



SANJAY GANDHI POST GRADUATE INSTITUTE

OF MEDICAL SCIENCES LUCKNOW-226014.

PHONES: 2668004-8,2668700,2668800,2668900

FAX: 91-522-2668973,2668218(JDMM)

GRAM: AYURVIGYAN

TENDER NOTICE

(Tender / Retender of tender adv. No: 79/09-10)

Sealed offers are invited from manufacturer/Direct importers/ authorized distributors for the supply of various medical and lab equipments viz. open surgical and laproscopic instruments, cryostats,defibrillators platelet aggregometer, , laboratory refrigerators, C-arm, video endoscopes, , blood cell separators, Neuro navigation system, , Bipaps vision ventilatory system, ESWL machine, centrifuges, upgradation of radiotherapy equipments pacemakers , Nephelometer, image intensifier and various other equipments for existing superspecialities. Those bidders who have already participated the tender vide adv no: 79/09-10 need not to participate again.

Detailed information like list of items, earnest money deposit & their specifications, you may please visit our website **www.sgpgi.ac.in**.

DIRECTOR

TENDER NOTICE



SANJAY GANDHI POST GRADUATE INSTITUTE OF MEDICAL SCIENCES RAEBARELI ROAD, LUCKNOW-226014.

PHONES: 2668004-8, 2668700, 2668800, 2668900
FAX: 91-522-2668973, 2668218 (JDMM)

Sealed offers are invited from reputed manufacturer/ Direct Importer/ distributor for supply of the following equipments, as per tender conditions as stipulated in the tender documents. Tender documents duly filled in will be received by speed post / regd. Post / courier only in the RSD cell , 3rd floor, Administrative block of the Institute in two bid system i.e. technical bid and price bid in separate envelop. Both envelopes may be sealed in single envelop. The tender no and the name of the item must be superscribed on the top of envelop. The tender fee Rs 300.00 (Rs three hundred only) for each quoted item (Non refundable) along with the EMD (Refundable) for respective tender s as indicated against each tender may be enclosed separately with tender document in the shape of demand draft (Nationalised bank only) payable at Lucknow in favour of the Director, SGPGIMS, Lucknow. Bids will be opened in the presence of authorized representative of the bidders on scheduled date and time. If any working day is observed as holiday the next working day will be treated as last date. Incase any legal dispute, the legal jurisdiction shall be court of law at Lucknow (UP) India.

Advertisement No:

Slno.	Tender No.	Name of Equipment	Earnest Money (Rs)	Date of Submission	Date of Opening
1	PGI/MM/Anaes/101/ 09-10	Percutaneous neuromodulation pain therapy system	1000.00	26.02.2010 (4 PM)	03.03.2010 (11AM)
2	PGI/MM/NS/103/ 09-10	Multi-dimensional neurological imaging system	1 Lac	26.02.2010 (4 PM)	03.03.2010 (11AM)
3	PGI/MM/NS/104/ 09-10	Pachymeter	1000.00	26.02.2010 (4 PM)	03.03.2010 (11AM)
4	PGI/MM/CVTS/107/ 09-10	Hyper-hypothermia water therapy system	1000.00	26.02.2010 (4 PM)	03.03.2010 (11AM)
5	PGI/MM/CVTS/108/ 09-10	Biphasic defibrillator monitor/recorder with pacemaker	5000.00	26.02.2010 (4 PM)	03.03.2010 (11AM)
6	PGI/MM/Endsur/110/ 09-10	Head mounted microscope integrated with, light source and image capture system with high definition resolution lcd monitor (21") mounted over trolley and required accessories	10000.00	26.02.2010 (4 PM)	03.03.2010 (11AM)
7	PGI/MM/Endsur/111/ 09-10	Laposcopic instruments for the deptt of Endocrine surgery	2000.00	26.02.2010 (4 PM)	03.03.2010 (11AM)
8	PGI/MM/Endsur/114/ 09-10	Video-endoscope (laryngoscope)	5000.00	26.02.2010 (4 PM)	03.03.2010 (11AM)
9	PGI/MM/IMM/115/ 09-10	Cryostat	4,000.00	26.02.2010 (4 PM)	03.03.2010 (11AM)
10	PGI/MM/ IMM /120/ 09-10	Phase contrast microscope	2000.00	26.02.2010 (4 PM)	03.03.2010 (11AM)
11	PGI/MM Gene/131/ 09-10	96 well electrophoresis system	1000.00	26.02.2010 (4 PM)	03.03.2010 (11AM)
12	PGI/MM/Gene/133/ 09-10	Fluorescence microscope with all accessories	5000.00	26.02.2010 (4 PM)	03.03.2010 (11AM)
13	PGI/MM/Gene/135/ 09-10	Electronic balance	1000.00	26.02.2010 (4 PM)	03.03.2010 (11AM)

14	PGI/MM/ Neuro/141/09-10	Spike and seizure detection software	3000.00	26.02.2010 (4 PM)	03.03.2010 (11AM)
15	PGI/MM/Paed Gas/142/09-10	Video-endoscopes for pediatric gastroenterology	25,000.00	26.02.2010 (4 PM)	03.03.2010 (11AM)
16	PGI/MM/ Path/145/09-10	Multipurpose table top centrifuge	2000.00	26.02.2010 (4 PM)	03.03.2010 (11AM)
17	PGI/MM/Path/147/09-10	Microwave oven	1000.00	26.02.2010 (4 PM)	03.03.2010 (11AM)
18	PGI/MM/Path/148/09-10	Electronic analytical weighing machine	1000.00	26.02.2010 (4 PM)	03.03.2010 (11AM)
19	PGI/MM/Path/149/09-10	Gross specimen photography unit (digital imaging system for gross specimen photography)	2000.00	26.02.2010 (4 PM)	03.03.2010 (11AM)
20	PGI/MM Path/150/09-10	Semi-automated specimen advance with manual Cutting rotary microtome	3000.00	26.02.2010 (4 PM)	04.03.2010 (11AM)
21	PGI/MM/Path/151/09-10	Hot air incubator	1000.00	26.02.2010 (4 PM)	04.03.2010 (11AM)
22	PGI/MM/Path/152/09-10	Knife sharpener	2000.00	26.02.2010 (4 PM)	04.03.2010 (11AM)
23	PGI/MM/TM/154/09-10	Blood mixing & weight monitoring apparatus	2000.00	26.02.2010 (4 PM)	04.03.2010 (11AM)
24	PGI/MM/ TM/155/09-10	Blood weighing scale	1000.00	26.02.2010 (4 PM)	04.03.2010 (11AM)
25	PGI/MM/ TM/156/09-10	Mobile battery powered workstation	2000.00	26.02.2010 (4 PM)	04.03.2010 (11AM)
26	PGI/MM/ TM/157/09-10	Platelet aggregometer	4000.00	26.02.2010 (4 PM)	04.03.2010 (11AM)
27	PGI/MM/ TM/158/09-10	Semi-automated blood grouping & cross-matching system	3000.00	26.02.2010 (4 PM)	04.03.2010 (11AM)
28	PGI/MM/ TM/159/09-10	Table top non-refrigerated centrifuges	2000.00	26.02.2010 (4 PM)	04.03.2010 (11AM)
29	PGI/MM/ TM/160/09-10	Wireless data loggers	5000.00	26.02.2010 (4 PM)	04.03.2010 (11AM)
30	PGI/MM/URO/161/09-10	Fluoroscopy c-arm machine :	25,000.00	26.02.2010 (4 PM)	04.03.2010 (11AM)
31	PGI/MM/ URO/162/09-10	Flexible ureteroscope	8,000.00	26.02.2010 (4 PM)	04.03.2010 (11AM)
32	PGI/MM/ URO/166/09-10	Extra shock wave lithotripsy machine (eswl)	25,000.00	26.02.2010 (4 PM)	04.03.2010 (11AM)
33	PGI/MM/Nephro/169/09-10	Defibrillator monitor recorder with pacer	1000.00	26.02.2010 (4 PM)	04.03.2010 (11AM)
34	PGI/MM/Nephro/171/09-10	Laboratory refrigerator	2000.00	26.02.2010 (4 PM)	04.03.2010 (11AM)
35	PGI/MM/Nephro/176/09-10	Bi impedance analyzer	2000.00	26.02.2010 (4 PM)	04.03.2010 (11AM)
36	PGI/MM/Nephro/177/09-10	Near infra red reactance analyzer	3000.00	26.02.2010 (4 PM)	04.03.2010 (11AM)
37	PGI/MM/Haem/180/09-10	Automated blood cell separator-apheresis machine	15,000.00	26.02.2010 (4 PM)	04.03.2010 (11AM)
38	PGI/MM/Haem/181/09-10	Nephelometer for free-light chain quantification	4000.00	26.02.2010 (4 PM)	04.03.2010 (11AM)
39	PGI/MM/ Haem/186/09-10	Tube sealer	1000.00	26.02.2010 (4 PM)	04.03.2010 (11AM)
40	PGI/MM/Gastro/187/09-10	Gastro videoscope (adult) with single balloon video enteroscopy system	15000.00	26.02.2010 (4 PM)	05.03.2010 (11AM)

41	PGI/MM/ Gastero/190/09-10	Modular electro surgery workstation with APC for GI endoscopy suit:	8000.00	26.02.2010 (4 PM)	05.03.2010 (11AM)
42	PGI/MM/ Endo/200/09-10	Calcium electrode (electrolyte analyzer)	2000.00	26.02.2010 (4 PM)	05.03.2010 (11AM)
43	PGI/MM Endo/201/09-10	Bone histomorphometry	8000.00	26.02.2010 (4 PM)	05.03.2010 (11AM)
44	PGI/MM/RT/202/09-10	Pin point chamber for brain lab	1000.00	26.02.2010 (4 PM)	05.03.2010 (11AM)
45	PGI/MM/ RT/203/09-10	Quality assurance phantom for IGRT	4000.00	26.02.2010 (4 PM)	05.03.2010 (11AM)
46	PGI/MM/ RT/204/09-10	Up-grade / replacement of radiation field analyser	20000.00	26.02.2010 (4 PM)	05.03.2010 (11AM)
47	PGI/MM/ RT/205/09-10	Radiation immobilization accessories	2000.0	26.02.2010 (4 PM)	05.03.2010 (11AM)
48	PGI/MM/Cardio/207/09-10	Portable echocardiography system	15000.00	26.02.2010 (4 PM)	05.03.2010 (11AM)
49	PGI/MM/Cardio/208/09-10	Temp pacemaker pulse generator	2000.00	26.02.2010 (4 PM)	05.03.2010 (11AM)
50	PGI/MM/CVTS/211/09-10	Micro saw for Paediatric Stenotomy	3000.00	26.02.2010 (4 PM)	05.03.2010 (11AM)
51	PGI/MM/ CVTS/212/09-10	Suction machine	1000.00	26.02.2010 (4 PM)	05.03.2010 (11AM)
52	PGI/MM/ CCM/215/09-10	MRI compatible transport monitor	2000.00	26.02.2010 (4 PM)	05.03.2010 (11AM)
53	PGI/MM/ CCM/217/09-10	Volumetric infusion pump	1000.00	26.02.2010 (4 PM)	05.03.2010 (11AM)
54	PGI/MM/ CCM/218/09-10	Bi-level Positive Airway Pressure (Non-Invasive) Machine	3000.00	26.02.2010 (4 PM)	05.03.2010 (11AM)
55	PGI/MM/Micro/219/09-10	Anoxomate	3000.00	26.02.2010 (4 PM)	05.03.2010 (11AM)
56	PGI/MM/Micro/221/09	Liquid Nitrogen container	2000.00	26.02.2010 (4 PM)	05.03.2010 (11AM)
57	PGI/MM/Micro/224/09-10	Pulse field gel Electrophoresis system	5000.00	26.02.2010 (4 PM)	05.03.2010 (11AM)
58	PGI/MM/Gsurg/225/09-10	Laproscopy surgical instruments	10000.00	26.02.2010 (4 PM)	05.03.2010 (11AM)
59	PGI/MM/Gsurg/228/09	Laprosopic equipments:	8000.00	26.02.2010 (4 PM)	05.03.2010 (11AM)

ADDITIONAL ITEMS WHICH ARE BEING TENDERED FIRST TIME

Slno.	Tender No.	Name of Equipment	Earnest Money (Rs)	Date of Submission	Date of Opening
1	PGI/MM/Gastero/229/09-10	High End C-arm system	1 LAC	26.02.2010 (4 PM)	05.03.2010 (11AM)
2	PGI/MM/Haemo/230/09-10	Automated Blood Cell Separator-Apheresis Machine	Rs 15000.00	26.02.2010 (4 PM)	05.03.2010 (11AM)
3	PGI/MM/Cardio/231/09-10	Radiofrequency Ablator	5000.00	26.02.2010 (4 PM)	05.03.2010 (11AM)
4	PGI/MM/Endosurg/232/09-10	Insulin pump	4000.00	26.02.2010 (4 PM)	05.03.2010 (11AM)
5	PGI/MM/GH/233/09-10	Colposcope	1000.00	26.02.2010 (4 PM)	05.03.2010 (11AM)

TENDER DOCUMENTS & TERMS AND CONDITIONS

sr	The offer must be fulfilling the following conditions:
1	Unconditional warranty & Guarantee for 5 years from the date of installation.
2	An undertaking from the firm that the equipment is of the latest model and version. Till date no revised or amended version has been launched and the spare parts will remain available for at least 10 years
3	The percentage (%) or amount of Indian Agency Commission must be mentioned in all offers of overseas suppliers who are offering through their Indian Agent. Please attach the photocopy duly attested of valid Agency certificate issued by their principals .
4	Details of after sale service support.
5	List of installations in India should be provided with the tender documents.
6	An undertaking that the equipment is of latest art of technology and no other model is superceeded this equipment.
7	Software upgradation if needed free of cost.
8	Annual Maintenance Contract should be 1 % without spares without escalation of subsequent year & 3% with spares without escalation of subsequent year must be undertaken. Please take this condition as mandatory.
9	CUSTOM CLEARANCE: After arrival of the goods at New Delhi Airport, Indian agent or Indian subsidiary of the principal firm is solely responsible for getting the material clearance from customs. Institute will provide all custom documents for custom clearance on the demand of agent. Transportation from New Delhi to SGPGI Central Stores is also the responsibility of authorized agent. All charges/ expenses incurred in this process will be reimbursed to firm after submitting the bill along with documentary proof in original. Please note that the freight forwarder or clearing agent should be approved from IATA. NO DEMURRAGE / WHARFAGE CHARGES WILL BE PAYBLE BY THE INSTITUTE IN ANY CIRCUMSTANCES. NO ADVANCE PAYMENT WILL BE PAYABLE FOR CUSTOM CLERANCE/ FREIGHT / INSURANCE ETC.
10	Break up of quoted items: Unit price of each product and accessories should be quoted seperately
11	Each tender / individual item to be quoted must be sealed in a separate envelop, if submitted for two or more tender/ offer failing with the tender / offer will not be received i.e. if two or more offers sealed in single envelop. The individual tender no. and name of item must be superscripted on the top of the envelop.

