SANJAY GANDHI POST GRADUATE INSTITUTE OF MEDICAL SCIENCES,
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Notice Inviting Tender

Sealed offers are invited from manufacturer/Direct Importers/Authorized Distributors/Authorized Agents for the Supply of medical equipments instruments & supportive items like Gynecology Examination Table & Light, Maternal & Fetal Monitor, 2D & 4D Ultrasound, Surgical Instruments, Pediatric Thermal Blanket & Mattress, Pediatric Operating Table etc. under PMSSY. The offers may be submitted based on FOB & CIF(in case of import) and FOR,SGPGIMS, Lucknow (in case of indigenous) Detailed information & specification may be downloaded from our website www.sgpgi.ac.in.

Advt. No. 57 /2009-10

Notice Inviting Tender-Adv. No. 57/2009-10

Sealed offers are invited from reputed manufacturers/Direct Importers/Authorized Distributors/Authorized Agents for supply of the following Equipments as per the conditions stipulated in the tender documents :

Sl.No	Tender No.	Name of items	EMD Rs.	Last Date of submission of Tender	Date of Opening of Tender
1.	PGI/MM/PMSSY/09-10/N.B/01	Gynecology Examination Table	1500.00	16-11-09 at 04.00 p.m.	18-11-09 at 11.00AM
2.	PGI/MM/PMSSY/09-10/N.B/12	Examination Light	4000.00	16-11-09 at 04.00 p.m.	18-11-09 at 11.00AM
3.	PGI/MM/PMSSY/09-10/N.B.-13	Obstetrics Delivery Table	2500.00	16-11-09 at 04.00 p.m.	18-11-09 at 11.00AM
4.	PGI/MM/PMSSY/09-10/N.B.-14	Delivery Bed	4000.00	16-11-09 at 04.00 p.m.	18-11-09 at 11.00AM
5.	PGI/MM/PMSSY/09-10/N.B.-15	Mobile Halogen Light	1500.00	16-11-09 at 04.00 p.m.	18-11-09 at 11.00AM
6.	PGI/MM/PMSSY/09-10/N.B.-16	Cardiotocography Machine	1000.00	16-11-09 at 04.00 p.m.	18-11-09 at 11.00AM
7.	PGI/MM/PMSSY/09-10/N.B.-17	Maternal & Fetal Monitor	1500.00	16-11-09 at 04.00 p.m.	18-11-09 at 11.00AM
8.	PGI/MM/PMSSY/09-10/N.B.-18	Portable Fetal Doppler	1000.00	16-11-09 at 04.00 p.m.	18-11-09 at 11.00AM
9.	PGI/MM/PMSSY/09-10/N.B.-19	Equipments of IVF	65000.00	16-11-09 at 04.00 p.m.	18-11-09 at 11.00AM
10.	PGI/MM/PMSSY/09-10/N.B.-20	4 D Ultrasound	20000.00	16-11-09 at 04.00 p.m.	18-11-09 at 11.00AM
11.	PGI/MM/PMSSY/09-10/N.B.-21	2 D Ultrasound	7500.00	16-11-09 at 04.00 p.m.	18-11-09 at 11.00AM
12.	PGI/MM/PMSSY/09-10/N.B.-22	Compound Analyzer	18000.00	16-11-09 at 04.00 p.m.	18-11-09 at 11.00AM
13.	PGI/MM/PMSSY/09-10/N.B.-23	Flexible Fetoscopy	7500.00	16-11-09 at 04.00 p.m.	18-11-09 at 11.00AM
14.	PGI/MM/PMSSY/09-10/N.B.-24	Surgical Instruments(For Maternal & Reproductive Health)	20,000.00	16-11-09 at 04.00 p.m.	18-11-09 at 11.00AM
15.	PGI/MM/PMSSY/09-10/N.B.-25	Baby Weighing Machine(Electronic)	1000.00	16-11-09 at 04.00 p.m.	18-11-09 at 11.00AM
16.	PGI/MM/PMSSY/09-10/N.B.-26	Surgical Instruments(For Paediatric Surgery-Superspecialties)	25,000.00	16-11-09 at 04.00 p.m.	18-11-09 at 11.00AM
17.	PGI/MM/PMSSY/09-10/N.B.-28	Paediatric Thermal Blanket(Patient Warming System)	2000.00	16-11-09 at 04.00 p.m.	18-11-09 at 11.00AM
18.	PGI/MM/PMSSY/09-10/N.B.-29	Paediatric Thermal Mattress	1000.00	16-11-09 at 04.00 p.m.	18-11-09 at 11.00AM
19.	PGI/MM/PMSSY/09-10/N.B.-30	Neonatal Intensive Care Incubator	2500.00	16-11-09 at 04.00 p.m.	18-11-09 at 11.00AM
20.	PGI/MM/PMSSY/09-10/N.B.-31	Neonatal Transport Incubator	2500.00	16-11-09 at 04.00 p.m.	20-11-09 AT 11.00AM
21.	PGI/MM/PMSSY/09-10/N.B.-32	Mobile Neonatal Radiant Heater on a stand	1500.00	16-11-09 at 04.00 p.m.	20-11-09 AT 11.00AM
22.	PGI/MM/PMSSY/09-10/N.B.-33	Paediatric Operating Table	2500.00	16-11-09 at 04.00 p.m.	20-11-09 AT 11.00AM
23.	PGI/MM/PMSSY/09-10/N.B.-34	Portable Procedure Light	1000.00	16-11-09 at 04.00 p.m.	20-11-09 AT 11.00AM
24.	PGI/MM/PMSSY/09-10/N.B.-35	Portable Electrical Slow Suction Machine	1000.00	16-11-09 at 04.00 p.m.	20-11-09 AT 11.00AM
25.	PGI/MM/PMSSY/09-10/N.B.-36	Paediatric Laproscopy Set	17500.00	16-11-09 at 04.00 p.m.	20-11-09 AT 11.00AM
26.	PGI/MM/PMSSY/09-10/N.B.-37	Paediatric Cystoscope & Resectoscope	5000.00	16-11-09 at 04.00 p.m.	20-11-09 AT 11.00AM

27.	PGI/MM/PMSSY/09-10/N.B.-38	Paediatric Bronchoscope	3500.00	16-11-09 at 04.00 p.m.	20-11-09 AT 11.00AM
28.	PGI/MM/PMSSY/09-10/N.B.-39	Urodynamic Study Equipment	12500.00	16-11-09 at 04.00 p.m.	20-11-09 AT 11.00AM
29.	PGI/MM/PMSSY/09-10/N.B.-40	Ultrasonic Cutting & Coagulating Device for open and laproscopic surgery	12500.00	16-11-09 at 04.00 p.m.	20-11-09 AT 11.00AM
30.	PGI/MM/PMSSY/09-10/N.B.-41	Instrument Washer & Disinfector	4000.00	16-11-09 at 04.00 p.m.	20-11-09 AT 11.00AM
31.	PGI/MM/PMSSY/09-10/N.B.-42	Bilirubinometer	2000.00	16-11-09 at 04.00 p.m.	20-11-09 AT 11.00AM
32.	PGI/MM/PMSSY/09-10/N.B.-43	Paediatric Resuscitation	1000.00	16-11-09 at 04.00 p.m.	20-11-09 AT 11.00AM
33.	PGI/MM/PMSSY/09-10/N.B.-44	Oxygen Hood	1000.00	16-11-09 at 04.00 p.m.	20-11-09 AT 11.00AM
34.	PGI/MM/PMSSY/09-10/N.B.-45	Portable ECG Mchine	1000.00	16-11-09 at 04.00 p.m.	20-11-09 AT 11.00AM
35.	PGI/MM/PMSSY/09-10/N.B.-46	Infant Transport Trolley	1000.00	16-11-09 at 04.00 p.m.	20-11-09 AT 11.00AM
36.	PGI/MM/PMSSY/09-10/N.B.-47	Table Top Autoclave for O.T.	2500.00	16-11-09 at 04.00 p.m.	20-11-09 AT 11.00AM
37.	PGI/MM/PMSSY/09-10/N.B.-48	Fluid Incubator for Warming Fluid in O.T.	1500.00	16-11-09 at 04.00 p.m.	20-11-09 AT 11.00AM
38.	PGI/MM/PMSSY/09-10/N.B.-49	Phototherapy Unit	1000.00	16-11-09 at 04.00 p.m.	20-11-09 AT 11.00AM
39.	PGI/MM/PMSSY/09-10/N.B.-50	Ultrasound Machine for Intra operative Ultrasound	12500.00	16-11-09 at 04.00 p.m.	20-11-09 AT 11.00AM
40.	PGI/MM/PMSSY/09-10/N.B.-51	Choledoscope	3500.00	16-11-09 at 04.00 p.m.	21-11-09 AT 11.00 AM
41.	PGI/MM/PMSSY/09-10/N.B.-52	Air Mattress for Bedsore Prevention	1000.00	16-11-09 at 04.00 p.m.	21-11-09 AT 11.00 AM
42.	PGI/MM/PMSSY/09-10/N.B.-53	Operating Head Light	1500.00	16-11-09 at 04.00 p.m.	21-11-09 AT 11.00 AM
43.	PGI/MM/PMSSY/09-10/N.B.-54	Volumetric Infusion Pump	20,000.00	16-11-09 at 04.00 p.m.	21-11-09 AT 11.00 AM
44.	PGI/MM/PMSSY/09-10/N.B.-55	Sleep Laboratory	7500.00	16-11-09 at 04.00 p.m.	21-11-09 AT 11.00 AM
45.	PGI/MM/PMSSY/09-10/N.B.-56	Spirometry system	3000.00	16-11-09 at 04.00 p.m.	21-11-09 AT 11.00 AM
46.	PGI/MM/PMSSY/09-10/N.B.-57	Body Plethysmograph system and Pulmonary Diffusion system	17500.00	16-11-09 at 04.00 p.m.	21-11-09 AT 11.00 AM
47.	PGI/MM/PMSSY/09-10/N.B.-58	Thoracoscopy System	7500.00	16-11-09 at 04.00 p.m.	21-11-09 AT 11.00 AM
48.	PGI/MM/PMSSY/09-10/N.B.-59	Nerve Stimulator	4000.00	16-11-09 at 04.00 p.m.	21-11-09 AT 11.00 AM
49.	PGI/MM/PMSSY/09-10/N.B.-60	Surgical Operating Microscope	15000.00	16-11-09 at 04.00 p.m.	21-11-09 AT 11.00 AM
50.	PGI/MM/PMSSY/09-10/N.B.-61	Hand Held Vascular Doppler	1500.00	16-11-09 at 04.00 p.m.	23-11-09 AT 11.00AM
51.	PGI/MM/PMSSY/09-10/N.B.-62	Basic Plastic Surgery Set	5000.00	16-11-09 at 04.00 p.m.	23-11-09 AT 11.00AM
52.	PGI/MM/PMSSY/09-10/N.B.-63	Micro Vascular Set	4500.00	16-11-09 at 04.00 p.m.	23-11-09 AT 11.00AM
53.	PGI/MM/PMSSY/09-10/N.B.-64	Tourniquet Set	2500.00	16-11-09 at 04.00 p.m.	23-11-09 AT 11.00AM
54.	PGI/MM/PMSSY/09-10/N.B.-65	Magnifying Loupe	2500.00	16-11-09 at 04.00 p.m.	23-11-09 AT 11.00AM
55.	PGI/MM/PMSSY/09-10/N.B.-66	Power Assisted Liposuction Set	6000.00	16-11-09 at 04.00 p.m.	23-11-09 AT 11.00AM
56.	PGI/MM/PMSSY/09-10/N.B.-67	Dressing Set for Ward	1000.00	16-11-09 at 04.00 p.m.	23-11-09 AT 11.00AM
57.	PGI/MM/PMSSY/09-10/N.B.-68	Power Drill For Maxillofacial And Small Bone Surgery	5000.00	16-11-09 at 04.00 p.m.	23-11-09 AT 11.00AM
58.	PGI/MM/PMSSY/09-10/N.B.-69	Titanium Osteosynthesis Plating System	7500.00	16-11-09 at 04.00 p.m.	23-11-09 AT 11.00AM
59.	PGI/MM/PMSSY/09-10/N.B.-70	Dermabrader Set	2500.00	16-11-09 at 04.00 p.m.	23-11-09 AT 11.00AM
60.	PGI/MM/PMSSY/09-10/N.B.-71	Electric Dermatome	2000.00	16-11-09 at 04.00 p.m.	23-11-09 AT 11.00AM
61.	PGI/MM/PMSSY/09-10/N.B.-72	Skin Graft Mesher	3000.00	16-11-09 at 04.00 p.m.	23-11-09 AT 11.00AM
62.	PGI/MM/PMSSY/09-10/N.B.-73	Wash Trolley/Burn Shower Trolly	1500.00	16-11-09 at 04.00 p.m.	23-11-09 AT 11.00AM
63.	PGI/MM/PMSSY/09-10/N.B.-74	Basic Plastic Surgery Set/Basic Instrument Set	5000.00	16-11-09 at 04.00 p.m.	23-11-09 AT 11.00AM
64.	PGI/MM/PMSSY/09-10/N.B.-75	Hand Held Dermatome	2000.00	16-11-09 at 04.00	23-11-09 AT

