



OFFICE OF THE DEAN & PRINCIPAL,  
MAHARAJA KRISHNA CHANDRA GAJAPATI MEDICAL COLLEGE,  
BRAHMAPUR.760 004, GANJAM, ORISSA.

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No. 8053 /MCB-2018/Welfare./Dated, Berhampur the

15<sup>th</sup> December, 2018

**TENDER CALL NOTICE**

Sealed Tenders are invited from the Registered firms for "Supply of Equipment/Instrument" for Strengthening and up-gradation of State Government Medical Colleges of MKCG Medical College, Berhampur for increase in PG Seats in two bid system (Technical & Financial) so as to reach the office of the undersigned within Twenty One days from the date of publication of the advertisement till 5 P.M. The detailed Tender paper, Terms & Conditions, list of Equipment/Instrument, specifications can be obtained from the office of the undersigned on payment of Rs.5000/- cash (non-refundable) at the Accounts Section. The details are also available in the website [mkcgmch.org](http://mkcgmch.org). Those who will download the tender documents from Website should enclose a DD for Rs.5000/- towards cost of Tender paper in favour of Dean & Principal, MKCG Medical College, Berhampur payable at the S.B.I, MCC Branch, Berhampur.

The undersigned reserves the right to cancel of the Tender in full or parts at any time without assigning any reason thereof.

  
Dean & Principal,  
MKCG Medical College,  
Berhampur

15-12-18

**OFFICE OF THE DEAN & PRINCIPAL  
M.K.C.G. MEDICAL COLLEGE, BERHAMPUR (GM.)**

*Tel / Fax : 0680-2292746 / e-mail : [mkcgmcbank@gmail.com](mailto:mkcgmcbank@gmail.com)*



**TENDER DOCUMENT FOR SUPPLY &  
INSTALLATION OF *MEDICAL EQUIPMENTS***

*12.12.13*

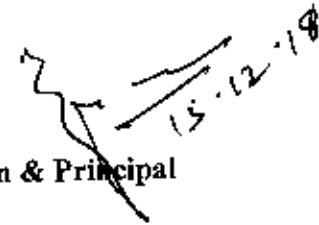
## SECTION -I

### NOTICE INVITING TENDER

Tender Reference No. MKCG/2018-19/WELFARE      Dated:

TENDERS ARE INVITED FROM ELIGIBLE BIDDERS AS PER THE ELIGIBILITY CRITERIA FOR MEDICAL EQUIPMENTS FOR THE DEPARTMENT OF ANESTHESIOLOGY, O&G, PATHOLOGY, COMMUNITY MEDICINE, PHARMACOLOGY, PHYSIOLOGY & ANATOMY

1	Period of Availability of Tender Document	From <del>18-12-2018</del> (date) to <del>07-01-2019</del> (date)  [Downloadable from website: <a href="http://www.mkcgmch.org">www.mkcgmch.org</a>  In case of any bid amendment and clarification, responsibility lies with the bidders to collect the same from the above mentioned website before last date of submission of tender document and the tender inviting authority shall have no responsibility for any delay / omission on part of the bidder.
2	Last date & time for submission of Tender	Date: <del>07-01-2019</del> , Time: up to 5 pm Address of Submission of Bid: The Dean & Principal, MKCG Medical College and Hospital Berhampur, Odisha, India (Through Speed post / Registered post only
3	Date, time and place of opening of Tender	a) <b>Technical Bid (Cover A) opening: <del>08-01-2019</del> 4 P.M</b> <b>(time) at the address mentioned above. (Postponed incase of unavoidable Circumstances) b) Financial Bid (Cover B):</b> <i>The date of opening of financial bid will be intimated to the firms found successful in the technical bid evaluation. ( The Venue is mentioned above) (Bidders / authorized representative may remain present at the time of opening of bid)</i>

  
15-12-18  
Dean & Principal

## SECTION -II

### IMPORTANT INSTRUCTIONS TO BE NOTED CAREFULLY BY THE TENDERERS

1.	Mode of Procurement	Through National Competitive Bidding Process. The O/o of Dean & Principal, MKCG Medical College & Hospital, Berhampur shall invite tender & evaluate the same by the technical expert. After finalization/approval of the supplier & the rate, the purchase order shall be placed by the Dean & Principal, MKCG Medical College Hospital
2.	Purchaser	Dean & Principal MKCG Medical College Berhampur, Odisha
3.	Consignee	Department of Anesthesiology, O&G, Pathology, Community Medicine, Physiology, Pharmacology & Anatomy.
4.	Delivery Period	Within 60 days from issue of the purchase order.
5.	Mode of Delivery	By Air / Road / Rail
6.	Guarantee / Warranty /CMC	<b>Comprehensive warranty</b> including all spares, maintenance etc. for a period 5 (five) <i>years</i> from the date of installation & commissioning and 5( <i>five</i> ) <i>years</i> CMC after warranty period.
7.	Tender Document Cost	Rs.5000/-). The tender document cost is to be submitted in the shape of bank draft in favour of Dean & Principal, MKCG MEDICAL COLLEGE, BERHAMPUR from any Nationalized/Scheduled Bank payable at Berhampur or deposit of Rs.5000/- in Accounts Section of this college on all working days between the scheduled period.
8.	Earnest Money Deposit (EMD) (The no. of equipment is mentioned in the Schedule of requirement – Section IV)	<i>Note: The bidder may quote for any or all the equipment by submitting the required EMD 2% for that equipment.</i>  The Earnest Money Deposit will be paid in the shape of Demand Draft only in favour of DEAN & PRINCIPAL MKCG MEDICAL COLLEGE, BERHAMPUR from any Nationalized/Scheduled Bank and payable at Berhampur
9.	Performance Security	The selected firm should submit the performance security in shape of Bank Draft /Bank Guarantee, equal to the amount of 5 % of the purchase order value (excluding the tax & CMC cost) of the items within 21 days of issue of the purchase order & the same will be returned back after completion of warranty period. The performance security shall be furnished at the O/o the Dean & Principal after getting the purchase order from the Dean.

10.	Pre-qualification (Eligibility Criteria)	<p>A. Manufacturing units / Importers are eligible to participate in the tender provided, they have</p> <ul style="list-style-type: none"> <li>(i) Import License (In case of Importer only)</li> <li>(ii) Valid ISO certificate.</li> <li>(iii) Product must be ISI /CE / US FDA/IEC etc certified if specified in Technical Specification (Section IV)</li> <li>(iv) Tenderer (Manufacturer/Importer) should have proof of supply of <b>equipment(s) mentioned in the schedule of requirement</b> (executed directly by manufacturer or through distributor) of the <b>equipment(s) /similar equipments</b> mentioned in the schedule of requirement to any Govt. organization / Corporate Hospitals / PSU Hospitals / UN Agencies and purchase order copies in support of that in last 3years as per format at Annexure VII (Item wise)</li> <li>(v) Proof of annual average turnover of in the last three (3) financial years certified by the Chartered Accountant as per the format at <b>Annexure VI supported by audited balance sheet/Annual Report.</b></li> </ul> <p>B. Authorized distributors on behalf of the manufacturer are eligible to participate in the tender provided:</p> <ul style="list-style-type: none"> <li>(i) They should have proof of annual average turnover of the last three (3) financial years certified by the Chartered Accountant as per the format at <b>Annexure VI supported by audited balance sheet/Annual Report.</b></li> <li>(ii) They should submit <b>manufacturer's authorization</b> to transact business on behalf of the manufacturer as per the format at <b>Annexure - V.</b></li> <li>(iii) Proof of supply of the equipments in the schedule of requirement to any Govt. organization /Corporate Hospitals / PSU Hospitals / UN Agencies and purchase order copies in support of that in last 3years as per format at Annexure VII (Item wise)</li> <li>(iv) The authorized distributor will submit the following documents in support of the manufacturer along with the tender :</li> <li>(v) Valid ISO certificate Valid ISI / BIS European / CE / US FDA / IEC certificates of the manufacturer is specified in technical specification (Section V)</li> </ul> <p>C. The Manufacturer or the tenderer if blacklisted either by the Tender inviting authority or by any state Govt. or Central Govt. organization for the quoted item is not eligible to participate in the tender during the period of blacklisting.</p>
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### SECTION -III

## **TERMS AND CONDITIONS FOR SUPPLY & INSTALLATION OF MEDICAL EQUIPMENTS FOR DIFFERENT DEPARTMENT**

- 1.1 Sealed tenders will be received till 07-01-2019(date) upto 5pm (time) by the office of the Dean & Principal, MKCG Medical College Berhampur. Any tender received after the due date & time will be rejected / returned to the sender unopened. **The tenders will be received through Regd. Post / / Speed Post only.** The prospective bidders may attend and clarify any doubts on the terms and conditions of the bid document.
- 1.2 The bidder(s) are to submit their tenders in **separate** sealed covered envelops for **technical bid** and **commercial bid** by super scribing **Cover "A" (Technical Bid)** & **Cover "B" (Price Bid)** and both the sealed covers should be put into a **third** outer Cover, which should be super scribed as **"Tender for Supply & Installation of Medical Instruments & Equipments**
- 1.3 The Sealed tenders "Cover A" (Technical Bid) submitted by the tenderers will be opened at the office of the Dean & Principal,, MKCG Medical College, Berhampur on 08-01-2019 (date) at **4 P.M** (time).

The tenderer or their duly authorized representatives are allowed to be present during the opening of the tenders if they so like.

### ELIGIBILITY CRITERIA

- 2.1 **Manufacturing units / Importers** are eligible to participate in the tender provided, they fulfill the following conditions:
- (i) Import License (In case of Importer only). In case of importers, they have to furnish the authorization from the manufacturer.
  - (ii) Valid ISO certificate (of the Manufacturer)
  - (iii) Product must be ISI/BIS European/CE / US FDA etc. (valid ISI/BIS /CE /US FDA certificate) certified (As per **Section VI** - technical specification).
  - (iv) Tenderer (Manufacturer/Importer) should have proof of supply of equipments mentioned in the schedule of requirement (executed directly by manufacturer or through distributor) of the equipment(s) /similar equipments mentioned in the schedule of requirement to any Govt. organization / Corporate Hospitals / PSU Hospitals / UN Agencies and purchase order copies in support of that in last 3years as per format at Annexure VII (Item wise)



- (v) Proof of annual average turnover (Manufacturers/Importer) of in the last three (3) financial years certified by the Chartered Accountant as per the format at **Annexure VI**.
- (vi) Proof of compliance with IEC Certificate (As per **Section VI** - technical specification) - Medical Electrical Equipments: Particular requirement for Electrical Safety of the equipments.
- (vii) Manufacturing unit who has been blacklisted either by the Tender inviting authority or by any state Govt. or Central Govt. organization is not eligible to participate in the tender for that item during the period of blacklisting. Copies of stay order(s) if any against the blacklisting and undertaking to the effect that, the unit has not blacklisted by any authority should be furnished along with the bid.

2.2 **Authorized distributors** are eligible to participate in the tender provided:

- (i) They should submit manufacturer's authorization from original equipment manufacturer (OEM) as per the format at **Annexure - V**.
- (ii) They should have proof of annual average turnover of in the last three (3) financial years certified by the Chartered Accountant as per the format at **Annexure VI**.
- (iii) Proof of supply of **the required equipment** (executed directly by manufacturer or through distributor) of the equipment(s) /similar equipments mentioned in the schedule of requirement to any Govt. organization /Corporate Hospitals / PSU Hospitals / UN Agencies inside the State/Country and purchase order copies in support of that in last 3 years as per format at Annexure VII (Item wise).
- (iv) The authorized distributor will submit the following documents in support of the manufacturer along with the tender:

a) Valid ISO certificate / ISI / BIS

b) European CE / US FDA / IEC certificates of the manufacturer as per technical specification.

2.3 The tenderer have to submit the EMD(s) as mentioned in **Clause 8 of Section -II** & the Tender document cost.

2.4 Tenderer will submit the following documents along with the technical bid-

1. IT Return of last 3 financial years.
2. Pan card.
3. GST Certificate.



## **DOCUMENTS TO BE SUBMITTED**

The following documents should be enclosed in Cover "A" (Technical Bid) by the tenderer.  
All the photocopies are to be attested by a Notary Public / Gazetted Officer

### **TECHNICAL BID :**

- 3.1 Checklist with detail of the documents enclosed in Cover "A" (as per Annexure - I) with page number. The documents should be *serially arranged* as per this Annexure - I and should be securely tied and bound.
- 3.2 List of Item (s) Quoted with name of the Make & Model of the item (s) (Annexure - II)
- 3.3 Tender document fee of Rs5000/- in shape of Demand Draft .
- 3.4 Earnest Money Deposit(s) as mentioned in the Clause 8 of Section -II in shape of Demand Draft). Details of EMD and the name of the equipment quoted should be clearly mentioned. (IIA to be filledup)
- 3.5 Details name, address, telephone no., Fax, e-mail of the manufacturer / authorized distributor / service centre / contract person / office in Odisha (Annexure - III).
- 3.6 The declaration form in Annexure - IV duly signed by the tenderer before Notary Public / Executive Magistrate.
- 3.7 Manufacturer's Authorization Format in Annexure -V (In case the bidder is not the manufacturer). Importers are also required to furnish the authorization from the manufacturer.
- 3.8 Certificate duly filled by the Auditor / Chartered Accountant (as per Annexure - VI) that the annual average turnover of the firm in the last 3 financial years (In case of bidders who are authorized distributors of the manufacturer).
- 3.9 Performance Statement (Annexure - VII) (Item wise) during the last three years towards proof of supply of the equipment(s) /similar equipments mentioned in the schedule of requirement to any Govt. organization / Corporate Hospitals / PSU Hospitals / UN Agencies inside the State Country. The copy of Purchase orders should be furnished in support of the information provided in the performance statement.
- 3.10 Deviation/No Deviation Statement from Technical Specification & details of technical specification of the product (Annexure-VIIIA & B)
- 3.11 Leaflet/Technical Brochures of the product/item offered.
- 3.12 Copy of Import License by the Importer (in case of Importer).





- 3.13 Copy of Valid ISO certificate.
- 3.14 Copy of Valid ISI / BIS European / CE /US FDA certificate (as per Section VI - Technical Specification).
- 3.15 Copy of the up to date GST clearance certificate.
- 3.16 The Original Tender Booklet with Conditions and the schedules signed by the tenderer at the bottom of each page with his official seal duly affixed.
- 3.17 Certificate in support of service center in Odisha or undertaking to set up service center in Odisha within one month from the date of installation if approved (for those who have no service centers in Odisha).

**N.B:** Valid means the certificate should be valid on or beyond the date of opening of tender (Cover-A).

#### **COVER – B (PRICE BID)**

4. The price to be quoted for medical equipments should be sent in the prescribed price format in a separate sealed cover hereafter called **Cover “B” (Price Bid)**. **Cover –B (Price Bid) of the tenderers who qualify in it's Technical Bid (Cover – A) and complies to tender specification & found to be as per technical specification of the Product in demonstration (if required) will only be opened .**
- 4.1 The tender format (Price Schedule) in duplicate in the prescribed form (as per Annexure – IX), must be submitted in Cover-B. The price of the item should be quoted inclusive of excise duty, insurance, packing, forwarding, freight (door delivery) and warranty for 5 years. The price of CMC for 5 years, turnkey job (accessories if any for installation including charges for installation/commissioning), sales tax / GST and entry tax charges (if any) should be quoted in a separate column. The rate should be quoted for *each item* both in figures and words. **In case of difference in words and figures, words will be taken into consideration for evaluation.**
- 4.2 The Cover “B” of tenderers who qualifies in their technical bid, will only be opened at the office of the Dean & Principal,, MKCG Medical College, Berhampur at a date & time which will be intimated to them.



## **REJECTION OF TENDER**

5. The tender submitted by the bidder will be rejected, if any of the following documents are wanting / not submitted with the tender:

1	List of Item(s) – Annexure II
2	Tender document Fee
3	Earnest Money Deposit
4	Details of Manufacturing Unit / contact person Liaisoning agent / servicing centre (Annexure III)
5	Declaration form (Annexure – IV) signed by the Tenderer & affidavit before Notary Public / Executive Magistrate
6	Manufacturer's Authorization Format (Annexure – V) (for distributor / Importer)
7	Proof of avg. Annual turnover of Rs.10 Crore or more for preceding 3 financial year (for Manufacturer / Importer) or Rs.10 Crores or more (for authorized distributors) Annexure – VI
8	Audited Account Statement (P&L Account) / Annual Report for the three financial years by highlighting the figure in it, which is mentioned in the annexure-VI
9	Performance Statement (Item Wise) during the last three year (Annexure-VII)
10	Copies of Purchase order (Item wise) in support of the performance statement
11	Deviation / No deviation Statement (item wise) & details of technical specification (Annexure – VIII A & B)
12	Leaflets / Technical Brochures of the Equipment offered (Item wise)
13	Copy of Import license (In case of Importer)
14	Copy of Valid ISO certificate
15	Attested Photocopy of Up-to-date CE/US FDA / BIS Certificate (Item wise) (As per technical specification)
16	Attested Photocopy of Up-to-Date IEC Certificate (Item Wise as applicable) (As per technical specification)
17	Photocopy of PAN
18	Photocopy of GST certificate
19	Copy of original Tender and schedules, duly signed by the Tenderer
20	IT Return of last 3 financial year
21	An affidavit to the effect that the firm has not been black listed anywhere

## **EARNEST MONEY DEPOSIT**

6.1 The amount of Earnest Money Deposit required is mentioned in the Section-II.

The Earnest Money Deposit will be submitted in the shape of **demand Draft only** in favour of **DEAN & PRINCIPAL MKCG MEDICAL COLLEGE, BERHAMPUR** from any Nationalized/Scheduled Bank payable at Berhampur.

6.2 The EMD of the unsuccessful tenderers will be returned back without interest after placement of purchase order to the successful tenderer and EMD of successful tenderer will be returned after submission of performance security (ies)

6.3 The EMD will be forfeited if the tenderer withdraws its tender / furnish forged documents which is found during bid evaluation OR doesn't sign the contract / doesn't furnish performance security / doesn't supply the items (in case of successful bidder) within the stipulated time period.

## **PERFORMANCE SECURITY & AGREEMENT**

- 7.1 The performance Security should be submitted in shape of Bank Draft/Bank Guarantee from a Nationalized / Scheduled Bank in favour of Dean & Principal,, MKCG Medical College, Berhampur payable at Berhampur equal to the amount of 5% of the purchase order value of the item (excluding cost of CMC & taxes) within 21 days of issue of the purchase order.
- 7.2 The agreement (as per Annexure – X) will be signed between the supplier, manufacturer and the purchaser and will be kept by the purchaser.
- 7.3 The performance Security Money will be returned back to the tenderer without interest after the expiry of the warranty period i.e. five years after the date of installation & signing of the CMC agreement.
- 7.4 Security money will be forfeited if there is any violation of the tender terms and conditions.

## **TENDER CONDITIONS :**

- 8.1 The details of the medical equipments with specifications are mentioned in Section VI. **The firm must clearly mention their specification, special features, upgraded version (if any), detail technical catalogue of the offered model in their tender.**
- 8.2 Tenders should be typewritten or computerized and every correction in the tender should invariably be attested with signature by the tenderer with date before submission, failing which the tender will be ineligible for further consideration.
- 8.3 Rates inclusive of excise duty / customs duty, packing, forwarding, insurance, transportation charges with **5 years onsite comprehensive warranty** and exclusive of Sales Tax/GST & Entry Tax should *be quoted for the medical equipments (Item wise) on door delivery basis. The turnkey job (cost of accessories if any required for Installation/Commissioning including installation/commissioning charges), 5 years CMC cost & Sales Tax/GST & Entry Tax should be mentioned in separate columns.* The rates quoted should be in Indian Rupees only. Rates quoted in any other currency will not be accepted.
- 8.4 The supplier shall be responsible for delivery and due verification, installation and commissioning of the equipment in the proper site.
- 8.5 The rate per unit shall not vary with the quantum of order placed for destination point.
- 8.6 If there is difference between figures & words, words will be taken into consideration.