The following terms & conditions should be compiled with while submitting tender:

- 1 Tenders should be submitted to the RSD Cell Located at 3rd Floor of the Administrative Building, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Raebareli Road, Lucknow 226014, India. Under the sealed cover failing which the tender shall be disqualified.
- 2 The tender terms and conditions be clearly typed or legibly written giving the full name and address of the tenderers. The tenderers should quote in figures as well as in words the rates and amount tendered by him/them. Alteration, if any unless legibly attested by the tenderers, with their full signature, shall invalidate the tender. The tender should be signed by the tenderers himself/themselves or his/their authorized agent on his/their behalf. In case the tender is signed by the agent the authority letter in his favour shall be enclosed with tender documents.
- 3 Sealed Tenders should be submitted in two-bid system (in two identical copies) consisting earnest money, technical offer & price bid. In case of equipments tender the Earnest Money and Technical Bid shall be submitted in first part i.e. technical bid and price be submitted in second part i.e. price bid both separately sealed.
- 4 The tenderers should take care that the rates and amounts are written in such a way that interpolation is not possible. No blank space should be left, which would otherwise make the tender liable for rejection.
- 5 Delivery schedule with definite date of delivery at destination taking into cognizance of transit facilities must be indicated. This contractual delivery date/period should be inclusive of all the lead-time.
6. The tenderers should clearly state whether he/they are manufacturer, accredited agents, or sole representative (indicating the name of Principal) on the top of the Bid.
- 7 The tenderer submitting his tender would be deemed to have considered and accepted all the terms and conditions. No Enquiries, verbal or written shall be entertained in respect of acceptance or rejection of the tender.
- 8 The quantity shown in the Schedule may be increase or decrease or any extent depending upon the actual requirement.
- 9 The tenderer shall specify after sales services facilities within the Guarantee/Warranty period. The warranty period will be extended for the period of the Instruments remain out of order during warranty period.
- 10 The tender shall also confirm the Installation, Commissioning, Demonstration and Training to the concerned of this Institute.
- 11 The tenderer shall submit the pre-requisite information like Civil works/ Electrical details etc. Within 2 weeks from the date of receipt of order or establishment of letter of credit as the case may be.
12. The Institute reserves the right to cancel/reject in full or any part of the tender which generally do not fulfill the conditions stipulated in the tender without assigning any reason.
13. Any action on the part the tender to influence any body of the Institute will make his tender liable to rejection.
- 14 The tenderers shall submit the offer with in original copy of the tender documents duly signed on each page. Item-wise rates indicating units can be offered on letter head of the firm.
- 15 In the case of placement of Purchase Order, the vendor (the tenderers whose tender is accepted) shall have to confirm the purchase order within 7 days from the date of the dispatch of purchase order otherwise it will be deemed that offer is acceptable to the firm. Notwithstanding any other provision, the terms & conditions and any other items given in the Purchase order will be treated as binding with "Errors & omission Expected" basis. However, if the supplier notices any mistake in the contentions of the order, he must bring the same to the notice of the Institute and seek clarifications. Supplier will have to bear the responsibility for failure to take this action.

16 The Institute may in writing make any revision or change in the purchase order, including additions or deletions from the quantities originally ordered in the specifications or drawings. If any such revisions/changes affect the price or delivery, the same shall be subject to the adjustment of price/delivery, where requires on a reasonable basis by mutual agreement in writing which should be communicated.

17 The tendered should furnish performance bank guarantee of 15% of the order value or FOB value at the time/ before shipment or supply of goods and this will be released after the successful completion of warranty period as committed.
18 The Institute reserves the right to cancel the purchase order or any part thereof and shall be entitled to revise the contract wholly or in part by a written notice to the vendor, if :-

The vendor fails to comply with the terms of the purchase order including specifications and other technical requirement.

The vendor becomes bankrupt or goes into liquidation.

The vendor fails to deliver the goods in time and or does not replace the rejected goods promptly.

A receiver is appointed for any of the property owned by the vendor.

19. Upon receipt of the said cancellation notice, the vender shall discontinue all works of the purchase order and matters connected with it

20 **Earnest Money be paid in shape of D/D, TDR, FDR, drawn in favour of the Director, Sanjay Gandhi Postgraduate institute of Medical Sciences and payable at Lucknow (U.P.), India as mentioned in the tender notification.**

21 Unless otherwise specified in the order, the order price shall remain firm and will not be subject to escalation of any description during the pendency of the order, notwithstanding the change in the cost of materials, labor and/or variations in taxes, duties and other levies on raw materials and components the may take place while the order is under execution even if the execution of the order is delayed beyond the completion date specified in the order for any reason whatsoever.

22 For indigenous goods the price should be on F.O.R. SGPGIMS basis inclusive of all levies and duties wherever applicable which should be indicated clearly. The rates of sales tax should be clearly indicated wherever chargeable. The SGPGIMS is not eligible to issue 'C' or 'D' Form, however the concessional rate of Central Sales Tax admissible to Research Institutions on purchase of Scientific Instruments/Equipments etc. from certain States like Maharashtra., Delhi, West Bengal etc. is applicable to this Institute.

23 **Prices will be quoted on FOB as well as estimated CIF New Delhi (Insurance from firm warehouse to SGPGI warehouse basis) for imported goods. Indian Agency commission / rebate payable to Indian Agent, if any, shall be shown separately and that will be payable in equivalent rupee directly to Indian Agent as per declaration furnished by foreign suppliers. The Institute reserves the right to get their goods air-freighted/Sea freighted & air insured/marine insured upto site.**

24 The offer of the tenders shall remain valid for a period of atleast 180 days from the date of opening of the tender.

25 All goods or materials shall be supplied by the tenderers whose tender is accepted, strictly in accordance with the specifications, drawings, data sheets, other attachments and conditions stated any alterations of those conditions shall not be made without the consent of the Institute in writing which must be obtained before any work against the order is commenced.

All material furnished by the seller pursuant to this order (irrespective of whether engineering, design data or other information has been furnished, reviewed or approved by the Institute) will be guaranteed to the best quality of their respective kind (unless otherwise specifically authorized in writing by the Institute) and shall be free from faculty design (to the extent such design is not furnished to the Institute) workmanship and materials, and to be of sufficient size and capacity and of proper materials so as to fulfill in all respects with all operating conditions, if any , specified in this order.

- 26 The Equipment supplied shall carry a warranty of 60 months from the date of satisfactory Installation and commissioning of the equipment. If any trouble or defect originating with the design, materials, workmanship or operating characteristics of any materials arise at any time from the date of Installation, the same shall promptly as possible make such alteration, repairs and replacement as soon as notified thereof, the seller shall at his own expenses and as promptly as may be necessary to permit the materials function in accordance with the specification and to fulfill the foregoing guarantee/warranty.
- 27 The Institute may at his option, remove such defective materials at the seller's expense in which event the seller shall, without any cost to the SGPGIMS and as promptly as possible, furnish and install proper materials, repaired or replaced materials shall be similarly guaranteed for a period of not less 30 (thirty) months from the date of shipment.
- 28 In the event that the materials supplied do not meet the specifications and are not in accordance with the drawings, data sheets or the terms of this order, rectification is required at site, the SGPIGMS shall notify to the seller giving full details of differences. The seller shall attend the site, within seven days of receipt of such notice to meet an agree with representative of the SGPGIMS the action required to correct the deficiency.
- 29 If the seller fails to attend meeting at site within the time prescribed above, the SGPGIMS shall immediately get the same rectified the work/materials and seller shall reimburse the Institute all costs and expenses incurred by the SGPGIMS in removing such trouble or defect
- 30 100% payments shall be released within 30 days from the date of satisfactory receipt of materials. Where necessary performance bank guarantee @ 15% of the ordered value or FOB value shall be submitted to the Institute before arranging the delivery till expiry of warranty period.
- 31 The mode of payment will be through irrevocable letter of credit OR International Bank draft. However, Indian Agency Commission or Technical Services charges would be paid in Indian rupee after satisfactory receipt & installation of goods at site duly verified by concerned HOD . Please note in case of IBD , the original bank draft will be handed over to firm only after satisfactory receipt and installation of the equipment.
- 32 Time delivery as mentioned in Purchase order shall be the essence of the order and no variation shall be permitted except with prior authorization in writing from Purchaser.
33. In the event of delay in making delivery on the part of the vendor, it will be at purchaser's discretion to receive delivery with a reduction in price of the article/or equipment.

- 34 Any strike, or lock-out (only those exceeding ten continuous days in duration) affecting the performance of the seller's obligations.
The seller shall advise the SGPGIMS by registered letter duly certified by Local Chamber of Commerce of Statuary authorities the beginning and end of the above causes of delay within 7 (seven) days of occurrence and cessation of such Forced Majeure conditions, in the event of delay lasting over one month, if arising our causes of Force Majeure, the SGPIGMS reserves the right to cancel the order and the provisions governing termination state under articles shall apply.
For delays arising out of Forced Majeure, the seller shall not claim extension in completion date for a period exceeding the period of delay attributable to the causes of Force Majeure and neither the SGPGIMS nor the seller shall be liable to pay extra costs provided it is Mutually established that Force Majeure conditions did actually exist
- The seller shall categorically specify the extent of Force Majeure conditions prevalent in his works (such as power restriction etc.) at the time of submitting the bid and whether the same have taken into consideration or not in the quotations.
- In the event of delay delivery and/or unsatisfactory manufacturing progress and supply, the SGPGIMS has the right to cancel the purchase order as whole or in part without liability for cancellation charges.
- In the event of rejection of non-confirming goods the vendor shall be allowed, without any extension of delivery time to correct the non-conformities, should however the vendor fail to do so within stipulated time, the SGPGIMS may cancel the order.
- 35 No Payment shall be made for rejected material nor would the tenderer be entitled to claim for such items.
- 36 Rejected items would be removed by the tenderer from the site within two weeks of the date of rejection at their own cost. In case they are not removed they will be auctioned at the risk and responsibilities of the suppliers without any further notice.
- 37 In the case of not honoring the supply order, Sanjay Gandhi Postgraduate Institute of Medical Sciences, will have the right to impose penalty as deemed fit to resort to make purchase at the suppliers cost and risk may forfeit his security to make purchase at the suppliers cost and risk
- 38 In the case of non-supply of stores within stipulated period, it will be at the discretion of the Sanjay Gandhi Postgraduate Institute of Medical Sciences to accept delivery with late delivery clause, in case of indigenous goods @ 1% per week maximum to the extent of 10% and incase of import 0.5% per week maximum to the extend of 5% of the ordered value for delayed supply.
- 39 All disputes and question, if any arise between the Institute and the bidder out of or in connection with the terms and conditions contained herein or as to the construction of application thereof, or the respective rights and obligations of the parties there under or as to any clause or thing herein contained or by reason of the supply or failure or refusal to supply any material or as to any other matter in any way relating to these presents shall be referred to the sole Arbitration, President of the Institute/Chief Secretary of the U.P. Govt. or his nominee. The decision of the sole arbitrator shall be final and binding upon both parties and subject to adjudication of Lucknow Court. Place for arbitration shall be at Lucknow (U.P.), India. Venue of such arbitration proceedings shall be the Institute. Arbitration and conciliation Act 1996 and rules made there under shall be applied to the proceedings under this clause.

40. Sales-Tax Registration certificate/ Vat registration certificate duly attested copy by a Gazetted Officer should be also enclosed. Sales Tax, Income Tax clearance certificate or in absence of this certificate you can attach the copy of VAT registration and copy of current return submitted along with the affidavit from a notary that the firm has never been black listed must be attached along with the tender documents failing which the tender will be rejected. Tenderers hereby agree to all terms and conditions stipulated in N.I.T. and undertake to sign the rate Contract or Supply order within the given days from the date of order failing which Security shall be liable to forfeit our requirement from time to time, against the guarantee / warrantee clause as per the terms and conditions agreed under negotiations would be provided at our Institute without fail. Any negligence on this account shall be the sole responsibility of foreign vendor and the liability for compensation will be fixed up by the SGPGI .
41. Comprehensive offer of same for 5 years would be finalized before placement of order either on comprehensive or semi / non comprehensive basis (with or without spare / consumables /accessories including labour charges) by the Institute to the tune of 95% uptime of equipment that AMC will be effective after expiry of warrantee period.

**JOINT DIRECTOR (MM)
For DIRECTOR**

Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow

SPECIFICATIONS

TENDER NO: PGI/MM/Anaes/101/09-10

Deptt of anesthesiology

Technical Specifications for Percutaneous Neuromodulation Pain Therapy System

1. Be microprocessor based system capable of delivering output through Percutaneous electrode Array (1.5" diameter microneedle array within 2.5" diameter hydrogel-based sterile electrode.
2. Have signal output through two feed electrodes (feed frequency 1:3858 Hz, Feed Frequency 2:3980 Hz).
3. Have voltage range : 0-27.5 V rms & waveform should be sum of 2 sinewaves.
4. Have power souce 12 V DC, 3850 mAh rechargeable NiMH internal battery.
5. Have compatibility with following accessories.
 - 5a) Percutaneous electrode Array having 1000 microneedles 0.74 mm (1.5" diameter microneedle array within 2.5" diameter hydrogel-based sterile electrode.
 - 5b) Surface feed electrodes of various sizes (2"X4" and 5" X 8").

TENDER NO: PGI/MM/NS/103/09-10

SPECIFICATION FOR MULTI-DIMENSIONAL NEUROLOGICAL IMAGING SYSTEM

A fully digital 3D c-arm with intergrated neuronavigation for cranio-spinal applications is required for neurosurgery operation suite at Department of Neurosurgery, SGPGIMS, Lucknow, UP. The unit should have the following specifications. Details of specifications must be supported by technical by data sheet from the manufacturer.

Generation:

1. High frequency X-ray generator with automatic regulation of radiation dose rate.
2. System should have continuous fluoroscopy and digital radiography mode. Ability to have pulsed fluoroscopy is desirable and will be preferred over continous fluoroscopy.
3. Should allow high resolution fluoroscopy (>50LP/in. in low dose mode)
4. It should have 20kW to 40 kW x-ray generator for imaging dense anatomy.