				p.m.	11.00AM
65.	PGI/MM/PMSSY/09-10/N.B.-76	Watson Skin Grafting Knife/ Handle	2000.00	16-11-09 at 04.00 p.m.	23-11-09 AT 11.00AM
66.	PGI/MM/PMSSY/09-10/C.-1/77	Nano- Spectrophotometer	1800.00	16-11-09 at 04.00 p.m.	23-11-09 AT 11.00AM
67.	PGI/MM/PMSSY/09-10/C-1/47	Temporary Pacing Box	3500.00	16-11-09 at 04.00 p.m.	23-11-09 AT 11.00AM
68.	PGI/MM/PMSSY/09-10/C-2/05	Steam Sterilizer	6500.00	16-11-09 at 04.00 p.m.	23-11-09 AT 11.00AM
69.	PGI/MM/PMSSY/09-10/C-1/37	Sterilization & Storage Container	5500.00	16-11-09 at 04.00 p.m.	23-11-09 AT 11.00AM
70.	PGI/MM/PMSSY/09-10/C-2/08	Electrocautery+ Argon Plasma coagulator	6000.00	16-11-09 at 04.00 p.m.	25-11-09 AT 11.00AM
71.	PGI/MM/PMSSY/09-10/C-2/09	Automatic Endoscopy washer / Endoscope Disinfection System	150000.00	16-11-09 at 04.00 p.m.	25-11-09 AT 11.00AM
72.	PGI/MM/PMSSY/09-10/C-1/125	Laser Resectoscope Set	2000.00	16-11-09 at 04.00 p.m.	25-11-09 AT 11.00AM
73.	PGI/MM/PMSSY/09-10/C-1/120	Table Top Sterilizer	3000.00	16-11-09 at 04.00 p.m.	25-11-09 AT 11.00AM
74.	PGI/MM/PMSSY/09-10/C-1/112	Table top High Speed Refrigerated Micro Centrifuge	2000.00	16-11-09 at 04.00 p.m.	25-11-09 AT 11.00AM
75.	PGI/MM/PMSSY/09-10/C-2/17	MR Compatible Stereotactic Frame	12500.00	16-11-09 at 04.00 p.m.	25-11-09 AT 11.00AM
76.	PGI/MM/PMSSY/09-10/C-1/45	Walk In Cold Room	2500.00	16-11-09 at 04.00 p.m.	25-11-09 AT 11.00AM
77.	PGI/MM/PMSSY/09-10/C-2/ 11	Clinical Scale Magnetic cell Sorter for Isolation of CD -34+Stem Cell	10000.00	16-11-09 at 04.00 p.m.	25-11-09 AT 11.00AM
78.	PGI/MM/PMSSY/09-10/C-1/121	Flexible Ureteroscope	3000.00	16-11-09 at 04.00 p.m.	25-11-09 AT 11.00AM
79.	PGI/MM/PMSSY/09-10/C-2/20	Automated Immunostainer	12500.00	16-11-09 at 04.00 p.m.	25-11-09 AT 11.00AM
80.	PGI/MM/PMSSY/09-10/C-1/130	Flexible Cystoscope	1800.00	16-11-09 at 04.00 p.m.	25-11-09 AT 11.00AM
81.	PGI/MM/PMSSY/09-10/C-1/36	Water Purification System	2500.00	16-11-09 at 04.00 p.m.	25-11-09 AT 11.00AM
82.	PGI/MM/PMSSY/09-10/N.B/77	Spectrophotometer	2500.00	16-11-09 at 04.00 p.m.	25-11-09 AT 11.00AM
83.	PGI/MM/PMSSY/09-10/N.B/78	Microfuge Centrifuges	1800.00	16-11-09 at 04.00 p.m.	25-11-09 AT 11.00AM
84.	PGI/MM/PMSSY/09-10/N.B/79	Table Top Centrifuges	2500.00	16-11-09 at 04.00 p.m.	25-11-09 AT 11.00AM
85.	PGI/MM/PMSSY/09-10/N.B/80	Speed Vac Centrifuges	1250.00	16-11-09 at 04.00 p.m.	25-11-09 AT 11.00AM
86.	PGI/MM/PMSSY/09-10/N.B/81	Low Speed High Capacity Centrifuges	2500.00	16-11-09 at 04.00 p.m.	25-11-09 AT 11.00AM
87.	PGI/MM/PMSSY/09-10/N.B/82	Monopan Balance	1000.00	16-11-09 at 04.00 p.m.	25-11-09 AT 11.00AM
88.	PGI/MM/PMSSY/09-10/N.B/83	Refrigerator (300ltrs)	1000.00	16-11-09 at 04.00 p.m.	25-11-09 AT 11.00AM
89.	PGI/MM/PMSSY/09-10/N.B/84	Deep Freezer	2500.00	16-11-09 at 04.00 p.m.	25-11-09 AT 11.00AM
90.	PGI/MM/PMSSY/09-10/N.B/85	Hybridization Oven	1000.00	16-11-09 at 04.00 p.m.	27-11-09 AT 11.00AM
91	PGI/MM/PMSSY/09-10/N.B/86	Thermo Cycler	2500.00	16-11-09 at 04.00 p.m.	27-11-09 AT 11.00AM
92.	PGI/MM/PMSSY/09-10/N.B/87	Gel Documentation System	2500.00	16-11-09 at 04.00 p.m.	27-11-09 AT 11.00AM
93.	PGI/MM/PMSSY/09-10/N.B/88	Microwave oven	1000.00	16-11-09 at 04.00 p.m.	27-11-09 AT 11.00AM
94.	PGI/MM/PMSSY/09-10/N.B/89	pH meter	1000.00	16-11-09 at 04.00 p.m.	27-11-09 AT 11.00AM
95.	PGI/MM/PMSSY/09-10/N.B/90	Vortex mixture	1000.00	16-11-09 at 04.00 p.m.	27-11-09 AT 11.00AM
96.	PGI/MM/PMSSY/09-10/N.B/91	Homogenizer	1000.00	16-11-09 at 04.00 p.m.	27-11-09 AT 11.00AM
97.	PGI/MM/PMSSY/09-10/N.B/92	Sonicator	1250.00	16-11-09 at 04.00 p.m.	27-11-09 AT 11.00AM
98.	PGI/MM/PMSSY/09-10/N.B/93	Microarray technology system	50000.00	16-11-09 at 04.00 p.m.	27-11-09 AT 11.00AM
99.	PGI/MM/PMSSY/09-10/N.B/94	Co2 Incubator	2500.00	16-11-09 at 04.00 p.m.	27-11-09 AT 11.00AM
100.	PGI/MM/PMSSY/09-10/N.B/95	HPLC (High Protein Lipid Chromotography)	3000.00	16-11-09 at 04.00 p.m.	27-11-09 AT 11.00AM
101.	PGI/MM/PMSSY/09-10/N.B/96	Electrophoresis System	1500.00	16-11-09 at 04.00 p.m.	27-11-09 AT 11.00AM