- 8.7 In the event of the date being declared as a holiday by Govt. of Odisha, the due date of sale, submission of bids and opening of bids will be the following working day at the scheduled place & time.
- 8.8 The price quoted by the tenderers shall not in any case, exceed the controlled price, if any, fixed by the Central / State Government / DGS&D and the Maximum Retail Price (MRP). The purchaser, at his discretion, will in such case, exercise the right of revising the price at any stage so as to confirm to the controlled price or MRP as the case may be.
- 8.9 The rate quoted and accepted will be binding on the tenderer for a period of **three years** from the **date of approval of the rate contract** and on no account, any increase in the price will be entertained till the completion of this tender period.
- 8.10 No tenderer shall be allowed at any time on any ground whatsoever to claim revision of or modification in the rate quoted by him. Clerical error / typographical error, etc. committed by the tenderers in the tender forms shall not be considered after opening of tenders. Conditions such as **" SUBJECT TO AVAILABILITY"** / **"SUPPLIES WILL BE MADE AS AND WHEN SUPPLIES ARE RECEIVED"** etc., will not be considered under any circumstance and the tenders of those who have given such conditions shall be treated as incomplete and for that reason, shall be rejected.
- 8.11 If at any time during the period of rate contract, the price of tendered item is reduced or brought down by any law or act of the Central or State Government or the tenderer, the tenderer shall be morally and statutorily bound to inform the purchaser immediately about such reduction in the contracted price. The purchaser is empowered to unilaterally effect such reduction in rate, in case the tenderer fails to notify or fails to agree for such reduction of rate.
- 8.12 Approved rate with terms, conditions & the quoted price of the tender shall remain valid for a period of **36 months from the date of approval**.
- 8.13 If the relevant documents / certificates which are required to be furnished along with the tender are written in language other than English, the tendering firm shall furnish English version of such documents / certificates duly attested by a Gazetted Officer / Notary with his seal and signature.
- 8.14 If any information or documents furnished by the tenderer with the tender papers are found to be misleading or incorrect at any stage the tender of the relevant items in the approved list shall be cancelled and steps will be taken to blacklist the said firm for three (3) years.

- 8.15 Rate should be quoted in Indian Currency, both in words and figures against each item as the payments will be made in Indian currencies only (Annexure-IX). The tenderer shall not quote his own rate for any item other than the item specified in the list. (**Section V – Schedule of Requirement**).
- 8.16 Both Cover-A and Cover-B should have an **index and page number** of all the documents submitted inside that cover.
- 8.17 The Tax will be charged as per the guidelines given by the Finance Dept., Govt. of Odisha from time to time. GST (as applicable) will be paid to the supplier. In case of Entry Tax, the supplier has to deposit the original receipt to claim it, if finished goods are brought from outside the State. The Sales Tax & entry tax components should be shown **separately** in the Price Schedule.
- 8.18 The requirement of items may increase or decrease depending on the situation.

**PACKAGING :**

- 9.1 All the packaging should be New. The supplier shall provide such packaging of the goods as is required to prevent their damage or deterioration during transit to their final destination. The packaging shall be sufficient to withstand without any limitation including rough handling during transit, exposure to extreme temperature, salt and precipitation during transit and upon storage.

**COMPREHENSIVE WARRANTY & CMC :** (Undertaking as per Annexure – XI)

- 11.1 The comprehensive warranty will remain valid for 5 years from the date of installation & commissioning of the equipment. The original copy of warranty documents will be submitted to the purchaser at the time installation.
- 11.2 The warranty will cover **all the parts of the machine or item and any replacement or repair required** within the warranty period and will be provided by the supplier free of cost at the destination point (installation point). The supplier will take back the replaced parts / goods at the time of their replacement. No claim whatsoever shall be on the purchaser for the replaced parts / goods thereafter. No traveling allowances or transportation cost will be paid by the purchaser during the warranty period.
- 11.3 The Supplier shall warrant that the Goods supplied under this contract are new, unused, of the most recent or current models and they incorporate all recent improvements in design and materials. The Supplier shall further warrant that all Goods supplied under this contract shall have no defect arising from design, materials or workmanship or from any act or omission of the Supplier that may develop under normal use of the supplied Goods in the conditions prevailing in the place of final destination.

11.4 **CMC:** The tenderer shall also commit to provide offer for CMC (**Labour + all spare**) for the next 5 (five) years after five (5) years of warranty. No extra cost will be paid other than the CMC cost for functioning of the item during this period. The supplier will provide one (1) preventive maintenance in every six months in a year during the period of CMC.

11.5 The selected firm should have a service centre in Odisha.

11.6 All the warranty certificates must be handed over to the consignee at the time of installation.

**TRAINING & OPERATIONAL MANUAL:**

12.1 The firm / supplier will provide hands on training to two doctors and two technicians in his own cost for operating / handling the medical equipment(s) at the time of installation of equipment.

12.2 The supplier / firm will provide the operation / maintenance manuals of all equipments to the purchaser at the time of installation.

**UPTIME GUARANTEE:**

13.1 **UP-TIME BALANCE :**

The Supplier (s) shall provide guarantee 95% uptime during comprehensive warranty period, i.e., for 5 years from the date of installation & commissioning. Any uptime less than the specified period above will be compensated by the Supplier(s) by extending the warranty period. The consignee shall maintain a logbook in the format provided by the Supplier(s) which will indicate usage of the equipment every day and for calculation of up-time.

**DOWNTIME PENALTY CLAUSE:**

14.1 During the Guarantee / warranty period, desired uptime of 95% of 365 days will be ensured (24 hour). If downtime exceeds 5%, penalty in the form of extended warranty, double the number of days for which the equipment goes out of service will be applied. The supplier must undertake to supply all spares for optimal upkeep of the equipment for **TEN YEARS** after installation. If accessories / other attachment of the system are procured from the third party, then the supplier must produce cost of the accessory / other attachment and the CMC from the third party separately along with the main offer and the third party will have to sign the CMC with the purchaser if required. In no case equipment should remain in non-working condition for more than 7 (seven) days from the date of complaint, beyond which a penalty will be applicable as per Rule.

14.2 The principals or their agents are required to submit a certificate that they have satisfactory service arrangements and fully trained staff available to support the uptime guarantee.



### **SPARE PARTS:**

- 15.1 The spare price list of all spares and accessories (including minor) required for maintenance and repairs in future after guarantee / warrantee period should be attached / enclosed along with the sealed quotation.
- 15.2 The tenderers are required to furnish the list of spares along with their cost in the financial Bid separately which will not be taken for evaluation.
- 15.3 Local agents / distributors quoting on behalf of the manufacturer / importer must attach the authority letter in their favour.

### **LABELLING:**

- 16.1 The equipment supplied must be properly labelled with Sl. No., Model Name, Make, year of Manufacture & certifications (European CE, USFDA, BIS electrical & electronic Certificate.

### **ACCEPTANCE OF TENDER AND SUPPLY CONDITIONS:**

- 17.1 The Purchaser reserves the right to reject the tenders or to accept the tenders for the supply of the item tendered without assigning any reason thereof.
- 17.2 The Purchaser will be at liberty to terminate the contract either wholly or in part without assigning any reasons thereof. The tenderers will not be entitled to any compensation whatsoever for such termination.
- 17.3 The **supply should be completed within 60 days** from the date of issue of purchase order unless otherwise specified. If no supply is received even after 60 days or 88 days with liquidated damage from the date of issue of the purchase orders , such orders will stand cancelled automatically without further notice. Penalties shall also thereafter be applied to the tenderer as specified in clause no. 21.1 to 21.2. The approved firm shall also suffer forfeiture of the EMD and Performance Security Deposit.
- 17.4 The tender inviting authority or his authorised representative (s) has the right to inspect the factory of those company who have quoted for the tender, before accepting the rate quoted by them or before releasing any purchase order (s) or at any point of time during the validity period of tender and has also the right to reject the tender or terminate / cancel the orders issued or not to reorder based on the facts brought out during such inspections.



## EVALUATION:

- 18.1 The price bid of the tenders who qualify in the technical bid fulfilling the eligibility criteria and complying to the technical specification shall only be opened.
- 18.2 The tender inviting authority may ask for demonstration of the equipment by the bidders at the premises of the tender inviting authority as a part of the technical evaluation before opening of price bid in order to verify the compliance to technical specification.
- 18.3 The rates of the item quoted by the tenderer who qualify technically will be evaluated after taking the following points into consideration: -
- a) Rate of the medical equipments will be taken after inclusion of the excise duty / customs duty, transportation, insurance, packing & forwarding & comprehensive warranty for (5) years, (cost of accessories if any for installation/commissioning and installation charges) & CMC for next seven years but excluding GST & Entry Tax (ET).
  - b) The cost of the medical equipments (excise duty / customs duty, transportation, insurance, packing & forwarding & comprehensive warranty for five(Five) years but excluding GST & ET ), next seven(7) years after warranty will be added for evaluation.
  - c) The circulars issued by the Finance Department, Govt. of Odisha from time to time regarding tax matters shall be taken into account for evaluation and shall be binding on the bidders. As per the Govt. of Odisha Finance Deptt. Order No. 48317(230)/F dt.23.11.2010, in comparing the cost of an article, if purchased from within the State with the price of similar article if purchased from outside the State, the amount of Odisha Sales Tax (OST) now GST shall be deducted from the total cost since it accrues back as revenue to the State. If after such deduction, the cost of articles to be purchased within the State is not more than the cost of including Central Sales Tax, transport and other charges of similar articles from outside the State, it would be economical to purchase articles within the State.
- 19.1 If the supplier fails to complete the supply within the extended period (if required), no further purchase order will be placed to the firm for the said item including forfeiture of the Performance security and the concerned firm will be blacklisted for two (2) years from the date of issue of letter for the said item.





## **TERMS OF PAYMENT:**

- 20.1 No advance payments towards cost of medical equipments or turnkey job will be made to the tenderer.
- 20.2 Payments as mentioned above will only be made after keeping the **performance security deposit** from the supplier as per clause no. 7.1, if they have not deposited the same before. Payment will only be made after ensuring signing of the Agreement, undertaking and handing over of warranty papers of equipment and turnkey jobs by the supplier to the purchaser.
- 20.3 No claims shall be made against the purchaser in respect of interest on earnest money deposit or performance security deposit or any delayed payment or any other deposit.
- 20.4 Payments in shape of Draft / Pay Order will preferably be despatched to the supplier by Registered post with A.D or e-payment / on-line transfer.
- 20.5 The payment of CMC will be made on a **six monthly basis**, after completion of warranty period and signing of the CMC agreement.
- 20.6 The 90% payment will be released only after Installation / Commissioning of the equipment and rest 10% will be release after satisfactory report received from the consignee i.e. the HOD of corresponding department.

## **PENALTIES:**

- 21.1 If the successful tenderer fails to deposit the required performance security within the time specified or withdraws his tender after acceptance of his tender owing to any other reasons or unable to undertake the contract, his contract will be cancelled and the earnest money deposit / performance security deposit submitted shall stand forfeited by the purchaser.
- 21.2 Violating the tender terms and conditions & non supply / supply which is not as per technical specification will disqualify the firm to participate in the tender for a period of 3 (three) years from the date of issue of letter and his E.M.D & performance security deposit will be forfeited and no further purchase order will be placed to that firm for that item.
- 21.3 In the event of any dispute arising out of the tender, such disputes would be subject to the jurisdiction of the Berhampur Court.

## **INSPECTION/TESTING:**

- 22.1 The selected supplier shall have to arrange for demonstration of the equipment at the supply point. The purchaser or its nominated representative(s) shall inspect and test the equipments at the supply point to check their conformity to the technical specifications and other details incorporated in the contract.



### **CONDITIONS APPLICABLE TO LOCAL MSEs / SSI OF ODISHA:**

The MSE / SSI Units of the State of Odisha will be given the following preferences in the tenders provided they produce the following documents as per MSME Development Policy-2009 and IRP - 2007:

- 23.1 Attested copy of valid manufacturing licence.
- 23.2 P.M.T Certificate from the Director of Industries, Odisha or General Manager District Industries Centre that it is a MSE / SSI Units of the State of Odisha, provided that MSE / SSI units has not been derecognised by the Govt. for that specified period.
- 23.3 Local Micro & Small Scale Enterprises (MSE) and Khadi & Village industrial units including handloom and handicrafts will enjoy a price preference of 10% vis- à-vis over local medium and large industries as well as industries outside the State. Local Micro & Small Scale Enterprises having ISO, ISI Certification for their product shall get an additional price preference of 3% as per provision of IPR-2007.
- 23.4 Local MSEs registered with respective DICs, Khadi, Village, Cottage and Handicraft Industries, OSIC, NSIC shall be exempted from payment of earnest money and shall pay 25% of the prescribed performance security deposit.
- 23.5 Clause number 1 to 22 is also applicable to the Small Scale Industry Units of the State of Odisha



## CHECK LIST

(To be submitted in Cover A Technical Bid)

**Note : The documents has to be arranged serially as per the order mentioned in the check list**

Please put "✓" in the respective box

**COVER - A (TECHNICAL BID)**

**DOCUMENTS : SUBMITTED OR NOT**

1	List of Item(s) – Annexure II	Page No	Yes	No
2	Tender document Fee	Page No	Yes	No
3	Earnest Money Deposit	Page No	Yes	No
4	Details of Manufacturing Unit / contact person Liaisoning agent / servicing centre (Annexure III)	Page No	Yes	No
5	Declaration form (Annexure – IV) signed by the Tenderer & affidavit before Notary Public / Executive Magistrate	Page No	Yes	No
6	Manufacturer's Authorization Format (Annexure – V) (for distributor / Importer)	Page No	Yes	No
7	Proof of avg. Annual turnover of Rs.10 Crore or more for preceding 3 financial year (for Manufacturer / Importer) or Rs.10 Crores or more (for authorized distributors) Annexure – VI	Page No	Yes	No
8	Audited Account Statement (P&L Account) / Annual Report for the three financial years by highlighting the figure in it, which is mentioned in the annexure-VI	Page No	Yes	No
9	Performance Statement (Item Wise) during the last three year (Annexure-VII)	Page No	Yes	No
10	Copies of Purchase order (Item wise) in support of the performance statement	Page No	Yes	No
11	Deviation / No deviation Statement (item wise) & details of technical specification (Annexure – VIII A & B)	Page No	Yes	No
12	Leaflets / Technical Brochures of the Equipment offered (Item wise)	Page No	Yes	No
13	Copy of Import license (In case of Importer)	Page No	Yes	No
14	Copy of Valid ISO certificate	Page No	Yes	No



15	Attested Photocopy of Up-to-date CE/US FDA / BIS Certificate (Item wise) (As per technical specification)	Page No	Yes	No
16	Attested Photocopy of Up-to-Date IEC Certificate (Item Wise as applicable) (As per technical specification) as applicable.	Page No	Yes	No
17	Photocopy of PAN	Page No	Yes	No
18	Photocopy of GST certificate	Page No	Yes	No
19	Copy of original Tender and schedules, duly signed by the Tenderer	Page No	Yes	No
20	IT Return of last 3 financial year	Page No	Yes	No
21	An affidavit to the effect that the firm has not been black listed anywhere	Page No	Yes	No



**Annexure II**

(Refer Clause No. 3.2)

(To be submitted in *Cover A - Technical Bid*)

**LIST OF ITEM(S) QUOTED**

Sl.	Name of Item(s)	Name of Manufacturer	Make	Model Name	Details of product offered at Page No. (s)
1					
2					
3					

Signature of the Tenderer :

Date :

Official

Seal:



**Annexure IIA**

(Refer Clause No. 8 of Section -II)

(To be submitted in *Cover A -Technical Bid*)

**DETAILS OF EMD(S) SUBMITTED**

Sl.	Name of Equipment	EMD 2% Amount (Rs.)
	<b>TOTAL (Rs.)</b>	

**Signature of the Tenderer :**

**Date :**

**Official**

**Seal**



**Annexure III**

(Refer Clause No. 3.5)

(To be submitted in *Cover A -Technical Bid*)**DETAILS OF THE TENDERER & LOCAL CONTACT PERSON**

	<b>Corporate Office</b> (The address in which the purchase orders and payment details will be communicated)	<b>Local Contact Person / Branch Office / Zonal Office / Service Centre if any, in Odisha.</b>
Name & Full Address		
Telephone Nos., landline		
Mobile		
Fax		
E – Mail		
Date of Inception	(Copy of Certificate of incorporation of Manufacturer)	
Name of the issuing authority		
Import License (in case of Importer only)	(Furnish photocopy of Import License)	
GST validity	(Furnish photocopy of GST)	
PAN		
Details of the Service Centre Facilities in Odisha/Eastern India		

**Signature of the Tenderer :**  
with seal**Date :****Official****Seal**

:



(To be submitted in *Cover A -Technical Bid*)

**DECLARATION FORM**

I / We .....having My /  
our .....office  
at.....do declare that I / We have carefully  
read all the terms & conditions of tender of the \_\_\_\_\_, Odisha for the supply of  
medical equipments. The approved rate will remain valid for a period of three year from the  
date of approval. I will abide with **all the terms & conditions** set forth in the **Tender  
Reference no.** \_\_\_\_\_

I/We do hereby declare I/We have not been de-recognized / black listed by any State  
Govt. / Union Territory / Govt. of India / Govt. Organization / Govt. Health Institutions for  
supply of Not of Standard Quality (NSQ) items / non-supply.

I/We agree that the Tender Inviting Authority can forfeit the Earnest Money Deposit and  
or Performance Security Deposit and blacklist me/us for a period of 3 years if, any information  
furnished by us proved to be false at the time of inspection / verification and not complying with  
the Tender terms & conditions.

I / We ..... do  
hereby declare that I / we will supply the ..... as per the terms, conditions  
& specifications of the tender document. I / we further declare that I / we have a service centre /  
will establish a service centre within one month of installation of the equipment in Odisha.

Signature of the bidder :

Seal

Date :

Name & Address of the Firm:

Affidavit before Executive Magistrate / Notary Public.





(To be submitted in *Cover A -Technical Bid*)  
**MANUFACTURER'S AUTHORISATION FORMAT**

To

The Dean & Principal,,  
MKCG Medical College,  
Berhampur -760004, Odisha

Ref: Tender No. \_\_\_\_\_ Dated \_\_\_\_\_ for \_\_\_\_\_.

Dear Sir,

We, \_\_\_\_\_ are the manufacturers of \_\_\_\_\_  
\_\_\_\_\_ (name of equipment(s) and have the manufacturing factory  
at \_\_\_\_\_.

1. Messrs \_\_\_\_\_ (name and address of the agent) is our authorized distributor for sale and service of \_\_\_\_\_ (name of equipment(s))
2. We confirm that no supplier or firm or individual other than Messrs \_\_\_\_\_ (name of the above distributor) is authorized to submit a tender and enter into a contract with you for the above goods manufactured by us.
3. We also extend our full warranty (5 years comprehensive warranty ) and also full back-up support for 5 years CMC after the warranty period as required by the purchaser.
4. We undertake that we have adequate infrastructure and spare part support to carry out the warranty and AMC/CMC services for 10 years and do accept to provide uptime guarantee of 95% as per this tender clause No. 13.1.

Yours faithfully,

\_\_\_\_\_  
\_\_\_\_\_

(Signature with date, name and designation)

For and on behalf of Messrs \_\_\_\_\_

(Name & address of the manufacturers)

Seal

Note :

1. This letter should be on the *letterhead* of the *manufacturer (Item wise)* and should be signed by a person having the power of attorney to legally bind the manufacturer.
  2. Original letter shall be attached to the technical bid.
- (To be submitted in **Cover A -Technical Bid**)



**ANNEXURE – VI**

(Refer Clause No. 3.8)

*(To be furnished in the letter head of the Auditor/ Chartered Accountant)*

**ANNUAL TURN OVER STATEMENT**

The Annual Turnover for the last three financial years of M/s \_\_\_\_\_ who is a Manufacturer /Distributor/Importer (*Pl. tick whichever is applicable*) are given below and certified that the statement is true and correct.

Sl.No.	Year	Turnover in (Rs.)
1.	2015-2016	-
2.	2016-2017	-
3.	2017-2018	-

***Average Annual Turnover*** (for the above three years) in (Rs.) \_\_\_\_\_

Date:  
Place:  
(Name in Capital)

Signature of Auditor/  
Chartered Accountant

Seal

Membership No.-

Registration No. of Firm

***Note:***

- To be issued in the letter head of the Auditor/Chartered Accountant mentioning the Membership no.*
- To be supported by the attested photocopies of audited account statement / P&L account/ Annual Report and the figure of turnover mentioned in the format (Annexure – VI) should be highlighted there. The authorized distributor has also to furnish his turnover statement in the above format.*



(To be submitted in *Cover A - Technical Bid*)

**Annexure VII**  
(Refer Clause no. 3.9)

**PROFORMA FOR PERFORMANCE STATEMENT**  
(For the period of last **three years**)

**ITEM WISE (Pl. Furnish separate performance statement itemwise if the bidder quote for more than one item & attach the order copies alongwith each performance statement)**

Tender Reference No.:

Name of Tenderer :

Name of Manufacturer: \_\_\_\_\_ Name of the Item : \_\_\_\_\_

Sl.	Order placed by (Address of purchaser) (attach documentary proof)*	Order no. & Date	Item Name	Make & Model	Qty	Value of Contract (Rs.)	Date of Completion		Reasons for delay if any	Have the goods been functional
							As per contract	Actual		
1										
2										
..										
..										
			Total Qty							

**Signature and seal of the Tenderer**

- \* The documentary proof will be **copies of the purchase order** (during the last 3 years) indicating Contract No. and date along with a notarized certification (by the bidder) authenticating the correctness of the information furnished.
- \*\* The documentary proof will be certificate from the consignee/end user indicating Contract No. and date along with a notarized certification (by the bidder) authenticating the correctness of the information furnished.