X-ray tube

5. X-ray tube should be dual focus suitable for fluoroscopy and radiography with high cooling rate to ensure continuous operation.
6. Anode heat storage should be large. Please specify.
7. Total heat capacity should be large. Please specify.
8. Automatic dose control.

C – Arm

9. It should have a 270° to 360° scan and should be motorized

10. It should allow lateral patient access
11. The bore diameter of the imaging system should be at least 75cm
12. The imaging system should offer 10cm volume cube or more anatomical coverage.
13. It should have a power drive for easy handling of imaging system.
14. It should have a robotic positioning system.
15. It should have the ability to position x-ray tube on either side of patient for decreased radiation exposure to operating surgeon.

Image intensifier

16. Please mention the diameter of the image intensifier
17. Input screen should be amorphous silicon/cesium iodide for increase resolution
18. Pixel pitch should be less than 0.2mm
19. Resolution should be minimum of 2.0k x 1.5k
20. Besides foot and hand control, it should allow image manipulation and viewing wirelessly from the sterile field.

Imaging Viewing

21. It should have LCD display [minimum 29" (diagonal)] with minimum of 3 mega pixel resolution.
22. An extra LCD display [minimum 29" (diagonal)] will be ceiling/wall mounted for surgeons viewing convenience.

Image acquisition and processing

23. Must be a fully digital imaging chain for acquisition, processing, storage and archiving
24. It should processing facility to provide high resolution 3 D axial, coronal and sagittal planes.
25. It should have the ability to go 'full-screen' on any image.
26. It should have facility of storage of pre-set imaging positions to avoid the need for re-scouting.
27. The 3D image should be displayed in less than 30 seconds from initiation of acquisition.
28. The imaging system should have a provision for selecting region of interest for automatic brightness and window/level control.
29. The imaging system should have an automatic noise reduction, edge enhancement, full screen, zoom, digital image rotation, digital window/level control, left/right and top/bottom image reversal positive/negative image inversion.
30. The imaging system should offer different levels of operation allowing optimal slice thickness/reconstruction time selection based on the clinical application.

Image Archiving and software interface

31. The imaging system should have on board hard drive for data archival and retrieval as well as DVD R/W
32. The imaging system should have DICOM functions and full DICOM 3 ready. It will be the responsibility of the vendor to seamlessly integrate the system with the PACS network whenever it is available in the Department of Neurosurgery, SGPGIMS, Lucknow, UP.
33. There has to be various outputs like internet, USB, composite video and S – video.

Image Guidance system

34. The multi dimensional surgical imaging system should be supplied with compatible/integrated surgical navigation system. The navigation system should be loaded with all spine and cranial applications. All related navigation instruments for spine and cranial should also be supplied.
35. A portable ultrasound machine which is integrated/compatible with the image guidance system should be supplied. The ultrasound machine will be supplied with trolley and three probes for various cranial and spinal applications along with all accessories.

Essential accessories

36. Lead apron 8 nos
37. Thyroid shield 8 nos
38. Laser printer for film of different sizes (specify)
39. Table extension should be provided along with the multi dimensional surgical imaging system.

Disposables

40. One year's supply of all disposable should be supplied (including 100 disposable drapes for the imaging system and 50 sets of fiducials).
41. Prices of all disposables required for the imaging system and image guidance system should be quoted at the time of price bid and will be frozen for 5 years.

Warranty/after sales service/Training

42. The complete multidimensional imaging system should come with a 5 year comprehensive warranty (spares & labor) (including x-ray tube, image guidance system and ultrasound machine, as well as all accessories. This will be followed by 5 years of comprehensive AMC. Spares should be available for at least 10 years after installation.
43. Training on the multi dimensional surgical imaging system should be provided to four neurosurgeons in batches (specify details).
44. 98% uptime guarantee should be given. In case down-time exceeds 2%, penalty in the form of extended comprehensive warranty, double the days for which the equipment was out of service, will be applied. Also, cash penalty of Rs. 10,000/_ day of downtime will be levied during warranty and post-warranty period.
45. Schedule of preventive maintenance, service response time should be mentioned.

TENDER NO: PGI/MM/NS/104/09-10

Pachymeter

- Probe Frequency : 15 Hz
- Measurement range : 0.30mm – 1.0mm
- Precision : +/- 1 micron
- Instrument accuracy : +/- 0.1 micron
- Acceptable Angle : 10°
- Calibration : Automatic
- Records 1- 33 corneal locations with programmable bias
- Thermal Printer optional

TENDER NO: PGI/MM/ CVTS/107/09-10

Hyper-Hypothermia water therapy system

- The product should meet international safety standards and should have CE approval.
- The unit should be compact, low noise and easy to handle.
- The unit should be compatible to use different size of water mattress according to the patient's requirements (Adult & Pead.).
- Should have a single provision to set different / adjust temp.
- Each unit must be supplied with two sets of operating manual / service manual.

• **TECHNICAL SPECIFICATION**

- Operating Voltage : 220 – 230 VAC / 50 Hz
- Power consumption : 320 W
- Setting range for water Temperature : 15 – 39 C
- Pumping Limit : max. 11 l/ minute max. 0.15 bar
- Cooling time (20 – 15) :abt. 5 – 10 min.
- Warming – up time (20 -37 C) : abt. 5-10 min.

- Safety cutoff : 41.5 C
- System of protection : 1, BF
- Noise rate : abt. 50 dB (A)
- Alarm level : > 65 dB (A)
- Guarantee Warranty and CMC clauses as per the Institute Norms.

TENDER NO: PGI/MM/ CVTS/108/09-10

Technical specifications for biphasic defibrillator monitor/recorder with pacemaker:

Should be a Biphasic Defibrillator monitor recorder and latest model

2. Should be light weight and portable. Should have defibrillator testing facility
3. Should be operable both on AC Mains and rechargeable battery
4. Should have Automated External Defibrillation as the standard feature along with Manual defibrillation.
5. Manual selection up to 270 J. Should be capable of doing both synchronized and a synchronized cardioversion.
6. Should have impedance compensation for a range of 25-150 ohms.
7. ECG pickup should be available either form ECG leads or directly from paddles
8. Defibrillator shall be capable of delivering at least 250J of biphasic energy
9. Shall be able to charge to maximum energy level in < 3sec. Charging indicator should be there.
10. Should be capable of delivering energy in increments of 102 Jules up to 30 J and increments of maximum 50 J thereafter.

11. Should have external paddles as well as Internal Paddles for both adult and pediatric purpose (one each)

12. Should be able to deliver at least 70 shocks of 250 Joules or at least 120 min of monitoring with fully charged battery
13. Should have fast ECG recovery for immediate monitoring after defibrillation
14. Should have minimum 5.5" color TFT LCD monitor with waveform display of Heart rate, alarm status and other formatting messages
15. Defibrillator should have 2 channel thermal array recorder
16. Should provide summary for Critical Event Record
17. Heart rate alarm and VF and VT alarm
18. Should have a Synchroniser with indication on screen
19. Power Supply : 220V AC 50Hz. Should be able to operate continuously in ambient temperatuof 10-40 degree C and relative humidity of 15-90%. Resettable overcurrent breaker should be fitted for protection.
20. Equipment must conform to International Safety standards and IEC 60601-1-2:2001 (or equivalent BIS) general requirements of safety for electromagnetic compatibility.
21. Comprehensive warranty for 5 years and provision of AMC for next 5 years.

Pacing Option:

- Non Invasive Pacing.
 - Pacing: Demand or Non Demand
 - Pacing Rate: 40 to 170ppm
- Output should be fully defibrillator protected and isolated

Accessories:

1. External paddles (adult and pediatric, one each)
2. Internal paddles with discharge control on paddle grip (adult- 6 cm diameter, pediatric-4.5 cm diameter, and neonatal- 2.8 cm diameter one each)
3. Patient cable 2
4. ECG rolls 50
5. Disposable pads 10
6. Complete set of ECG leads 02
7. Multifunction electrodes and multifunction pad electrodes (10 each)

TENDER NO: PGI/MM/Endsur/110/09-10

Department Endocrine – Surgery

Head mounted Microscope integrated with, Light Source and Image Capture System with High Definition Resolution LCD Monitor (21”) mounted over Trolley and required accessories

Specifications

Working distance: 300mm to 700mm (11.81 to 27.56 inches)

Field of vision: 30mm to 224mm (1.18 to 8.82 inches with standard oculars)

Magnification:

-Stepless

-Standard Oculars: 20 x (2.9-7x)

-Interchangeable oculars I: 14 x (2.0-4.8x) (optional)

-Interchangeable oculars II: 26 x (3.75-9x) (optional)

Individual vision correction:

-Wide-field oculars for spectacle wearers

-Dioptic setting for individual vision correction (+7 dpt)

Integrated coaxial light: -Shadow-free illumination of the work area at every working distance

Integrated autofocus camera: -Higher quality documentation from the user's point of view, ½ inch colour CCD, PAL or NTSC, compatible to every S-VHS connector

Swiveling angle: 72 degree

Hygiene: All parts can be disinfected

Footswitch control

TENDER NO: PGI/MM/ Endsur/111/09-10

Laprosopic Instruments

Forceps 10mm (Laheys)

Applicator 10mm (Hemolock applier)

Applicator 10mm (Multifire applier)

Applicator 10mm (Ligaclip applier (LT-300))

TENDER NO: PGI/MM/ Endsur/114/09-10

Video-Endoscope (Laryngoscope)

Specification

- Flexible Endoscope for viewing and taking biopsy from Larynx and cervical tracheal region
- Integrated biopsy system with Five Biopsy Forceps
- Integrated High Definition (1920X 1080 resolution) LCD Display / Monitor (21”)
- Integrated Device for Image capture in both video / still frame, digital recording in DICOM format, Archive and transfer to DVD USB device and other digital capture devices. Image out put should be in DICOM format and should integrate in to Digital Operation Theatre System Network
- UPS (Two KVA with 30 minutes back up
- Trolley to house all the above items of equipment with Lockable Wheels
- Necessary Cable, Connectors and other items necessary for to Develop an integrated solution

TENDER NO: PGI/MM/IMM/115/09-10

Department of Immunology

Cryostat

- Open top, heated sliding window, corrosion proof, stainless steel cryo chamber with good
- Fluorescent illumination.
- Cooling via two separate refrigeration system.
- Temp. of cryo chamber should be at least -30° c Facility for integrated peltier quick
- Specimen freezing up to -45° C. Separate cooling should be adjustable up to -50°C.
- Temperature of the cryo chamber should be maintained within $\pm 2^\circ$ C of set temperature and maintained by hermetically sealed compressor system.
- Automatic programmable defrosting and manual defrosting should also be possible.
- Fully motorized microtome – movement controlled by manual as well as foot switch.
- Microtome should be encapsulated to support efficient spray disinfection.
- Microprocessor / Microcontroller based touch key control panel with LCD display for all functions including microtome
- Space for other specimen rack minimum 6 blocks . Removable section waste tray.
- Section thickness setting must be outside the cryo chamber.
- Disposable blade holder for low and high profile blades and Knife holder which can hold minimum 16 cm C type knife.
- Specimen holder can hold specimen size up to 70 x 50 mm. Facility for both 360° rotation as well as movement in X Y axis. Section thickness cutting 1-60 micro meter.
- Specimen retraction around 50 micron.
- Trimming in steps from 5 to 150 Microns
- Motorised coarse speed 500 micro meter /sec & 1000 micro meter / sec
- Control for number of sections.
- Cryo cabinet should be of appropriate size.
- Voltage - 220 -240 V, 50 Hz

TENDER NO: PGI/MM/ IMM/120/09-10

PHASE CONTRAST MICROSCOPE

- Phase Contrast Microscope for Bright field, Dark field, Phase Contrast and Fluorescence applications with built in Halogen Illumination system.
- Objective nosepiece with turret.
- Universal Condenser for Bright Field, Dark field, Phase contrast and Automatic light intensity control.
- Step focusing (Coarse / Medium / Fine).
- Eyepiece for Field of View
- Objective High Resolution Objectives (Magnification): 10x to 100x / oil emulsion
- Height Adjustable focus knobs.
- Capability to change the focus knob assembly from one side to another of the microscope and one hand focus and stage control.
- Phototube with facility for beam splitting positions.
- Heat compensated to prevent focus shift and facility of drawers for easy lamp exchange.
- Fluorescent light illumination system with lenses achromatic collector, UV optimized transmission with Fluorescent filters.
- High Resolution Digital camera compatible with the system. Full size live images with maximum frames per sec with Imaging software for Chromosome analysis and Gram staining for identification of bacteria, fungi.

- The digital camera & computer software should be compatible with Microscop

❖
TENDER NO: PGI/MM/ Gene/131/09-10
96 well electrophoresis system

- ❖ Horizontal Gel unit with removable gel casting tray with a comb having 96 wells.

TENDER NO: PGI/MM/ Gene/133/09-10

FLUORESCENCE MICROSCOPE WITH ALL ACCESSORIES

OPTICAL SYSTEM	UIS2 Universal Infinity corrected Optical system As per ISO standards
FRAME	Ergonomic Design frame with built in filters LBD-IF, ND6, GIF,ND25 and an empty slot for additional filter, condenser movement should be on both left and right side, built in Auto Photo Preset switch including Motorized Z-focusing with minimum increment of 0.01 micron,
OBSERVATION TUBE	Widefield Trinocular tube, inclined at 30 degree with 3 position light path selector (100:0, 20:80, 0:100), interpupillary distance adjustment range of 50-76mm.
ILLUMINATION STAGE	Built in Koehler illumination of 12V 100W transmitted light Ceramic Coated Rectangular Mechanical Stage (left handle) with stage size of 191 x 151mm and travel area of 76 x 52 mm. The movement of the stage should be based on wire diagram system. The stage should be capable of holding two slides at a time, stage rotation should be in the range of 250 degrees. The stage should have tactile covers for light touch stage movement.
CONDENSER	Abbe Condenser N.A. 1.1
NOSEPIECE	Interchangeable Sextuple (6 holes) revolving nosepiece with a slot for polariser or DIC slider with inward tilt. It should have a slot for Polarizer/DIC.
OBJECTIVE	Plan Achromate Objectives: 10 X/ 0.25 W.D. 10.5, 20 X/ 0.75 W.D. 0.6 Plan Achromat Objectives 60 X/0.9 W.D. 0.2 with corrected collar 100 X /0.5-1.4 W.D. 0.12 (spring, oil, iris)
EYE PIECE TUBE	Trinocular
EYEPiece	Widefield paired eyepiece of 10X
LENS CLEANING KIT	Cleaning kit should be part of standard supply
FLUORESCENCE ATTACHMENT	Motorized universal reflected light fluorescence illuminator equipped with motorized shutter, field stop, aperture stop, motorized 6-position mirror unit cassette, including UV protection shield with 100 W mercury burner and built in hour meter in the power supply. Filter cubes for FITC, TRIC, DAPI Spectral aqua (400-440nm), Spectrum gold (540-560 nm), FITC +TRIC +DAPI, , clear
Digital Camera Attachment	Digital Camera with effective resolution of minimum 7.1 million pixel with resolution 7.4 megapixel gross. Shutter speed - 1/4000 sec - 16 sec (under various conditions) Memory :64 MB x D Picture Card 1.8 Inch semi transmissive TFT color Swivel LCD monitor with tiltable facilities in order to have convenient viewing.