102.	PGI/MM/PMSSY/09-10/C-1/114	Biological Safety Cabinet	2500.00	16-11-09 at 04.00 p.m.	27-11-09 AT 11.00AM
103.	PGI/MM/PMSSY/09-10/C-1/40	Heavy duty cooking range	1000.00	16-11-09 at 04.00 p.m.	27-11-09 AT 11.00AM
104.	PGI/MM/PMSSY/09-10/C-1/41	Internal air circulation system	1000.00	16-11-09 at 04.00 p.m.	27-11-09 AT 11.00AM
105.	PGI/MM/PMSSY/09-10/C-1/42	Heavy duty mobile storage drum(Assorted)	1000.00	16-11-09 at 04.00 p.m.	27-11-09 AT 11.00AM
106.	PGI/MM/PMSSY/09-10/C-1/43	Exhaust hood	1000.00	16-11-09 at 04.00 p.m.	27-11-09 AT 11.00AM
107.	PGI/MM/PMSSY/09-10/C-1/44	Miscellaneous Kitchen equipment	1000.00	16-11-09 at 04.00 p.m.	27-11-09 AT 11.00AM
108.	PGI/MM/PMSSY/09-10/C-1/56	Alignment software for sequencer	20000.00	16-11-09 at 04.00 p.m.	27-11-09 AT 11.00AM
109.	PGI/MM/PMSSY/09-10/C-1/136	Data mining tools and server	3000.00	16-11-09 at 04.00 p.m.	28-11-09 AT 11.00AM
110.	PGI/MM/PMSSY/09-10/C-1/137	Data Acquisition system (a) Intelligent Character Recognition system (b) Document scanner with ADF	5000.00	16-11-09 at 04.00 p.m.	28-11-09 AT 11.00AM
111.	PGI/MM/PMSSY/09-10/N.B/97	Sequential Compression Device for Lymphedema	2500.00	16-11-09 at 04.00 p.m.	28-11-09 AT 11.00AM
112.	PGI/MM/PMSSY/09-10/C-3/05	Cytometer/Bench Top 4 color analytical Flow Cytometer	50000.00	16-11-09 at 04.00 p.m.	28-11-09 AT 11.00AM
113.	PGI/MM/PMSSY/09-10/C-3/06	Electrophysiology ablation apparatus	20000.00	16-11-09 at 04.00 p.m.	28-11-09 AT 11.00AM
114.	PGI/MM/PMSSY/09-10/C-3/07	Isocentric Brachytherapy Simulator	50000.00	16-11-09 at 04.00 p.m.	28-11-09 AT 11.00AM
115.	PGI/MM/PMSSY/09-10/C-3/09	Videotelemetry system	12500.00	16-11-09 at 04.00 p.m.	28-11-09 AT 11.00AM
116.	PGI/MM/PMSSY/09-10/N.B./98	Clinical Chemical Auto Analizer	8000.00	16-11-09 at 04.00 p.m.	28-11-09 AT 11.00AM
117.	PGI/MM/PMSSY/09-10/N.B./99	Syringe Infusion Pump	2500.00	16-11-09 at 04.00 p.m.	28-11-09 AT 11.00AM
118.	PGI/MM/PMSSY/09-10/N.B./100	Fibreoptic Vidobronchoscopy system	14000.00	16-11-09 at 04.00 p.m.	28-11-09 AT 11.00AM
119.	PGI/MM/PMSSY/09-10/N.B./101	C Arm(high end)	25,000.00	16-11-09 at 04.00 p.m.	28-11-09 AT 11.00AM
120.	PGI/MM/PMSSY/09-10/N.B./102	Advance Neonatal Incubator	4500.00	16-11-09 at 04.00 p.m.	28-11-09 AT 11.00AM
121.	PGI/MM/PMSSY/09-10/N.B./103	Incubator Transport	4500.00	16-11-09 at 04.00 p.m.	28-11-09 AT 11.00AM
122.	PGI/MM/PMSSY/09-10/N.B./104	Infant Open Care System for NICU	2000.00	16-11-09 at 04.00 p.m.	28-11-09 AT 11.00AM
123.	PGI/MM/PMSSY/09-10/N.B./105	Transducer Bilirubinometer	1000.00	16-11-09 at 04.00 p.m.	28-11-09 AT 11.00AM
124.	PGI/MM/PMSSY/09-10/N.B./106	Laproscopic Equipmentsl	10000.00	16-11-09 at 04.00 p.m.	28-11-09 AT 11.00AM
125.	PGI/MM/PMSSY/09-10/N.B./107	Burns Bath Treatment Unit with Lifting System	8000.00	16-11-09 at 04.00 p.m.	28-11-09 AT 11.00AM
126.	PGI/MM/PMSSY/09-10/N.B./108	Paitent Hoist with Integrated Weighting Scale	3500.00	16-11-09 at 04.00 p.m.	28-11-09 AT 11.00AM
127.	PGI/MM/PMSSY/09-10/N.B./109	Laproscopic Equipment for maternal&Health	10000.00	16-11-09 at 04.00 p.m.	28-11-09 AT 11.00AM
128.	PGI/MM/PMSSY/09-10/N.B./110	Ultrasoniccutting& Coagulating Deviceforopen And Laparoscopic Surgery (Scalpel)	12500.00	16-11-09 at 04.00 p.m.	28-11-09 AT 11.00AM
129.	PGI/MM/PMSSY/09-10/N.B./111	Hysteroscopy Equipment	5000.00	16-11-09 at 04.00 p.m.	28-11-09 AT 11.00AM
130.	PGI/MM/OT/15/09-10	Patient positioning appliances	6000.00	16-11-09 at 04.00 p.m.	28-11-09 AT 11.00AM
131.	PGI/MM/PMSSY/09-10/N.B./112	Bilevel positive pressure ventilators(BiPAP)	1000.00	16-11-09 at 04.00 p.m.	28-11-09 AT 11.00AM
132.	PGI/MM/PMSSY/09-10/N.B./113	Portable Color Doppler Ultrasound	10000.00	16-11-09 at 04.00 p.m.	28-11-09 AT 11.00AM

The Tender documents may be downloaded from our website www.sgpgi.ac.in. 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 & price bid in separate envelop. Both envelop may be sealed in single envelop. The tender no. and the name of item must be super scribed on the top of the envelop. The tender fee for Rs. 300.00 (Rs. Three hundred only) (Non Refundable) along with Earnest Money Deposit (Refundable) for respective tenders as indicated against each tender may be enclosed separately with tender documents in the shape of demand draft (Nationalized 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 & time. If any working day is observed as holiday the next working day will be treated as last date. In case any legal dispute, the legal jurisdiction shall be court of law at Lucknow.

The Director reserves the right to accept or reject any tender in part or full without assigning any reason thereof. The Institute will not be responsible any postal delay.

Director

SANJAY GANDHI POST GRADUATE INSTITUTE OF MEDICAL SCIENCES, RAEBARELY ROAD, LUCKNOW – 226 014

TENDER DOCUMENTS

GENERAL TERMS & CONDITIONS FOR NOTICE INVITING

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

1. **Tender** should be submitted to the RSD Cell Located at 3rd Floor of the Administrative Building, Sanjay Gandhi Post Graduate 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 legible 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 legible attested by the tenderers, with their full signature, shall invalidate the tender. The tender should be signed by the tenderers himself/themselves or him/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 while price bid be submitted in second part, 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 congnizance 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 ther name of Principal) on the top of the Bid.
7. **The** tenderers submitting his/their tender would be deemed to have considered and accepted all the terms and conditions. No Equiries, 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 on any extent depending upon the actual requirement.
9. **The** tenderer shall specify after sales services facilities within the Guarantee/Warrantee period. The warrantee period will be extended for the period of the Instruments remain out of order during warrantee period.
10. **The** tenderer 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 of the tender to influence any body of the Institute will make his/their 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 they must bring the same to the notice of the Institute and seek clarifications. Supplier will be 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 required on a reasonable basis by mutual agreement in writing which should be communicated.
17. **The** tenderer shall also furnish performance bank guarantee of **15%** of the order value or (FOB) value at the time of shipment or supply of goods and this will be relapsed after the successful completion of warrantee period.
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.

SANJAY GANDHI POST GRADUATE INSTITUTE OF MEDICAL SCIENCES, RAEBARELY ROAD, LUCKNOW – 226 014

TENDER DOCUMENTS

GENERAL TERMS & CONDITIONS FOR NOTICE INVITING

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 a Lucknow (U.P.), India as per 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, labour and/or variations in taxes, duties and other levies on raw materials and components 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 F.O.B. as well as estimated CIF New Delhi 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 up to site.
24. **The** offer of the tenders shall remain valid for a period of **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 faulty design (to the extend 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 of the SGPGIMS and as promptly as possible, furnish and install proper materis, 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, date sheets or the terms of this order, rectification is required at site, the SGPGIMS 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.

    100% payments shall be released within 30 days from the date of satisfactory receipt of materials or satisfactory installation if applicable. 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.
30. **In** the event that the materials supplied do not meet the specifications and are not in accordance with the drawings, date sheets or the terms of this order, rectification is required at site, the SGPGIMS 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.

SANJAY GANDHI POST GRADUATE INSTITUTE OF MEDICAL SCIENCES, RAEBARELY ROAD, LUCKNOW- 226 014

TENDER DOCUMENTS

GENERAL TERMS & CONDITIONS FOR NOTICE INVITING

31. **In** the event that the materials supplied do not meet the specifications and are not in accordance with the drawings, date sheets or the terms of this order, rectification is required at site, the SGPGIMS 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.
32. **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.
33. **100%** payments shall be released within **30 days** from the date of satisfactory receipt of materials or satisfactory installation if applicable. 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. In case of imported goods/equipment, the payment schedule will be as follows :
    A - 75% against shipment
    B - 25% against installation
34. **The** mode of payment will be through irrevocable letter of credit. However, Indian Agency Commission or Technical Services charges would be paid in Indian rupee after satisfactory receipt & installation of goods at site. Indian Agency Commission will be declared in the price/bid.
35. 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.
36. **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.
37. **Forced** majeured shall mean and be limited to the following :
    Any war/hostilities
    Any riot or civil Communication
    Any earthquake, flood, tempest, lighting or other natural physical disaster
    Any strike, or lock-out (only those exceeding ten continues day 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 within7 (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 SGPGIMS 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 of 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.
38. **No** payment shall be made for rejected material nor would the tenderer be entitled to claim for such items.
39. **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.
40. **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.
41. **In** the case of non-supply of stores within stipulated period, it will be at the desecration of the Sanjay Gandhi Postgraduate Institute of Medical Sciences to accept delivery with late delivery clause @ 1% per week maximum to the extent of 10% of the ordered value for delayed supply. In the case of imported goods, the late delivery clause will be imposed @ 0.5% per week subject to the maximum of 5% of FOB value.
42. **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.