(To be submitted in *Cover A - Technical Bid*)



**Annexure VIII A**

*(Refer Clause No. 3.10)*

**STATEMENT REGARDING DEVIATIONS FROM TECHNICAL SPECIFICATIONS (IF ANY)**

Following are the Technical deviations and variations from the purchaser's Technical Specifications.

Sl. No.	Item Name	Clause of Technical Specification	Statement of Deviations Variations if any
1			
2			
..			
..			
..			

In case there is no deviation from technical specification, Pl. Mention *No Deviation.*

Signature of the Bidder

Name :

Date :

Place :

Seal

  
12.12.18

(To be submitted in *Cover A - Technical Bid*)

**Annexure VIII B**

(Refer Clause No. 3.10)

**DETAILS OF TECHNICAL SPECIFICATION OF THE PRODUCT (S) OFFERED BY  
THE BIDDER**

Sl. No.	Item Name	Make	Model	Detail Specification of the product(s) offered* (Pl. Describe the detail specification of the product offered) – Para wise compliance to the technical specification asked for.	**Page no. of the Catalogue / Leaflet where Para wise compliance information as per technical specification is available
1					
2					

\* Leaflets/Technical Brocheures of the product offered must be attached in support of the information provided above.

\*\* It is mandatory to mention the page no(s) in the format as mentioned above.

Signature of the Bidder

Name :

Date :

Place :

Seal



# **ANNEXURES -IX**

**(To be submitted in COVER B - PRICE BID)**

**Note :** Price schedule should be submitted in separate sheets for each item(s) quoted and sealed in separate envelopes. Each envelop should be superscribed with the *Item Name (s) quoted , i.e. (1) Decahead Teaching Microscope on turnkey basis (where necessary) (2) ..... (3)*

.....

## **List of Enclosures to be submitted in Price Bid :**

- 1) Price schedule format duly filled in and signed by the authorized signatory with company seal**
- 2) Photocopy of GST registration certificate**



**To be submitted in Cover B – Price Bid**  
(Refer Clause No. 4.1 & 8.15)

**FORMAT I - PRICE SCHEDULE**

Whether GST paid to Government of Odisha: Yes / No . If Yes, furnish the copy of Odisha GST registration certificate

Name of the Item (s) (Items mentioned in the schedule of requirement)	Make & Model	* Price of the items with all accessories which includes excise duty / customs duty, packing, insurance, forwarding / transportation (door delivery) with 5 (five) years onsite warranty, calibration charges if any & excludes GST/sales tax / entry tax Cost in Rupees (both in words & figures)	CMC (excluding Service Tax) for five years after expiry of five years warranty period (please mention on yearly basis)	**Cost of Turn Key if any (all materials : for electrical, civil , air conditioning work etc.) for installation & commissioning and all charges towards installation/commissioning including all taxes for in Rs. (Door delivery & installation)	Total Cost with CMC (Exclusive of CST/GST & ET) (In Rupees)	***Taxes CST/GST & ET (if any) on & above the item price mentioned in col. (3) (Mention whether CST / GST and ET, the % of tax & it's value in Rs.)	In Case of GST, pl. Mention whether GST is payable to Govt. of Odisha (Yes/No)
1	2	3	4	5	6=3+4+5	7	8

\* Breakup of the price of individual items of the items mentioned at col. (3) above should be mentioned separately at Annexure IXA2

\*\* The cost of turnkey shall include any specific accessories/equipment required for installation/commissioning and . In case of turnkey, the details of accessories/equipment are to be mentioned.

\*\*\* CST/GST & ET which will be chargeable on the price (3) shall be mentioned separately in column 7 above.

Date :

Place :

1. Rates should be quoted both in figures & words for each item and if there is any discrepancy, the quoted rates in words will be taken for evaluation.
2. The tenderer has to mention the make / brand, specification, warranty of all the items in turn



# **ANNEXURES**

## **(Agreement, Warranty and CMC Undertaking)**

81-21-51  
15-12-18



**AGREEMENT**

THIS AGREEMENT IS MADE AT \_\_\_\_\_ THIS THE DAY OF \_\_\_\_\_ 2014

BETWEEN

Name of the Supplier  
with full address

Here in after called the "Supplier(s) \_\_\_\_\_" as 1<sup>st</sup> Party

AND

**Dean & Principal,, MKCG Medical College, Berhampur**

herinafter called the "PURCHASER" \_\_\_\_\_ as 2<sup>nd</sup> Party.

Relying on the documents and representation of facts connected to the issue of aforesaid parties to undertake the responsibilities of sell and purchase of following equipment(s) etc. with the terms & conditions hereinafter laid down.

And whereas the 2<sup>nd</sup> party "Purchaser(s)" is willing to purchase

**Name of the Item:**

Specifications: As per specifications laid down in the Tender terms & conditions

The Supplier(s) has agreed to sell the equipment(s) completed in all respects according to the Tender requirements and their / his offer dtd. \_\_\_\_\_ and the Supplier(s) has also agreed to install to make them operative at the destination mentioned in the Tender document with the following descriptions and their cost mentioned against each.

<u>Description of goods</u>	<u>Qty</u>	<u>Price</u>	<u>Total</u>
-----------------------------	------------	--------------	--------------

The price / cost of the item also include the followings in addition to above.

1. Insurance
2. Freight
3. Transportation
4. Customs duty / Excise duty
5. Charges for documents, instructions manual, tools
6. F.O.R. at the destinations mentioned in the consignee list
7. Training to doctors & technicians.
1. Maintenance of the system includes all accessories supplied and their spare parts required during comprehensive warranty period of five year at free of cost from the date of successful installation and satisfactory functioning of the system at the site.
2. Installation and commissioning of the system by the Supplier's engineer at site.
3. Any other charges including loading & unloading, packing & forwarding etc. will be paid by the Supplier(s) till the completion of the installation and turnkey job if any.

CMC cost for next 5(five) years after the warranty period shall be paid after completion of the warranty period (on a six monthly basis).



## **TERMS AND CONDITIONS:-**

### **PRICE :**

Only the price quoted by the Supplier(s) in his / their financial proposal will be the price for payment and no other price escalation will be allowed at any circumstances.

### **SUPPLY**

The supply should be completed within 60 days from the date of issue of purchase order unless otherwise specified. If no supply is received even after 60 days or extended period days with liquidated damage from the date of issue of the purchase orders , such orders will stand cancelled automatically without further notice. Penalties shall also thereafter be applied to the tenderer as specified under Penalty. The approved firm shall also suffer forfeiture of the EMD and Performance Security Deposit.

### **LIQUIDATED DAMAGE :**

The Purchaser may allow extension for a maximum period of 4 (four) weeks (28 days), after the stipulated date of supply (i.e. 60 days) with a penalty of 0.5% which will be deducted from the purchase order value as "Liquidated Damage", for each week (7 days) of delay upto a maximum 2% on the value of the goods.

If the supplier fails to complete the supply within the extended period, i.e. 60 days after being allowed by the purchaser, no further purchase order will be placed to the firm for the said item including forfeiture of the Performance security and the concerned firm will be blacklisted for two (2) years from the date of issue of letter for the said item.

### **TERMS FOR PAYMENT :-**

- A. The payment(s) shall be made by purchaser in Indian currencies. No advance payments towards cost of Instruments and Equipments etc. will be made to the tenderer. No payment will be made to the supplier if he has not deposited the unconditional performance security in shape of Bank draft/bank guarantee amounting to 5% of the purchase order value which will be deposited with the O/o of the concerned consignee.

90% of the cost of the equipment (excluding CMC Cost)+100% turnkey +100% tax shall be released to the supplier on receipt of stock entry certificate and installation certificate (that it is working satisfactory) from the consignee. The remaining ten percent (10%) will be released after satisfactory working certificate received from the consignee after 6 weeks of installation subject to submission of performance security (5% of P.O. Value). For this purpose the supplier will submit two bills, one 90% of the cost of the equipment+100% turnkey +100% tax and the other for the remaining ten percent (10%) of the cost of the equipment.

- B. Before release of payment the supplier has to submit the signed agreement, warranty documents of equipment and turnkey job to the consignee. The undertaking as per Annexure – XI & XII will also be submitted to the consignee with photocopies to the purchaser.
- C. The payment of CMC will be made on six monthly basis after expiry of the warranty period and signing of the CMC agreement.

### **UP-TIME BALANCE :**

The Supplier (s) shall provide guarantee 95% uptime i.e. 41610 hours (95% of 43800 Hours) during comprehensive warranty period. The up time guarantee will be 95% as calculated here under i.e. 8322 hours per annum.

1 year – 365 days (24 working hours per day)

Total working time per annum – 365 days x 24 hrs = 8760 hrs.

Up time guarantee -  $0.95 \times 8760 \text{ hrs.} = 8322 \text{ hrs. per annum.}$

For 5 years warranty =  $8322 \times 3 \text{ hrs}$

Any uptime less that specified above will be compensated by the Supplier(s). The consignee shall maintain a log-book in the format provided by the Supplier(s) which will indicate usage of the equipment every day and for calculation of up-time.

**DOWNTIME PENALTY CLAUSE:**

During the Guarantee / warranty period, desired uptime will be 95% of 365 days (24 hour) if downtime exceeds 5%, penalty in the form of extended warranty, double the number of days for which the equipment goes out of service will be applied. The vendor must undertake to supply all spares for optimal upkeep of the equipment for TWO YEARS from the date of installation at the site. If accessories / other attachment of the system are procured from the third party, then the vendor must produce cost of accessory / other attachment and the CMC from the third party separately along with the main offer and the third party will have to sign the CMC with the consignee if required.

In no case equipment should remain in non-working condition for more than 7 working days.

The manufacturers or their agents are required to submit a certificate that they have satisfactory service arrangements and fully trained staff available to support the uptime guarantee.

**COMPREHENSIVE MAINTENANCE CONTRACT:**

The supplier will provide CMC for 7 (seven) years after the completion of 3 years comprehensive warranty period.

**INSTALLATION AND DEMONSTRATION :**

The installation and demonstration of the equipment shall be done by the Supplier(s) at free of cost at the installation site of the respective institutions.

**TRAINING :**

Supplier(s) shall impart adequate training to 2 doctors and 2 technicians at the site / his / their factory / workshop inside / outside India as the case may be at the Supplier(s) cost.

**INCIDENTAL SERVICES :**

The Supplier(s) shall abide by the terms and conditions under incidental services & the installation of Instrument / Equipment at the destination point (Door Delivery) of consignee and demonstrate the machine in working condition to the receiving authority.

Furnishing of tools required for assembly and / or maintenance of the supplied Instruments / Equipments.

Furnishing of detailed operations and maintenance manual literatures for each appropriate unit of supplied Goods.

Performance or supervision or maintenance and / or repair of the supplied Goods, for a period of five (5) years i.e. the warranty period, provided that this service shall not relieve the Supplier of any warranty obligations under this contract.

The successful supplier shall replace any part or whole system as may be necessary in the event of damage during transit or found damaged on arrival or during installation of the system or if found not in conformity to the specifications at his / their own cost.

The tenderer should furnish an undertaking to the effect that he / they should take responsibility after sales service of the equipments / instruments to be supplied by him / them and to provide spare parts for up keeping the Equipments / Instruments for a minimum period of 10 years from the date of installation.

The price of the instruments / equipments is inclusive of warranty for a period of 5 (five) years commencing from the date of installation. The tenderers shall submit undertaking for C.M.C (Comprehensive Maintenance Cost) for a period of 5 (Five) years from 8<sup>th</sup> year onwards duly signed by authorised signatories for the execution at appropriate time (Annexure – X & XI).

**SPARE PARTS :**

The supplier will provide all the spare parts, repairing & maintenance by its trained personnel after the warranty period (5 years) during the CMC period.

**COMPREHENSIVE WARRANTY :**

This warranty shall remain valid for three (5) years from the date of installation & commissioning of the machine / item & must be submitted at the time of installation to the consignee with a photocopy to the purchaser.

The warranty will cover all the parts of the machine or item and any replacement or repair required within the warranty period will be provided by the supplier free of cost at the destination point (Installation point). The supplier will take back the replaced parts / goods at the time of their replacement. No claim whatsoever shall be on the purchaser for the replaced parts / goods thereafter. No traveling allowances or transportation cost will be paid by the purchaser during warranty period.

The Supplier warrants that the Goods supplied under this contract are new, unused, of the most recent or current models and they incorporate all recent improvements in design and materials (even if the advanced facilities are not mentioned in our product specification). The Supplier further warrants that all Goods supplied under this contract shall have no defect arising from design, materials or workmanship (except when the design and / or material is required by the Purchaser's Specifications) or from any act or omission of the Supplier, that may develop under normal use of the supplied Goods in the conditions prevailing in the place of final destination.

The Purchaser / consignee shall promptly notify the Supplier in writing / Fax / Telephone of any claims arising under this warranty.

Upon receipt of such notice, the Supplier shall with all responsible speed will repair or replace the defective goods or parts thereof without cost to the purchaser to maintain its UP TIME offered in the beginning of purchase otherwise penal provisions shall apply if the supplier fails to keep up its UP TIME.

If the Supplier, having been notified, fails to remedy the defect(s) within 10 days, the Purchaser may proceed to take such remedial action as may be necessary, like forfeiture of EMD or recovery from security deposit the amount of loss incurred by the purchaser.

**GOVERNING LANGUAGE :**

The contract shall be written in English language. English language version of the contract shall govern its interpretation. All correspondences and other documents pertaining to the contract which are exchanged by the parties shall be written in English.

**DELIVERY OF DOCUMENT :**

Four (4) copies of the Supplier invoice / bills showing purchase order number, good's description, quantity, unit price, total amount with stock entry certificate by the consignee.

Photocopy of the Insurance Certificate if any (The Original Certificate is to be given to the Consignee).

Attested Photocopy of Manufacturer's / Supplier's warranty certificate. (The original warranty certificate is to be submitted to the consignee at installation point).

**INSURANCE :**

For delivery of goods at site, the insurance shall be obtained by the Supplier(s) in an amount equal to 110% of the value of goods from "Warehouse" (final destination) on "All Risks" basis including natural calamities.

**PACKAGING :**

The supplier shall provide such packaging of the goods as is required to prevent their damage or deterioration during transit to their final destination. The packaging shall be sufficient to withstand without limitation rough handling during transit and exposure to extreme temperature, salt and precipitation during transit and upon storage. All primary packaging containers which come in contact with the item should strictly protect the quality and integrity of the Instruments & Equipments. Packing case size and weights should be taken into consideration, in case of remoteness of final destination and the absence of heavy handling facilities at all points in transit.

The packaging marking shall show the description of quantity of contents, the name of the consignee and address, the gross weight of the packages, the name of the supplier with a distinctive number of mark sufficient for purposes of identification. Each package shall contain:

- i. a packaging note quoting the name of the purchaser
- ii. the number and date of order
- iii. nomenclature of the goods
- iv. schedule of parts for each complete equipment giving part number with reference to assembly.
- v. Name & address of the consignee
- vi. Name & address of the supplier.

**TERMS OF CONTRACT :**

The Dean & Principal, MKCG Medical College, Berhampur will be at liberty to terminate the contract either wholly or in part without assigning any reason. The tenderers will not entitled to any compensation whatsoever in such terminations.

**PENALTIES :**

If the successful tenderer fails to execute the agreement and / or deposit the required security within the time specified or withdraws his tender after acceptance of his tender owing to any other reasons, he is unable to undertake the contract, his contract will be cancelled and the Earnest Money Deposit deposited by him along with his tender shall stand forfeited and he will also be liable for all damages sustained by the Dean & Principal, MKCG Medical College, Berhampur by reasons of such breach, such as failure to supply / delayed supply including the liability to pay any difference between the prices accepted by him and those ultimately paid for the procurement of the articles concerned. Such damages shall be assessed by the Dean & Principal, MKCG Medical College, Berhampur whose decision is final & binding in the matter.

If any articles or things supplied by the tenderer have been partially or wholly used or consumed after supply and are subsequently found to be in bad order, unsound, inferior in quality or description or are

otherwise faulty or unfit for consumption / use & rusted then the contract price or prices of such articles in full will be recovered from the tenderer, if payment had already been made to him or the tenderer will not be entitled to any payment for that item & no further order will be given to him. For infringement of the stipulations of the contract or for other justifiable reasons, the contract may be terminated by the Dean & Principal, MKCG Medical College, Berhampur and the tenderer shall be liable for all losses sustained by the Dean & Principal, MKCG Medical College, Berhampur in consequence of the termination, which may be recovered from the Security Deposit made by the tenderer or other money due or become due to him.

Supply of sub-standard items or non - performance of tender terms & conditions will disqualify a firm to participate in the tender for the next five years.

**ARBITRATIONS :**

In the event of any dispute out of the contract, such dispute should be subject to the Jurisdiction of the High Court, Odisha.

**CHANGE OF TERMS AND CONDITIONS :**

Any amendment to the terms & conditions and clauses of the agreement if required must be done in writing duly signed by the two parties.

IN WITNESS WHERE OF the parties herein to have set and subscribed their respective hands the day and year first herein above written.

Executed by Purchaser (s) / Consignee

Executed by Supplier(s)

In presence of (Witness)

In presence of (Witness)



**ANNEXURE – XI**

(Refer Clause No. 11.1 to 11.6 & 13.1)

**UNDERTAKING**

**(To be submitted on Rs.50/- stamp paper)**

Tender ref. No. \_\_\_\_\_

Name of the equipment:

Date of Installation:

Name of the Consignee:

Name of the purchaser:

Sir,

I / we \_\_\_\_\_

hereby declare that

1. I / we am / are the manufacturers / authorized agents / distributors of \_\_\_\_\_.
2. I / we do accept / agree for the all clauses including the warranty 5 years followed by 5 years CMC) and payment terms and conditions of this tender.
3. I / we do hereby confirm that the prices / rates quoted are fixed and are at par with the prices quoted by me / us to any other Govt. of India / Govt. of Odisha Hospitals / Medical Institutions. I / we also offer to supply the stores at the prices and rates not exceeding those mentioned in the price bid.
4. I / we agree to abide by my / our offer for a period of 365 days from the date of approval of the tender.
5. I / we have necessary infrastructure for the maintenance of the equipment and will provide all the accessories / spares as and when required.
6. I / we also declare that in case of change of Indian Agent or for any other change, merger, dissolution solvency etc. in the organization of our foreign principles, we would take care of the Guarantee / warranty / maintenance of the machinery / equipment and have provided written confirmation for the same.
7. I / we shall provide assistance to the consignee in clearance and delivery of store at consignee's stores / premises.



8. The demurrage / storage charges, if any, payable to the customs department, due to non-receipt of required documents in time by the hospital / delay due to incorrect entries, mistakes to the documents etc. shall be borne by me / us.
9. I / we have carefully read and understood all the terms and conditions of the tender and shall abide by them.
10. I / we undertake to get the equipment's repaired within 48 hours of receiving of the complaint from the indenting hospital / consignee failing which a penalty @ 1% of the cost may be recovered from the performance security before releasing the same to us after 5 years warranty period.

Signature of the witness  
Name & address

Signature of the Tenderer  
Name & address

Dated

Seal of the firm.

**N.B:** 1. To be attested by Notary Public

2. Only to be submitted by the approved supplier / tenderer to the consignee and a copy to the purchaser before release of payment.