	Metering system - Digital ESP multi pattern, spot Multi spot. Flash - Built in Flash & hot shoe for external flashes Image adjustments - Sharpness, Contrast, Saturation, Each adjustable +/- 5 steps. Optical zoom 1x-4x (upto 20x with 5x digital zoom) Image editing : Resizing, Trimming, Red eye flx, raw data editing Compatible adapter
Photography tube	The system should be compatible with applied imaging cytovision system
Power consumption	220-240 volt/50 Hz

TENDER NO: PGI/MM/ Gene/135/09-10

Electronic Balance

- ❖ High precision digital electronic balance from reputed manufacturers. Capacity 1500 gm.
- ❖ Readability 0.1 mg. Internal calibration. Weighing mode in grams/milligrams. Easy access door. 200 V, 60 Hz. Soft touch pad.

TENDER NO: PGI/MM/ Neuro/141/09-10

SPIKE AND SEIZURE DETECTION SOFTWARE

Comprehensive software required fro automatically detecting spikes and seizures either offline or online recording of EEG. The software should have following specifications.

1. The software quoted by bidder must be compatible for use with Biologic EEG system.
2. The software should be based on neural network algorithms with good accuracy in detecting spikes and seizures in EEG recordings.
3. Able to view a multi-hour overview of spike and seizure detections, or focus on just the last few minutes with the online graph that displays spike density, seizure perception, and duration.
4. Should have facility to customize visual and audible notifications for spike burst and rhythmic burst seizures while the scan is in progress.
5. The software should be able to sort spike events into similar groups based on topology and /or morphology.
6. Should be able to compare left and right hemisphere discharges with side-by side tracings.
7. Should be able to examine spikes within the context of the EEG page.
8. Should be easily distinguished between Rhythmic burst vs spike burst with color coding.
9. Should have provision to review seizures and rapidly review spikes grouped automatically even while the recording is in progress.
10. Above all, the software should be user friendly and able to delete the false positive spikes in review mode after automatic detection and generate a report with waveforms/graphs etc.
11. The bidder should specifically mention the name of the software quoted and should provide adequate printed information of the software and should be prepared to provide a demo at site for a period on one week on the Biologic EEG system.

TENDER NO: PGI/MM/Paed Gas/142/09-10

Video-endoscopes for Pediatric Gastroenterology

- A. Video Upper Gastrointestinal Endoscopes
- B. Video Lower Gastrointestinal Endoscopes (Colono Videoscope)
- C. Video Duodenoscope
- D. Video Duodenoscope infant/ neonatal

- E. VIDEO Processors (RGB O/P)
- F. Xenon light source preferably with emergency lamp. Power supply as per Indian standards.
- G. LCD Color monitor
- H. Endoscopy reporting software and Hardware with color laser printer

Video-endoscopes:

- Slimmer, lighter and should possess high resolution image quality, fully immersible in disinfectant solution, in built scope identification memory chip for monitor display of scope's with automatic white balancing control etc. convenient distal end irrigation nozzle.
- All sizes of distal end outer diameters and inner channel diameters and also both pediatric and adult video-endoscopes should be quoted.
- Diagnostic and therapeutic endoscope models both.
- Latest models

TENDER NO: PGI/MM/ Path/145/09-10

MULTIPURPOSE TABLE TOP CENTRIFUGE

Microprocessor controlled timer and digital display, 40x15ml 4 bucket, swing out rotor, Minimum speed 100-300 rpm, maximum speed 3000-5000 rpm, 20x10 ml angle rotor, motorised lid lock, with stabilizer

TENDER NO: PGI/MM/ Path/147/09-10

MICROWAVE OVEN

Specifications:

Capacity: 25-35 Lits

Type : Microwave with Convection

Cavity : Stainless Steel

Type of Wave : Three dimensional Distribution wave

Programme Panel : Touch / Tactile

Display : LCD, with temperature display

Power Out put : 900-1000w Warranty : 1year

TENDER NO: PGI/MM/ Path/148/09-10

ELECTRONIC ANALYTICAL WEIGHING MACHINE

Specifications:- Electronic Analytical Weighing Balance with cover and metallic Pan with following features

- Least count 1.0 mg
- Range at least 1 mg to 3 k.g dual range optional
- Capacity –up to 3 k.g
- Power supply – 220-230 V (50-60 Hz)

TENDER NO: PGI/MM/ Path/149/09-10

GROSS SPECIMEN PHOTOGRAPHY UNIT (DIGITAL IMAGING SYSTEM FOR GROSS SPECIMEN PHOTOGRAPHY SPECIFICATIONS

Comprising of Digital camera, connected with computer along with appropriate software and mountable with photography stand

Digital Camera

Atleast 5 megapixel, High quality optics,
With atleast 4X optical zoom
Macro mode photography
Foot control device shall be preferable

Computer

High end computer atleast 3.0 Ghz with core to duo processor
Atleast 250 GB storage capacity Hard disc
2 GB RAM to handle and process images
Network compatible
21" TFT Monitor (touch screen shall be preferable with touch pen)
UPS

Softwares to integrate camera with computer

Dedicated software for Image annotation, editing and archiving software. Easily interfaced with Laboratory/ Hospital/ Information System

Stand:

Photographic stand with water resistant base and easily /freely movable camera holder for height adjustment with both side day light even and powerful illumination.

Justification:

Additional advancement in histopathology services to archive. Gross specimen photographs for patient care and teaching and research.

Remarks: computer and camera specification shall be acceptable latest at the time of procurement of system

TENDER NO: PGI/MM/ Path/150/09-10

SEMI-AUTOMATED SPECIMEN ADVANCE WITH MANUAL CUTTING ROTARY MICROTOME

Specifications:

Power supply 220-230 V, 50/60 Hz
Section thickness via precision stepping motor from 0.5 or less to 100 micron.
Trimming thickness from 1-2 micron onwards.
Horizontal feed of approximately 30 mm
Vertical specimen stroke 50-70 mm
Specimen retraction of varying microns.
Facility for precise specimen orientation in X,Y directions
Standard quick release specimen / cassette clamp can hold specimen blocks up to 60 mm.
Spacious removable section waste tray.
Knife angle position locking facility
Knife holder base and knife holders for
1). Low profile disposable blade
2). High profile disposable blade
3). Steel knife of profile "C" and profile "D".
Cold light source and cold plate dry type.
1). High quality High profile blades 30 X50
2). High quality Low profile blades 15X50
3). Steel knives "C" profile type, 16 cms or more - Five
4). Microtome Lubricant oil - 5 Bottles
Standard tools & accessories
Service and Operator Manual
Servo type appropriate rating voltage stabilizer

Note:

1) Warranty period – 36 months from date of installation.
Quote separately for comprehensive and non-comprehensive AMC from 4th year to 9th year.

TENDER NO: PGI/MM/ Path/151/09-10

HOT AIR INCUBATOR

heater of 1-1.5 kw, +5-200⁰C temp range,
LED digital display, 2-3 adjustable shelves, timer,
capacity at least 150-160 Lt with glass window.
Temperature range +5 - 80⁰C
Temperature display
Internal Capacity 150-160 lit
Air Jacket chamber
Microcomputer control system

TENDER NO: PGI/MM/ Path/152/09-10

4. PATHOLOGY DEPARTMENT (Histopathology)

Equipment :- **KNIFE SHARPENER**

- Effective sharpening of c-& d profile steel knives of size at least 22 cm in length
- Compatible to accommodate different knife lengths
- Provision for two different knife holders
- Provision for two honing technicians- coarse and fine
- Glass-plate oscillation
- Optional height adjustment
- Easy single-button operation
- Transparent plastic cover for dust free environment
- All standard accessories
- 10 packets of honing compound for fine and coarse honing.

Department of Transfusion Medicine

TENDER NO: PGI/MM/TM/154/09-10

Blood mixing & weight monitoring apparatus

Compact instrument to provide smooth and gentle rocking for homogeneous mixing with anticoagulant; Volume should be set in 1 ml. increments. Provision of pausing collection and change programmed volume during pause. Micro-controller based program. Volume can be set from 1 ml to 999 ml. Display of weight and volume. Auto tare facility to accurate for the weight of the bag. Motor activated clamping at the end of the collection. Audio Visual alarm to alert in case of any abnormal condition. Auto Calibration. Over load indication.

TENDER NO: PGI/MM/ TM/155/09-10

BLOOD WEIGHING SCALE

Micro controller based Scale designed for weighing blood and blood components; LCD display, displays the weight and volume with an accuracy of 1 gm/ml.; Easy conversion of weight to volume and vice versa; Auto Calibration. Should have a built-in interface to integrate an Electronic Plasma Expressor

TENDER NO: PGI/MM/ TM/156/09-10

MOBILE BATTERY POWERED WORKSTATION

Battery powered Mobile workstation with automated hook-rack and shelf for handling of blood bags for leukoreduction, bacterial detection testing or pooling of blood components; 24 hook racks; adjustable working height; lockable swivel wheels; stainless steel body.

TENDER NO: PGI/MM/ TM/157/09-10

PLATELET AGGREGOMETER

Automatic optical aggregation system minimum 2 channel for aggregation test in whole blood, diluted blood, platelet rich plasma; should involve low sample volumes

(250-500 µls);should have facility for von Willebrand co-factor assays; should have facility to display the instructions for easy operation; ability to store standard curves for future use; able to calculate test results in percentage of activity; possible to run test in replicate with ability to monitor CV; able to display real time

growth amplitude and slope data & possibilities to store & recall test curves & associated data; system should be able to run with windows type of software for ease of operation & convenient data reduction. The machine should be quoted complete with software and data reduction device including necessary liquid handling systems & reagents. Appropriate stabilizer or UPS with 1 hour battery backup.

TENDER NO: PGI/MM/ TM/158/09-10

SEMI-AUTOMATED BLOOD GROUPING & CROSS-MATCHING SYSTEM

System should be based upon solid phase technology; Should use reagent red cell antigens in dried format; Shelf life of the red cell antigens should be more than three months at the time of supply; Should have positive & negative control run as a protocol; Should be able to perform Antibody screening, antibody identification, crossmatching, syphilis, CMV IgG+IgM, Platelet antibodies & platelet crossmatch; Should have an incorporated wash step for processing of hemolyzed, rouleaux, lipemic or icteric samples System should contain a centrifuge, an incubator & a washer dedicated for the procedure; Reagents should be US FDA approved

TENDER NO: PGI/MM/ TM/159/09-10

TABLE TOP NON-REFRIGERATED CENTRIFUGES

Microprocessor control system; Automatic lid locking, auto lid lift ; swinging bucket rotor, stainless steel bucket; max speed not more than 5000 rpm, speed setting in increment of 10-100 rpm; 80 X 15 ML ; Precise temperature control upto 40 C; digital timer display with 1 minute increment ; Alarm display on Lid open, Imbalance, Over speed; Can spin microplates apart from test tubes if required.

TENDER NO: PGI/MM/ TM/160/09-10

WIRELESS DATA LOGGERS

Datalogger with an external temperature probe. Single remote module, with one external probe (digital-type sensor).Temperature Range : -55°C to +125°C.; Real Time Alarms and Collection of Data; System should be radio frequency based and approved for usage in India ; User defined for collection and transmission of data from 1 minute to 1 day. Sensors are calibrated. Accuracy of Temperature +/- 0.1C. Digital signaling for no loss of data.; Alarms are transmitted by landline, mobile phone, email, fax, and print out; User friendly software for easy monitoring of parameters; Software should be LAN enabled and can be upgraded. Parameters such as Temperature, humidity, CO2, Dry Contacts and Differential Pressure can be monitored.; Alarms are generated for any technical fault.

TENDER NO: PGI/MM/Uro/161/09-10

Department of Urology

Fluoroscopy C-Arm machine :

Specifications: -

A	C-Arm
	LAO / RAO upto 90 degree. Cranial / caudal upto 30 degree Longitudinal movement at least 100 cm Image intensifier movement (forward/backward) Angulation speed at least 10 degrees/sec. C-Arm movement during lateral fluoroscopy projection
B	Generator & Tube:-
	(I)Generator :- Suitable high frequency minimum 80 KW output generator for serial radiography, to give 1000mA at 80 KV and 800 mA at 100 KV. Minimum exposure time of 1 m sec in automatic & manual mode.

	Automatic exposure control.
	<p>(II) Image intensifier & monitors: 512X512 matrix for serial digital radiography, with high definition image intensifier TV systems and monitors with automatic dose rate control. Last image hold capacity. Multi-field image intensifier with at least 2 range input field (9"X12"). High contrast & high resolution monitors. Tele transfer of flouro screen should be possible online.</p>
C	<p>Storage & Data transfer: Can store upto 500 images. Images can be converted & copied into CDs / DVDs /HDD. Dicom software should positive.</p>

TENDER NO: PGI/MM/ Uro/162/09-10

FLEXIBLE URETEROSCOPE

Preferably with Chip on tip technology

Primary deviation should be at least 270 degrees, preferably in two axis, secondary deviation, if present is desirable.

Channel diameter should preferably be not less than 3.5 F.

Loss of deflection should not be more than 30-50 degrees after placing a 3F instrument.

Working channel should allow 200 micron and 360 micron laser fibres without loss of deflection exceeding 10-20 percent.

Waterproof and fully immersible in solution especially Cidex

Small diameter- as small as preferable

Should fit to all other standard Endourological accessories and armamentarium (should not require a special light source)

Durable, should at least cross 50 -75 cases.