SANJAY GANDHI POST GRADUATE INSTITUTE OF MEDICAL SCIENCES, RAEBARELI, ROAD, LUCKNOW – 226 014

TENDER DOCUMENTS

GENERAL TERMS & CONDITIONS FOR NOTICE INVITING

43. **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.
44. **In** the case of non-supply of stores within stipulated period, it will be at the desecration of the Sanjay Gandhi Postgraduate Institute of Medical Sciences to accept delivery with late delivery clause @ 1% per week maximum to the extent of 10% of the ordered value for delayed supply. In the case of imported goods, the late delivery clause will be imported @ 0-5% per week subject to the maximum of 5% of FOB value.
45. **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.
46. **Sales-Tax** Registration certificate duly attested copy by a Gazzetted Officer should also be enclosed.
    Sales Tax, Income Tax clearance certificate along with the affidavit from a notary that the firm has never been black listed must be attached along with the tender failing which the tender will be rejected and no correspondence will be entrained in this regard.
    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.
    The manufacturer or their Indian representative will ensure a proper after sales service as per 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 negligency on this account shall be the sole responsibility of foreign vendor and the liability of compensation will be fixed up by the Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow.
    A 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 labor charges) by the Institute to the tune of 95% uptime of equipment that AMC will be effective after expiry of warrantee period.
47. **The** price bid will be opened in the presence of authorized representative of qualified tenderer within 45 to 60 days from the date of opening of technical bid.
48. **The** price ranking will be carried out as under :
    (i) The exchange rate of last date of submission of bid will be applicable for price ranking.
    (ii) The prices for optional items will be excluded for ranking purpose i.e L-1, L-2 etc.
    (iii) After omitting 'optional items' ranking will be determined as under
    Total Price = Price with all accessories as per technical specification
    + CMC Price (with spares) for five years after warranty.
49. **The** supplier will get the equipment/consignment cleared from the custom. The Custom Duty and clearance charges as well as freight charges will be borne by the manufacturer/Indian representative at the time of clearance which will be reimbursed by the Institute on production of documentary evidence. Also the insurance will be arranged by the firm effective from port of shipment to Central Store, SGPGIMS, LUCKNOW and the charges will be reimbursed by the institute based on documentary evidence.

Joint Director (MM)
for Director
Sanjay Gandhi Postgraduate Institute of Medical Sciences,
Raebareli Road, Lucknow

SANJAY GANDHI POST GRADUATE INSTITUTE OF MEDICAL SCIENCES, RAEBARELY ROAD, LUCKNOW 226 014

Adv. No.-57/2009-10

SPECIFICATION FOR EQUIPMENT

Tender No.	Specification
(2)	(3)
PGI/MM/PM SSY/09-10/N.B.-01	**GYNAECOLOGY EXAMINATION TABLE:** Gynecological Examination Table made of metal frame of square pipe of heavy gauge and top sheet made of well-chrome plated. Should have a two sectional mattress base with perinial cut suitable for gynaecological examination. It should have a detachable foot section. Overall size of the table 72"x20"x32". The top of the table fitted with high density foam covered with water proof material It should have leg rest suitable for pelvic examination and colposcopy and height adjustment of the leg rest possible with the help of the knob. It should have stainless steel bowl which could be pushed under the base Foot step provided with the unit for the comfort of the user.
PGI/MM/PM SSY/09-10/N.B.-12	**EXAMINATION LIGHT:** To be used in Obstetrics OPDs Mobile lights with 5 swivel castors. Arm: 105 cm articulated, spring loaded arm, arm with on/off switch and incorporated electronical transformer. Power supply: 110/220 V. Bulb: 12V/20W, halogen, light intensity: approx 20.000 Lux at 40 cm. Lamp should emit natural white light: colour temperature 4000 K. Reflector adjustable for positioning. Free cord: lenght approx 3 m. To be supplied with: 1 spare bulb and 1 spare fuse. Examination light, mobile, 220/12V must be in conformity with Council Directive 93/42/EEC, on medical devices and have a CE marking.
PGI/MM/PM SSY/09-10/N.B.-13	**OBSTETRICS DELIVERY TABLE :** Should have 3 sectional mattress base made up of epoxy powder coated steel with large perineal cut Should have Hydraulic height adjustdment 550-920mm, with pedals on both the sides. Should have pneumatic adjustment for back section for Trendelenburg and reverse trendelunberg . Should have support bar for additional support during forceps delivery. Side rail with hand gripper or holder. Should have a stainless steel basin which should slide on tracks. Should have sliding foot section which can slide below the other part of the table. Should have antistatic mattress 80mm thick. Should have antistatic castors of diameter 150mm with central braking system and steering facilities for facilities for easy transfer patient. Should be equipped with accessory rail for fixing various accessories. Should be complete with side rails, Infusion rod and adjustable leg supports. Leg rest should be padded and adjustable to different heights and angle
PGI/MM/PM SSY/09-10/N.B.-14	**DELIVERY BED:** Delivery Bed suitable for deliveries in Sitting and Supine position - Should have 3 sectional mattress base. - Seat section should have a large perenial cut-out and should be made up of durable ABS Plastic for easy cleaning. - Should have a retractable Foot Section made up of ABS Plastic for converting bed to chair. - Should have Hydraulic Height Adjustment 530-900 mm, with pedals on both the sides. - Should have pneumatic stepless adjustment for back section such as Trendelenburg and reverse trendelenburg position. - It should have a separate back section control lever for mother. - Should have adjustable foot supports - Should have support bar for additional support during forceps delivery. - Should have a detachable head board to provide access during resuscitation procedures - Should have a stainless steel basin which could be pushed under the base. - Should have antistatic castors of diameter 125 mm with central braking and steering facilities for easy patient transfer. - Should be supplied complete with antistatic mattress 80mm thick, side rails with push grip

	handles and adjustable leg supports.
PGI/MM/PM SSY/09-10/N.B.-15	**Mobile Halogen Light (DELIVERY ROOM LIGHT)** To be used in delivery rooms and minor procedure room Should offer light intensity 1,00,000 lux or more Should have three halogen bulbs with infrared coating and ceramic base for providing cool light. The heat increase at the surgeon's head should not be more than 2 deg c. Service life of the lamp should be at least 1000hrs. Should have facet type metal reflectors with infrared coating to ensure shadow-less, cool and steady light output over entire operating area. Should have colour temperature typically 4300K. Lamp cover should be made up of impact resistance plastic. Should have adjustable height and an articulated arm for wide range of adjustments & wide turning radius. Should have detachable k& sterilizable handle for aiming and focusing of light. Should have main switch in the lamp head. Lamp should be easily changeable without any tool. Lamp head should have smooth design & easily cleanable surfaces with good laminar flow properties (laminar flow index 12). The light head should be compact and light weight for easy maneuverability. Should be equipped with four castors with brakes. Should confirm with International Standard for Medical Electrical equipment Working distance : 700 to 1500mm
PGI/MM/PM SSY/09-10/N.B.-16	**CARDIOTOCOGRAPHY MACHINE**: Capable to monitor continuous and intermittent fetal heart rate & maternal contraction pressure Compact and portable design, can be put on table or wall mounted LCD screen display which can be rotatable up to 60° Display of the patient data and curve clearly Can record fetal movement manually High and low fetal heart rate alarm function Continuous 24-hour real-time monitoring Continuous 12-hour patient curve and data storage with playback ability With picture freeze function Single, Twins Monitoring selectable 9 chip pulse width beam probe Extra-long life, high-resolution built-in thermal printer which can output waveform, text, and other information Preferable to have twin monitoring USG probe Built-in communication interface, can be connected with central monitoring system Ultrasound probe with nominal frequency:1.0MHz FHR Range☐65BPM☐210BPM☐ Accuracy:±2☐ Manual push button☐ Operated by pregnant women☐
PGI/MM/PM SSY/09-10/N.B.-17	**Maternal & Fetal Monitor** For use in both the labour rooms Maternal Parameters: ECG, SPO2, NIBP, RESP, TEMP, Pulse rate Automatic Fetal Movement Detection, AFM waveform display 24 hours monitoring data storage and reload Fetal heart rate Acceleration and Deceleration measurement ability Baseline, acceleration and deceleration analysis capability Easy operation by with shortcut key and rotary knob Automatic monitoring mode, parameters configurable Clinical data management , can be reload, reanalysis, reprint Visual and audio alarm, comply with international standard Printing functions and support external thermal printer or inkJet printer Built-in rechargeable battery, DC/AC power supply Built-in network capability **Five monitors to be placed in clean labor room should have individual bed-side display and also connected to a single centrally placed large color TFT screen display. TFT screen and it's connection to individual monitors to be provided by the supplier.** Optional accessories: printer and twins monitoring probe
PGI/MM/PM SSY/09-	**Portable Fetal Doppler FOETAL HEART MONITOR (PORTABLE)** To monitor the fetal heart rate.