(SECTION-IV)

**SPECIFICATION**  
**SECTION**

15.12.18

SL.N O.	NAME OF THE EQUIPMENT	QT Y.	SPECIFICATIONS
<b>PATHOLOGY</b>			
1	Decahead Teaching Microscope	2	<ol style="list-style-type: none"> <li>1. Optical system: Infinity corrected system.</li> <li>2. Focus: Vertical stage movement 25mm per coarse stroke. Vertical stage movement 1micron per fine stroke. Stage rotation of 270 degrees with Stage Lock and Stage Tension adjustment.</li> <li>3. Illuminator: Built-in-Koehler illumination for transmitted light LED bulb (pre-centered).Light Intensity adjustment centrally located so both hands can be used to increase and decrease light, New Eco Switch for Energy saving to switch off the Light when user moves away from the microscope, Light preset switch for photography. Blue Built-in filters, Neutral density filter 6 and Neutral Filter 25.</li> <li>4. Revolving nosepiece: Interchangeable Reversed Septuple Nosepiece with DIC slot.</li> <li>5. Objectives: Plan 2x,4x, 10x, 20x, 40x, &amp; Plan Fluor 100x Oil.</li> <li>6. ObserGSTion tube: Wide field Trinocular head with Field no. 22 mm or more with three Light path selection of 100:0, 20:80 and 0:100.</li> <li>7. Stage: Ceramic-coated coaxial stage with right hand low drive Control with X and Y axis Tension adjustment.</li> <li>8. Condenser: Swing out condenser (N.A 1.1), for 2x -100x.</li> <li>9. Teaching Attachment:For 1+ 9 persons Head with eyepiece of Field no. 22 or more, LED arrow pointer with variable intensity and with Green / Red colour selection.</li> <li>10. The equipment should be USA- FDA/European- CE approved.</li> <li>11. The instalment should be on a turn-key basis.</li> <li>12. The cost for AMC / CMC for 5 years after the warranty period must be quoted separately.</li> </ol>
2	Grossing Station	1	<ol style="list-style-type: none"> <li>1. The equipment should be a floor mounted model.</li> <li>2. There should be facility for video, audio recording and photography attachment. The photography attachment should have facility for enlargement.</li> <li>3. There should be facility for digital measurement of grossing specimens.</li> <li>4. There should be IT support for storage andretrieval of data recorded with TFT display and recording system.</li> <li>5. There should be a formalin tank on top of the station with direct supply system to the work area.</li> <li>6. Both water and formalin faucets should beavailable in the work area.</li> <li>7. The station should be made of noncorrosivehigh grade stainless steel.</li> <li>8. Exhaust with filters for formalin vapours should be available.</li> <li>9. Sink should have removable filters on drain to trap debris/tissue bits.</li> </ol>

SL.N O.	NAME OF THE EQUIPME NT	QT Y.	SPECIFICATIONS
			<p>10. Working area should have good illumination.</p> <p>11. Magnetic front board should be available to stick instruments for grossing.</p> <p>12. Approximate size should be- breadth 6ft, depth 3ft, working area height 3ft.</p> <p>13. Sink with drain board would be preferred.</p> <p>14. The equipment should be USA- FDA/European- CE approved.</p> <p>15. The instalment should be on a turn-key basis.</p> <p>16. The cost for AMC / CMC for 5 years after the warranty period must be quoted separately.</p>
3	Cytocentrifu ge	1	<p>1. The equipment should be a Bench-top centrifuge for cytology specimens.</p> <p>2. The equipment should be capable of thin-layer cell preparation for retrieving cells from various body fluids especially paucicellular fluids and preserving their morphology</p> <p>3. Should be capable of processing up to 12 specimens at one time.</p> <p>4. Should be equipped with Biological safety cabinet for safety of the operator.</p> <p>5. Auto-lid lock during rotation with a special lid release mechanism should be available.</p> <p>6. Should be designed for easy disinfection and also have a wipe- clean control panel.</p> <p>7. Should be resistant to fluid spillage on the electronic components with capped disposable sample compartments/ chambers for elimination of aerosol.</p> <p>8. May have different sizes of disposable chambers.</p> <p>9. Safety alarms during all stages of operation should be available.</p> <p>10. Microprocessor based controls and programming for time and speed with pull-out program card for fast retrieval.</p> <p>11. Should be compliant with international standards for electrical equipment requirements for laboratory use 220 V, 50Hz.</p> <p>12. Speed 100 to 4,000 rpm</p> <p>13. Noise levels &lt; 50 Db</p> <p>14. The equipment should be an automated slide preparation system that produces uniform thinlayerslides for both gynecologicandnongynaecologicalsample processing which shouldremove obscuring blood, mucus, debris and alsothoroughly mix the sample.</p> <p>15. Processes about 80 samples per cycle withautomatic chain-of-custody verification of patientsamples.</p> <p>16. Should be US FDA / CE certified.</p> <p>17. The equipment should be USA- FDA/European- CE approved.</p> <p>18. The instalment should be on a turn-key basis.</p>

SL.N O.	NAME OF THE EQUIPME NT	QT Y.	SPECIFICATIONS
			19. The cost for AMC / CMC for 5 years after the warranty period must be quoted separately.
4	Fully automated urine analyzer	2	<p>1. The analyser should be compact benchtop, fully automated integrated urine analyzer, integrating urine chemistry and urine sediment analysis.</p> <p>2. Chemistry parameters required to be provided should be glucose, protein, blood, bilirubin, urobilinogen, ph, ketones, nitrate, leuokocyte, creatinine, albumin, alb/ cre ratio, pro/cre ratio.</p> <p>3. Additional instrument parameters should have specific gravity, turbidity &amp; colour.</p> <p>4. The analyser should be based on fluorescence flowcytometry for accurate measurement of urine parameters such as rbc, wbc, epithelial cells, cast and bacteria.</p> <p>5. The instrument should provide scattergrams and histograms for easy interpretation.</p> <p>6. The analyser should provide additional rbc information, UTI information and conductivity.</p> <p>7. The analyser should have user friendly software with cross check function.</p> <p>8. The analyser should have a throughput 100 samples / hour (chemistry) &amp; 50 samples / hour (sediment analysis).</p> <p>9. The equipment should have a storage of 200 test strips at a time with continuous loading for true walkaway analysis.</p> <p>10. The equipment should have the capability to load two different types of strips for better flexibility in analysis.</p> <p>11. The equipment should be capable of analysis in both manual and sampler mode.</p> <p>12. Sampler should have the capacity of 60 sample tubes and internal barcode for sample identification.</p> <p>13. Controls should be available for both chemistry and sediment analysis.</p> <p>14. Data storage of 10000 samples including graphics &amp; 24 qc files with 300 data points each should be available.</p> <p>15. The equipment should have interface for output to printer or transmitted to LIS / HIS and it would the responsibility of the supplier to do the interfacing.</p> <p>16. The equipment should be USA- FDA/European- CE approved.</p> <p>17. The instalment should be on a turn-key basis.</p> <p>18. The cost for AMC / CMC for 5 years after the warranty period must be quoted separately.</p>



SL.N O.	NAME OF THE EQUIPMENT	QTY.	SPECIFICATIONS
5	Trinocular microscope with projection system	25	<ol style="list-style-type: none"> <li>1. Aluminium die-cast body with all critical movements based on ball bearing &amp; wire guides thereby ensuring smooth &amp; precise manipulation.</li> <li>2. Co-axial low drive mechanical stage (125mm x 145mm)(+/-5 mm) with traverse area of 50 mm x 76 mm (+/-5mm) with dual side holder.</li> <li>3. Co-axial coarse &amp; fine controls with a focus adjustment and fine adjustment knobs, Coarse Focus range 20 mm. Fine focus range 0.2 mm.</li> <li>4. Rack &amp; pinion mounted condenser holder.</li> <li>5. Centerable abbe condenser with aperture iris diaphragm (N.A. 1.25) focusable with rack &amp; pinion through 20 mm and a continuously variable iris diaphragm with a removable blue filter for daylight observation.</li> <li>6. LED light source (with battery back-up) High brightness, long life (30,000). Battery back-up in-built NiMH Rechargeable batteries provide 6 to 8 hrs back-up on full charge.</li> <li>7. Quadruple revolving inward nosepiece based on precision ball-bearing mechanism with positive click stop.</li> <li>8. Objectives: 4x (N.A 0.10 W.D 25 mm), 10x (N.A 0.25 W.D 5 mm), 40x (spring loaded) (N.A 0.65 W.D 0.5 mm), 100x (oil, spring loaded) (N.A 1.25 W.D 0.14 mm).</li> <li>9. Infinity corrected plan optics, Uniformly centered, Interchangeable &amp; Parfocal, Anti-fungus treated, Tropicalized anti fungus treatment ensures image excellence for long periods in conditions, favouring to fungus growth.</li> <li>10. Binocular (30 deg inclined seidentopf), 360 deg rotatable, dioptr adjustment.</li> <li>11. WF 10x (F.N 20 mm) paired eyepiece. The unique optical design of the compensating eyepiece provides relief from eye fatigue and renders color- compensated wide-field images of utmost clarity. Compatible with optionally available eyepiece micrometer.</li> <li>12. Certification: ISO 9001:2008, CE</li> <li>13. Camera &amp; Software: Digital Cooled CCD Camera approx 5 MP pixel size 4.65 mm x 4.65 mm, with 12 bit digitization, Fire wire port. Software to capture and image processing.</li> <li>14. Computer system: i5 processor, 4GB RAM 500 GB HDD, DVR R/W, TFT 21".</li> <li>15. The system should be upgradeable to Fluorescence attachment with multicolour more than 6 filters positions on turret at a time.</li> <li>16. The Microscope and camera should be from same manufacturer.</li> <li>17. The microscope should be provided with digital 40" HD LED projection panel.</li> <li>18. Face to Face second observer attachment with binocular head and eyepiece 10x/20mm with LED Pointer, the head should be 360° rotatable.</li> </ol>



SL.N O.	NAME OF THE EQUIPMENT	QTY.	SPECIFICATIONS
			<p>19. There should be provision for simultaneous viewing at projector as well as microscope.</p> <p>20. There should be provision for split screen display for simultaneous viewing of acquired as well as image.</p> <p>21. Document supporting track record and satisfactory performance from institutes of national importance (minimum one) should be provided.</p> <p>22. Appropriate work bench/ stand should be provided with the instrument.</p> <p>23. UPS backup for the duration of one hour to be provided.</p> <p>24. The equipment should be USA- FDA/European- CE approved.</p> <p>25. The instalment should be on a turn-key basis.</p> <p>26. The cost for AMC / CMC for 5 years after the warranty period must be quoted separately.</p>
6	Binocular Research microscope	20	<p>1. Optical system: Infinity corrected system</p> <p>2. Focus: Vertical stage movement 25mm or more per coarse Stroke, Vertical stage movement 1micron or less per Fine stroke.</p> <p>3. Illuminator: Lamp House for LED with connecting cable having life Span of 20,000 hrsapprox.</p> <p>4. Revolving nosepiece: Reversed Sextuple revolving nosepiece.</p> <p>5. Objectives: Plan Achromat 2X,4X,10X, 20X,40X,100X.</p> <p>6. Observation tube: Wide field Trinocular Eyepiece Tube with 10X eyepieces of 25mm F.O.V</p> <p>7. Stage: Ceramic coated surface mechanical stage with right/left hand</p> <p>8. Low drive control with left hand for two specimens</p> <p>9. Condenser: Swing out condenser usable for 2X-100X</p> <p>10. The equipment should be USA- FDA/European- CE approved.</p> <p>11. The instalment should be on a turn-key basis.</p> <p>12. The cost for AMC / CMC for 5 years after the warranty period must be quoted separately.</p>
7	Automated clinical electrophoresis system	1	<p>1. The instrument should be bench-top automated agarose-gel based electrophoresis system with sequential processing of each electrophoresis step from application, migration, incubation, staining, destaining, drying, scanning and quantification to allow walk-away operation.</p> <p>2. It should be able to perform electrophoretic analysis of Acid &amp; Alkaline Haemoglobin(Hb), serum/ urine Proteins, Bence Jones proteins, Isoenzymes and Lipoproteins. It should be capable of performing serum/ urine Immunofixations and Haemoglobin/CSF/ Transferrin Isoelectric Focusing.</p>



SL.N O.	NAME OF THE EQUIPME NT	QT Y.	SPECIFICATIONS
			<p>3. It should have a wide Test Menu which include: Alkaline Hemoglobin electrophoresis; Acid Hemoglobin electrophoresis; Serum Protein electrophoresis; Immunofixation Violet; Immunofixation Blue; Bence-Jones protein electrophoresis and Immunofixation; Pentavalent Immunofixation; Hb/ CSF/ Transferrin Isoelectric Focusing; High resolution (H.R). and Split Beta serum Protein electrophoresis; SDS Urine Proteinelectrophoresis; Lipoproteins; Cholesterols, LDH Isoenzymes; CK Isoenzymes; ALP Isoenzymes.</p> <p>4. It should be able to perform tests on urine and CSF without concentration.</p> <p>5. The system should have capacity to run at least 20 protein samples, 12 haemoglobinsamples and 6 immunofixations simultaneously on one gel.</p> <p>6. The system should have option for simultaneous run of blood, urine and CSF samples.</p> <p>7. The system should have automatic sampling station and use disposable applicators for sample application.</p> <p>8. The system should work on No-carryover technology.</p> <p>9. The system should have automatic regulation of voltage, current, power and volt hour.</p> <p>10. The temperature control on the instrument should be precise, Peltier effect driven.</p> <p>11. The system should have facility for on-board reagents.</p> <p>12. The system should be compatible with ready to use, pre-standardized reagent kits.</p> <p>13. The system should have capacity for user defined programming for at least 15 methods.</p> <p>14. The drying in the system should be by convection heater with laminar air flow.</p> <p>15. The staining compartment of the system should be able to operate at least 6-8 different reagents/ stains.</p> <p>16. The system should be supplied with compatible gel scanner/ densitometer and easy to use intuitive software for gel quantification and analysis.</p> <p>17. The instrument should have optimal patient data storage facility.</p> <p>18. The instrument should allow customizable reporting formats and print outs of graphical reports including results, images, traces, demographics and logos.</p> <p>19. The instrument should have compact foot print.</p> <p>20. The instrument should have voltage range of 3.5 to 350 V, current range of 3.5 to 200mA and power range of 0 to 30 W.</p> <p>21. The instrument should be capable of quality control measures such as automatic Levey Jennings analysis, standard deviations and flagging of normal and abnormal results.</p>

SL.N O.	NAME OF THE EQUIPME NT	QT Y.	SPECIFICATIONS
			<p>22. Document supporting track record and satisfactory performance from institutes of national importance (minimum one) should be provided.</p> <p>23. Appropriate work bench/ stand should be provided with the instrument.</p> <p>24. To be supplied with computer (minimum i5 processor, 500 GB HDD and 4 GB RAM), A4 size printer and appropriate bar code reader.</p> <p>25. Start-up kit for at least 100 tests should be provided free of cost.</p> <p>26. UPS backup for the duration of one cycle of processing to be provided.</p> <p>27. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests to be provided by the company.</p> <p>28. The equipment should be USA- FDA/European- CE approved.</p> <p>29. The instalment should be on a turn-key basis.</p> <p>30. The cost for AMC / CMC for 5 years after the warranty period must be quoted separately.</p>
8	Sperm quality analyzers (SQA) are used for assessing male fertility	1	<p>1. System complete with printer and necessary software should run on fresh, frozen and washed semen samples. Should not require any sample dilution.</p> <p>2. Fully automatic numerical readouts of separate integrated and totalized semen parameters.</p> <p>3. Results to be calculated and displayed within 50-75 seconds</p> <p>4. Must have self testing and self calibrating facility</p> <p>5. Built-in printer.</p> <p>6. RS232/USB output for Printer, PC connectivity and Data acquisition should be there.</p> <p>7. Should report sperm count, motility, normal morphology and additional semen parameters.</p> <p>8. A built-in memory capable of storing up to 1000 test results.</p> <p>9. All consumables required for installation and standardization of system to be given free of cost.</p> <p>10. Cost of capillaries for 1000 tests should be quoted.</p> <p>11. Cost of quality control reagents required for 1000 tests.</p> <p>12. Cost of other reagents required for 1000 tests.</p> <p>13. The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%</p> <p>14. The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%.</p> <p>15. Power input to be 220-240VAC, 50Hz fitted with Indian plug</p> <p>16. UPS of suitable rating shall be supplied for minimum 1 hour backup for the entire system.</p> <p>17. Should be FDA or CE or ISI approved product</p>



SL.N O.	NAME OF THE EQUIPME NT	QT Y.	SPECIFICATIONS
			18. Manufacturer should be ISO certified for quality standards. 19. Comprehensive warranty & AMC/CMC as per TC 20. User/Technical/Maintenance manuals to be supplied 21. Certificate of calibration and inspection from factory. 22. Inspection Certificate from manufacturer to be complying with WHO specification as specified above. 23. List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.


 15-12-18

SL.NO.	NAME OF THE EQUIPMENT	QTY.	SPECIFICATIONS
<b>O &amp; G</b>			
1	CTG Machine (labour Room)	6	<p>FHR (Fetal Heart Rate), UC (Uterine constraction) and FM (Fetal Movement) Twin Capability, Automatic fetal movement detection, Alarm on abnormal FHR, High speed printout of stored data, Durable water tight probes, Atleast 6 hours of memory capacity, High Sensitivity, Uterine contraction:</p> <p>Input source External transducer with strain guage, Reference (zero) control: One toch switch, Measurement range: 0~99 units,</p> <p>Fetal Movement measurement:</p> <p>Detection source: Ultrasound pulsed Doppler, Recording method Spike like 2 waveforms on uterine activity sector denote relative intensity &amp; duration of fetal movement.</p> <p>Make: Preferably Emco Huntleigh type of equivalent.</p> <p>Must be FDA / CE Certification.</p> <p>Technical Specifications:</p> <p>These units should monitor FHR ranges of at least 50 to 210 bpm, Probe frequency between 2 to 3 MHz &amp; diameter between 20 to 35 mm, Outputs typically generated using a speaker or headphones allowing priGSTe or shared listening, The controls on ultrasonic fetal heart detectors should include power on/off and volume., The unit should operate on line &amp; battery power, the batteries should be rechargeable to save on the cost of constantly replacing batteries.</p> <p>System Configuration Accessories, spares and consumables:</p> <p>1 System as specified should have accessories like one obstetric probe, coupling gel a carrying case, and an instruction manual.</p> <p>Environmental factors:</p> <p>! Shall meet IEC-60601-1-2:2001 (OR Equivalent BIS) General Requirements of Safety.</p>
2	IUI setup	1	<p>microscope, centrifuge machine, pippette, media, syringe, laminar flow system</p>
3	Multipara monitor (labour Room)	8	<p>with ECG, Gain: 2.5mm/mV, 5.0mm/mV, 10mm/mV, 20mm/mV, auto Adult: 15 ~ 300 bpm, Neo/Ped : 15 ~ 350 bpm, Resolution : 1 bpm</p> <ul style="list-style-type: none"> <li>✓ Multi Parameter bedside monitor should have capability for the measurement of ECG, Resp, Spo2, NIBP, Continuous Temp, Single Channel Invasive Blood Pressure (IBP)</li> <li>✓ Should have <u>Adult, Pediatric and Neonate application mode</u>. Monitor should be ready for transport use for emergency with minimum <u>4 hrs. Lithium ion battery</u> backup and <u>integrated bed rail hanger</u>.</li> <li>✓ The monitor should have bright, highly visible, minimum 8.4" color display with <u>resolution of 800X</u></li> </ul>

SL.NO.	NAME OF THE EQUIPMENT	QTY.	SPECIFICATIONS
			<p><u>600 pixel</u> for easy viewing from a distance.</p> <ul style="list-style-type: none"> <li>✓ Should have the capability to <u>display 4 real real-time waveforms</u> along with related numerical parameters on a single screen. Monitor should have flexible Display format with large numeric</li> <li>✓ Monitor should display the value of Spo2 with Pleth, Perfusion Bar and <u>Peripheral Perfusion Index (PI)</u></li> <li>✓ Monitor should have <u>96 hrs. Graphical &amp; tabular trends.</u></li> <li>✓ Monitor should have audio &amp; visual alarm facility.</li> <li>✓ Monitor should have selectable <u>3 or 5 Lead ECG with Pacemaker detection, ECG freeze facility</u> and Basic arrhythmia facility.</li> <li>✓ Monitor should have <u>ECG signal output for Defibrillation</u>, Alarm output for nurse call system and <u>data output in HL7 format.</u></li> <li>✓ Monitor should be <u>CE and USA FDA approved.</u></li> </ul>
4	Multi para monitor (ward)	6	<p>with ECG, Gain: 2.5mm/mV, 5.0mm/mV, 10mm/mV, 20mm/mV, auto Adult: 15 ~ 300 bpm, Neo/Ped : 15 ~ 350 bpm , Resolution : 1 bpm</p> <ul style="list-style-type: none"> <li>✓ Multi Parameter bedside monitor should have capability for the measurement of ECG, Resp, Spo2, NIBP, Continuous Temp, Single Channel Invasive Blood Pressure (IBP)</li> <li>✓ Should have <u>Adult, Pediatric and Neonate application mode.</u> Monitor should be ready for transport use for emergency with minimum <u>4 hrs. Lithium ion battery</u> backup and <u>integrated bed rail hanger.</u></li> <li>✓ The monitor should have bright, highly visible, minimum 8.4" color display with <u>resolution of 800X 600 pixel</u> for easy viewing from a distance.</li> <li>✓ Should have the capability to <u>display 4 real real-time waveforms</u> along with related numerical parameters on a single screen. Monitor should have flexible Display format with large numeric</li> <li>✓ Monitor should display the value of Spo2 with Pleth, Perfusion Bar and <u>Peripheral Perfusion Index (PI)</u></li> <li>✓ Monitor should have <u>96 hrs. Graphical &amp; tabular trends.</u></li> <li>✓ Monitor should have audio &amp; visual alarm facility.</li> <li>✓ Monitor should have selectable <u>3 or 5 Lead ECG with Pacemaker detection, ECG freeze facility</u> and Basic arrhythmia facility.</li> <li>✓ Monitor should have <u>ECG signal output for Defibrillation</u>, Alarm output for nurse call system and <u>data output in HL7 format.</u></li> <li>✓ Monitor should be <u>CE and USA FDA approved.</u></li> </ul>