TENDER NO: PGI/MM/ Uro/166/09-10

Extra Shock Wave Lithotripsy Machine (ESWL)

Technical specifications :

Main Features:-

	Therapy unit incorporating shockwave generation by electro-magnetic technology.
	Dual mode integrated imaging by ultrasound as well as x-ray.
	Integrated multipurpose patient positioning table .
	Isocentric positioning of shock head x-ray beam and ultrasound beam.
	Description:
A	Therapy unit with electro-magnetic shock wave source:-
	Electro-magnetic shockwave source.
	Therapy head three dimensionally movable with motorized positioning system with remote control and 50 degrees of movement along C bow for various windows for renal stones.
	Should permit both over table and under table position with above mentioned degrees of freedom.
	Focus distance (approx) 150mm.
	Focal pressure 36.6 to 90 Mpa.
	Optimum focal size capable of treating small & large stones.
	Energy flux density 01 to 0.7 mJ/meter ² .
	Shockwave frequency 1 to 2SW/sec or ECG Triggering.
	Energy level: variable levels from 7.1 to 45mJ.
B	X-ray localization system:
	Generator : High frequency x-ray generator (approx 20 KHz).
	X-ray tube: Fixed anode double focus x-ray tube.
	Image intensifier: 9" Tri mode image intensifier.
	Grid: 8:1 ratio 51 Vcm
	TV Camera: TV chain with CCD Camera.
	Radiography and Fluoroscopy : KV Range:40to 110KV range, MV range :0.2 to 8.
	X-ray C-arm should move isocentric to the shock wave source in both directions around the source in CC position, to get the third dimension (Z-axis) of the stone after getting the first two dimensions (X& Y coordinates)
C	Integrated Ultrasound locating system
	B/ W Image with linear convex real time scanner
	Transducer:3.5.to 5 MHz convex transducer for imaging with Isocentric Scanner Guide with manual & motorized movement.
	Ultrasound guided stone localization, patient positioning.
	Both x-ray and ultrasound software and hardware provision for parallel image grabbing, archiving, patient annotation and image processing with capability to have compatibility with the existing hospital information system and DICOM 3.0 capability.
D	Patient positioning system: Integrated patient positioning table with different capabilities.
E	Complete installation to be done by the equipment's supplier.
	Training: Cost to be born by supplier.
	Clinical training: Application training (upto one week) at the site or operator training at overseas reference site.
F	Standards: FDA and CE approved.
G	Major spares: Shockwave generator, coil, bellows. Ultrasound transducer.
H	Warranty- After installation three years with service & spares. Guarantee : Upto 5 years after expiry of warranty

TENDER NO: PGI/MM/ Nephro/169/09-10

DEFIBRILLATOR MONITOR RECORDER WITH PACER

- Biphasic Defibrillator Monitor Recorder
- Operable both on AC mains and Rechargeable battery.
- Capable of Delivering up 360J.

- LCD monitor size 5.5” color TFT.
- Recorder should automatically record events and ECG during defibrillation episode).
- Power supply 220V AC 50 Hz.
- Pacing Rate 40-170 ppm.

TENDER NO: PGI/MM/ Nephro/171/09-10

LABORATORY REFRIGERATOR

1. Microprocessor control system with digital display.
2. Should have Eye Level Digital LED display of actual inner temperature and set temperature of Refrigerator.
3. Should have Two Sensors, One for Upper Cabinet Temp. and the other for Lower Cabinet Tem. Of the Freezer as well as to see the average temp. of the Freezer.
4. Temperature range adjustable from 2 deg C to 8 deg C with an increment of 0.1deg.C.
5. Instrument should give the malfunction alarm both in audible and flashing.
6. Malfunction alarm should include High temperature; low temperature, Sensor failure, and power supply failure, Door Open and Low Battery.
7. Should have key on control panel to silent alarm.
8. Provision should be there inside the cabinet to fix the bottles containing Glycerin or Glycol for upper and lower temperature sensors.
9. Should have calibration key to calibrate temperature sensors of both upper and lower cabinet.
10. Should have provision to test the alarm function.
11. Should have built-in chargeable battery to display cabinet temperature for at least 72 hours after power failure.
12. Should have switch for internal florescent lighting with 10-20 watt tube.
13. Should have adjustable shelves, at least 5 nos.
(a) The machine should be capable of working with broad range of voltage from 200V to 250V and A maximum ambient temperature of 32 deg C without compromising the performance.
14. Should have caster wheel for easy movement.
15. Body should be made of Acrylic finish backed on zine galvanized still with rounded corner.
16. CFC free refrigerant & insulation.
17. Remote alarm system.
18. Automatic Cyclic Defrosting System.
19. Should be 14001 and CE certificate.

TENDER NO: PGI/MM/ Nephro/176/09-10

BI IMPEDENCE ANALYZER

Technical:

- Multi – frequency 5, 50, 100 and 200 KHz’s.
- Raw data Impedance, phase angle, resistance, reactance, capacitance, 2 channel 8 points direct measurement.
- Calibrated for children, adults, older population, normal, lean, obsess, clinically diseased patients.
- Calibratd for different ethnicity.
- Large colour display.
- Bluetooth.
- Certified medical isolated USB
- Stores 1000 patients results.

DIRECT ASSESSMEDNT IN ANY CONFIGURATION:

- Single assessment

- Continues monitoring.
- Real time monitoring.
- Segmental direct monitoring.
- Abdominal director monitoring.
- Pre – defined testing monitoring.
- 5 Segmental assessments.
- 3 segmental assessments.
- Star Assessment.

45 Different Parameters in Following Category:

- Dry weight for renal patient
- Body cell mass (BCM).
- Glomerular filtration rate (GFR) using plasma creatinine.
- Fluid status (ECW/ICW and interstitial – fluid extravascular etc.)
- Body composition
- Nutritional status
- Mineral
- Protein
- Creatinine clearance
- Malnutrition screening

Abdominal composition.

- Visceral, subcutaneous fat.
- Visceral, subcutaneous fat. Depth.
- Metabolic syndrome risk
- One side full body assessment
- Both right/left full body assessment
- Both right/left full body differences
- Multi-segmental muscle volume, muscle mass, for upper and lower arms, torso, upper and lower legs assessment.
- Multi – segmental ECW and ICW for upper and lower arms, torso, upper and lower legs assessment.
- Upper arms cross sectional area of muscle, fat and bone
- Upper and lower arms, torso, upper and lower legs multi – segmental assessment.
- Z score
- Vector analysis
- Blood pressure analysis
- Blood pressure & cholesterol risk
- Statistical analysis
- Complete with software.

TENDER NO: PGI/MM/ Nephro/177/09-10
NEAR INFRA RED REACTANCE ANALYZER

Provides fast accurate measurements of essential body fat, reserve body fat, and excess body fat. Advanced body composition analyzer FDA 510(k) cleared and carries the CE medical mark for international use.

Provides the following results:

- Percent body fat total body fat (pounds or kg).
- Weight of “Essential body fat.”

- Weight of “Reserve body fat”
- Weight of “Excess body fat”
- Total lean mass (pound or kg) basal metabolic rate total body water body mass index.

Product Features :

- FDA 510(k) cleared.
- European medical CE (0459) marked
- Portable (battery Operated)
- Includes power adapter for use with AC Electricity.
- Easy to use
- No special training needed
- No pre - test protocols
- Includes powerful software for post measurement reports and client tracking.

Includes an attractive, durable carrying case with all needed accessories:

- 6 Rolls of thermal paper (for test results)
- Operations manual
- Light shield
- Optical standard
- Biceps locator
- Snap shot of your health & fitness form (for post test interpretation)
- Computer Communications cable.
- Bodyometry software
- Couon software
- AC adapter
- 6 AA Batteries.

Calibrated for adults age 18 and above, and includes a separate calibration for children from the ages of 5-17.

Powerful analysis software with body metry & body composition/fitness analysis report

- The importance of body fat
- The importance of weight
- The body’s use of food energy
- Nutrition & exercise recommendations
- Generate “Update” reports to evaluate progress.

Physical analysis ratings report

Provides a complete fitness assessment package to evaluate:

- Cardiovascular & Respiratory capabilities
- Aerobic capacity
- Body composition
- Flexibility
- Muscular strength
- Muscular endurance.

TENDER NO: PGI/MM/Haem/180/09-10

Department of Hematology

Specifications: Automated Blood Cell Separator-Apheresis Machine

The Apheresis Machine should have facility for all blood component collection including peripheral blood stem cells, platelet pheresis, red cell pheresis, granulocyte pheresis, lymphocyte pheresis and therapeutic plasmapheresis with both single & double access.

1 Operational Requirements

- 1 Fully automatic, microprocessor controlled with access operator control panel such as touch screen.
- 2 Should perform both single and double access Apheresis

2. Technical Specifications

- 1 It should be based on continuous flow technology during both double & single needle access to minimize procedure time & increase the efficiency.
- 2 Equipments should ensure all donor safety parameters before starting the procedure and at all time during operation.
- 3 Capable of priming with normal Saline and or mixture of Normal Saline and ACD
- 4 In – built cuff pressure and prompt grip for donor comfort and adequate blood flow.
- 5 It should have auto cuff mechanism for automatic inflation & deflation.
- 6 Facility to use platelets additive solution and / or normal Saline for re-suspension and storage fluid in place of plasma
- 7 Advance help menu should be available at any time during alarm conditions
- 8 Lower extra corporeal volume, less than 200 ml in case of both single and double needle apheresis
- 9 Yield estimator to help decide yield, volume to be processed and suggested storage fluid and should have optical sensor at PRP line for online monitoring of component collection against the desired yield.
- 10 Capable of downloading or printing full procedure report any time after procedure.
- 11 Should have rechargeable battery to store data and restart in case of power failure.
- 12 Continuous monitoring of collection to avoid any contamination through Interface detector.
- 13 Inlet and return flow rates up to 100ml/min
- 14 Should have fluid leak detector for donor safety
- 15 In case of inlet line occlusion, machine should be able to re-start automatically.
- 16 Should have provision for saline re-infusion to donor.
- 17 Should be able to regulate ACD delivery, should not have bolus return of blood to ensure reduction in citrate reaction.
- 18 Should have automatic door lock for centrifuge during the procedure.
- 19 Lockable castors/ wheels for mobility.

3. System Configuration Accessories, spares and Consumables

- 1 System as specified-
2. Apart from this 10 consumables should be provided
- 3 Consumables should be available for atleast 10 years after the sale of machine.
- 4 All consumables required for installation and standardization of system

to be given free of cost.

5 The final cost of the machine will include

- a) Original cost of the machine,
- b) AMC,
- c) Cost of consumables for evaluation.

4 Power Supply

- 1 Power input to be 220-240VAC, 50Hz fitted with Indian plug
- 2 Suitable Servo controlled Stabilizer/CVT
- 3 Suitable UPS with maintenance free batteries for minimum one-hour back-up should be supplied with the system.

5 Standards and Safety

1. Manufacturer should be ISO certified for quality standards.
2. Comprehensive training in – house and for 2 persons at a site where machine is regularly operational

6 Documentation

- 1 List of installations in the country along with user's certificate should be provided.
- 2 List of Equipments available for providing calibration and routine Preventive Maintenance Support as per manufacturer documentation in service/technical manual.
- 3 List of important spare parts and accessories with their part number and costing.
- 4 Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist.
- 5 User/Technical/Maintenance manuals to be supplied in English.

TENDER NO: PGI/MM/ Haem/181/09-10

: Nephelometer for Free-Light Chain Quantification

1. Fully automated nephelometric system for precise quantification of body fluid proteins including free light chains, immunoglobulin heavy chain/light chain pairs, immunoglobulins (IgG, IgA, and IgM), β 2-microglobulin and high sensitive-CRP.
2. The system should have at least two measuring modes and the quantification sensitivity of the equipment for free kappa and lambda light chains @ 1/5 dilution of the samples should be less than 0.5 mg/L.
3. The free kappa and lambda light chain quantification range of the system should be 5-150 mg/L.
4. The system should have device for automatic dilutions of samples and other reagents used in quantification assay.
5. The system should have device for antigen excess detection and re-measure the samples with antigen excess after automatic re-dilution.
6. The calibration should be single or multi-point using a single standard and calibrations of at least two different reagent lots should be stably retained by the system.
7. The system should have bar code identification device for standards and control reagents and sensor to detect liquid level in the reagent vials.

8. Should have capacity of more than 25 onboard reagents and throughput of more than 50 results per hour.
9. The system should use disposable or semi-disposable corvettes or tubes in the quantification assays for data precision.
10. System should have integrated QC programme and software for auto-calculation of results.
11. Electrical Requirements: 200-240 volts AC, 50-60 Hz.
12. Certification: At least one of CE/UL/C-UL.

TENDER NO: PGI/MM /Haem//186/09-10

Tube sealer

1. Fully automatic portable sealing system for sterile, leak-proof and temper-proof sealing of blood bag and cryocyte-bag tubings for aseptic processing and storage of cellular products at various temperatures from ambient to -180⁰C.
2. The system should efficiently seal empty or fluid filled PVC/thermoplastic tubings of 5 to 10mm diameter and wall thickness 0.25 to 0.75mm.
3. The equipment should have a power unit and sealing handle with minimal cable length of 1.5meter.
4. The sealing time should be 2.5 sec to 10 seconds with auto adjustment of timing depending upon tube thickness..
5. The seals created should have minimum width of 2.5mm.
6. System should run on both mains and battery (more than 3 hrs. back up and charger).
7. Should have automatic power adjustment for uniform sealing irrespective of power supply variation.
8. Should have indicators for Power, Ready and Sealing Completion modes.
9. Power supply: 220-240VAC/ 50 Hz fitted with appropriate Indian plugs and sockets.
10. Certification: CE/ISO or equivalent.
11. Approval: FDA /CSA or equivalent for sterile sealing of blood bags and cryocyte-bags.
12. Documents: User Manual, Service Manual and List of important spares & accessories with their part number and pricing.

TENDER NO: PGI/MM/Gastro/187/09-10

Deptt of Gastroenterology

PART - A

GASTRO VIDEOSCOPE (Adult):

- Fully immersible in disinfectant solution & compatible with leak testing device with automatic regulation of air flow & pressure..
- Capable of optically generating the images while using special band of light intended for finer mucosal detailing.
- In built scope identification memory chip.
- Separate inlet ports for air & water supply.
- Four or more no. of remote control switches on control body.

Field of view	:	140 degree or more
Direction of view	:	0 degree, forward viewing
Depth of field	:	3 to 100 mm or better
Distal end outer diameter	:	8.8 mm or less
Insertion tube outer diameter	:	8.8 mm or less
Tip Bending rage	:	Up 210 deg, Down 90 deg, Left & right 100 deg.
Working length	:	1030 mm or more
Channel inner diameter	:	2.8 mm or more
Minimum Visible distance of instrument used thru channel	:	3 mm or closer from distal end.