<table>
<tr><td>10/N.B.-18</td><td>It should have audio output, and can be connected with earphone or recorder with audio input. Three heart rate processing modes: real-time FHR display mode, averaged FHR display mode and manual mode with auto and manual counting facility.
Accurate FHR detection and LCD display.
FHR Measuring Range: 50~240BPM (BPM: beat per minute) with Resolution: 1BPM and Accuracy: ±2BPM
It should have Power supply battery and battery energy indicator
Nominal Frequency of probe: 2.0MHz
Working Frequency: 2.0MHz±10%</td></tr>
<tr><td>PGI/MM/PM SSY/09-10/N.B.-19</td><td><u>IVF Lab Equipment</u>
IVF equipments should be compatible to each other and preferable from the same source in order to make the complete Lab dedicated to one firm. This is being suggested in the wake that the after sale service and upkeep of the equipment is done by one company.

<table>
<tr><td>Sr.No</td><td>Equipments Required & Specifications</td><td>Qty</td></tr>
<tr><td></td><td>ANDROLOGY LAB INSTRUMENTS</td><td></td></tr>
<tr><td>1)</td><td>Binocular Microscope
With Focusing by Co-axial Coarse & Fine focusing controls.
Halogen Light: 6V 20W.
Objectives: 4x, 10x, 20x & 40x
Eyepiece: Compensating Widefield Paired Eyepiece WF10x</td><td>1 No</td></tr>
<tr><td>2)</td><td>Makler Sperm Counting Chamber for accurate method of Sperm Counting With Cover Slip.(Original)
The makler Counting Chamber should be 10 microns deep. 1 sq. Mm fine grid in the center subdivided into 100 squares of 0.1 x 0.1 mm each. Facility for spacing to be secured by quartz pins</td><td>1 No</td></tr>
<tr><td>3)</td><td>Indian make Laminar Flow Unit Clean Air Equipment (For Andrology)
VERTICAL DOWN FLOW SYSTEM
Size 2 x 2 x 2ft
Cleanliness: Class 100.
Particle Retention: 0.3 Micron & Above.
Noise Level: 60-65 decibels (A).
With Power Input: 230V Ac/50Hz.</td><td>1 No</td></tr>
<tr><td>4)</td><td>Centrifuge
with digital speed & time indicator.
Adapter for 13ml round bottom tube.</td><td>1 No</td></tr>
<tr><td>5)</td><td>Digital Cell Transporter with Steel body Heating Block (Dry Bath) for heating of test tubes in removable, autoclavable anodized aluminium blocks for maintenance of required temp. Digital display & control of temp. With + 0.2ºC accuracy from ambient to 110ºC, Anodized blocks of 75X50X50mm to accommodate 12x13ml & 12 x 6ml Tubes</td><td>2 No</td></tr>
<tr><td>6)</td><td>Air Jacketed CO2 Incubator with FP-IR Sensor
Features:-
Capacity 150 Litres with inner seamless chamber
Inner Glass Doors to save loss of CO2 gas
System to achieve Maximum relative Humidity and Dry Inner Walls
Stainless steel interior.
Fan Free Interior – Prevents building up of Germs.
Perforated Shelves for uniform heat distribution.
LCD/LED Display.
Hot Air Auto Sterilization above 180ºC
Data logging facility.</td><td>2 No.</td></tr>
<tr><td></td><td>IVF INSTRUMENTS</td><td></td></tr>
<tr><td>7)</td><td>Work Station (Imported) for IVF Laboratory, Vertical Flow with Complete with Accessories.

Workstation, Standard (Electrically Heated)</td><td>1 No</td></tr>
</table>
</td></tr>
</table>

		Laminar Flow Cabinet: 1246x735x2015mm(WxDxH): 1 Stainless steel table plate: 1 Liquid based heating system with heating area, 1 Gassing system, 1 Transmitted light opening, 1 Preparation for Microscope light base: 1 Light Source, Microscope light source/base Plain Mirror 360 degrees tilt ability: 1 Hollow frosted – 360 degrees tilt ability: 1 011171 Standard Accessories , Warming Block for 7 follicular fluid tubes Warming block for 2 centrifuge tubes 16,5mm Warming Block for one Falcon 1006 ICSI Dish, Warming Block for one 60mm dish, Warming Block for one 4 well dish, Glass Incubator hood, 1 Glass Incubator Hood, 1 Steel Incubator Hood, 1	
	8)	Stereozoom Microscope SMZ Zooming Body. Standard binocular eyepiece tube which can be inclined 20° for observation in a natural posture with a straight back. Facility of ergonomic objectives. Eyepiece 10 x . With diopter adjuster, rubber eye shield, reticle lead. Diascopic Stand (Transmitted Light Illuminator). with reflecting mirror supplied with transparent stage glass, 6V-20W Halogen lamp with reflector.	1 No
	9)	Ovum Aspiration Pump with Foot Operated Switch with Vacuum gauge and regulator. Specifications: Low Pressure : 0-550mm Hg Volume of overflow vessel : 2x100ml Connecting for aspiration tubing : 2 to 4 mm Power Supply : 230V Power Frequency : 50/60 Hz Power Point : 50 VA Nominal Current : 220mA Power Line isolation : 0.315 AT	1 No
	10)	Indian Make Pressurizing Module. Pressurizing Module is used to Create the positive pressure inside culture lab. Tech specification: Pressure : 250 CFM. Filtration : 0.3µ Efficiency : 99.97% Construction : Stainless Steel body	1 No.
	11)	Petri-Plate Prewarmer with Steel Body for preheating of slides, petridishes, pipettes etc. of desired temp. anodized aluminium heating plate. (Approx dimension 300X100X40mm) Temp range : from ambient to 110ºC with accuracy of +0.2ºC.	1 No.
	12)	Microscope Stage Warmer with Steel Body for maintaining the temp.of critical biological specimens at desired level during microscopic observation. An anodized plate of 10mm thickness with 50mm central grove with glass & 175X155mm dimension which should fit on most microscopic stages. Temp. Range ambient to 55ºC with accuracy of + 0.2ºC.	1 No.

	13)	"CODA" Portable Air Purification unit Max Air Flow: 530 CFM Effective coverage: up to 350 sq feet Application: more than 2000 sq feet	1 No.
	14)	Cryopreservation Equipment portable capable of taking at least 40 embryos Controlled Rate Preprogrammed Freezer for Freezing Sperms, Oocytes, Embryos complete with Preprogrammed Controller Standard Cryochamber for Vertical Freezing LN2 bath(Capacity maximum 2L) Software for making new programs for future user SPECIFICATIONS Temperature Controller: Controlled Temperature range: +40ºC and –120ºC Temperature warning (LED or Sound): ~1.5ºC deviation Temperature Sensor: Platinum resistance element. Temperature display: Digital, LCD, 0.1ºC resolution Vertical freezing Internal Programs: Maximum number of Fixed programs: 16 nos. Duration of Programs: no limit Power Consumption / less than 60watt Standard Cryo-Chamber: Capacity: 23 straws (0.5cc) or 46 straws (0.25cc)	1 No.
		ICSI & ASSISTED HATCHING INSTRUMENTS.	
	15)	Inverted Microscope: Inverted Microscope basic unit (100-240V) 12V-100W Consisting of: Lamphouse- with Precentred 100W Halogen. Main Body, Side port Coaxial coarse/Fine focus W/tension adjustment, with uniform light distribution T-DH 100W Dia illumination Pillar (Tiltable) supplied with detachable condenser carrier, diffuser four filter holder and field diaphragm, 45mm filter slots. Lamphouser Remote Cable. T-PS 100W Power Supply 100-240V for T-DH100W Dia illumination Pillar. Halogen Lamp 12-100W LL. Power Cord BE. 25 Inclination tube D 25 Inclination angle, Turret selector incorporated B/2.5x/C/0. CFI 10X W/Diopter adjustment (FOV 22mm). CFI UW Eyepiece Guard C-N6 Sextuple Nosepiece. Filter 45mm NCB11, Daylight Colour Balance. Filter 45mm Heat Absorbing. HOFFMAN MODULATION CONTRAST SYSTEM Contrast Control Polarizer. Diaphragm. OBJECTIVES > 20XF N.A. 0.40, W.D. 3.1mm & 40X objective > Plan Achromat 4X (Anti Fungus) N.A.0.1 > W.D.30.0MM Plan Achromat 10X N.A. 0.25, W.D. 10.5 mm C-Mount TV Adapter A. SPARES: Halogen Lamp 12V-100W LL.	1 No. 1 No.
	16)	Micromanipulator (Mechanical)/Non-Hydraulic System for ICSI and PGD.oil free single lever control for all axis Stage including:	1

		4 Channel Temperature Controllers. Single lever control for XYZ movements. Two Additional Metal Heated Stage and extra port for connecting Extra stage warmer. Digital Help Menu -Pipette Home Function Both side Double Tool Holder: 1 Air Syringe: 2 Xyz Mechanical Stage: 1 Glass Heated Central Stage Insert (16mm Hole): 1		
	17)	Laser System for assisted Hatching & Embryo Biopsy, with: Control Box, Hand Held control unit, Collimator, mirror, Fiber Optic Cable, Pilot Laser Targeting System and Laser Objective, to be Mounted On Inverted Microscope with Software for embryo analysis which can stand alone capable of working even without pc Laser power=300-400mw	1 No.	
	18)	Spindle Ultra Imagining system from Oocyte Imaging System for Routine Operation. For Non-invasive Imaging of the Spindle and Zona Pellucida in Living Oocyte with facility of Color Overlay. Specifications: Optical: Wavelength of operation: 546nm (prefereable) Good Spatial Resolution: with Limited Diffraction Relay Optics: 0.65x (requires 1x c-mount attachment) Electrical Controls: Power Source: Universal Serial Bus 2.0 (USB 2.0) to CPU Image Acquistion: Image Output Format: BMP or TIFF Camera: CCD Chip Dimensions: 2/3" diagonal Image Size: 1392 x 1040, 8-bit Pixel Dimensions: 8.98 x 6.71mm	1 No.	
	19)	SOFTWARE is designed to cover Important areas in a fertility clinic. It can be used in a LAN environment with Multiple users. Degree of access to individual User can be pre-defined by the administrator. With Hard ware Lock System Requirements : Minimum requirement is Pentium II or higher Computers with 64 MB RAM. 20 MB of free hard space Windows operating system LAN connection	1 No.	
PGI/MM/PM SSY/09-10/N.B.-20		**4D Ultrasound :** • The system should be a state of the art, high end digital system with special use for obstretic and gynecology practice with continuous wave doppler imaging. • Please mention the Year of introduction. • Firm to furnish a list of reputed Indian medical institutions where the equipment is being used for fetal scanning along with satisfactory performance certificate from the users. • Scan methods: Convex, Linear, Volume, Phased array sector • The system should have the following scan modes: 2D, 3D with multiplanar reformatting, 4D, M Mode, PW, CW Colour Flow Imaging, Colour Power Angio Imaging, Directional colour Power Angio Imaging, Volume imaging • System should have colour compare mode, colour power mode and the normal gray scale mode, side-by-side or equivalent • The system should have a floating key board with Backlit alphanumeric display • The system should have a non interlaced high resolution Monitor with tilt and swivel facility. • The system should have Integrated recording keys for remote control storage and printing		