SL.NO.	NAME OF THE EQUIPMENT	QTY.	SPECIFICATIONS
5	Digital Colposcope	1	More Than 1200000 pixels, Auto focus, Wide Zoom range 1-48 X., Super White LED light , Sony CCD camera inside with Electronic Green Filter and digital signal processor
6	Office Hysteroscope	1	Sensor:CCD 1/4' high sensitivity, Resolution (752 x 582) PAL - (768 x 494) NTSC, Definition : 470 lines, Sensitivity : 2 lux, Automatic White balancing
7	Operating Hysteroscope	1	<p><b>30° wide angled 4 mm and 2.7 mm, WL 302 Autoclavable, High Definition.</b></p> <ul style="list-style-type: none"> <li>• Diagnostic Hysteroscopy Sheath Outer Dia. 5mm, working length 281mm with marking / distance holder including obturator to use with 4 mm 30 degree telescope</li> <li>• Operative Continues Flow Inner/Outer Sheath with one instrument channel, outer sheath dia. 4.3mm, inner sheath should have working channel of 5 Fr., inner / outer sheath should be detachable for continues flow to use with 2.7mm telescope.</li> <li>• Flexible grasping forcep 5 Fr., working length 400mm</li> <li>• Flexible biopsy forcep 5 Fr., working length 400mm.</li> <li>• Flexible scissor 5 Fr., working length 400mm.</li> </ul> <p><b><u>Irrigation pump</u></b>  <b>Digital Display for preset and actual pressure</b>  <b>Digital display for flow rate</b>  <b>Setting for small cavity</b>  <b>Roller pump technique</b></p>
8	Bowels sterilizer	4	Vacuum: -800mBar, Working Pressure: 1.2Bar ~ 2.4Bar, Steam Source Pressure: 0.4 - 0.6 Mpa
9	LCD Projector with screen	3	<p>Display Type: LCD  Light Output: 3200 Lumens  Warranty : 5 Years  Features: Digital Keystone Correction, HDMI Input, Speakers  Audio: Mono  Life of Lamp – full Usage: 3000 Hours  Life of Lamp – Standard usage : 5000 hours  Life of Lamp – Eco Usage: 7000 Hours  Screen Coverage: 30 to 300 Inches  Contrast Ratio: 2500:1  Throw Ratio: 1:37 to 1.80:1  Aspect Ratio: 4:3  Resolution: XGA (1024 x 768)  Audio Output: 1 Watts  Projector Lens: 1.3 x Manual Zoom / Manual Focus.</p>
10	Laparoscope Set	1	<ul style="list-style-type: none"> <li>• Telescope 30° Straight forward enlarged view, diameter 10 mm, length 32 to 35 cm, autoclavable, fiber optic light</li> </ul>

SL.NO.	NAME OF THE EQUIPMENT	QTY.	SPECIFICATIONS
			<p>transmission incorporated – 3 nos</p> <ul style="list-style-type: none"> <li>• Complete rigid telescope with variable angle of vision from 0 degree to 120 degree, should be controllable via a rotary nob diameter 10 mm, length 31 cm, autoclavable, fiber optic light transmission incorporated – 3 nos.</li> <li>• Veress needle with spring loaded blunt stylet, lock, length 13 cm – 3 nos.</li> <li>• Veress needle with spring loaded blunt stylet, lock, length 13 cm – 3 nos.</li> <li>• Trocar, size 11 mm, with pyramidal tip, cannula without valve, with insufflations stop – cock, length 10.5 cm Multifunctional valve – 3 nos.</li> <li>• Trocar, size 6 mm, with pyramidal tip cannula without valve, with insufflations stop cock, length 10.5 cm multifunctional valve – 4 nos.</li> <li>• Safety trocar endoscopic threaded imaging port cannula, size 11 mm, Multifunctional valve.</li> <li>• Trocar, size 6 mm, with pyramidal tip Cannula without valve, with insufflation stop- cock, length 10.5 cm Multifunctional Valve -4 no</li> <li>• Safety trocar endoscopic threaded imaging port Cannula, size 11 mm, Multifunctional Valve Cannula with thread, with rotational insufflation stopcock, length 10.5 cm -3 no</li> <li>• Trocar, size 11 mm, with blunt tip Cannula without valve, with insufflations stop cock, with 2 flanges for fixation of sutures length 13 cm Automatic valve Sliding Cone -4no</li> <li>• Reduction Sleeve, 11 /5 mm -3 no</li> <li>• Reduction Sleeve, reusable, Instrument-Diameter8 mm, trocar cannula O.D. 11 mm -3 no</li> <li>• Mary land Dissecting and Grasping Forceps, rotating, with connector pin for unipolar coagulation, size 5 mm, length 36 cm, double action jaws, consisting of: Plastic Handle without ratchet, Outer Tube, insulated Forceps Insert- 2 No.</li> <li>• Bowel Grasper Grasping Forceps, rotating, with connector pin for unipolar coagulation, size 5 mm, length 36 cm, atrau- matic, fenestrated, curved, single action jaws, consisting of: Plastic Handle with ratchet Outer Tube, insulated Forceps Insert- 3 nos</li> <li>• Forceps Insert, BABCOCK Grasping Forceps, atraumatic, jaws with multiple teeth, fenestrated, single action jaws, size 5 mm, length 36 cm- 3 nos</li> <li>• Claw Forceps, rotating, size 10 mm, length 36 cm, 2x3 teeth, single action jaws, consisting of: Metal Handle, without ratchet Outer Tube, insulated Forceps Insert- 3 nos</li> <li>• Dissecting and Grasping Forceps, rotating, with connector</li> </ul>

SL.NO.	NAME OF THE EQUIPMENT	QTY.	SPECIFICATIONS
			<p>pin for unipolar coagulation, size 5 mm, length 36 cm, -3 nos</p> <ul style="list-style-type: none"> <li>• Right angled Forceps, rotating, with connector pin for unipolar coagulation, size 5 mm, length 36 cm, double action jaws, -3 nos</li> <li>• Grasping Forceps, with insulation, size 5 mm, length 36 cm, Handle spring loaded Insert -3 nos</li> <li>• Scissors, rotating, with HF-Connector-Pin, size 5 mm, length 36 cm, single action jaws, slim, serrated, Insulated Handle – 3 nos.</li> <li>• Biopsy Punch Forceps, rotating, size 5 mm, length 36 cm with 2 teeth, single action jaws, •Metal Handle, without ratchet Outer Tube, insulated - 3 nos</li> <li>• Grasping Forceps, 2 x 4 teeth, rotating, with connector pin for unipolar coagulation, size 5 mm, length 36 cm, double action jaws, consisting of: Plastic Handle with ratchet Outer Tube, insulated Forceps Insert- 3 nos</li> <li>• Needle Holder Parrot -Jaw straight handle, with ratchet, size 5 mm, length 33 cm, for use with suture material 4/0-6/0, needle sizes -3 nos</li> <li>• Macro Needle Holder, ergonomic handle with ratchet, left curved jaws, with tungsten carbide inserts, 5 mm, length 33 cm for use with suture material 0/0- 7/0- 3 nos</li> <li>• Myoma Fixation Instrument, with spiral tip, 5 mm - 2 no</li> <li>• Coagulating Suction-/ Irrigation Cannula, bipolar, 0 5mm, length 30cm, for use with suction and irrigation handles -2no</li> <li>• Clip Applicator, for use with Pilling-Weck Titanium-Clips dismantling, rotating, with ratchet to lock the jaw part holding the clip, size 10 mm, length 36 cm, should consists of Metal Handle, with ratchet Metal Outer - 3 nos</li> <li>• Tube Insert -1. It should also consist of Inserts for holding Ethicon Clips - 300 &amp; 400.</li> <li>• Rotating Bipolar Dissecting and Grasping Forceps, rotational, with connector pin for bipolar coagulation, size 5 mm, length 36 cm, wide jaws, for dissection and grasping of large vessels and tissue layers, single-action jaws, consisting of: Ring Handle, Outer Sheath Forceps Insert- 3 nos</li> <li>• Rotational Bipolar instruments 5mm and 36 cm wide jaws for dissection, grasping and bipolar Coagulation of large vessels and tissue layers. Mary Land type - 3 nos .</li> <li>• Rotational Bipolar instruments Type 5mm and 36 cm wide jaws for dissection, grasping and bipolar - 3 nos</li> <li>• Hook Scissors, rotating, with connector pin for unipolar coagulation, size 5 mm, length 36 cm, single action jaws, consisting of: Plastic Handle, without ratchet Outer</li> </ul>



SL.NO.	NAME OF THE EQUIPMENT	QTY.	SPECIFICATIONS
			<p>Tube, insulated Scissors Insert- 3 nos</p> <ul style="list-style-type: none"> <li>• Suction and Irrigation Tube, anti-reflex surface with two-way stopcock, for single hand. control, size 5 mm, length 36 cm- 3 nos</li> <li>• Fascial Closure Instrument for subcutaneous ligation of trocar incisions, size 2.8 mm, length 17 cm- 3 nos</li> <li>• Endo-Loop Ligature, with ROEDER- knot, for bleeding stumps, with absorbable synthetic thread, sterile, package of 12, - 3 nos</li> <li>• Distensible fan retractor 5mm length 36 cm which should have simple opening of the fan by axial movement of the outer sheath. - 3 nos</li> <li>• Telescope 30° Straight Forward enlarged view, diameter 5mm, length 31 cm, autoclavable. Fiber optic light transmission incorporated -3 nos</li> <li>• High frequency needle for spilling and coagulation insulated, retractable with connector pin for unipolar coagulation length 31 cm - 3 nos</li> <li>• Spare needle electrode autoclavable diameter 1.1 mm package of 5 - 2 no</li> <li>• Ring applicator may be fitted with 2 silastic ring for double puncture laproscopy - 2no</li> <li>• Trocar, size 7 mm, consisting of Trocar only, with pyramidal Cannula without valve, with insufflation stop- cock, length 10.5 cm Multifunctional Valve, size 7 mm- 3 nos</li> <li>• Coagulation and dissection electrode L type - 2 no</li> <li>• Coagulation and dissection electrode Spatula type - 2 no</li> <li>• Monopolar Cable - 4</li> <li>• Bipolar cable - 4</li> <li>• Utrine Manipulator - For mobilization of the utres identification of vaginal fornices and sealing of the vagina during hysterectomy the manipulator should include manipulator handle with fixing screw, manipulator rod, sealing cylinder, manipulator sheath, manipulator insert conical, manipulator insert cylindrical, anatomical blade short - 3 nos</li> <li>• Fiber Optic Light Cable, size 3.5 mm, length 180 cm - 3 nos</li> </ul> <p>✓ Additional Accessories for LAP Set</p> <ul style="list-style-type: none"> <li>❖ Lap Trolley - 1 no</li> <li>❖ Sterilization Tray - 1 no</li> <li>❖ Co2 Cylinder - 1 no</li> <li>❖ Co2 connector Set - 1 no</li> <li>❖ 10 Minute Instrument Sterilant- 6 bottles</li> <li>❖ Formalin Chamber - 1 no</li> </ul> <p>Terms &amp; Condition</p> <ul style="list-style-type: none"> <li>❖ All the above items under category (A,B) should be</li> </ul>



SL.NO.	NAME OF THE EQUIPMENT	QTY.	SPECIFICATIONS
			<p>of same manufacturer of International repute only,</p> <ul style="list-style-type: none"> <li>❖ Demonstration Set should be available.</li> <li>❖ The equipment's must be CE &amp; US FDA Approved</li> <li>❖ Installation base of Orrisa must be provided</li> <li>❖ Original manufacturer Service person should be based in Orrisa</li> <li>❖ Principle manufacturer must have registered service center in India</li> </ul>
11	Patient examination table	8	<p>Overall approximate dimension 1890 mm x 560 mm, 74"x 22"x33"(L x W x H), Fixed Upholstered top in two peices of 560 m, 22"(w), Headrest adjustable on gas spring, Upper section of box with three drawers, Lower section comprises of three cabinets with separate doors and lock on two side doors., BP apparatus tray prvided near headrest, Inbuilt sliding step stool, Pre treated and powder coated, Safe working load of 170 kgs and patient load bearing capacity of 135 kgs, Supplied in Semi Knocked Down condition (SKD)</p>
12	Vessel sealer	1	<ol style="list-style-type: none"> <li>1. The unit Should be a Microprocessor controlled 350 KHz output, up to 400 Watts class Electrosurgery unit with TFT single display having Touch key Screen</li> <li>2. Visual indicator for the actual power being delivered through Bar Graph along with audio indicator</li> <li>3. The unit should multifunctional socket for Vessel sealing based on plug &amp; operate mechanism, also having the facility to upgrade to additional socket if required.</li> <li>4. The Unit should have heat dissipation without external air passing inside the unit i.e. Internal Cooling system (no conventional external air cooling system)</li> <li>5. Automatic control of output power according to all currently available electrosurgical regulative technologies to prevent the tissue damage and charring (The output voltage should be regulated in various levels)</li> <li>6. Should have the facility for preview function to show the expected target tissue effect on display even prior to actiGSTion.</li> <li>7. Unit should have plug and operate facility.</li> <li>8. Should have facility to program 99 with procedure or surgeon's name</li> <li>9. Should have facility of self check of the unit after every On &amp; Off of the unit</li> <li>10. Unit should have CE and FDA approved</li> <li>11. Reusable Vessel Sealing instruments for Open Surgery &amp; Laparoscopic surgery - FDA approved instruments for 7mm Vessel Sealing more than 3-times brust pressure with disposable laparoscopic hand accessories for vessel sealing with sealing &amp; cutting.</li> <li>12. The unit should have special solution for changing the</li> </ol>



SL.NO.	NAME OF THE EQUIPMENT	QTY.	SPECIFICATIONS
			<p>power settings without touching the equipment. Also having the initial arc required for cutting has to be automatic depending on the type of tissue and during this time the unit has to be capable to generate up to 400 watts (power peak system).</p> <p>13. The unit should be supplied with all standard accessories to make the system to work full functional includes (All accessories should be from same manufacturer):</p> <ul style="list-style-type: none"> <li>➤ Reusable Vessel Sealing for Open Surgery – 1 No. OR disposable Vessel Sealing for Open Surgery – 20Nos.</li> <li>➤ Reusable Vessel Sealing complete set for Lap Surgery Full Set – 1 Set OR Disposable Vessel Sealing for Lap Surgery – 20 Nos.</li> </ul>
13	Electro Cautery	4	<ol style="list-style-type: none"> <li>1. Microprocessor controlled Electrosurgery unit</li> <li>2. TFT Display with focused view of current active mode</li> <li>3. Visual and audible alarms during actiGStion</li> <li>4. Facility to store programs</li> <li>5. <b>Power output</b></li> <li>6. Maximum cut output 200 Watt for 500 Ohm</li> <li>7. Maximum Coag output upto 120 Watt</li> <li>8. Should be upgradable with Argon Plasma Coagulation system</li> <li>9. Two different Endo Cut modes (Endo Cut I &amp; Q or equivalent) – one for Polypectomy and another one for Papillotomy, this modes should have facility of the cutting duration, coagulation duration and intervals (Preset and reset)</li> <li>10. Should have two Monopolar and Bipolar outputs</li> <li>11. Should have Universal Socket for Monopolar, Bipolar and Neutral Electrodes</li> <li>12. Should have continuous patient monitoring for neutral electrode</li> <li>13. Should be supplied with Universal adaptor for connecting endoscopi accessories from major manufacturers</li> </ol> <ul style="list-style-type: none"> <li>➤ The unit should be CE &amp; FDA certified</li> <li>➤ Should be supplied with following accessories</li> <li>➤ Patient plate disposable – 500 nos. / Reusable 5 Nos.</li> <li>➤ Monopolar Bovie Cable – 5 Nos. ( compatible to all types of Olympus and Boston Scientific Snare or equivalent)</li> <li>➤ Electro surgery pencil – 500 nos. / reusable pencil – 5 nos.</li> <li>➤ Bipolar connecting cable – 2 nos.</li> <li>➤ Bipolar forceps (non stick) - 2 Nos.</li> <li>➤ All accessories should be from same manufacturer.</li> </ul>
14	Ventouse (Sylastic)	6	<ul style="list-style-type: none"> <li>• Silicon vacuum cup (ventouse cup)</li> <li>• Easy insertion</li> <li>• Excellent vacuum seal</li> <li>• Minimizes risk of traumas in forcep delivery</li> </ul>

SL.NO.	NAME OF THE EQUIPMENT	QTY.	SPECIFICATIONS
15	Ventouse (metallic)	6	<ul style="list-style-type: none"> <li>• Vacuum Extractor Set, Malmstorm type, manual operated.</li> <li>• Complete with 3 S.S. Cups, (40, 50, 60 mm)</li> <li>• PVC pressure tube</li> <li>• Traction Handle</li> <li>• Suction Pump</li> </ul>
16	Patient Beds	50	<ul style="list-style-type: none"> <li>• Size: 2030 x 900 x 500 mm.</li> <li>• Epoxy coated mild steel framework</li> <li>• Mounted on protective stumps</li> <li>• Provision for I.V. Rod</li> <li>• Freight saving knock-down construction</li> </ul>
17	Suction machine	10	<ol style="list-style-type: none"> <li>1. Volt-230 Vac</li> <li>2. Rating of Motor –continuous</li> <li>3. Suction Bottle Capacity – 2 x 2000 ml minimum (with safety valve)</li> <li>4. Guage – 0 to 760 mm Hg</li> <li>5. Pump – Oil lubricates rotary pump</li> <li>6. Suction Tubings – ID 7 mm, 5m long and non-collapsible</li> <li>7. Should have air tight lids</li> <li>8. Should have noiseless operation</li> <li>9. Should provide filter to absorb moisture and water particles entering into the rotor</li> <li>10. Should have an external provision ofr topping up of lubricant</li> <li>11. Should be well designed, cabinet made of mild steel powder coated</li> <li>12. Should bear ISI Mark</li> </ol>
18	USG machine with colour Doppler	1	<p>SHOULD BE OF LATEST DIGITAL TECHNOLOGY WITH 12 BIT DIGITAL CONVERTER</p> <ul style="list-style-type: none"> <li>• SHOULD HAVE AT LEAST 17" LCD/TFT COLOR DISPLAY</li> <li>• SHOULD SUPPORT B,M,COLOR,PW,POWER, DOPPLER MODES</li> <li>• Directional power Doppler and advance dynamic flow/e flow MUST BE PRESENT For small flow detection</li> <li>• SHOULD HAVE 3 ACTIVE PORT</li> <li>• SHOULD HAVE HIGH FRAME RATES MORE THAN 700 FPS</li> <li>• SHOULD HAVE TISSUE HARMONIC IMAGING CAPABILITY IN ALL PROBES</li> <li>• SHOULD HAVE REAL TIME COMPOUND IMAGING TECHNOLOGY</li> <li>• BOTH REAL TIME AND FROZEN ZOOM UPTO 16 TIMES</li> <li>• HEMISPHERIC SOUND TCHNOLOGY OR MATRIX PROBE AT LEAST IN CONVEX PROBE SHOULD BE AVAILABLE TO GET THE BEST POSSIBLE PENETRATION AND RESOLUTION TOO</li> <li>• THE TECHNOLOGY SHOULD PROVIDE THE MOST</li> </ul>

SL.NO.	NAME OF THE EQUIPMENT	QTY.	SPECIFICATIONS
			<p>LIGHT WEIGHT VOLUME PROBE 200 GMS AT MAX</p> <ul style="list-style-type: none"> <li>• 3D SHADING , STIC , MULTI- SLICE IMAGING SHOULD BE AVAILABLE</li> <li>• REAL TIME QUANTIFICATION OF DOPPLER PARAMETERS WITH SMART TRACE</li> <li>• FACILITY OF MULTI LEVEL AND USER CONFIGURABLE SPECKLE REDUCION TECHNOLOGY AS IN BUILT</li> <li>• SPECIAL SOFTWARE FOR INTIMA MEDIA THICKNESS CALC(IMT PACKAGE)</li> <li>• ADVANCED FEATURES LIKE ECHO TRACKING MUST BE OFFERED AS FEUTURE UPGRADE</li> <li>• ADVANCED CONTRAST IMAGING MUST BE OFFERED AS FEUTURE UPGRADE</li> <li>• ALL PROBES SHOULD BE MULTIFREQUENCY WITH MINIMUM 5 FREQUENCY SELECTIONS</li> <li>• CINE LOOP MEMORY OF MORE THAN 15000 FRAMES AND 60 SEC M/D SCROLL</li> <li>• SCANNING DEPTH MINIMUM 34 CMS</li> <li>• EXHAUSTIVE SOFTWARE FOR WHOLEBODY APPLICATIONS WITH REPORT FORMATS</li> <li>• 1000 PATIENT DATA MEMORY SHOULD BE AVAILABLE</li> <li>• SHOULD HAVE INTEGRATED HARD DISK FOR IMAGE STORAGE/RECALL WITH COMPLETE IMAGE MANAGEMENT</li> <li>• DIRECT COMPATIBILITY TO ATTACH INKJET/LASERJET PRINTER ALONG ITH A CD-RW MUST BE AVAILABLE</li> <li>• THE SYSTEM MUST HAVE FACILITY FOR UPGRADATION TO REAL TIME 4D IMAGING USING ABDOMINAL &amp; TRANSVAGINAL VOLUME PROBE(PRICES TO BE OFFERED OPTIONALLY)</li> <li>• TISSUE DOPPLER IMAGING SHOULD BE AVAILABLE AS OPTION</li> <li>• ANGULAR M-MODE/ANATOMICAL M-MODE OPTION SHOULD BE AVAILABLE</li> <li>• SYSTEM TO BE OFFERED WITH MULTIFREQUENCY CONVEX, LINEAR ENDOCAVITARY PROBES AND 4D ABDOMINAL AND VAGINAL 4D PROBES</li> </ul>