COLONO VIDEOSCOPE (Full length):

- Fully immersible in disinfectant solution.
- Four or more no. of remote control switches on control body.
- Adjustable stiffness (controllable by knob at control section).
- Capable of imaging with special band of light for finer mucosal detailing.
- In built scope identification memory chip.
- Auxiliary water jet for mucosal cleansing

Field of view	:	170 degree or more
Direction of view	:	0 degree, forward viewing
Depth of field	:	3 to 100 mm or better
Distal end outer diameter	:	13.2 mm or less
Insertion tube outer diameter	:	12.8 mm or less
Tip Bending range	:	Up & Down 180 deg, Left & right 160 deg.
Working length	:	1675 mm or more
Channel inner diameter	:	3.7 mm or more
Minimum Visible distance of instrument used thru channel	:	3 mm or closer from distal end.

DUODENO VIDEOSCOPE (Therapeutic):

- Fully immersible in disinfectant solution.
- Four or more no. of remote control switches on control body for user's ease of operation.
- In built scope identification memory chip.
- Detachable distal cover for easier cleaning of scope tip.

Field of view	:	100 degree or more
Direction of view	:	5 degree, backward oblique viewing
Depth of field	:	5 to 60 mm or better
Distal end outer diameter	:	13.5 mm or less
Insertion tube outer diameter	:	11.5 mm or less
Tip Bending rage	:	Up 120 deg, Down & Left 90 deg, & right 110 deg.
Working length	:	1235 mm or more
Channel inner diameter	:	4.2 mm or more

Minimum Visible distance : 10 mm or closer from distal end.

VIDEO PROCESSER :

- Digital signal processing for signals received from a Colour CCD chip.
- Equipped with high definition & special light band Imaging capacity.
- Automatic IRIS control.
- Picture in Picture display possibility with option to have full screen images from both the image sources.
- HDTV & SDTV Signal Output : RGB or YpbPr output, Digital (IEEE-1394), Y/c
- Should have Automatic Gain control and Contrast control functions.
- Edge/Structure enhancement : 3 to 8 levels of switchable settings
- Image display size : 3 or 4 different sizes of image display on monitor

XENON LIGHT SOURCE (300 watts):

- Automatic switch off function when source is not used for extended period of time
- Backlit front panel indicators.
- Equipped with special filters required for finer mucosal detailing.
- High intensity Xenon Light source (300W)
- Compact & light weight design.
- Emergency halogen light.

Cooling : Forced air cooling
Electric shock protection : Type Class I with Type BF applied part.
Power supply : 220 -240 V AC, Frequency 50/60 Hz, Input current 3 A.
Weight : Around 15 – 16 Kg.

HIGH RESOLUTION LCD MONITOR :

- Flat – Panel LCD, progressive scan monitor with high resolution.
- Superb high resolution imaging performance with exceptional image quality.
- 19 inch LCD screen with 1280 x 1024 native resolution
- Display devices : TFT active matrix
- Display dots : 1280 X 1024 dots (SXGA)
- Video input (signal) format : Composite (BNC)
- Y/c input signal format : 4 pin mini – DINI
- Analog RGB + Ext Sync / YpbPr_input : BNC connector (X4)
- Video Output : BNC, Y/C, RGB,

PART - B

SINGLE BALLOON VIDEO-ENTEROSCOPY SYSTEM

VIDEO ENTEROSCOPE

- *High resolution CCD for quality imaging and finer details.
- *Suitable for Narrow Band Imaging observation.
- *Slimmer insertion tube.
- *Fully immersible in disinfectant solution.
- *Suitable for antegrade and retrograde application both.
- Field of view : 140 degree or more
- Depth of view : 3-100 mm or better
- Distal End & Insertin tube dia. : 9.2 mm or less
- Tip bending range : Up & Down 180 degree
Left & Right 160 degree

Working length : 2000 mm or more
Instrument Channel dia. : 2.8 mm or more
Minimu visible distanct from D/E : 3 mm or less

BALLOON CONTROL UNIT:

- *Automatic pressure control function
- *Simple operational system for balloon inflation and deflation.
- *Balloon inflation and deflation control on front panel of unit and thru compact remote control.
- *Balloon pressure indicator with display on front panel.
- *Power consumption : 150 VA or less
- *Set Pressure of Balloon : 5.4 kPa (+2.6kPa, -0.0 kPa)

SPLINTING TUBE (with Hydrophilic coating) :

Insertion Tube Outer dia. : 13.2 mm or less
Insertion Tube Inner dia. : 11.0 mm or more
Working length : 1320 mm
Total length : 1400 mm
Material of tube & balloon: Silicon rubber (Latex free material)
Inlet for water insertion for lubrication during procedure.

Video Processor (RGB O/P) & Light Source :

Video Out Put : RGB, Y/c, BNC & XGA outputs
Digital Out Put : Type IEEE1394
Structure Enhancement : 2-3 mode.
Light Source : Xenon or Halogen 150 Watts or more.
Spare lamp : Swichable as and when required.

HIGH RESOLUTION LCD MONITOR :

-Flat – Panel LCD, progressive scan monitor with high resolution.
-Superb high resolution imaging performance with exceptional image quality.
-19 inch LCD screen with 1280 x 1024 native resolution
Display devices : TFT active matrix
Display dots : 1280 X 1024 dots (SXGA)
Video input (signal) format : Composite (BNC)
Y/c input signal format : 4 pin mini – DINI
Analog RGB + Ext Sync / YpbPr_input : BNC connector (X4)
Video Output : BNC, Y/C, RGB,

TENDER NO: PGI/MM/ Gastero/190/09-10

Modular Electro surgery Workstation with APC for GI endoscopy suit including:

1. Electro surgery unit with forced APC mode.
2. Upgrade endocut
3. Two pedal footswitch, AP and IP x 8 equipments
4. APC 2 unit

5. Argon gas bottle 5 l, 200 bar
6. Pressure reducer with sensor
7. Silicon electrode, conductive area 17.5x29.5 cm=516cm² with rubber strap and ECG connection.
8. Patient plate table ICC, ACC international, for silicon plate, length 9m.
9. Monopolar connecting table ICC, ACC international for cut, coag,MIS instruments,length 4m.
10. Connecting cable for flexible , APC probes, 2.5m long
11. APC probe 2200 A, OD 2.3 m, L 2.2m
12. APC probe 2200 SC,OD 2.3 mm, L 2.2 m

TENDER NO: PGI/MM/ Endo/200/09-10

Specifications for Calcium Electrode (Electrolyte Analyzer)

- Microprocessor controlled programmable analyzer with Ionized Calcium Sensor Electrode.
- Ion selective, flow through liquid membrane calcium electrode.
- Should be able to perform measurement in whole blood, serum and plasma.
- Measurement range:0.2 to 5.0 mmol/L
- Resolution:0.001 mmol//L
- System should have automatic calibration and program storage capacity.
- Standard character/alphanumeric LCD display and in-built or external full graphic printer for printing reaction curves and test results.
- Caliberators/standards, quality control reagents, consumables (capillary, tubes, cups, syringes, electrode etc) should be quoted.
- The manufacturer should be able to supply kits against order.
- User friendly software.
- Quality and safety certification as per international norms. (Certificates to be enclosed).
- Power supply should be 220-240V with suitable voltage stabilizer/UPS.
- System warranty should be 3 years or as per Institute rules.
- AMC with spares (comprehensive) after warranty should be submitted along with the offer.
- Three appreciation/reference letters from any reputed institutes must be accompanied with the proposal towards its performance and services.
- Literature/manuals need to be provided to support the technical specification.

TENDER NO: PGI/MM/ Endo/201/09-10

Specification of Bone Histomorphometry

A. Upright Fluorescent Microscope

- Research Upright Trinocular bright field fluorescence Microscope,
- Basic stand with Trinocular tube: 12V 100W illumination with stabilized power supply. Entire optics including parts like eyepiece, condensers holder tubes should be of metal base. Optical system infinity corrected with suitable system. Attachment for bright field, fluorescence and integrated modulation contrast with suitable condenser for all the above
- Standard mechanical stage size with X-Y movement and holding slide.
- Eye piece 10X wide field objective.
- Semi apochromatic Objective40X 60X oil and 100X oil
- Plan achromatic objective 4X, 10X.

- Fluorescence Illuminator unit With range of 6 filters, dichromatic mirror and barrier filter for UV, blue and green excitation (preferably narrow band filter) filter for GFP.
- Universal EPI fluorescence attachment with lamp housing, power supply and lamp.
- Filters: Excitation filter (Blue, Green and UV, Emission barrier filter long-pass and DAPI/FITC/Texas Red.
- High resolution C – mount video adaptor for CCD camera.
- Camera Digital camera set for microscope with approx. 12.0 million pixel cooled CCD (fire wire kind) with online integration, connection cable, with necessary.
- Antifungal agents for protection from fungus.
- Spare bulbs 2 numbers each
- Required capacity UPS

B. Common Imaging Work Station

- Core2Duo processor with speed of more than 3.0 GHZ, 320Gb HDD, 4 GB RAM, DVD Writer, Flat 24” LCD plasma screen, Mouse, Key board, Photo quality printer, 1KV UPS, Windows XP operating system

C. Image analysis and management software

- Dedicated software for bone histomorphometry preferably based on ASBMR nomenclature, interactive, that uses the specialized measurement list to automatically calculate over 150 parameters of bone. Automatic compensation for kinetic labeling method. Sophisticated data handling to integrate independent measurement for serial sections. Data viewer to allow composition from primary or derived data, to automatic collates all the data in a particular folder. Entire system should be menu driven and user friendly for bone specific prompts and options. Spreadsheet based packages which support cut and paste function.

Manufacturer will provide the following documents along with the equipment:

1. One copy each of instruction manual, service manual, circuit diagram
2. Catalogue and price list of spares, as well as list of spares needed.
3. Undertaking that the equipment will not be phased out during next 10 years and that the manufacturer will ensure service and supply spare parts during this period strictly as per time schedule
4. Undertaking that if the Indian agent is changed then it will be the responsibility of the manufacturer to provide the service directly
5. Undertaking that software upgrade will be provided free cost.
6. Installation, demonstration & training
7. Guarantee 2 years (minimum)
8. AMC proposal for 10 years (with & without spares separately)
9. The percentage or amount of Indian agency commission (viz. payable in Indian currency) must be mentioned in all offers of overseas supplier who are offering through their Indian agents. Please attach certificate’s photocopy being Indian agent.

TENDER NO: PGI/MM/RT/202/09-10

Name of Equipment: Pinpoint Chamber

Details of Equipment: Pinpoint chamber compatible with the existing BrainLab IMRS phantom and electrometer available in department.

Specification of the Equipment:

- Compatible with the existing BrianLab IMRS phantom
- Should be waterproof and volume less than 0.02 cc

- High spatial resolution and polarizing potential of minimum 250 Volts

TENDER NO: PGI/MM/ RT/203/09-10

Name of Equipment: Quality assurance phantom for IGRT

Details of Equipment: Quality assurance phantom for image guided radiotherapy to be used with the Varian Linac with OBI for kV-kV and CBCT matching.

Specification of the Equipment:

- Preferably acrylic phantom in cube of size < 15cm
- Light field and Laser alignment lines
- Built-in spirit level

Storage and handing container

TENDER NO: PGI/MM/ RT/204/09-10

Name of Equipment: Upgrade / Replacement of the Radiation Field Analyser

Details of Equipment: Upgrade / Replacement with buyback of the Radiation Field Analyser (RFA- 300) with supply of new water phantom with water reservoir and software for carrying out beam data measurements. The system should be compatible with the existing chamber and hardware available in the department. Latest release with technological innovative design have the following features.

Specification of the Equipment:

Hardware:

- Fully computerized phantom with scanning volume of at least 45 x 45 x 40 cm (LxWxH) with floating leveling frame or similar mechanism.
- Integrated with inbuilt servo controlled electrometer.
- Holder accessories for following chambers are required FC65, CC01, ROOPS parallel plate, PFD, EFD, sterotactic Detector, PTW 30001 & PTW Markus 23343 to be used in RFA.
- Water Reservoirs with automatic pump for bi-directional water transport to and from the water phantom.
- Holders for reference detector.
- Positional & Reproducibility accuracy within 1mm
- Magnetostrictive sensor for sensing position to the highest accuracy.
- Control Unit leakage <2 fA

Bias Voltage $\pm 100V$ to $\pm 500V$ in steps of 5 volt or less

Software:

- Advanced software for beam data acquisition
- Software for routine QA of machine and IMRT
- RTPS license for Eclipse and Oncentra treatment planning system

Interface and license for Detector Array, Absolute Dosimetry

TENDER NO: PGI/MM/ RT/205/09-10

Name of Equipment: Radiation Immobilization Accessories
Details of Equipment: Immobilization accessories and devices for various sites as mentioned below are required which needs to be used in the RTP CT Scanner and Linear Accelerator existing in the department. These need to be compatible with the Linear Accelerator and Med Tec accessories available in the department.

**01 Set
containing
the following
items**

a) Prodigy, CT version, 53cm width	2No.
b) Varian Exact, 1/8" thick, 53cm width	4No.
c) Type-S Head, Neck, Shoulder Cushion	2No.
d) Extended wing board with Arm-up "T" grip	2No.
e) Silverman supports; 6/set; clear	3Set.
f) Bolus; 30x30x0.5cm with skin	1No.
g) Bolus; 30x30x1.0cm with skin	7No.
h) Prone head holder	1No.
i) Prone shell with Vac-Lok cushion	1No.
j) Knee-Lok Low Cushion	1No.
k) Radio-opaque markers :1.0mm mark; 110/box	2No.
l) Radio-opaque markers: 2.0mm mark; 110/box	4No.
m) Thermoplastic pellets, 3 lbs	2Bag.
n) Type-S extension with carbon fiber frame	1No.
o) Prone Lock Cushion	2No.

TENDER NO: PGI/MM/Cardio/207/09-10

Portable Echocardiography System

A compact Laptop based portable echocardiography machine is required with the following technical features

- It should be suitable for Cardiac, Vascular, vascular access applications in adult & pediatric patients.
- The unit must have real time compound imaging for improved contrast resolution and eliminating ultrasound artifacts to achieve optimum image quality on vascular probe.
- System should have both online (Read) as well as offline(Write) zoom facility
- System must have frequency range from 1 – 14 MHz (± 1 MHz)
- Imaging modes of Real time 2D, Colour Doppler, Pulsed wave Doppler, Continuous wave Doppler, Power Doppler must be available on all cardiac transducers.
- System must have fast start up to scanning in less than 2minutes from off condition, for use in critical and emergency situation in CCU and Emergency with adequate battery back up..
- System should support transducer technologies like, phased array, convex, linear TEE etc.
- Cine memory on all modes.
- The unit must be compact, portable and lightweight.