	options • The system should have more than 8000 digital processing channels. Higher channels is desirable. Please mention the number of processing channels • The system should have Windows Operating System. Please specify the operating system used in the machine. • The system should have minimum 80 user defined preset per tranducer, More presets is desirable. • The system should have advanced calculation package for all mentioned application - obstetrics , gynaecological , transvaginal, small parts, doppler and cardiac(adult and pediatric) • All transducers should have tissue harmonics imaging as standard. • The system should have Real time triplex imaging with Real time compounding with Color doppler mode on all transducers. • The system should have Panaromic View imaging • The system should have trapezoidal imaging for all linear probes. • The system should have Volume 3d and 4d Imaging • The system should have one touch optimisation function for adjusting doppler function while doing doppler scans . • System should have post processing facility on Freez and Pulse and continuous wave doppler imaging . • System should have facility for multiple frequency selection for fat patients preferably at one touch of a button • System should have a maximum depth of 30 cm • Dynamic range of 120Db or more . • 4d Frame rates should be more than 20 frames/sec • System should have real time zoom and zoom facility on frozen image too. • System should have a facility for Real time Calculation for Spectral doppler . • System should have an integrated image management system for printing and storing images for the offline analysis • System should have Dicom facility to connect it to the hospital server/printer and PACS. • System should have inbuilt CD/DVD drive for copying images directly on CD • The system should have direct printing facility on both thermal and color inkjet printer • The system should store real time loops in B mode and Color mode . • System should have the facility for the parallel slicing of the volume in real time mode , view possible in Real & Post with and without color flow as well. • System should have real time coronal imaging facility possible • System should have broad band, high frequency tranducers with 5 frequecny selection option • Multifrequency convex transducer of 2-5Mhz for obstetrics and gynaecological application • Multifrequency Volume transducer from 2- 5Mhz for obstretic and abdominal 4d imaging • Multifrequency Volume transducer from 5-9 Mhz for transvaginal and transrectal 4d imaging • Multifrequency linear tranducer of 5-12 Mhz for small parts and vascular imaging (optional) • Biopsy Needle guides with kit • System should have advanced 4d fetal echo facility both with color and power doppler imaging • Essential requirement. a) The machine should be supplied with a high-resolution B&W thermal printer.; It should be possible to print Images from the ultrasound machine console. b) Trolley: The machine and the printer should be mounted on a trolley with lockable 'castor wheels. (c) Suitable online UPS for the equipment with 30 minutes back up. h) High-resolution photo quality Color Printer for providing printed reports and colour Doppler images to patients.
PGI/MM/PMSSY/09-10/N.B.-21	**2D ULTRASOUND WITH DOPPLER FOR OBSTETRICS USE IN MATERNAL AND REPRODUCTIVE HEALTH:** Essential features/ minimum specifications: General

	(a) The system should have full digital, truscan technology. (b) It should be upgradeable for any future applications (c) It should be suitable for obstetrics and gynecology System operating modes **The system should be capable of operating following modes:** (a) B mode ' (b) M mode including M Colour (c) Pulsed wave Doppler including HPRF mode (d) Color Doppler. (e) Power Doppler (f) Tissue Harmonic imaging (g) Contrast Harmonic Imaging (h) Compound imaging with at least Nine Lines of sight. Display Monitor a) 15 inch or larger high-resolution, non-interlaced flat screen monitor (CRT/TFT), liable with tilt and b) It should be adjustable with tilt and swivel facility. Provision to adjust height should be there Imaging Formats a) Convex and micro convex with variable angle b) Linear with beam steering and virtual convex c) Sector with Trapezoidal format Transducers All the transducers should be light weight electronic arrays with wide bandwidth and Multi frequency capabilities. At least three universal ports should be there for imaging transducers. Fast Selection of transducers should be possible with single keystroke. Transducer cable management system should be present. At least four slots/ holders for safe parking of not in use transducers. Following transducers and accessories for different clinical applications are to be supplied: (a) Convex array for general abdominal and obstetrics use covering frequency range of 2-5 MHz. (b) Convex array for pediatric and early obstetrics used covering frequency range of 4-10 MHz. (c) Linear array for small parts and vascular use coveting frequency range of 4-10 MHz. (d) Endocavitary probe for TVS and TRS use covering frequency range of 5-8 MHz (e) Biopsy attachment for one Convex, Linear and Endocavitary probes Measurement, calculation and Reports a) Trackball with multiple sets of depth, distance, area, b) Circumference, volume, ratio, angle, slope time, velocity, heart rate, etc. At least 6 distance measurement should be possible on one image c) Comprehensive measurement and calculation packages for all the clinical applications including tables and summary reports. d) Equipment should have multi-gestation measurement and reporting capability. User programmable obstetrical tables and Estimation of fetal weight and Expected date of delivery from measurements should be automatically reflected in the report page. e) Automatic waveform trace in Doppler made with display of calculated values and indices in real time, frozen image and recalled archived image. Control Panel, software and other features : (a) All controls and trackball to be economically positioned for easy access and reduced operator fatigue. (b) Full sized backlit alphanumeric keyboard with Interactive back lighting of control panel switches.

	(c) Digital beam former with multiple (at least four) transmit foci and dynamic receive focus. (d) System should have raw data processing technology. (e) Should have 2500 or more processing channels. (f) At least 256 Grey scale levels in displayed images. Frame rate should be more than 600 F/Sec (g) System dynamic range of 150dB or more. (h) User programmable presets for different types of examinations. (i) Automatic optimisation function that optimises the system parameters for B and Doppler modes. This should be in addition to the presets for various examinations (j) Acoustic output display in mechanical and thermal indices. (k) Frame by frame and continuous cine loop review of 150 or more images acquired just prior to freezing arVimage, (I) Magnification with Scrolling/jPanning in real time & frozen modes. (m) Multiple Pre & Post processing functions and B Colour maps. (n) Onboard archival facility with easy and rapid retrieval of images in the form of integrated DVD/CD-RW/ MOD drives. Should be able to store static images and cine clips in system hard disk and in on board archival devices.Integrated 80GB HDD. (0) At least 5000 image storage and recall facility. (p) Integrated recording keys for remote control of peripheral devices. (q) It should be possible to annotate and perform measurement functions on recalled images. (r) Dual image dual composite image for linear and display of B+M mode images in various size combinations. (s) Triplex mode (simultaneous 2D, Colour Doppler and PW Doppler) (t) Application specific programmable annotations and bocfy marks with image plane orientation (u) Space for keeping ultrasound gel bottle (v) Internet port for networking and USB port. It should be possible to transfer images to the supplied desktop Pfc. Essential requirement. a) The machine should be supplied with a high-resolution B&W thermal printer.; It should be possible to print Images from the ultrasound machine console. b) Trolley: The machine and the printer should be mounted on a trolley with lockable 'castor wheels. (c) Suitable online UPS for the equipment with 30 minutes back up. (h) High-resolution photo quality Colour Printer for providing printed reports and colour Doppler images to patients. Installation Base: Firm to furnish a list of reputed Indian/ Foreign medical institutions where the machine being quoted is installed along with satisfactory performance certificate from the users for obstetrics use.
PGI/MM/PM SSY/09-10/N.B.-22	**<u>Compound analyser for serum screening:</u>** To be used for first and second trimester serum screening during pregnancy to detect fetal aneuploidy. • Technology: TRACE (Time Resolved Amplified Cryptate Emission) technology, measurement takes place in homogenous phase. • Specimen Capacity:Up to 64 in a maximum of 4 sample cassettes • Specimen test tubes: Primary and Secondary test tubes, diameter 11-17mm,variable from sample to sample • Specimen identification: barcode recognition and manual entry • Specimen recognition/availability: barcode recognition, liquid level monitoring, clot recognition • Specimen volume: 10-70 uL (test specific) • Intelligent Auto Dilution: Out of range samples are detected within 5 minutes & auto diluted. • Operating Modes: Random access, emergency (STAT) • Reagent capacity: Up to 12 kits on board in a maximum of 3 reagent cassettes • Reagent identification: barcode reader and manual entry • Calibration: calibrtation 1 and 2 point (test specific)

	• Specimen and reagent distribution:1 heated ,Teflon coated steel needle, movable radially & vertically, automatic wash step between different tests • System liquid: two 5-liter containers for buffer and distilled water, reservoirs with fill level monitoring.(enables refilling / changing of liquids while the unit is in operation.) • Reaction Medium: Compact specific reaction plate (MTPformat) with 96 wells • Signal Generation: Nitrogen laser, emission at 337nm • Signal detection: 2 photomultipliers • Incubation time: 9 to 59 minutes (test specific) • Online Connection: LIS interface • This should be provided with an external PC for data processing and a laser printer and the software for the risk analysis should be provided along with it. Suitable online UPS for the equipment with 30 minutes back up should be provided.
PGI/MM/PMSSY/09-10/N.B.-23	**Flexible Fetoscopy Equipment:** Should have minimum diameter, of appropriate length and maximum resolution for fetal visualisation and fetal laser surgery in twin to twin transfusion syndrome. Specification: 1. Telescope: Semiflexible 0^0 fiber-optic scope which can be curved with diameter: 2mm and length: 30cm with remote eye piece and angle of inclination could be 30^0 or more. 2. Fetoscopic sheath: with channels for laser fibers upto 600µm with one stopcock and one Luer-lock adaptor. 3. Trocar and cannula: Specially developed for amniotic sac. 4. Nd-YAG laser or Diode laser can be set at 30-70w.
PGI/MM/PMSSY/09-10/N.B.-24	Surgical Instruments(For Maternal & Reproductive Health) The exact size of the instrument can vary upto 10% on either side.