SL.NO.	NAME OF THE EQUIPMENT	QTY.	SPECIFICATIONS
			<ul style="list-style-type: none"> <li>• PHASED ARRAY ADULT CARDIAC PROBE WITH CARDIAC APPLICATION SOFTWARE TO BE OFFERED AS OPTION WITH STEERABLE CWD</li> <li>• THE UNIT SHOULD BE DICOM READY FOR CONNECTING TO REMOTE SERVER/LASER CAMERA</li> </ul> <p>System should be offered with the following probes and accessories:  All probes should be wide band frequency probes for Convex, TV, Linear, Tissue Harmonic Imaging should be available in all the above probes, and Biopsy should be available with Convex &amp; TV / TR Probe.</p> <ul style="list-style-type: none"> <li>• Should have multi frequency convex array probe 2-6 MHz for abdominal imaging.</li> <li>• Should have 5-16 MHz broadband Linear Array probe for vascular imaging.</li> <li>• Should have multi frequency TV/TR probe 5-9 MHz</li> <li>• 2-4 MHz broadband phased array sector probe for adult cardiac imaging must be offered as option.</li> </ul>
19	Pelvic Maniquine	2	<p>Pelvic maniquin: Pelvic Manikin the manimin should resemble female pelvic model. Pubic bone should model should withstand the pressure. Baby movement of the baby should be easier and to be controlled by a trainer. Should allow teaching</p> <ul style="list-style-type: none"> <li>• Normal delivery</li> <li>• Shoulder dystocia</li> <li>• Cord prolapsed</li> <li>• Breech delivery</li> <li>• Delivery of the placenta</li> <li>• PPH management the manikin should be provided with</li> <li>• A fetus</li> <li>• Umbilical cords</li> <li>• Placenta</li> </ul>
20	Dummy Pelvis	5	Made of PVC plastic
21	Specimen jars	50	2' x 1' & 1' x 1', 2' x 2'

SL.NO.	NAME OF THE EQUIPMENT	QTY.	SPECIFICATIONS
22	Focussing Light for labour room	12	Signal-Stat, LED, Red/Yellow Square, 24 Diode, LH, Dual Face, Vertical Mount, Side Marker
23	Pelvic trainer (Laporscope, Hysterscope)	2	<p>1 X MEDISIMU simulator</p> <p>1 X Cutting Trainer for Laparoscopic MEDISIMU simulator</p> <p>1 X Suturing Trainer for Laparoscopic MEDISIMU simulator</p> <p>1 X Laparoscopic Forceps 05x330mm 360° Rotation</p> <p>1 X Laparoscopic Scissors 05x330mm 360° Rotation</p> <p>1 X Laparoscopic Needle Holder V Type 05X330mm</p> <p>1 X Surgical Knife with 10 blades for suture training kit</p> <p>1 X Box of 12 Surgical 3/0 Silk Braided Suture for training use.</p> <p>3 X Maze for trainer</p> <p>1 X Maze or T-shape plate for trainer</p> <p>5 X Rounded Rods for trainer</p> <p>1 X Tik-Tac-Toe plate for trainer</p> <p>10 X Tik-Tac-Toe rods for trainer</p> <p>5 X T-shape for trainer</p> <p>2 X Height expander</p> <p>1 X Angle expander</p> <p>1 X User manual</p>
24	Cryo Instrument	1	<p>A. Operating Pressure Range: 40-60 bar.</p> <p>B. Coolant: N20 or C02 in two cylinders (A type).</p> <p>C. Gas consumption for freezing: ca.35g - 50 g/min.</p> <p>D. Max. exhaust gas volume: 40-60 l/min.</p> <p>E. The unit has Manometer to monitor operating pressure.</p> <p>F. A different indicator lamp to indicate freezing and defrosting phase.</p> <p>G. Connection pipe for gas exhaust.</p> <p>H. Mounted in a cart with cylinder case for easy mobilization.</p> <p>I. ActiGSTion is via footswitch or hand control.</p> <p>J. Min freezing temperature reaches within 5 seconds.</p> <p>K. Supplied with multiple different sized probe-tips to cater for cervical cryocautery of lesion of all sizes</p>
25	Desktop Set with LCD monitor and Printer	5	512Gb Hard Disk with i-5 processor with 2Gb RAM with wifi Modem, UPS, 1916HV 18.5 inch LCD monitor with Printer with Scanner

SL.NO.	NAME OF THE EQUIPMENT	QTY.	SPECIFICATIONS
<b>Instruments for Labour Room</b>			
26	Sponge Holder	20	18 cm, made up of stainless steel
27	Large Single Bladed speculum	10	Material: Austenitic (quenched, magnetic steel) Sims, 52.20.00: vaginal speculum double ended Size 1 : blade one side 70x25 mm, other 75x30mm Size 2 : blade one side 75x30 mm, other 80x35mm Size 3 : blade one side 80x35 mm, other 90x40mm
28	Tooth Forcep	10	Specifications material: Dissecting forceps, springy Available with our without teeth Flexible arms Good adjustment of the teeth Good gripping of the jaws Length: 14.5, 18, 20cm Packaging: unit presentation: individual, with protective wrapping The following should appear on the packaging: designation of the instrument – name and address of supplier (manufacturer) other requirements: conforms to ISO
29	Episiotomy scissors	20	14.5cms.
30	Allies Forcep 8"	50	Surname Allis Length 7-1/2" Tip configuration 5x6 Teeth Instrument Type Tissue Grasping Forceps CurGSTure straight handle finger rings material stainless steel disposable or reusable sterile or non-sterile latex or latex-free grade premium or grade.
31	Instruments Trolley	20	Strong stainless steel tubular frame work <ul style="list-style-type: none"> <li>• Two stainless steel shelves</li> <li>• Provision of SS railing on both top and bottom shelves</li> <li>• Mounted on 4x100 castors, 2 with breaks</li> <li>• Size: 60L x 50W x 80H cm\</li> <li>• Supplied in knock down condition</li> </ul>
32	Instuments Tray	20	Stainless steel with cover,45"x30"
33	Suction machine	10	<ol style="list-style-type: none"> <li>1. Volt-230 Vac</li> <li>2. Rating of Motor –continuous</li> <li>3. Suction Bottle Capacity – 2 x 2000 ml minimum (with safety valve)</li> <li>4. Guage – 0 to 760 mm Hg</li> <li>5. Pump – Oil lubricates rotary pump</li> <li>6. Suction Tubings – ID 7 mm, 5m long and non-collapsible</li> <li>7. Should have air tight lids</li> <li>8. Should have noiseless operation</li> <li>9. Should provide filter to absorb moisture and water particles entering into the rotor</li> <li>10. Should have an external provision ofr topping up of lubricant</li> <li>11. Should be well designed, cabinet made of mild steel powder coated</li> <li>12. Should bear ISI Mark</li> </ol>
<b>Instrument for OT</b>			

SL.NO.	NAME OF THE EQUIPMENT	QTY.	SPECIFICATIONS
34	Kochers Forcep (curve)	20	Kocher Forceps 14cm Straight / Curved Material: Stainless Steel Rusting Prevention Procedure: PassiGSTed Ultrasonic Cleaned :Yes Lubricate: Yes Polished: yes Usage: Left Hand or Right Hand Tests Performed: Boil Test, Performance Test, Shape Test
35	Kochers Forcep	20	(straight)
36	Allies Forcep 8"	50	Surname Allis Length 7-1/2" Tip configuration 5x6 Teeth Instrument Type Tissue Grasping Forceps CurGSTure straight handle finger rings material stainless steel disposable or reusable sterile or non-sterile latex or latex-free grade premium or grade.
37	Doyen's Retractor	10	Length 9-3/4 tip dimensions 1/2 x 2 tip, configuration blade instrument Type retractor material stainless steel disposable or reusable sterile or non sterile latex or latex free grade premium or grade
38	Myoma Screw 6"	10	53: myoma screw: Material: Stainless steel Size: 6", 7" / 150 mm, 175 mm
39	D & C Set	10	
40	Uterine Curette	5	Uterine curette: dimensional and other requirements for double ended uterine curette, Sim's pattern with both ends sharp
41	Surgeons Scissors curved	10	Straight, S/S: 12-13 cm long b-Curved, B/B, 17-18 cm long
42	Stitch Cutting scissor	10	Straight, 15-18 cm
43	Needle Holder 8"	10	Wide serrated jaws, 150-160 mm with fine tip b-length of 120-130 mm, Halsey type with fine tip
44	Vascular Clamp 8"	2	Curved, serrated jaws, 130 mm b-curved, serrated jaws, 175 mm c-straight, serrated jaws, 130 mm d-straight, serrated jaws, 175mm
45	Wertheims Ritht Angle Clamp	4	Length of 8" and contains a ratchet mechanism on the inner ring handles. The 2" right angle jaws with longitudinal serrations
46	Abdominal Retractor	2	2-3/4" x 10" Mayo Abdominal retractor. Surname Mayo Length 10" Tip Configuration Blade Instrument Type Retractor Material Stainless Steel Disposable or Reusable Sterile or Non-Sterile Latex or Latex Free.
47	Vaginal Hook Retractor	5	Made from Martensitic Stainless Steel Grade AISI 410 and AISI 420. 90 x 25mm surface: Silk matte satin finish / polish finish
48	Uterine Clamps	10	Instrument Family Heany instrument grade German grade

SL.NO.	NAME OF THE EQUIPMENT	QTY.	SPECIFICATIONS
	8"		stainless steel jaw style serrated latex free no length inches 8.25 in length in CM 20.96 cm shank type straight
49	Suction Canula (Metalic )	20	Cannula stainless steel aspiration. METALLIC SUCTION CANNULA 3.0 MM.
50	Single bladed Vaginal Speculum	10	6" handle 6 cm blade length
51	Kochers Clamp	10	6" & 8"

  
15-12-18



SL.NO.	NAME OF THE EQUIPMENT	QTY.	SPECIFICATIONS
<b>ANAESTHESIOLOGY</b>			
1	Combined epidural & Spinal Injection	100	<p>SPECIFICATION – CSECURE® MINIPAKS (Contains CSEcure® needle set with lock, catheter (3 eyes) and connector, Filter (0.2µm), LORD, Fixation sponge, catheter ID label)</p> <p>SPECIFICATION – CSECURE® NEEDLE SETS</p> <p><b>Tuohy 18G Needle</b>  <b>With Attachable Wings Spinal Needle 27G</b>  <b>Spinal Needle Type PENCIL TYPE</b></p> <p>CSE Needle Systems</p> <ul style="list-style-type: none"> <li>• Providing the rapid onset and reliability of a spinal block, allowing anaesthesia to be prolonged both intra and post-operatively via an epidural catheter</li> <li>• Designed for optimal performance, minimising drag of needle through needle and maximising feel of dural puncture</li> <li>• Rapid CSF flashback to confirm correct needle tip position</li> <li>• CSEcure's™ unique needle hub locking feature enables tip relationships to be maintained after dural puncture, providing increased confidence of correct spinal needle tip position during injection of the anaesthetic</li> </ul>
2	Multiprobe Machine	RF 1	<ol style="list-style-type: none"> <li>1. The machine should be US FDA approved with details of previous sales to reputed institutions.</li> <li>2. Adequate safety to operator, patients, attendants and other medical apparatus connected.</li> <li>3. Device should have both the output frequencies- Monopolar and Bipolar.</li> <li>4. Device should have output frequency: 4 MHz for Monopolar and 1.7 MHz for Bipolar.</li> <li>5. Device should have a minimum output power of 90 W.</li> <li>6. Device should have Cut (90W or above), blend (65 W or above), Coag( 45 W or above), fulgurate( 35 W or above) and bipolar (90 W or above) output waveforms.</li> <li>7. Device should come with a dual frequency footswitch and cable.</li> <li>8. Device should have an option of both reusable and disposables consumables.</li> <li>9. Device should have Digital Control Panel for easy operation and clear view of settings.</li> <li>10. Device should have Solid State Circuitry for dependable and consistent energy emission.</li> </ol>

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			<p>11. Device should have auto-cut facility.</p> <p>12. Device should have safety indicators to provide visual and auditory alerts.</p> <p>13. Device should have parameter recall for rapid set-up.</p> <p>14. Device should have an audible alarm for neutral plate dislodgement.</p> <p>15. Device should be able to produce very sharp and precise cutting, negligible lateral heat production, and adequate haemostasis.</p> <p>16. Device should come with a foot-controlled handpiece.</p> <p>17. Device should come with a handpiece clip.</p> <p>18. Device should come with a three-button finger switch handpiece.</p> <p>19. Device should be a quieter system, small, lightweight generator for easy portability.</p> <p>20. Weight of the machine should not be more than 10kg.</p> <p>21. Device should come with a reusable medical electrode kit.</p> <p>22. Device should come with a reusable neutral plate that does not require skin contact.</p> <p>23. Device should come with an instantly ready to use hand piece.</p> <p>24. Device should have platform to use multiple electrodes, for various surgical procedures.</p> <p>25. Device should be able to treat following indications – moles, verrucae vulgaris, rhinophyma, nevus, papilloma or flat warts, seborrheic keratosis, hemangioma, venous lake, benign lesions of scalp, soft fibroma, telangiectasia, keloids.</p> <p>26. Standard accessories should include:</p> <ol style="list-style-type: none"> <li>1. Neutral plates</li> <li>2. Two sets of surgical electrodes (loops, balls, knives, pin, finewire, needle, sharp pointed electrodes, scalpel, coagulation ball). Loops should be round, oval, triangular and diamond shaped. Electrodes' proximal diameter should be 1.6 mm and 2.4 mm, to accommodate standard hand piece connection.</li> <li>3. RF Surgipens</li> <li>4. Bipolar forceps with cable.</li> <li>5. Instruction manual</li> </ol>
3	Resuscitation equipment (CPR)- Ambu Bag with face mask	1	<ul style="list-style-type: none"> <li>• Silicone Resuscitation Adult (1500 ml)</li> <li>• Airways Sizes 2,3,4, No.</li> <li>• Guedel Airways – 2,3,4 No.</li> <li>• Mouth Opener</li> <li>• Hand Suction</li> <li>• Oxygen Tube</li> <li>• Oxygen Reservoir Bag with Valve</li> </ul> <p><b>AMBU BAG</b></p> <p>The complete resuscitator system with all accessories required for a rescuer/ambulance. Color of the bag: yellow/</p>

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			<p>white/ black/blue. The dead space of the valve is only 8 ml. The connection diameters are ISO 15/22 mm. All of the models are supplied with transparent patient valve with rotating connection, Pressure limiting valve, Transparent oxygen reserve valve, Face mask, PEEP valve. It is also available in silicone, PVC and rubber versions if required.</p> <ul style="list-style-type: none"> <li>• Pocket mask with oxygen port (should be widely available in all clinical areas)</li> <li>• Self inflating resuscitation bag with oxygen reservoir and tubing (ideally, the resuscitation bag should be single use – if not, it should be equipped with a suitable filter)</li> <li>• Clear face masks, sizes 3,4 &amp; 5</li> <li>• Oropharyngeal airways, sizes 2, 3 &amp; 4</li> <li>• Nasopharyngeal airways, sizes 6 &amp; 7</li> </ul>
4	Trueview Larygoscope	2	<ul style="list-style-type: none"> <li>• Easy to transport &amp; Set up flexible video scope with monitor for intubation and Bronchoscope.</li> <li>• It should be facilitate with video output should be supplied with monitor</li> <li>• Monitor should have video recording and capability to take still images and should have storage of minimum 8GB.</li> <li>• Monitor should have at least 4 hours battery backup. It can be mount on IV pole Maximum start up time should not be more than 10 sec.</li> <li>• Minimum length should be 600mm.</li> <li>• It should be direct both the way 130 degree with thumb control lever with paediatric scope. 150 degree up and 130 degree down with adult scope and 140 degree up and 110 degree down with large scope.</li> <li>• It should have ET tube parking slot.</li> <li>• Scope should have outer diameter of 3.6-3.9 mm, working channel more than 1.0 mm for paediatric scope, outer diameter of 4.8-5.2mm, working channel more than 2.0 mm for adulate scope, outer diameter of 5.6-5.9 mm, working channel of 2.7 mm for large scope.</li> <li>• It should have additional working channel and can be used for oxygen flushing.</li> <li>• It should be integrated with camera chip and LED light source.</li> <li>• System should be supplied with 6 nos of sterile scopes.</li> <li>• Should be USFDA &amp; European CE approved, confirming to international standards of safety.</li> </ul>



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5	MRI Compatible monitor	1	<p><b>Specification of MRI Compatible monitor</b></p> <ol style="list-style-type: none"> <li>1. Monitor should be equipped with MRI shielding for up to 3T machine and set to remote communication mode.</li> <li>2. Should be MRI safe up 200 gauss line.</li> <li>3. Monitor should have FDA &amp; CE approval.</li> <li>4. Should have real time safe distance indicator.</li> <li>5. It should be capable of monitoring ECG, SpO<sub>2</sub> &amp; NIBP, IBP &amp; EtCO<sub>2</sub> with option of upgrading to 2<sup>nd</sup> IBP &amp; 2 Temperature and full gas module in the future.</li> <li>6. The monitor should have wireless SpO<sub>2</sub> and ECG sensor which should be chargeable inside the MRI room.</li> <li>7. The monitor should have adult, paediatric and neonatal applications using the same sensor.</li> <li>8. Should have integrated power supply for charging monitor and sensors/accessories inside the MRI Room with battery backup option of at least 6 hours.</li> <li>9. SpO<sub>2</sub> &amp; ECG Sensors should be wireless &amp; have Lithium polymer battery with back up of at least 8 hours.</li> <li>10. Should have integrated power supply for charging monitor and sensors/accessories inside the MRI Room.</li> <li>11. Should have at least 15" colour TFT display touch screen with high resolution (800*600) display.</li> <li>12. It should be operational at wide temperatures (10<sup>0</sup>C to 40<sup>0</sup>C) and humidity (20% to 90%)</li> <li>13. Should be able to store and view at least 8 hours trend memory both graphical and tabular with option of selection the intervals of storing the trends.</li> <li>14. Should have a facility to deactivate all the alarms if necessary.</li> <li>15. Should provide a digital value of the arterial oxygen saturation as well as diagnostic plethysmographic pulse waveform.</li> <li>16. Should have 3 Lead ECG and should display one or all the selected leads at a time.</li> <li>17. Should be able to display at least 5 waveform and all related numerical parameters.</li> <li>18. Monitor mode: digital signal processing (DSP)</li> <li>19. T-wave suppression for high field MRI</li> <li>20. Should have arrhythmia monitoring facility.</li> <li>21. Should have user selectable upper and lower limit of alarms.</li> <li>22. Heart rate measuring ranges 30-300 beats/min.</li> <li>23. The monitor should be defibrillation proof.</li> </ol>