Battery Type : Standard 9V Alkaline/Lithium

TENDER NO: PGI/MM/CVTS/211/09-10

Specification for Micro Saw for Paediatric Sternotomy

Power CONSOLE, 220 Volts

Electrically operated, Touch Screen controls, Graphic display of the settings of the unit. Capability to recognize the Hand-piece, Digital display of Speed, Preference control of Speed, Breaking & Screen Displays. Capability to accept two hand pieces simultaneously. Upgradeable,

CONNECTING CORD

- Thin Flexible & Flash Autoclavable.

MULTI FUNCTIONAL FOOT SWITCH

- Accelerator type.
- Waterproof.
- Controls for Forward/Reverse & Oscillation mode.
- Options to scroll from one handpiece to another handpiece.

MICRO SAW I

- Maximum Speed of 19000 rpm.
- Maintenance Free DC brushless Motor.
- Options for Hand Control & Foot Control.
- Toolless Autoclavable handpiece.
- Along with suitable blades

MICRO SAW II

- DC Brushless Motor.
- Speed 16000 rpm.
- Toolless blade mounts.
- Flash Autoclavable Handpiece.
- Along with suitable blades

TENDER NO: PGI/MM/ CVTS/212/09-10

Technical specification suction machine

WORKING VOLTAGE :220/240V AC, Single phase, 50 Hz.

TYPE OF VACUUM PUMP: Vane type – mono block

LUBRICATION:Continuous oil re-circulating type.

VACUUM:0 – 700 mm Hg. Max

CAPACITY:35 Litres / min.

VACUUM GAUGE:2 1/2“ Dial, 0 to 760 mm Hg. Vertically mounted

VACUUM CONTROL:Needle type vacuum regulator with dust collector. Adjustable from 0 to 660 mm Hg. Negative pressure.

BOTTLE CAPACITY:2 Nos. 3 litre bottle standard.

BOTTLE LID: Made out of moulded poly-propylene.

SAFETY DEVICE: A float valve is provided in the bottle to safe guard against inflow of liquid in the pump.

GENERAL: Confirms to IS norms for Suction Apparatus, & safety requirements.

Needed is IS 302. (Type 2.1.2) Is 4533.

TENDER NO: PGI/MM/ CCM/215/09-10

MRI Compatible Transport Monitor

Specifications:

1. Basic Configuration: ECG, SpO₂, NIBP, minimum 01 IBP
 - a. NIBP - with a set of reusable medium and small adult cuff, pediatric cuff and neonatal cuff
 - b. SpO₂ - with a set of reusable adult and pediatric probes
 - c. ECG-Leads I, II, III (selectable)
2. Dimensions (H x W x D) not more than 375 x 375 x 375 mm
3. Clear LCD-colour display readable even from 10 feet distance
4. Four channel selectable waveform display with other numeric display
5. Individually adjustable alarm limits
6. Integrated monitoring system suitable for the strength of the magnetic field 3.0 tesla
7. Fiber optic sensors
8. For monitoring of neonates, pediatric and adult patients
9. Interference-free images
10. Mains and Battery operation during the MRI examination
11. Battery operating time minimum 120 min.
12. Regulatory
 - a. Approved by FDA and CE – European Medical Device
 - b. No recall or alerts from FDA
13. Each unit must be supplied with two sets of operating manual, service manual and any circuit diagram
14. Guarantee, warranty, comprehensive maintenance and non-comprehensive maintenance clauses as per the Institute Norms

TENDER NO: PGI/MM/ CCM/217/09-10

Volumetric Infusion Pump

1. Power: AC with battery back-up for at least 04 hours for flow rate 75-100 ml/hr with battery indicator and remaining battery life indicator
2. Alarms and Pre-alarms with adjustable sound volume
 - a. Main's disconnection
 - b. Upstream and downstream line occlusion and disconnection
 - c. Pressure rise and pressure drop
 - d. Air inline
3. Infusion rate – Minimum range of 0.1 to 999 ml/hr with micro and macro modes with accuracy as high as +/- 5%
4. Bolus – With continuous volume display, anti-bolus at occlusion release
5. Display panel: Visibility from 4-5 meter distance, Drug/Fluid, infused volume, flow rate, inline pressure

6. Optional drop detector
7. Event log and time display for preventive maintenance is desirable
8. Changes in flow rate and bolus should be without stopping the pump
9. Preferably light weight (less than 3.5 kg)
10. Information technology enabled by RS 232
11. Programming: Display panel, occlusion pressure, drug information storage
12. Mounting: Mounting on both horizontal and vertical bars should be possible
13. Regulatory
 - a. Approved by FDA and CE – European Medical Device
 - b. No recall or alerts from FDA
14. Each unit must be supplied with two sets of operating manual, service manual and any circuit diagram
15. Guarantee, warranty, comprehensive maintenance and non-comprehensive maintenance clauses as per the Institute Norms

TENDER NO: PGI/MM/ CCM/218/09-10

Bi-level Positive Airway Pressure (Non-Invasive) Machine

1. Electrically operated microprocessor based operation
2. Pressure relief at the end of inhalation and at the beginning of exhalation
3. Auto adjustment of the cycle between inspiratory and expiratory pressures
4. Mask leak compensation
5. Mask off alarm
6. Ventilation modes:
 - a. CPAP
 - b. CPAP and Pressure Assisted/Support Ventilation
 - c. Pressure Controlled Ventilation
7. CPAP: 3 to 20 mbar
8. IPAP: 5 – 30 mbar
9. EPAP: 2 – 20 mbar
10. Frequency:
 - a. CPAP and Pressure Assisted/Support Ventilation: 6 - 40 /min
 - b. PCV : 6 - 60 /min
11. Maximum pressure limit 40 mbar (on patient)
12. Max inspiratory and expiratory resistance: 6 mbar at 60 L/min
13. Airway pressure measurement display
14. Oxygen Concentration: 21 to 100%
15. In-built Humidifier
16. Easy disinfection of all parts where in re-breathing takes place
17. Full face mask (large size 1, medium size 2, and small size 2)
18. Nasal face mask (large size 1, medium size 2, and small size 2)
19. Nasal pillow CPAP/BiPAP masks each with 03 pillows (large size 1, medium size 2, and small size 2)
20. Regulatory
 - a. Approved by FDA and CE – European Medical Device
 - b. No recall or alerts from FDA
21. Each unit must be supplied with two sets of operating manual, service manual and any circuit diagram
22. Guarantee, warranty, comprehensive maintenance and non-comprehensive maintenance clauses as per the Institute Norms

PGI/MM/Micro/219/09-10
ANOXOMATE MARK II CTS AN2CTS

MART ANOXOMAT SYSTEM
AN2CTS ANOXOMAT MARK II CTS
Operation by color touch screen
Including Vacuum pump, Connection for 1 Jar, Connection of 1 Jar,
Quality assurance consisting of:
Gas input test , Jar leak test, Seal leak test(5 levels),
Catalyst activity test (5 levels), On-screen failure indication
Accessories:

AN2GC-One additional gas connection (including software update)

AN2UPF User Programming function (User can program O2 level, Gas Mixture and evacuation level

PGI/MM/Micro/221/09-10

Liquid Nitrogen Container:

Static holding time days 19,
working time days 12,
Evaporation rate liter/days 2.5,
Liquid Nitrogen capacity liters 48,
Weight Empty lbs 42, kg 19.1,
Weight full lbs 125, kg 56.7
Neck diameter in 14, mm 356
Overall Height in 29.7, mm 754
Overall dimension in 15.4, mm 391
Usable height internal in 19.2, mm 391
Internal diameter in 14.0, mm 356
Capacity:
2 ml plastic vials 3024
Box size shape Triangle, size in 6.75x6.87, size mm 171x175, vials per box 56
Roller base

PGI/MM/Micro/224/09-10
PULSE FIELD GEL ELECTROPHORESIS SYSTEM

Specification

1. Protocol optimization through embedded auto algorithm
2. Interactive algorithm program disk
3. Cell for electrophoresis
4. Should have cooling module
5. Should have variable speed pump with tygon tubing
6. Casting stand of 14 cm x 13 cm
7. 15 well 1.5 mm thick comb and comb holder

Disposable plug molds

PGI/MM/Gsurg/225/09-10
LAPROSCOPY SURGICAL INSTRUMENTS

Instrument	Quantity	
Trocar 11mm	12	working length 10.5cm with multifunctional valve, pyramidal tip
Trocar 11mm	6	working length 10.5cm with multifunctional valve, conical tip

Trocar 06mm	12	working length 10.5cm with multifunctional valve, pyramidal tip
Trocar 15 mm	6	working length 12 cm with multifunctional valve, pyramidal tip
Trocar 15 mm	8	working length 15 cm, pyramidal tip, multifunctional valve
Trocar 06 mm	4	working length 15 cm, pyramidal tip, multifunctional valve
Trocar 06mm	6	working length 10.5cm with multifunctional valve, conical tip
Veress 10 cm	4	spring-mounted blunt inner cannula, Luer-lock, diameter 2.1 mm
Veress 15 cm	4	spring-mounted blunt inner cannula, Luer-lock, diameter 2.1 mm
Veress 13 cm	6	spring-mounted blunt inner cannula, Luer-lock, diameter 2.1 mm
Reduction Sleeve	6	15 mm to 5 mm
Reduction Sleeve	10	11mm to 5 mm
Sealing Cap 6mm	10	
Sealing Cap 10mm	10	
Dissecting and Grasping Forceps 5mm	4	size 5mm, 36 cm length, Reddick olsen, rotating, dismantling, insulated with connector pin for unipolar coagulation
	4	size 5mm, 36 cm length, alligator jaw, rotating, dismantling, insulated with connector pin for unipolar coagulation
	4	size 5mm, 36 cm length, Kelly, rotating, dismantling, insulated with connector pin for unipolar coagulation
	4	size 5mm, 36 cm length, Kelly, long jaw, rotating, dismantling, insulated with connector pin for unipolar coagulation
	4	size 5mm, 36 cm length, alligator jaw with Manhes ratchet, rotating, dismantling, insulated with connector pin for unipolar coagulation
	4	size 5mm, 36 cm length, atraumatic, rotating, dismantling, insulated with connector pin for unipolar coagulation
	2	size 5mm, 36 cm length, Reddick olsen Dolphin nose, rotating, dismantling, insulated with connector pin for unipolar coagulation
	4	size 5mm, 36 cm length, Fenestrated with fine atraumatic serration, rotating, dismantling, insulated with connector pin for unipolar coagulation
	4	size 5mm, 36 cm length, atraumatic with hollow jaws, rotating, dismantling, insulated with connector pin for unipolar coagulation
	4	size 5mm, 36 cm length, atraumatic with hollow jaws with Manhes ratchet, rotating, dismantling, insulated with connector pin for unipolar coagulation
	4	size 5mm, 36 cm length, Croce-Olmi, atraumatic, fenestrated and curved, rotating, dismantling, insulated with connector pin for unipolar coagulation
	4	size 5mm, 36 cm length, right angled, short and curved, rotating, dismantling, insulated with connector pin for unipolar coagulation

- 4 size 5mm, 36 cm length, Babcock ,long with Manhes ratchet, rotating, dismantling, insulated with connector pin for unipolar coagulation
 - 2 size 5mm, 36 cm length, Manhes forcep with multiple teeth, width of jaw 4.8 mm, rotating, dismantling, insulated with connector pin for unipolar coagulation
 - 2 size 5mm, 36 cm length, Manhes forcep with multiple teeth with tiger jaw, rotating, dismantling, insulated with connector pin for unipolar coagulation
 - 2 size 5mm, 36 cm length, Schneider forcep, atraumatic, rotating, dismantling, insulated with connector pin for unipolar coagulation
 - 2 size 5mm, 36 cm length, DeBakey forcep with Manhes ratchet, rotating, dismantling, insulated with connector pin for unipolar coagulation
 - 3 size 5mm, 36 cm length, Babcock, fenestrated, rotating, dismantling, insulated with connector pin for unipolar coagulation
 - 2 size 5mm, 36 cm length, Grasping forcep, atraumatic with double spoon , fenestrated, multiple teeth, rotating, dismantling, insulated with connector pin for unipolar coagulation
 - 2 size 5mm, 36 cm length, small atraumatic grasping forcep, fenestrated, rotating, dismantling, insulated with connector pin for unipolar coagulation
 - 2 size 5mm, 36 cm length, Babcock, fenestrated, atraumatic, rotating, dismantling, insulated with connector pin for unipolar coagulation
 - 2 size 5mm, 36 cm length, Bowel grasper, long , fenestrated, rotating, dismantling, insulated with connector pin for unipolar coagulation
 - 2 size 5mm, 36 cm length, Allis forcep, long, with Manhes ratchet, rotating, dismantling, insulated with connector pin for unipolar coagulation
 - 2 size 5mm, 43 cm length, Manhes forcep ,duck-bill jaw , blunt with Ratchet, jaw 15mm, rotating, dismantling, insulated with connector pin for unipolar coagulation
 - 4 size 5mm, 43 cm length, Swolin, atraumatic, blunt with Ratchet, jaw 15mm, rotating, dismantling, insulated with connector pin for unipolar coagulation
 - 2 size 5mm, 43 cm length, bowel forcep, fenestrated, short rotating, dismantling, insulated with connector pin for unipolar coagulation
 - 2 size 5mm, 43 cm length, Fanous grasping forcep with integrated scissor, rotating, dismantling, insulated with connector pin for unipolar coagulation
 - 2 size 5mm, 43 cm length, Right angled, rotating, dismantling, insulated with connector pin for unipolar coagulation
- dissecting and Grasping Forceps 10mm