Sl No	**Name of the item with specification**
1	SIMS Bivalve Vaginal Speculum 75×30MM 125MM
2	SIMS Bivalve Vaginal Speculum 80×35MM 150MM
3	SIMS Bivalve Vaginal Speculum 90×40MM 175MM
4	CUSCO STANDRAD BIVALVE VAGINAL SPECULUM (SET OF 4)
5	SEIDL,VAGINAL SPECULUM,SET,80X8MM,170MM
6	SEIDL,VAGINAL SPECULUM,SET,80X10MM,170MM
7	SEIDL,VAGINAL SPECULUM,SET,90X14MM,170MM
8	KRISTELLER, VAGINAL SPEC. SET, 70X15 MM
9	BRAUN,VAGINAL SPECULA,56X13MM
10	BRAUN,VAGINAL RETRACTOR,60X10MM
11	ANTERIOR VAGINAL WALL RETRACTOR
12	DOYEN,VAGINAL SPECULA,60X45MM
13	DOYEN,VAGINAL SPECULA,90X45MM
14	RANDALL ENDO BIOPSY CURETTE 240MM
15	NOVAK SCHOECKAERT ENDO BIOPSY CURETTE 240MM
16	SIMS UTERINE PROBE, GRADUATED, MALLEABLE
17	ENDROMETRIAL BIOPSY CURETTE, SMALL
18	SCHROEDER UTERINE SCOOP, SHARP, RIGID
19	FAURE BIOPSY FORCEPS, 210MM
20	PLACENTA AND OVUM FORCEPS, CURVED WITH SERRATED CUPS
21	UTERINE CURETTE,DOUBLE ENDED, BLUNT AND SHARP.,RIGID SHAFT 4,5MM

22	UTERINE CURETTE,BLUNT AND SHARP.,RIGID SHAFT 7,5MM
23	SHIRODHKAR UTERUS HOLDING FORCEPS
24	JOLLY SELF RETAINGING VAGINAL RETRACTOR 155MM
25	KELLY TISSUE GRASPING FORCEPS WITH RACHET 320MM
26	LANDON VAGINAL SPECULA, 89x25MM,195MM
27	JACOBS UTERINE TENACULUM FORCEPS 215MM
28	BRAUN TENACULUM FORCEPS 250MM STRAIGHT AND SLENDER
29	SCHROEDER TENACULUM FORCEPS, 250 MM
30	UTERINE VULSELLUM FORCEPS, 270 MM
31	BRAUN UTERINE DEPRESSOR 270MM
32	SIMS UTERINE PROBE GRADUATED CURVED 330MM
33	ZWEIFELA UTERINE CURETTE DOUBLE ENDED 31CM LONG
34	HYWOOD-SMITH POLYP FORCEPS STRAIGHT 250MM
35	MAIER POLYPUS, SPONGE AND DRESS.FORCEPS
36	COLLIN UTERINE ELEVATING FORCEPS, 265 MM
37	HEGAR UTERINE DILATOR, 1+2MM, 195MM
38	HEGAR UTERINE DILATOR, 3+4MM, 195MM
39	HEGAR UTERINE DILATOR, 5+6MM, 195MM
40	HEGAR UTERINE DILATOR, 7+8MM, 195MM
41	HEGAR UTERINE DILATOR, 9+10MM, 195MM
42	HEGAR UTERINE DILATOR, 11+12MM, 195MM
43	HEGAR UTERINE DILATOR, 13+14MM, 195MM
44	HEGAR UTERINE DILATOR, 15+16MM, 195MM
45	HEGAR UTERINE DILATOR, 17+18MM, 195MM
46	CHEATTLE STERILIZING FORCEPS 280MM
47	EPIOSOTOMY SCISSOR CURVED BLADE 240MM
48	ROUND BOWL, 0.16 L
49	ROUND BOWL, 0.4 L
50	KIDNEY TRAY, 170 MM
51	KiDNEY TRAY, 250 MM
52	KIDNEY TRAY, 275 MM
53	PROBE, DOUBLE ENDED, 300MM, DIAM. 2,0 MM
54	GUIDE PROBE,4,5MM BROAD, 195 MM
55	BACKHAUS TOWEL HOLDING FORCEPS, 110MM,
56	FOERSTER SPONGE HOLD. FORC., SERRAT.JAWS Straight
57	SCALPEL HANDLE, NO. 4
58	SCALPEL HANDLE NO. 3
59	DUROTIP DISS.SCISS.,METZENBAUM,Curved.200MM
60	DUROTIP DISS.SCISS.,NELSON METZENBAUM,Curved.230MM
61	DUROTIP DISS.SCISS.,MAYO-LEXER,Curved,165MM
62	DUROTIP-DISSECT.SCISSORS,WERTHEIM,230 MM
63	UTERUS SCISS. SIMS DUROTIP BLUNT P. DULL 230 MM
64	DUROTIP-LIGATURE SCISSORS, 180MM LONG
65	OP. SCISSORS, Straight., BL/SH, 145 MM
66	DISSECTING FORCEPS, SLEND. PATT., 145 MM

67	TISSUE FORCEPS, AM. PATT., 1X2 T., 145MM
68	TISSUE FORCEPS, 1X2 TEETH, 200 MM
69	TISSUE FORCEPS, 1X2 TEETH, 250 MM
70	TISSUE FORCEPS, 1X2 TEETH, 145 MM
71	STANDARD FORCEPS, SERRATED, 180 MM
72	FORCEPS, STRAIGHT, 2MM JAW, ATRAUMATIC.150MM
73	FORCEPS, STRAIGHT, 2MM JAW, ATRAUMATIC.200MM
74	FORCEPS, STRAIGHT, 2MM JAW, ATRAUMATIC.240MM
75	WAUGH FORCEPS, 1X2 TEETH, 180 MM
76	ROCHESTER-OCHSNER FORCEPS.,STRAIGHT.,1X2Teeth.,140MM
77	PEAN ARTERY FORCEPS, STRAIGHT, 140 MM
78	KOCHER HYSTERECTOMY FORCEPS STRAIGHT, 200 MM
79	KOCHER HYSTERECTOMY FORCEPS STRAIGHT., 240 MM
80	MIKULICZ PERITONEUM FORCEPS LARGE, 205MM
81	OVERHOLT-GEISSENDOERFER, DISS. FORCEPS 220 MM
82	OVERHOLT-GEISSENDOERFER, DISS. FORCEPS 225 MM
83	CRILE HAEMOSTATIC FORCEPS CURVED 160MM
84	BABY CRILE HAEMOSTATIC FORCEPS CURVED 140MM
85	HALSTED-MOSQUITO HAEM FORCEPS 200MM STRAIGHT
86	HALSTED-MOSQUITO HAEM FORCEPS 200MM CURVED
87	GREEN-ARMYTAGE FORCEPS ANGLED 195MM
88	GREEN-ARMYTAGE FORCEPS STRAIGHT 220MM
89	ALLIS ATRAUMATIC FORCEPS 8.4MM 255MM
90	ALLIS ATRAUMATIC FORCEPS 6.2MM 155MM
91	BABCOCK ATRAUMATIC FORCEPS 160MM
92	BABCOCK TISSUE FORCEPS 220MM
93	KIEBACK HYSTRECTOMY SCISSOR 90DEGREE 240MM
94	KOCHER-OCHSNER FORCEPS STRAIGHT 1×2 225MM
95	KOCHER-OCHSNER FORCEPS CURVED 1×2 225MM
96	DUROGRIP CRILE-WOOD NEEDLE HOLDER,145MM
97	DUROGRIP HEGAR-MAYO NEEDLE HOLDER, 205MM
98	DUROGRIP HEGAR NEEDLE HOLDER, 205MM
99	DUROGRIP HEGAR NEEDLE HOLDER, 245MM
100	MASSON NEEDLE HOLDER 265MM
101	MAYO-HEGAR NEEDLE HOLDER 195MM
102	DOYEN MYOMA SCREW 190MM
103	DOYEN RETRACTOR 90×35MM 242MM
104	MORRIS RETRACTOR 70×65MM
105	SEMM ABDOMINAL RETRACTOR COMPLETE
106	ROUX RETRACTOR, DOUBLE-ENDED, SET OF 3
107	VOLKMANN RETRACTOR, SEMI-SHARP,4-PRONGED
108	KOCHER ABDOMINAL RETRACTOR
109	VAGINAL RETRAC.,TUEBINGER PATT.,95X20MM
110	SURGICAL DRUM (SMALL, MEDIUM AND BIG)
111	TRAY WITH LID (SMALL, MEDIUM AND BIG SIZE)
112	HABERER ADOMINAL SPATULA, MALLEAB., TAP.

113	MICRO SCISS. SPRING TYPE,ROUND HDL.145MM
114	SPRING SCISSORS,MICRO,MILLESI,STR.,160MM
115	MICROSCOPIC FORCEPS, NO.7, 115MM LONG
116	SUTURE TYING FORCEPS,150MM, CURVED
117	MICRO-ADSON-BIEMER TISS.FORC.,1X2T.120MM
118	DUROGRIP GRUENWALD DISS. FORCEPS, 185MM
119	MICRO NEEDLEHOLDER,150MM,CVD,WITH RATCH.
120	JACOBSON NEEDLE HOLDER, W. CATCH, 185 MM
121	SIMPSON OBSTETRICS FORCEPS 23CM LONG
122	WRIGLEY OBSTETRIC FORCEPS 28CM LONG
123	DITTEL URETHRAL BOUGIES AND DILATING SOUNDS, STIFF, 345MM
124	FEMALE CATHETER METAL, 155MM

PGI/MM/PM SSY/09-10/N.B.-25

Electronic baby weighing machine

Specification:

Microprocessor based Electronic weighing machine should have large digital display with easy visibility.