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			24. The monitor should have option of upgrade of features in future.
6	MRI Compatible Anaesthe Machine	1	<p><b>Anaesthesia Machine should have the following features:</b>i Should be constructed of Stainless steel 304 material fram mounted with four nos of castor wheels with locking arrangement in front castors.ii Should have drawer unit, large Work tray and Top tray made up of stainless steel material.iii Should have colour coded ring indexed pipeline connections for O<sub>2</sub>, N<sub>2</sub>O and Airiv Should have pin indexed yoke for two O<sub>2</sub> &amp; one or two N<sub>2</sub>O cylinder.v Should have Anti hypoxic device with reliable lever mechanism to prevent flow of less than 21% of Oxygen and to enable O<sub>2</sub>, N<sub>2</sub>O mixture 1:3vi Should have antistaic flow meters for O<sub>2</sub>, N<sub>2</sub>O and Air.vii Should have pressure gauges for both Pipeline and Cylinder pressure indication.viii Should have interlock mounting system to mount 2 nos of Seletatec Vapourisersix Should have Non-Return Valve on Back Bar to protect Vapouriserx Should have movable Patient block with 22M/15F mm common gas outletxi Should have Emergency O<sub>2</sub> flush buttonxii Should have Patient safety blow off valve set at 50 cmH<sub>2</sub>Oxiii Should have Pneumatic Oxygen failure alarm for Oxygen failurxiv Should have high pressure relief valve (set at 600KPa) to prevent high pressure in O<sub>2</sub> pipeline circuitxv Should have O<sub>2</sub> reservoiri 2 ltr storage for backupxvi Should have an auxiliary O<sub>2</sub> outlet with flowmeter for direct patient application.xvii Should have provision to connect Scavenging System.xviii Should have provision to connect Ventilatorxix Should be a European CE Certified product and HSFDA should be MCI compatible.</p> <p><b>CO2 Absorber with the following features</b>i Should have double chambered soda lime canister with 1.0 kg capacity each.ii Should have visible inspiratory and expiratory valvesiii Should have adjustable pressure relief valveiv Should have by stable BAG to VENT switch to change over from Manual to Mechanical ventilation<b>Vapouriser (Halothane and Isoflurane) have the following features:</b>i Should be of selettec type mounting with front control dial knobii Should be of Key fill typeiii Should have tool free installation and should have interlocking facilityiv Should be temperature and flow compensated with high accuracy of delivered concentration of agent, particularly at low flowv Should have nominal capacity of 250ml &amp; above volume of Anesthetic agent.vi Should be maintenance/service free</p>



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7	PCA Pumps	10	<p>Syringe Size : 1 ml-20 ml Single use Syringe</p> <p>Infusion Rate : 1mm /hr-99 mm/hr</p> <p>Alarms : Battery Depleted, Mechanical, Error, Occlusion Syringe Disengaged, Completion</p> <p>Accuracy : <math>\pm 2\%</math></p> <p>Bolus Volume : No limit, min 0.1 ml</p> <p>"Low Batt: LED Indicator : Flashing Yellow/Red indicator when battery is low or depleted</p> <p>Maximum infusion Pressure : <math>\leq 0.12</math> MPa (with 10ml syringe)</p> <p>Occlusion Alarm Pressure : 0.12 MPa (with 10ml syringe) CE 0197, IEC 606601</p> <p>Safety Approvals : -1-8 : 2003, Type CF IPX1</p> <p>Battery Size : AAx3</p> <p>Dimensions : 16(w) x 60(D) 30(H) mm</p> <p>Weight : <math>\leq 180g</math> (battery weight not included).</p>
8	TCO2 & TCPO2 monitoe	5	<ol style="list-style-type: none"> <li>1. The monitor should be modular and should measure these parameters for all type of patient (Adult, Paediatric, Neonatal): 12 lead ECG, Respiration, Massimo/Nellcor SPO2 Technology, NIBP, Dual IBP, Simultaneous monitoring of dual Temp (1 core and 1 skin), upgradeable to module like BIsx, NMT, 4 channel EEG, Transcutaneous O2/CO2, PICCO with 4IBP, CO with 4IBP is must for all quoted monitors.</li> <li>2. The monitor should have: Highly visible, bright, high resolution 19" or above colour Medical grade screen. Oxy CRG, ST analysis, Advance arrhythmia analysis as standard. The monitor should have a visual indicator for the type of alarms being generated. Alarm should glow in different colour indicating from a distance the seriousness/priority of the alarms. Should be able to operate through rotary knob operation.</li> <li>3. The monitor should display at least 8 waveforms on a single screen along with related numerical parameters on a single screen. The size of the numeric should be adjustable capable to become bigger for viewing from very long distance.</li> <li>4. It should display inspired and expired anaesthesia gas monitoring with automatic identification of</li> </ol>

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			<p>agents and MAC values.</p> <ol style="list-style-type: none"> <li>5. There should be alarm limit setting for every parameter.</li> <li>6. It should have emergency nurse call alarm function and defib-sync function.</li> <li>7. It should have capability to view all 12 lead ECG simultaneously on screen along with ST segment analysis/mapping and arrhythmia analysis.</li> <li>8. The patient monitor and parameter modules should be US FDA approved for safety and quality assurance.</li> <li>9. There should be provision for using wireless LAN card with power off storage function and monitor should be capable to support networking and compatibility to use with central monitoring system. Wired connectivity should be standard.</li> <li>10. It should have calculation package for: Drugs, Hemodynamic, Ventilation</li> <li>11. It should be provided with proper mounting for monitor stand.</li> <li>12. It should have facility to interchange all the modules/servers/pods between all the monitors so that one or more optional modules/ servers can be operable on all monitors at different point of time without needing the help of service engineer.</li> <li>13. It should have the capability to provide event review based on the events defined by the user of the monitor as per the specific condition of the patient.</li> <li>14. Display setting should have various configurable user defined setups variable as per applications for flexible use of the monitor in various clinical environments like emergency, training, post operative, general monitoring etc.</li> <li>15. Monitor should be capable to display events trends for all monitored parameters and also capable to provide event review based on the events defined by the user of the monitor as per the specific condition of the patient.</li> <li>16. It should have the option monitoring level of consciousness with the Bi-spectral index option.</li> <li>17. Bed to bed view facility between monitors should be standard.</li> <li>18. Should have the facility of remote access of multi-channel bedside monitors and anaesthesia ventilators data (waveforms, trends, loops) from anywhere including access of online waveforms and numeric remotely in Hospital and outside hospital (consultants residence, internet) through hardwired LAN connection, or through modem.</li> </ol>

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			<p>(Quote separately and specify the capacity of one server (hardware &amp; software)</p> <p>19. It should be both US FDA/ European CE (Notified body) approved for safety and quality assurance (for both standard and optional supplies)</p> <p>20. The price of accessories and mounting option should be quoted separately and that should be freezed for next 5 years</p>
9	Advanced Anaesthe workstation	4	<p><b>General Requirement</b></p> <ul style="list-style-type: none"> <li>a) Compact and modular, three gas Anaesthesia workstation with an integrated ventilator for adult to infants and integrated airway monitor for airway pressures and volume.</li> <li>b) The machine should be suitable for low and minimal flow anesthesia application with compliance compensation of breathing ckt, fresh gas flow compensation/decoupling.</li> <li>c) The machine should have minimum 2 drawers.</li> <li>d) The anaesthesia machine, inbuilt ventilator, vaporizer and patient monitor should be manufactured by same company to maintain uniformity of part and efficient after sale service.</li> <li>e) Dual Cascade type flow meter tubes for Oxygen&amp;N2O.Range 20 ml/min to 10 Lit/min. Calibrated in multiple scales. Single tube for air 100 ml to 14 L/min.</li> <li>f) The system should have upto 2 Hrs. battery backup.</li> <li>g) System should confirm to European CE and EN 60601-2-13(Requirement for safety and essential performance of anaesthesia system).</li> <li>h) Should have integrated anaesthesia gas monitoring module with automatic identification of agent with values display on patient monitor.</li> </ul> <p><b>2. Gas delivery system</b></p> <ul style="list-style-type: none"> <li>a) Should have pin index yokes for Oxygen &amp; Nitrous Oxide besides separate connection for Central gas supply for Oxygen, Nitrous Oxide and Air.</li> <li>b) The machine should have pressure gauges for cylinders &amp; central supply lines mounted on front of Anaesthesia machine for better visibility. The gas connections should be non- interchangeable.</li> <li>c) The system should be suitable to use at minimal flow upto 700ml fresh gas setting.</li> <li>d) Automatic cutoff of N2O by Oxygen pressure failure.</li> <li>e) Hypoxic guard for linear regulation of minimum oxygen concentration at 23% volume.</li> <li>f) To ensure patient safety minimum Oxygen flow of 200 ml at low fresh gas flow settings even below</li> </ul>



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			<p>total 500 ml fresh gas flow.</p> <ul style="list-style-type: none"> <li>g) Audible visual oxygen failure alarm.</li> <li>h) Emergency Oxygen flush at 30 -70 L/min bypassing the vaporizer.</li> <li>i) In the event of complete power loss and battery failure it shall be possible to manually ventilate and deliver anaesthetic agent.</li> </ul> <p><b>4. Vaporizer</b></p> <ul style="list-style-type: none"> <li>a) Machine should have possibility to mount two quick mount type vaporizer for easy inter change ability, and safety with interlock facility.</li> <li>b) Should be provided with a Temperature/pressure compensated and flow independent Vaporizer for Isoflourane &amp; Sevoflourane.</li> <li>c) Vaporizer should have extended delivery range from 0 to 6 Vol. %.</li> <li>d) The vaporizer should require no calibration in its life time.</li> </ul> <p><b>5. Breathing System</b></p> <ul style="list-style-type: none"> <li>a) Should have fresh gas de-coupled semi closed circle absorber system.</li> <li>b) Should have adjustable pressure relief valve from 5 to 75 mbar.</li> <li>c) Should have change over from Spontaneous to Bag ventilation with single step.</li> <li>d) The system should have leak and compliance test (including patient hoses upto the Y piece).</li> <li>e) Should have compact breathing system with approx. 1.5 Ltr. Volume capacity.</li> <li>f) Should have an external fresh gas outlet for connecting Magill or Bain's circuit.</li> <li>g) The device should have port for anesthesia gas scavenging system.</li> </ul> <p><b>6. Anesthesia Ventilator</b></p> <ul style="list-style-type: none"> <li>a) The system should have inbuilt ventilator with electronically controlled and pneumatically or electrically driven technology.</li> <li>b) Should not require changing of bellows for adult &amp; infants.</li> <li>c) Should have color LCD display with minimum screen size of 10".</li> <li>d) ) Modes: Manual/Spont, Volume controlled, Pressure controlled &amp; SIMV.</li> <li>e) The same ventilator should be capable to be upgrade to pressure support.</li> </ul> <p><b>7. Integrated Airway monitoring and display of following parameters:</b></p> <ul style="list-style-type: none"> <li>a) Expiratory Tidal Volume</li> <li>b) Expiratory Minute volume</li> <li>c) PEEP, Peak &amp; Mean and Plaetau airway pressure</li> </ul>

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			<p>d) Frequency  e) Waveform display for Airway pressure</p> <p><b>8. Adjustable high/low alarm limits with audio and visual alarms for the following:</b></p> <p>a) Minute volume  b) Airway pressure  c) Insp oxygen concentration  d) Audio power supply fail alarm  e) Fail to cycle warning</p> <p><b>9. Machine should have RS 232 connectivity port.</b></p> <p><b>10. Scope of supply</b></p> <p>a) 3 gas Anaesthesia machine  b) Trolley with 3 drawers  c) Writing surface  d) Pin Index yokes for O<sub>2</sub> &amp; N<sub>2</sub>O  e) Pipeline connections for all three gases  f) Anaesthesia ventilator  g) Patient monitor  h) Semi-closed breathing system  i) Adult &amp; Pediatric autoclavable patient tubing  j) Anesthetic mask size - Adult &amp; child  k) Vaporizers for Isoflourane &amp; Sevoflourane  l) Central gas supply hoses(Color coded)  m) Instruction for use</p> <p><b>Specifications for Advanced Multiparameter Monitor</b></p> <p>1. Should be suitable for adult, paediatric neonatal patients monitoring.</p> <p>2. Should monitor ECG, Respiration, NIBP, SpO<sub>2</sub>, Dual Temperature, Dual IBP as standard.</p> <p>3. Should have ST analysis, Arrhythmia detection, pacer spike detection, Drug Dose Calculation and OxyCRG as standard in every monitor.</p> <p>4. Should have integrated 15" or above TFT-LCD colour touch screen display (resolution min 1024*768) with minimum 10channels of waveforms.</p> <p>5. Defib and ESU protection should be present.</p> <p>6. Should have monitoring, surgery and diagnostic mode of monitoring.</p> <p>7. Should have Advance Arrhythmia monitoring for Asystole, Vfib/Vtac, VT&gt;2, Couplet, Bigeminy, Trigeminy, R on T, PVC, Tachy, Brady, Missed Beats, IRR, PNC, Vbrady.</p> <p>8. Monitor access should be with Touch screen, rotary knob and fast access key for quick function.</p> <p>9. 120 hrs of trend and 60 events with waveform as standard in all monitors.</p> <p>10. Color or position of waveforms or parameters should be able to be adjusted based on users preferences. Big font on screen format should</p>

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			<p>be present.</p> <ol style="list-style-type: none"> <li>11. Nurse call, VGA output port should be standard in every monitor.</li> <li>12. Monitor should have USB port for software upgrade.</li> <li>13. Should have inbuilt three channel recorder as standard in every monitor.</li> <li>14. Should have 2hrs (typically) of battery backup as standard in every monitor.</li> <li>15. Should be European CE complying to European Directive 93/42/EEC for both Monitor and software to control physiologic monitoring systems.</li> <li>16. Wired networking should be standard to connect to Central station.</li> <li>17. Should display automatic Agent identification Anaesthesia Gas monitoring module with MAC value.</li> <li>18. Should be provided with appropriate mountings system to mount patient monitor on anaesthesia machine.</li> </ol> <p><b>19. Should have following parameters</b></p> <p><b>ECG</b></p> <ul style="list-style-type: none"> <li>o Monitor should have capability for display up to 7 Leads</li> <li>o ST Analysis</li> <li>o Waveform Freeze option with review of 120 sec</li> <li>o Range:15 to 350bpm</li> </ul> <p><b>RESPIRATION</b></p> <ul style="list-style-type: none"> <li>- Through impedance pneumography method or EtCO<sub>2</sub></li> </ul> <p><b>SpO<sub>2</sub></b></p> <ul style="list-style-type: none"> <li>- Should provide value for arterial oxygen saturation as well as plethysmographic pulse waveform</li> </ul> <p><b>NIBP</b></p> <ul style="list-style-type: none"> <li>o By oscillometric principle of measurement.</li> <li>o Should display Systolic, diastolic, mean pressure in large easy to read display</li> <li>o Range:10 to 270mmHg</li> </ul> <p><b>Dual Temperature</b> - core &amp; skin. Range: 0 to 50 Deg C</p> <p><b>Dual IBP</b> - Should include Starter kit and simultaneous monitoring of dual temp and dual IBP should be possible. Range:-50 to 300mmHg</p> <p><b>20. Scope of supply must include:</b></p> <ul style="list-style-type: none"> <li>o Basic unit with ECG, Respiration, SpO<sub>2</sub>, Dual Temp, NIBP, Dual IBP, inbuilt battery, Inbuilt three channel recorder- 1 no.</li> <li>o 5 lead ECG Cable-1 no.</li> <li>o ECG disposable electrodes-30 nos.</li> <li>o SpO<sub>2</sub> finger sensor-1 no.</li> </ul>

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			<ul style="list-style-type: none"> <li>○ Skin temperature probe - 1 no.</li> <li>○ NIBP Hose-1 no.</li> <li>○ Adult &amp; Paediatric cuff- 1 no.</li> <li>○ Should be supplied with intermediate IBP cable-2 nos.</li> <li>○ Disposable transducers-10 nos.</li> <li>○ Water trap-12 nos.</li> <li>○ Sampling lines- 10 nos.</li> <li>○ Paper rolls-4 nos.</li> <li>○ Instruction for Use-1 no.</li> </ul>
10	Adult Manikin	1	<p>Intravenous training arm for access to major veins of arm and hand  Deltoid: for intramuscular injection site  Airway management trainer: Simulation of non-anaesthetised patients for practice of intubation/ ventilation/ suction/ supraglottic airway insertion/ Sellicks manoeuvre  Tracheostomy, Cricothyrotomy &amp; naso-gastric tube insertion  Simulation for Central Venous &amp; Arterial cannulation  <b>CPR, Defibrillation:</b> Auscultation site with heart &amp; lung sounds, ECG simulator, Pacing, Arrhythmia recognition  Blood Pressure Simulation  Peripherally introduction of central catheter simulation  Spinal: both intrathecal &amp; extrathecal injection simulator  Monitoring of performance against standard protocol.  Recording of events during practice.  Should be CE and FDA approval.  Should be user friendly &amp; sturdy design.  <b>Hence, the HOD must be involved in the scientific team for evaluation and order of the ventilator which involves Human Resources (as this varies from place to place)</b></p>
11	Paediatric Manikin	1	<p>Infant arm for venipuncture procedures.  Paediatric arm for venipuncture &amp; intramuscular procedures.  Tracheostomy, Cricothyrotomy &amp; naso-gastric tube insertion.  Blood Pressure arm.  Intra-osseous infusion &amp; femoral access.  Inter-active ECG &amp; arrhythmia simulator.  Child &amp; New-born intubation &amp; airway management trainer.  Defibrillation &amp; CPR simulation.  PICC &amp; CVC simulator in new-born and paediatric.  Monitoring of performance against standard protocol.  Recording of events during practice.  Should be CE and FDA approval.  Should be user friendly &amp; sturdy design.  <b>Hence, the HOD must be involved in the scientific team for evaluation and order of the ventilator which involves Human Resources (as this varies from place to place)</b></p>
12	Anodyne Machine	1	<p>Specifications</p> <ul style="list-style-type: none"> <li>• Set for a security of 600 mw per therapeutic pad</li> <li>• Wavelength – 890 nm</li> <li>• 60 infrared diodes per therapy pad</li> <li>• Pulsed Energy – 292 times per second</li> <li>• Resistant Carrying Case</li> <li>• 1 year warrant</li> </ul>

SL.NO.	NAME OF THE EQUIPMENT	QTY.	SPECIFICATIONS
			<p>Product</p> <ul style="list-style-type: none"> <li>• MH 120 Home machine with 4 therapy pads</li> <li>• System Manual for the Home unit</li> </ul> <p>Advantages</p> <ul style="list-style-type: none"> <li>• Safe</li> <li>• Effective</li> <li>• Helps prevents complications of diabetic neuropathy such as wounds/ ulcers / amputations,</li> <li>• Gives relief from pain and thereby improves quality of life,</li> <li>• Is painless</li> <li>• Totally non invasive</li> <li>• An effective alternative to prescription medication</li> <li>• Available as Professional or Home use models</li> <li>• Can be self administered (after consultation with Doctor)</li> <li>• Portable (Can carry it with you while travelling)</li> </ul> <p>Specifications</p> <ul style="list-style-type: none"> <li>• Energy output fully adjustable up to 780 mw per therapeutic pad</li> <li>• Wavelength – 890 nm</li> <li>• 60 infrared diodes per therapy pad</li> <li>• Pulsed Energy – 292 time per second</li> <li>• Resistant Carrying Case</li> </ul> <p>Product</p> <ul style="list-style-type: none"> <li>• MP 480 machine with 8 therapy pads</li> <li>• Professional Procedures System Manual</li> </ul> <p>Advantages</p> <ul style="list-style-type: none"> <li>• Safe</li> <li>• Effective</li> <li>• Helps prevents complication of diabetic neuropathy such as wounds / ulcers / amputations</li> <li>• Gives relief from pain and thereby improves quality of life</li> <li>• Is painless</li> <li>• Totally non-invasive</li> <li>• An effective alternative to prescription medication</li> </ul>
13	Transcutaneous Electric Nerve Stimulating Machine (Optional)	1	<ul style="list-style-type: none"> <li>▪ Dual-Channel Tens Stimulator, 2 Lead Wires, 4 Self Adhesive Electrodes</li> <li>▪ Timer: 30 minute, 60 minute or continuous mode selectable.</li> <li>▪ Molded Plastic Carrying Case, 9 Volt Battery, Operating Manual</li> <li>▪ Power Indicator Light</li> <li>▪ Wave Form: Asymmetrical biphasic square pulse.</li> <li>▪ Pulse Amplitued: 0 to 80 mA each channel, adjustable, (500 ohm load)</li> <li>▪ Pulse Rate: 2 to 120 hz, adjustable</li> </ul>

SL.NO.	NAME OF THE EQUIPMENT	QTY.	SPECIFICATIONS
			<ul style="list-style-type: none"> <li>▪ Pulse Width: 40 to 260 microseconds, adjustable</li> <li>▪ Mode Selector: Switch: Burst, Normal, Modulation</li> <li>▪ M: Modulated Width. Pulse width is automatically varied in an interval of 6 seconds. The modulation range of pulse width is from setting value to 35% less than the control setting value, then returns to the setting value. Rate, width and intensity are fully adjustable.</li> <li>▪ B: Cycle Bursts, 2 Bursts/sec, 9 pulses/Burst, 100Hz width is adjustable.</li> <li>▪ C: Continuous mode. Pulse rate, pulse width and intensity are adjustable.</li> <li>▪ Maximum Voltage: 110 volts, open circuit</li> <li>▪ Maximum Charge: 21 micro coulombs per pulse</li> <li>▪ Power Source: 9 volt battery or similar rechargeable cell</li> <li>▪ Dimensions: 95 mm (H) x 61.5mm(W) x 26m(T)</li> <li>▪ Weight: Approx. 120 grams battery included in weight</li> <li>▪ All electrical specifications are +/- 10% exception the amplitude is +/- 20% (500 load).</li> <li>▪ 5 Year Warranty</li> </ul>