	<ul style="list-style-type: none"> 4 size 5mm, 43 cm length,Manhes forcep ,duck-bill jaw , blunt with Ratchet, jaw 15mm, rotating, dismantling, insulated with connector pin for unipolar coagulation 2 size 5mm, 43 cm length,Maryland forceps, long jaw, rotating, dismantling, insulated with connector pin for unipolar coagulation 2 size 5mm, 43 cm length,Mouret dissecting forceps, atraumatic, fenestrsted, rotating, dismantling, insulated with connector pin for unipolar coagulation
Scissors 5mm	<ul style="list-style-type: none"> 4 size 5 mm, length 36 cm, rotating, Manhes scissor,dismantling, with connector pin for unipolar coagulation 2 size 5 mm, length 36 cm, rotating, Hook scissor,dismantling, with connector pin for unipolar coagulation 1 size 5 mm, length 36 cm, rotating, Manhes Micro scissor with long jaw, self-sharpening,dismantling, with connector pin for unipolar coagulation 2 size 5 mm, length 36 cm, Metzenbaum scissor with12mm long jaw, self-sharpening,rotating,dismantling, with connector pin for unipolar coagulation 2 size 5 mm, length 36 cm, Serrated curved scissor with 17mm long jaw, self-sharpening,rotating,dismantling, with connector pin for unipolar coagulation 2 size 5 mm, length 36 cm, Serrated curved, conical scissor with long jaw, self-sharpening,rotating,dismantling, with connector pin for unipolar coagulation 2 size 5 mm, length 43 cm, Metzenbaum scissor with 17mm long jaw, self-sharpening,rotating,dismantling, with connector pin for unipolar coagulation
Biopsy and punch forcep 5mm	<ul style="list-style-type: none"> 2 size 5 mm, length 36 cm, Manhes biopsy forcep, with rotating, dismantling,with connector pin for unipolar coagulation 2 size 5 mm, length 36 cm, Blakesley dissecting and biopsy forcep, with rotating, dismantling,with connector pin for unipolar coagulation
Irrigation and suction tube 5mm	<ul style="list-style-type: none"> 3 size 5mm, length 36 cm, suction and irrigation tube with lateral holes 3 size 5mm, length 36 cm, suction and irrigation tube with lateral holes with 2 way stopclock for single hand use 1 size 5mm, length 43 cm, suction and irrigation tube with lateral holes with 2 way stopclock for single hand use
Irrigation and suction tube 10mm	<ul style="list-style-type: none"> 2 size 10 mm, length 36 cm, suction and irrigation tube with lateral holes with 2 way stopclock for single hand use
Modular handle for I & S tube	<ul style="list-style-type: none"> 3 straigh handle with trumpet valve, autoclavable, for use with suction - coagualtion cannula of 5 amd 10mm tube

Coagulation and dissecting electrodes 5mm	3	size 5 mm, length 36 cm, coagulating and dissecting electrode L type
	3	size 5 mm, length 36 cm, Cadiere coagulating and dissecting electrode L type with cm marking
	3	size 5 mm, length 36 cm, coagulating and dissecting electrode U type
	2	size 5 mm, length 36 cm, Remorgida coagulating and dissecting electrode L type, can be distally angled upto 15 degrees
	2	size 5 mm, length 43cm, coagulating and dissecting electrode L type
Fascial closure instrument	4	Berci fascial closure, size 2.8mm, length 17 cm,
Knot tier 5mm	2	size 5 mm, length 33cm, Cuscheiri integral knt pushar and thread catcher
Needle holder 5mm	4	Koh macro needle holder with tunguston carbide insert, striagth handle with disengagable ratchet, straight jaw, size 5 mm, lenht 33cm, for use of 0/0 to 7/ sutures
	2	Koh macro needle holder with tunguston carbide insert, striagth handle with disengagable ratchet, straight jaw, size 5 mm, lenht 43 cm, for use of 0/0 to 7/ sutures
Retractors 5mm	3	Size 5mm, length 36 cm, Fan retractor, dismantling, distendable
Retractors 10mm	3	Cuschieri retractor, size 5 mm, length 36cm
	2	size 12 mm, length 36 cm, Deflecting Fan retractor
	2	Cuschieri retractor, size 10 mm, length 36cm, large contact surface
Clip applicator 10mm	3	Insert for Ethicon clips, medium large for use with other handles
	3	Clip applicator, dismantaling and rotating with ratchet to lock the jaw, for medium large clip
	3	Clip applicator, dismantaling and rotating with ratchet to lock the jaw, for medium clip

PGI/MM/Gsurg/228/09-10

LAPROSCOPIC EQUIPMENTS:

High Definition Laparoscopic System

Specifications for Full High Definition Digital Camera

Qty-2

The system should have following features:

- It should have Pure digital signal with high definition video of 1920 x 1080p (min) native resolution and progressive scan technology both on camera head and console
- It should be compatible with Aspect ratio of 4:3 and 16:9

- The system should have Digital Zoom to enhance the quality of Image size & cross specialty standardization of the camera system, regardless of the telescope used.
- Digital zoom, white balance control and two peripheral controls on camera Head
- Integrated Gain/Shutter/Enhancement with automatic brightness control
- Video Outputs: two DVI, one SVHS, direct fiber optic output
- The system should automatically optimize all settings and be ready- to- use as soon as it is connected to the camera control unit.
- Should be touch screen Menu driven.
- The system should have multiple surgical specialty settings.

Technical Specifications:

Image System:	1/3" Progressive Scan CCD, PAL
Pixels	1920 X 1080 pixels per chip (min)
Camera Head Weight	< 100 gms.
AGC:	Microprocessor controlled
Signal-to-noise ratio	65-75 dB
Video output:	S-video signal
	Digital Video Interface
Power Supply	100-240 VAC, 50/60HZ

High Resolution Monitor (HD)

Qty-2

The system should have:

- Hi Definition Colored Monitor 26" Flat Panel Monitor
- PAL system compatible.
- Composite, S-Video and DVI inputs.
- Compact & Lightweight design.
- Resolution more than 1100 lines

LED Light Source

Qty-1

The system should have:

Electrical specification

- Primary: 100 - 240 VAC, 50/60 Hz, 400 W
- Fuses (2): 5.0A 250V

Light Engine

- Type: Red, Green, Blue LEDs (for light emission)
- Light outlets: 1
- Light intensity adjustment: continuously adjustable from 0 to 100% manually
- It should have Standby mode which will reduce light output to a minimum, preventing the light cable from generating excessive heat
- It should have Electronic Scope Sensing Technology (ESST), a special safety feature that helps prevent accidental burns caused by a light cable that is not connected to the scope.
- Intuitive simple user Interface with LCD touch screen
- Universal Jaw Assembly to adapt any make of Fiber Optic Cable

- **Light source should have a life of atleast 3000 hours, and if it is non-LED source (Xenon 300W), cost of six bulbs should be quoted alongwith the bulb life.**

Specifications for High Definition Recording System

Qty-1

- Real time, MPEG 2 HD, 1or 2 compression engine with full IBP encoding
- Video inputs minimum 2 nos. S-Video, 2 nos. Composite, 1 XGA (1024 X 768) and 1 High-Definition (1280 X 1024).
- Video outputs S-Video, Composite, DVI & XGA (1024 X 768, 1280 X 1024, and 1600 X 1200)
- Capable of Progressive scan image capture: Analog (640 x 480), Hi-Res (1024 X 768), and Hi-Def (1280 X 1024)
- Stereo audio Input
- Disc Capacity of 250 GB
- Touch screen (min 10”) control panel interface
- Multi session disc recording capability
- Supports file formats for Images: Bitmap (BMP), JPEG, JPEG2K, Tagged Image File Format (TIFF) Videos: MPEG-1, MPEG-2, and MPEG-4
- CD-R, DVD-R, DVD+R (single session), DVD+RW Disc Recording Formats

Specifications for 45ltr Insufflator

Qty-1

- 45 liter of high flow & having LCD Display
- Microprocessor controlled & Software driven for real time pressure measurement.
- Soft approach pressure control for safe recovery of abdominal pressure
- Should have four mode & visual and audible alarms with min 0.1 L flow rate
- Internal leakage detection capability
- Integrated Gas heating
- Having internal venting system for safety
- Should have video on screen display
- Unit should include heated tubing, hose & yoke
- Unit should have inbuilt setting for pediatric/neonatal mode.

Laparoscopes: 10mm & 5mm

**Qty-10mm 0° 01
10mm 30° 02
05mm 30° 01**

- Should be high definition scopes.
- Should be Fully Autoclavable
- Should be in both 0 and 30 degree
- Should be Wide Angled distortion free view
- Must be equipped with Universal Adaptor for other Light Sources
- Should have Yellow Sapphire Glass Tip Index

Fiber Optic Cable

Qty-2

- Should be at least 4mm diameter and it should be compatible to transmit the best picture quality from HD camera system.
- It should have the technology to ensures that the light source goes to standby mode when it is detached from the scope

ITEMS TENDERED FIRST TIME

PGI/MM/GASTERO/229/09-10

High End C-Arm System

We require high frequency C-arm Image Intensifier system. The unit should have the following essential features.

1. Generator and X-ray tube

A) Generator should be microprocessor controlled with the following modes

- i) Continuous fluoroscopy
- ii) Digital pulsed fluoroscopy
- iii) Digital Radiography mode

The range of KV should be 40-110 KV for each mode.

Give details of

- a) mA for each mode
- b) pulse width
- c) pulse rate

B) X-ray tube should have a

- i) Focal spot of nominal value suitable for fluoroscopy and radiography.
- ii) Nominal X-ray tube voltage 110 KV
- iii) Inherent filtration. Give detail.
- iv) Automatic dose control

C) Collimator Unit

- i) Iris diaphragm for radiation free collimation
- ii) Shutters / diaphragm for symmetric radiation free collimation and 360° rotation.
- iii) Indication for LIH.

2. C-arm

Fully counterbalanced isocentric C-arm movement with integrated cables and electromagnetic brakes.

Give details of –

- (i) Angulation and orbital movement
- (ii) Horizontal movement
- (iii) Longitudinal movement
- (iv) Swivel range
- (v) Source to II distance
- (vi) Depth of immersion
- (vii) Extension for 3D mode.

3. A Image intensifier and X-ray TV system.

- i) Image intensifier should be at least 9" with zoom facility.
- ii) Input screen should be cesium iodide for excellent resolution and minimum noise.
- iii) Electron optics should allow consistent high resolution across the entire image field. Give details.
- iv) Grid : Give details

B. The X-ray TV System

It should be maintenance free with CCD technology.

- i) TV matrix at least 1K X 1K
- ii) Digital image rotation + 360°

4. Image Display

- i) 2 Nos. LCD monitors at least 15" in size.
- ii) Image matrix at least 1024 x 1024

5. Image acquisition storage and processing

Must be a fully digital continuous imaging chain for acquisition, processing, storage, archiving and documentation.

- (i) Alphanumeric keyboard for entering patient data and for image annotation etc.
- (ii) Disk storage of minimum of 10,000 2D images in at least 1K X 1K matrix
- (iv) Split screen. Give details
- (v) Last image hold
- (vi) Interactive zoom, image rotation, roam etc.
- (vii) Image reversal, remask, invert etc.
- (viii) Annotation, measurement of angles and distances.

7. Image Documentation

- (i) Should be possible to archive images on CD R/W format.
- (ii) Print images on paper / film

System should have AERB, BARC and CE certified.

Digital output needed

Diacom compatibility preferable.

Live recording (REAL TIME) of fluoro output.

Live fluoro output of atleast 7.5 frames /sec for continuous recording of fluoro output.

PGI/MM/HAEMO/230/09-10

Automated Blood Cell Separator-Apheresis Machine

1. A fully automated and microprocessor controlled therapeutic apheresis system for aseptic harvesting of stem cells/mononuclear cells and /or granulocytes from bone marrow and mobilized peripheral blood.
2. The continuous flow system with centrifugation and optical detection technology for therapeutic apheresis procedure.
3. The mononuclear apheresis product should have CD34+ cell collection efficiency of >60% with low granulocyte and platelet contamination.
4. FDA or equivalent certification of the system for stem cell apheresis/bone marrow processing for clinical application.
5. Built-in color graphic, LCD touch screen for display of all vital parameters of the procedure of the system.
6. Build-in safety measures like access of pressure sensors, air-bubble detectors fluid replacement detector, Detectors for fluid leakage and anticoagulant detectors.
7. Automatic setting of run parameters and donor blood volume to be processed according to the patient data and harvesting procedure.
8. Automatic loading, priming and self testing before actual apheresis procedure.
9. Real-time online display of interface position to monitor optimal collection of product.

10. Extra-corporeal volume should not be more than 200ml and the rate of blood flow should be compatible for pediatric as well as adult patients.
11. System should be upgradeable for future therapeutic apheresis/ cell therapy protocols.
12. Built-in storage facility for data of at least 100 procedures and connectivity of the system to printer for data interface.
13. Power supply: 220-240VAC/ 50 Hz fitted with appropriate Indian plugs and sockets.
14. Documents: User Manual, Service Manual and List of important spares & accessories with their part number and pricing.

PGI/MM/Cardio/231/09-10

Specification of Radio frequency Ablator

1. RF Ablator power should be in the range of 70W -100W
2. Operation modes: Power control for irrigation mode and temperature control mode
3. System capability to register tip electrocardiogram during ablation
4. Capability of the system to handle both thermistor and thermocouple sensing devices
5. Storage of at least 3 present RF delivery parameters in co-relation to the type of arrhythmia i.e. customization of parameters of power, temp, voltage etc to each arrhythmia type
6. should have dual sensor ablation catheter adaptability
7. Direct electronic interface with saline irrigation pump is preferred to restrict RF delivery if air bubble detected in saline line
8. Display of ablation delivery timer up to a minimum of 350 sec with 1 sec steps
9. display of temperature measured at tip tissue interface up to a minimum of 80 degree centigrade with 1 degree c steps
10. display of bio impedance.

PGI/MM/Endosurg/232/09-10

INSULIN PUMP

1. Small, Compact and Comfortable.
2. Battery Operated.
3. Basal Insulin Delivery Rate : Biopulse Insulin Delivery.
4. Minimum Basal Increment (0.05 units).
5. 5 Basal Profiles.
6. Temporary Basal Rate (During Sickness and Emergency) :
15 mins. to 24 hours.
7. Bolus Delivery: Dose dependent.
8. Minimum Bolus Increment: 0.1 U.

9. Variable Bolus Options (e.g. Discreet Bolus, Standard Bolus, Extended Bolus, Multiwave Bolus for different meal coverage).
10. Bolus Calculator for bolus dose based on carbohydrate counting for all Indian foods provided in hard copy.
11. Water proof and not water resistant.
12. Reservoir size: 315 IU.
13. Different types of Infusion sets to match different skin types of patients.
14. Computer compatibility for downloading Insulin pump information.
15. Audible and Vibrating Bolus alert.
16. Low reservoir, low battery, no insulin delivery alert.
17. Safety checks: 9 million.
18. 6 Years of International Warranty (possibility of complete replacement).
19. 3 User Menus: Standard Menu, Advanced Menu, Customized Menu.
20. Real-time basal rate display.
21. Reversible display & Back light display.
22. Automatic Prime.
23. Languages: 12 languages.
24. Key lock function.
25. Occlusion detection.

PGI/MM/GH/233/09-10
SPECIFICATION FOR COLPOSCOPE

1. Magnification / zoom 1-40 X
2. Resolution: > 800 lines
3. Pixels > 11,00,000
4. Green filter – Yes
5. Focus – Automatic / manual
6. Focus distance – 30 -40 cm
7. Illumination – high MCD, super bright, shadow less LED light
8. Gamma Processor – Yes
9. Original software for automatic screening and reporting
10. Image management software

Accessories :

1. Endocervical speculum
2. LEEP / LLETZ wire loop
3. Cryoprobe
4. Insulated speculum – 2
5. T V Screen comuter with printer