCU for ease of operation
- Function should be available – to improve visualization in the dark and posterior compartments of surgical field.
- Desaturation function- to decrease the saturation of longer wave length colors in the image to the level preferred by the surgeon.
- The system should have Optical/ Digital zoom to enhance the quality of image size and cross speciality standarization of the camera system, regardless of telescope used.
- the O/P's should be - atleast 2 DVI, RGBHV/VGA, S- Video, optimized for medical display on flat screen.

OR

2x display port 1.2 , 4x 3G – SDI, 2x DVI-D

- Classifications and approvals- it should comply with medical safety standards: FDA and medical EMC standard.



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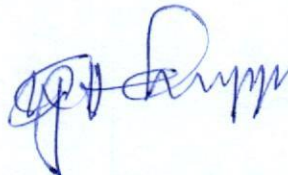
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Specification:

**4. Medical grade 26 inches / 31 inches/ 32inches full HD / 4K monitor – Qty -01**

- It should have LED back lighting and LCD/LED colour flat panel to support high definition images and videos.
- Screen technology- IPS TFT/ IPS- PR and back light – white edge Lit LED.
- Resolution- 1920 x 1080p/ 3840 x 2160p.
- Wide screen and aspect ratio of 16:9.
- Contrast ratio 1400:1 or higher and luminance- 450cd/m<sup>2</sup>/ 4K.
- Should be light weight.
- Should produce 10bit color resolution.
- Should have multiple input and output options . Atleast 1DVI-1 port, 1 display port and 13G- SDI.



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## Specification:

### **5. HD telescopes with aspherical lens technology and infrared compatibility-Qty -01 each**

Telescope should have aspherical rod lens technology for minimized optical distortions, better center of age resolutions and reduced fish-bowl effects. It should have triple tube medical grade stainless steel design and laser welded enclosures for increased quality and durability over standard scopes. The telescope should be fully autoclavable, ETO and plasma sterilizable. 4mm scopes should be C- mount video arthroscopes.

- 4mm – 30deg scope
- Cannula – 5.8mm. speed – lock cannula with 2 rotating stopcocks. Fast scope – cannula locking every time in every case. Perforated distal tips irrigation for even the most demanding shoulder. Cannula tips should Hoods Scope Lens, also protecting it from cutters,burs,and instruments.
- Obturator for 5.8 mm cannula. Trocar for 5.8 mm cannula.

Classifications and approvals- it should comply with medical safety standards: FDA and medical EMC standard



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## Specification:

### **6. Video cart trolley- Qty-01**

Trolley should be capable to mount above mentioned systems.  
Should have moveable arm to mount monitor for easy height adjustment.

Classifications and approvals- it should comply with medical safety standards: FDA and medical EMC standard



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## Specification:

### **7. Full HD 3-Chip CMOS/4K Endoscopic camera control unit**

The system should be high definition, with progressive scan and CMOS/ 4K technology, 3-Chip- endoscopic video camera.

- It should have pure digital signal with high definition video of 1920x1080p/ 4K resolution and progressive scan technology both on camera head and console.
- Should have 9 or more dedicated surgical speciality settings and customizable color and brightness settings for cross specialty usage of system.
- Should have an intuitive touch screen LCD/LED interface on CCU for ease of operation
- Function should be available – to improve visualization in the dark and posterior compartments of surgical field.
- Desaturation function- to decrease the saturation of longer wave length colors in the image to the level preferred by the surgeon.
- The system should have Optical/ Digital zoom to enhance the quality of image size and cross speciality standardization of the camera system, regardless of telescope used.
- the O/P's should be - atleast 2 DVI, RGBHV/VGA, S- Video, optimized for medical display on flat screen.

OR

2x display port 1.2 , 4x 3G – SDI, 2x DVI-D

Classifications and approvals- it should comply with medical safety standards: FDA and medical EMC standard



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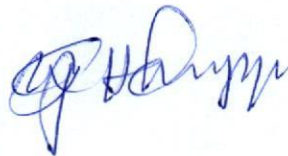
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## Specification:

### **8. 400 watt LED light source with fiber optic cable- QTY 01**

The light source system should be compatible with HD / 4K cameras to provide maximum illumination to get optimum brightness, sharpness, clarity for the images and videos. The system should generate optimum light with different wavelengths such as standard white light, infrared and near infrared wavelength for enabling surgeons to view critical anatomies in different modes of the camera. This system should be supplied with one light source console and one fiber optic cable. Also, it should have:

- Light intensity adjustment: continuously adjustable from 0-100% manually.
- Should have standby mode which will reduce light output to a minimum, preventing the light cable from generating excessive heat.
- Control of the light source should be possible directly from the camera head as well as from intuitive capacitive LED touch screen on the light source.
- Should provide with a safe light fiber optic cable of 4.5 mm or more in diameter and 300cm or more in length and should be compatible for transmitting different wavelength light such as infrared, near infrared and standard white light that is needed for special imaging mode.
- Guaranteed light span: 30000 operating hours or more.
- Light output/ light flux : 18000 lumen
- Classifications and approvals- it should comply with medical safety standards: FDA and medical EMC standard.




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Specification:

**9. Swivel lock biocomposite:**

- A. 4.75 mm rotator cuff repair cortical fixation, knotless, twist in design suture anchor vented design.
- B. Made up of Biocomposite (made up of 30% Beta tricalcium phosphate and 70% poly-L-d-lactic acid)/ PEEK material and having PEEK (poly ethylether ketone) closed eyelet at the end.



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