SL.NO.	NAME OF THE EQUIPMENT	QTY	SPECIFICATIONS
<b>PHARMACOLOGY</b>			
1	Tail flick apparatus/Analgesiometer	2	CE Certified Heating through Halogen lamp provided with digital intensity controller for controlling the intensity of heating lamp Heating platform is made of thick aluminium plate with groove provided for placement of animal tail provided with digital timer for displaying the time of tail flick Digital timer can be controlled through foot switch instrument is supplied with 2 perspex restrainers- one for mice and one for rat.
2	Physiographs with Transducers and other relevant accessories (may substitute kymographs)	1	<ul style="list-style-type: none"> <li>• Data Acquisition System for online and offline HRV analysis. ECG switch box (lead I, II, III, aVL, aVF, aVR and V1 to V6) for real time cardiac axis &amp; vector analysis. Sampling rate <math>\geq 200</math> KHz aggregate Variable sampling rate on each channel. ADC resolution 24 bits.</li> <li>• Student physiograph should ready to use experiments with step by step instruction protocol for each experiment to be supplied with compatible transducers and stimulator.</li> <li>• Isolated Stimulator:- Constant-current stimulator with Output current: 0–20 mA in 0.1 mA steps and Pulse duration: 50–200 <math>\mu</math>s (software-selectable)</li> <li>• Amplifiers: - Bio-Potentials (EMG, EOG, EEG.ECG), temperature, Pulse, respiration, isometric.</li> <li>• Transducers:- Pressure, volume, muscle activity/force respiration belt, Isotonic fine movement, pulse, respiration &amp; temperature, heart sound, reflective drop counter , push button switch. ECG electrode, EEG &amp; EMG paste</li> <li>• Manufacturer should have ISO certification for quality standards. Should be approved to the IEC 60601-1 patient safety standard, making them safe for use with human subject</li> </ul>
3	Digital Plethysmograph	1	<p><b>Features:</b> Direct connection to a PC via included software, Multifunction graphic readout, Printout from thermal printer , Animal weight scale</p> <p><b>MEASURING WATER CELL , DATA AQUISITION</b></p> <p>The Plethysmometer is microprocessor controlled, fea-turing direct PC output. Internally-stored data can be routed to the PC serial or USB port. Communication is managed by a Windows® based data acquisition software package. This software enables the data storage into individual files, ready to be easily managed by most statistical analysis packages available on the market</p>

SL.NO.	NAME OF THE EQUIPMENT	QTY	SPECIFICATIONS
4	Metabolic Cages (Diuretic Study)	5	CE certified should offer 99% separation efficiency of urine and faeces assuring maximum purity of samples, Minimal animal stress: should meet CPCSEA requirements, sample removing should be without stressing animal, access to all elements below the cage floor without disturbing animal should be with serration separators for separation of urine and faeces. All components should be made for autoclavable polycarbonate, P.P. and S.S. 304 material components should included: Polycarbonate cage with lid Polycarbonate collection funnel S.S. 304 grill for mice and rat-leach Liner diffuser guide or serration separator P.P. Urine collection tube P.P. faeces collection tube Polycarbonate water bottle 250 ml with holder waste water collection tube S.S. 304 food hopper for mice, S.S. 304 food hopper for rat, S.S. 304 stand for cage.
5	Water maze (Mories) for rat and mice with video tracking system, Computerised software to record data	1	Dimension- 72"X30" 500 gallon capacity, 12" square /round platform. Water Maze specific application program Comprehensive data review capabilities Simple operation Pre-configured for popular platform placement User configured zone maps Scores zone activity, path length and latencies Minimum Computer Hardware Requirements: 533Mhz PC with Windows 2000/XP, SVGA color monitor, serial port Other Requirements: Videomex-V or Videomex-ONE tracking unit, Video Camera (NTSC/PAL/SECAM), video monitor
6	Animal grip strength meter	1	Acrylic, one station Outside Dimensions- 26" (W) x 9" (D) x 9.5" (H), Animal Channel Dimensions- Adjustable 1" to 5" (W), Gauge Mount Dimension-Adjustable 5.5" to 8.25", standard cable length-6 ft. for digital gauge with PC output, white color, Power supply, Transducer, LCD Display, Zero button, Measuring capacity 1000 gm, Accuracy 0.5%, Zero tare control micro processor circuit, S.S. 304 grip for rat & mice with software.



SL.NO.	NAME OF THE EQUIPMENT	QTY	SPECIFICATIONS
7	Rotarod Assembly	2	<ul style="list-style-type: none"> <li>• For rats or mice, should be made of Perspex, arnite (lanes)</li> <li>• The angular speed can be preset from 4-40 RPM</li> <li>• In the acceleration mode, 4-40 RPM in an acceleration time of 30 seconds (standard procedures) and also 1, 2, 5, or 10 minutes</li> <li>• Rotarod unit with integrated control unit and RS232 communication's port</li> <li>• Micro-switch detection of fall</li> <li>• Individual lane timers</li> <li>• Constant speed and fixed acceleration rate</li> <li>• Automatic recording of latencies to fall and rotation speed</li> <li>• CE Compliant</li> </ul>
8	Cook's Pole Climbing Apparatus	1	<p><b>Cook's Pole Climbing Response Apparatus</b> New improved model built in solid state buzzer and stimulator to provide electrical shocks of 400V in pulsating rates 0.2mA a frequency of 5 per sec, for a duration controlled manually or by built in 30 second timer. Output available for recording on kymograph or polygraph complete to work on 220V AC.</p>
9	Isolated organ bath	5	Outer perspex bath, inner glass bath, aeration tube & other fittings, Thermostat & Strior
10	Step down latency apparatus (Passive avoidance test)	2	Step Down Instrument SD-01 is designed for passive avoidance testing in mice. The test station can be configured with up to 6 channels for testing large groups of animals. Each channel starts and runs independently. The floor grid is delivered an electric shock while the animal steps down of a small, elevated platform. The highly sensitive photobeams allow ongoing monitoring of animal location that is reliable taking down the response latency. The controller is configured with digital setting of the shock intensity in three levels, 24V, 28V and 32V, to meet various research needs.
11	Electric Hot Plate	2	CE Certified with 12mm thick aluminium plate, Digital temperature controller with temperature Accuracy: $\pm 0.2$ deg c and temperature range ambient to 70 deg c, Digital timer- 6 digit with resolution of 0.1 sec, with foot switch
12	Centrifuge Machine	2	<p>Laboratory centrifuge : are suitable for routine sample analysis in medical hospital pathology and institutional laboratories</p> <p>Salient Features :-</p> <ul style="list-style-type: none"> <li>• Stainless steel centrifuge chamber easy to clean</li> <li>• Brushless induction motor with variable frequency drive</li> <li>• Microprocessor controller with digital display</li> <li>• Stable speed output even under unstable voltage conditions</li> <li>• Smooth &amp; soft start</li> </ul>

SL.NO.	NAME OF THE EQUIPMENT	QTY	SPECIFICATIONS
			<ul style="list-style-type: none"> <li>• Low sample temperature rise</li> <li>• Inverter fault detection with auto shutdown</li> <li>• 7 segment LED display of speed</li> <li>• Alphanumeric LCD display of speed &amp; RCF</li> <li>• Selection of 3 acceleration &amp; deceleration profiles</li> <li>• Digital countdown timer &amp; continuous run</li> <li>• Safety lid Interlock to prevent lid opening during centrifugation</li> <li>• Imbalance detection &amp; centrifugation stop with display of error</li> <li>• Dynamic brake for quick deceleration</li> <li>• Motor overload protection</li> <li>• Gas hinge to prevent door failing</li> <li>• Emergency lid lock release</li> <li>• Last set parameters recall (Useful for repetitive analysis)</li> <li>• Wide variety of rotors &amp; reduction adaptors</li> </ul> <p>Technical Data  Maximum speed : 6000 RPM  Maximum RCF : 5070 g  Maximum capacity : 400 ml.  Digital timer range : 0-59 Min  WxDxH : 380x470x300 mm</p> <p>Angle head for above  (a) 10x2 ml. with glass tubes &amp; reduction adaptors of 1 ml. &amp; 0.5 ml.  (b) 24x1.5 ml. with tapered bottom polypropylene tubes &amp; reduction adaptors of 4ml. &amp; 2 ml.</p>
13	Single pan semi Micro balance 0.001-1000gm (Anamed / Denvermake)	2	Measurable upto minimum weingh capacity 0.0001 mg.
14	Vogels test: Anxiometer-102	1	Home cage with grid floor, Electronic unit with special nipple. Sensing Current: less than 1 microampere. Shock for 0.25 to 2.0 sec, Shock Current: user adjustable from 0 to above 1 milliampere
15	Polyprpelene cage	50	18" X 10", 12" X 8" size cage with stainless steel grid lid
16	sipper bottle	50	200 ml capacity
17	Rat feeding needle	5	Ce Certified product and GMP Certified manufacturer
18	Mouse feeding needle	5	<p>Features:  Cannula and balls made of AISI 304 Stainless steel. Hub amde from Nickel plated Brass. Luer lock. Leak proof and strong joint between hub - cannula and steel ball - cannula. Type: straight and bent type should be supplied in packet of 6 needles  Needle details:  10 G for rabbit 6" length with S.S. ball diameter 6</p>

SL.NO.	NAME OF THE EQUIPMENT	QTY	SPECIFICATIONS																																				
			mm 14 G for rat 3" length with S.S. ball diameter 4 mm 16 G for rat 3" length with S.S. ball diameter 3 mm 18 G for mice 2" length with S.S. ball diameter 2.1 mm 20 G for mince 2" length with S.S. ball deameter 2.3 mm 20 G for mice 3" length with S.S. ball diameter 2.36 mm 22 G for mice 1-1/2" length with S.S. ball diameter 1.08 mm 24 G for mice 1" length with S.S. ball diameter 1.20 mm																																				
19	Digital PH meter	2	<table border="1"> <tr><td><b>pH</b></td><td></td></tr> <tr><td><b>Range</b></td><td>-2.00 to 16.00 pH</td></tr> <tr><td><b>Resolution</b></td><td>0.01 pH</td></tr> <tr><td><b>Accuracy</b></td><td>±0.01 pH</td></tr> <tr><td><b>Cal. Points</b></td><td>Up to 5</td></tr> <tr><td><b>Buffer Sets</b></td><td>USA (1.68, 4.01, 7.00, 10.01, 12.45), NIST (1.68, 4.01, 6.86, 9.18, 12.45)</td></tr> <tr><td><b>ORP</b></td><td></td></tr> <tr><td><b>Range</b></td><td>±2000 mV</td></tr> <tr><td><b>Rel. mV Range</b></td><td>±2000 mV</td></tr> <tr><td><b>Resolution</b></td><td>0.1 mV (±199.9 mV) / 1 mV (beyond)</td></tr> <tr><td><b>Accuracy</b></td><td>±0.2 mV (±199.9 mV) / ±2 mV (beyond)</td></tr> <tr><td><b>Temperature</b></td><td></td></tr> <tr><td><b>Range (Meter)</b></td><td>0.0 to 100.0 °C / 32.0 to 212.0 °F</td></tr> <tr><td><b>Resolution</b></td><td>0.1 °C / 0.1 °F</td></tr> <tr><td><b>Accuracy</b></td><td>±0.3 °C / ±0.5 °F (0 to 70 °C)</td></tr> <tr><td><b>Compensation</b></td><td>ATC / MTC (0 to 100 °C) (pH only)</td></tr> <tr><td><b>Calibration</b></td><td>Offset in 0.1 °increments; offset range: ±5.0 °C / ±9.0 °F</td></tr> <tr><td><b>Power Requirements</b></td><td>9 V DC adapter, 1.3 A (100/240 VAC, SMPS)</td></tr> </table>	<b>pH</b>		<b>Range</b>	-2.00 to 16.00 pH	<b>Resolution</b>	0.01 pH	<b>Accuracy</b>	±0.01 pH	<b>Cal. Points</b>	Up to 5	<b>Buffer Sets</b>	USA (1.68, 4.01, 7.00, 10.01, 12.45), NIST (1.68, 4.01, 6.86, 9.18, 12.45)	<b>ORP</b>		<b>Range</b>	±2000 mV	<b>Rel. mV Range</b>	±2000 mV	<b>Resolution</b>	0.1 mV (±199.9 mV) / 1 mV (beyond)	<b>Accuracy</b>	±0.2 mV (±199.9 mV) / ±2 mV (beyond)	<b>Temperature</b>		<b>Range (Meter)</b>	0.0 to 100.0 °C / 32.0 to 212.0 °F	<b>Resolution</b>	0.1 °C / 0.1 °F	<b>Accuracy</b>	±0.3 °C / ±0.5 °F (0 to 70 °C)	<b>Compensation</b>	ATC / MTC (0 to 100 °C) (pH only)	<b>Calibration</b>	Offset in 0.1 °increments; offset range: ±5.0 °C / ±9.0 °F	<b>Power Requirements</b>	9 V DC adapter, 1.3 A (100/240 VAC, SMPS)
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20	LCD Projector	1	Brightness more than 2500 lumes ; Image brightness – 3200 ANSI Lumes ; Display technology – LCD ; Image aspect ratio – 4 : 03 Resolution - 800 x 600																																				
21	Inverter for the LAB	3	5 KVA 96 Volts Inverter Features:DSP based pure sine wave static UPS system. Auto sense intelligent control smart charger mains mode short circuit protection Fast changeover ensuring with computers, time delay realy especially for AC compressor based applicaions compatible with DG sets. to be supplied with bateries.																																				

SL.NO.	NAME OF THE EQUIPMENT	QTY.	SPECIFICATIONS
<b>PHYSIOLOGY</b>			
1	LCD projector-EPSON (Model:EB1980WU)	1	Direct Pendrive support / PC free operation . Both VGA and HDMI port.
2	Physiograph 4 channel (Medical system)	2	Facility to record Bioelectric potential eg- EEG,ECG,EMG,Pulse, Respiration ,Blood Pressure etc. Data acquisition to convert data from Physiograph to a computer with HRV and ECG recording.
3	Cardiac Autonomic Neuropathy analysis system with interpretation.	1	ECG Discloser of parasympathetic and sympathetic function assessment. Work with windows operating software.
4	Computerized ECG	1	3 channel Graphical colored TFT for continuous ECG Monitoring, measurements and interpretation, 20 patient memory storage, paper-out indication with computer printer (A4 ECG Printing facility).
5	Computerized Pulmonary Function Test	1	PC based spirometer, USB with inserted flow sensor with adult and pediatric mouth piece. Open spirometer system with flow / volume and MVV measurement facilities along with other Lung function parameters. Pre-post broncho dilatation test facility.
6	Examination table-	1	Size 72"(L)x 30"(W)x 30"(H) Adjustable back rest 2 section cushioned top steel / powder coated legs
7	Mosse's Ergograph	5	<u>Wooden board with arm rest, finger holder with straps, Automaticratchet, pully set of 5kg weight.</u>
8	Ophthalmoscope (Heine Ophthalmoscope Mini 3000)	2	Battery operated. Handheld.
9	Body Composition Monitor (OMRON HBF 701)	2	Measures: Body fat%, Weight, BMI, Visceral body fat, Segmental fat and muscle distribution.
10	Edrich Green Lantern	4	The lantern consists of five rotating discs-three discs contain seven coloured glasses and one clear aperture, one disc contains seven various sized apertures and obturator, and one contains seven modifying glasses. The discs are held before a reflector containing a mains voltage lamp giving a controlled brilliancy.
11	Snelles Chart	6	Standard
12	Perimeter(Pristley Smith)	5	Calibrated arc, revolving chart holder. Able to rotate in any direction and fix at any position graduated from 0° to 90° with a movable test object. Adjustable chin rest
13	Aesthesiometer	10	Standard Specification

SL.NO.	NAME OF THE EQUIPMENT	QTY.	SPECIFICATIONS
14	Digital handgrip dynamometer.	2	Adjustable center knob LCD display. Both knob lb display.
15	Digital metronome	3	Battery operated LCD Display Tempo range 30-250bpm
16	Ishihara's chart	4	chart for color vision test
17	Jagger's chart for near vision test.	4	With English and odia fonts
18	Automatic Gas analyser	1	Automatic analysis of CO <sub>2</sub> , O <sub>2</sub> , N <sub>2</sub> Gas



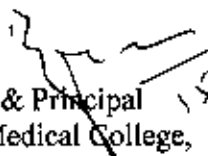
SL.N O.	NAME OF THE EQUIPMENT	QTY.	SPECIFICATIONS
<b>ANATOMY</b>			
1	Dissection Microscope	5	Side & Top Interpupillary Adjustment ; 1x & 3x Objectives ; two 10x & 20x wide field eye piece ; 10x 60x magnification range ; Dual coarse focus knob; Upper tungsten & lower halogen bulb illumination ; Translucent and Opaque stage plate
2	Microtome Rotary	2	1 - 50 Micron (in steps of 1 micron each) Feed adjustment ; opening of object clamp (ball & flange type) 37 x 27 mm (total feed excursion 28 mm) ; overall size 16 x 10 x 9 inch
3	Hot Plate For Flattening Section	1	Slide drying hotplate; Slimline 110 - 230 Vt. AC ; 50-60 Hz
4	Refrigerator	2	311 lt Frost free double door refrigerator
5	Skeleton (Original Bone) Articulated	3	Original human bone full articulated
6	LCD Projector	2	Brightness more than 2500 lumes ; Image brightness - 3200 ANSI Lumes ; Display technology - LCD ; Image aspect ratio - 4 : 03 Resolution - 800 x 600

SL.N O.	NAME OF THE EQUIPMENT	QTY.	SPECIFICATIONS	
<b>COMMUNITY MEDICINE</b>				
1	Teaching Microscope, Penta Head	1	Optical System	Infinite Optical System
			Viewing Head	Trinocular Head ,Inclined at 30°, Interpupillar distance: 48-75mm, (Sidentopf Type) Diopter Adjustment for both eyepiece – one nos
				Binocular Head, Inclined at 30°, Interpupillar distance:48-75mm,(Sidentopf Type) Diopter adjustment for both eyepiece -Four nos
			Penta Head Attachment	Length X Breadth (in mm) - 1370 X 246 (in mm)
				Stand for support - Two nos
				LED pointer attachment - One nos
				Connecting fitting - Two nos
			Image Rotation Connecting fitting - Two nos	
			Eyepiece	WH10X/20 (FN 20) – Ten nos
			Nosepiece	Inward facing Quadruple Nosepiece
			Objective	Infinite plan Achromatic: 4×, 10×, 40×, 100X
			Focus System	Coaxial Coarse and Fine Focusing System, Sensitivity and Graduation of Fine Focus: 0.002 mm
			Stage	Single layer mechanical stage, area: 125×145mm, movement range: 76×50mm
			Illumination	Illumination system, LED 3w
Condenser	Centerable abbe condenser with Iris diaphragm (NA 1.25) focusable with Rack & Pinion			
Viewing Head	30° Sidentopf Trinocular Head			
Eyepiece	WH 10X (FN 20) eyepiece			
Objective	Infinite plan objective: 4×, 10×, 40×, 100×			
Condenser	Abbe Condenser, NA 1.25			
2	Compound Microscope	2	Stand	<ul style="list-style-type: none"> <li>• Ergonomic design for long hours of fatigue free work</li> <li>• Main controls like focusing, intensity control, stage joystick, power Switch should be located close together.</li> <li>• Window in the arm section so that the specimen can be viewed from the back while using external light &amp; also can be used to carry microscope.</li> <li>• Quadruple revolving nosepiece</li> </ul>
			Transmitted Illumination	<ul style="list-style-type: none"> <li>• Built in 6V 20W halogen illumination through SMPS circuit for constant voltage output 100 – 240 V having universal power supply to cover Voltage fluctuations.</li> </ul>

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3	LCD Projector	2	Brightness more than 2500 lumes ; Image brightness – 3200 ANSI Lumes ; Display technology – LCD ; Image aspect ratio – 4 : 03 Resolution - 800 x 600																				
4	Motorized Screen	2	<ol style="list-style-type: none"> <li>1. Motorized Projector screens allow for the automatic raising and lowering of the screen via remote control or inline switch. Remote control ssytem</li> <li>2. White foldable</li> <li>3. Wall Mount</li> <li>4. Size-6x4</li> </ol>																				



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5	Entomology Slide Set	10	Standard Specification
6	Infantometer	4	Standard Specification
7	Stadiometer	2	Standard Specification

  
 Dean & Principal  
 MKCG Medical College,  
 Berhampur

12.12.18