Unit should have 0-120 kg range and 10 gm accuracy.

Should have facility to weigh moving patient using electronic software freeze averaging facility.

Should have display freeze facility which helps to note the weight even after baby is taken off the scale.

Space for lying babies with dropdown sides, sitting babies and platform for standing patients should be provided.

It should have following features:-

- Capacity : 120 kg
- Resolution : 10 gms.
- Accuracy : +/- 10 gms. throughout the range.
- Portable/Mobile/Static : Mobile/Static
- Weight in Kg : approx. 15 Kg.
- Baby pan : approx. 520 X 280 mm.
- Electrical Specifications : 220V AC, 50 Hz

PGI/MM/PM SSY/09-10/C-2/05

Description of Horizontal High Pressure-
High Vacuum Steam Sterilizer

- QUANTITY: 01 NO SPECIFICATION.
- SIZE: 24 CUBIC FEET
- SHAPE: HORIZONTAL RECTANGULAR.
- CHAMBER DIMENSION: 600X900X1200 MM
- STANDARD: ISI AND COMPATIBLE TO INTERNATIONAL STANDARDS
- CAPACITY: 640 LTS
- WORKING TEMPERATURE: 121°C AND 134°C.
- WORKING PRESSURE: 1.2KG. /CM2 TO 2.2 KG./CM2
- HYDRAULIC TEST: DOUBLE OF WORKING PRESSURE
- DOOR: SINGLE RADIAL ARM
- CARRIAGE: 1 NO. EACH

THE STERILIZERS SHOULD BE CONFIRMING TO IS: 3829 WITH ISI MARK (VALID CERTIFICATE FROM ISI). SUITABLE FOR STERILIZATION OF WRAPPED AND UNWRAPPED S.S. INSTRUMENTS & OTHER DEVICES, LINEN, GLASSWARE, RUBBER GOODS & LIQUID IN OPEN BOTTLES AND CAN BE OPERATED ON BOTH STEAM FROM CENTRAL STEAM FACILITY AND INBUILT STEAM GENERATOR.

(A) MATERIAL OF CONSTRUCTION

(i) CHAMBER: STAINLESS STEEL OF 316 OF IS 6911 OF 1992
(ii) JACKET: CARBON STEEL

(iii) DOOR: STAIN LESS STEEL OF 304 OF IS 6911 OF 1992.

(iv) DOOR GASKET: HIGH TEMPERATURE RESISTANT SILICONE ELASTOMER TYPE SUITED FOR AUTOCLAVING OPERATION. MATERIAL SHOULD BE NON-TOXIC AND COMPLIES WITH THE REGULATIONS FOR AUTOCLAVING USE.

(v) INSULATION: NON FIBER SHREDDING RESIN BONDED GLASS WOOL WITH S.S. COVERING OF 304 OF IS 6911 OF 1992.

(vi) DOOR HINGED TYPE WITH RADIAL ARMS WITH PROCESS LOCK TO PREVENT OPENING OF DOOR DURING THE PROCESS AND DOOR OBSTRUCTION SAFETY TO PREVENT CLOSING OF DOOR IN CASE OF AN OBSTRUCTION.

(vii) MOUNTING: ON STAINLESS STEEL TUBULAR STAND WITH LEVELING LUGS OF 6".

(viii) VACUUM SYSTEM: WATER RING TYPE VACUUM PUMP. THE SHELL AND TUBE TYPE CONDENSER SHOULD BE FABRICATED FROM STAINLESS STEEL OF 304.

(ix) STEAM SUPPLY: THE STEAM GENERATOR SHOULD HAVE HEATERS OF REQUIRED ELECTRICAL LOAD, AUTOMATIC PRESSURE CONTROLLER WITH GAUGE, LOW WATER LEVEL CUT OFF, SAFETY VALVES AND WITH UTMOST SAFETY FEATURES SHOULD BE OF STAIN LESS STEEL 316 WITH ARGON WELDING.

(x) STEAM TRAP: BOTH CHAMBER AND JACKET SHOULD HAVE STANDARD STEAM TRAPS. LOADING CAR (CARRIAGE): STAINLESS STEEL 316 GRADE OF IS 6911 OF 1992 WITH TWO SHELVES ENSURING A FLEXIBLE LOADING ARRANGEMENT.

(xi) TROLLEY: THE TROLLEY FOR LOADING AND UNLOADING OF MATERIAL.

(B) PROCESS

INDIVIDUAL STAINLESS STEEL CONTROL VALVES FOR PROCESS OF AUTOCLAVING AND ALSO FOR MANUAL OPERATION AS.

(1) STEAM TO JACKET THROUGH PRV
(2) JACKET TO CHAMBER
(3) EXHAUST – FAST & SLOW
(4) VACUUM AND DRY
(5) DIRECT STEAM DISCHARGE LINE.

(C) OPERATION OPTION (AUTOMATIC)

THE SYSTEM CYCLE SHOULD INDICATE THE FOLLOWING PARAMETERS ON LED DISPLAY.

1. (A) CYCLE NUMBER
   (B) LOADING INFORMATION
   (C) DATE
   (D) STERILIZATION DURATION
   (E) TOTAL PROCESS TIME
   (F) ALARMS FOR MALFUNCTION
2. CHAMBER AIR LEAK TEST.
3. PULSING AIR REMOVAL SYSTEM WITH DETECTION BY BOWIE DICK TEST.
   1. REAL TIME DATA – REAL TIME TEMPERATURE AND GRAPH OF TEMPERATURE INDICATION DEGREE CENTIGRADE VERSUS TIME IN MINUTES WITH SET POINT SHOWING THE SELECTED STERILIZATION TEMPERATURE ON STRIP CHART RECORDER.
   2. RETRIEVAL OF DATA –STORAGE OF ALL-IMPORTANT INFORMATION IN THE COMPUTER OF RECORD AND RETRIEVAL PURPOSE OF AT LEAST LAST 1000 ENTRIES.
   3. PRINTER PROVIDED FOR HARD COPY.

(D) OTHERS

1. VACUUM PUMP: ISI MAKE HIGH CAPACITY WATER RING VACUUM PUMP OF STANDARD COMPANY OF REQUIRED CAPACITY COMPLETE WITH CONDENSER AND FITTINGS FOR MECHANICAL AIR REMOVAL I.E. VACUUM (PRE-VACUUM) AND DRYING (POST VACUUM).
2. NOISE CONTROL: ANTI VIBRATION MOUNTING
3. ALL PIPES, FITTING, CONNECTION & STAND: STAINLESS STEEL OF GRADE X 4 CR 19 NI 9 (ISS 304 SI) OF IS 6911
4. STEAM GENERATOR: S.S. STEAM GENERATOR WITH AUTOMATIC PRESSURE REGULATION & OVER PRESSURE SAFETY & MEETING ALL NECESSARY REQUIREMENTS.
5. PLUG SCREEN : ONE REMOVABLE PLUG SCREEN FOR CHAMBER DRAIN

LINE TO BE PROVIDED

6. BAFFLE : S.S. BAFFLE PLATE FOR EVEN DISTRIBUTION OF STEAM

TO BE PROVIDED.

(E) TERMS AND CONDITIONS

1. INSTALLATION ON TURNKEY BASIS I.E. ONLY WATER, ELECTRIC AND STEAM SOURCE AT SITE WILL BE PROVIDED. ALL CONTROL LIKE ICPT SWITCH, INPUT VALVES AND PRV IF REQUIRED SHOULD BE PROVIDED/INSTALLED BY THE SUPPLIER.
2. ISI CERTIFICATE AND LIST OF USERS INSTALLATIONS OF RECTANGULAR STERILIZER MAY BE PROVIDED.
3. THE SUPPLIER WILL PROVIDE 2 SETS OF OPERATING MANUAL AND CIRCUIT DIAGRAM AND A SERVICE MANUAL.
4. GUARANTEE/WARRANTY OF 05 YEARS.
5. OFFER FOR BOTH COMPREHENSIVE (LABONR & SPARE) MAINTENANCE AND NON-COMPREHENSIVE. (ONLY LABOUR AND PRICE LIST OF SPARE PART WITH VALIDITY OF RATES TO BE PROVIDED.
6. 95% UPTIME DURING WARRANTY AS WELL AS DURING MAINTENANCE CONTRACT. FINE/PENALTY AS PER INSTITUTE TERMS.
7. A COPY OF CERTIFICATE FROM BIS SHOULD BE ATTACHED. ALL TESTING CERTIFICATES FOR THE JACKET CHAMBER AND ALL OTHER COMPONENTS USED SHOULD BE PROVIDED

(F) Safety

1. IBR APPROVED PRESSURE-REDUCING VALVES WITH GAUGES; THE TENDERER SHOULD PROVIDE TRAPS IN LINES AND SAFETY VALVES FOR JACKET AND CHAMBER FOR OVER PRESSURE SAFETY.
2. DOOR SAFETY TO PREVENT STARTING OF PROCESS UNLESS THE DOOR IS CLOSED AND OPENING OF DOOR WHEN THE CHAMBER IS PRESSURIZED.
3. INSULATED SURFACE TO AVOID SCALDING TO OPERATOR.

PGI/MM/PMSSY/09-10/N.B.-26

Surgical Instruments(For Paediatric Surgery-Superspecialties)

Sl. no	Instrument	Specifications
Scissors		
1	Stevens tenotomy scissors	Tapering, fine, tip. Curved. 12.5 cms, 5”
2.	Reynolds’ scissors	Fine, pointed 145 mm 175 mm
3.	Metzenbaum curved scissors	Tungten carbide cutting edge, gold plated rings 14.5cms. Curved 16 cms, curved 18 cms, curved 20 cms curved
4.	Metzenbaum curved scissors	14.5cms. Curved 16 cms, curved 18 cms, curved 20 cms curved
4	Metzenbaum straight scissors	16mm 20mm
5.	Potts scissors	Fine, pointed, curved 180 mm
6	Micro scissors	Curved & straight 120mm 160mm
Dissecting and tissue forceps		
7	Micro-adson tissue forceps, non toothed	120mm
8	Mc. Indoe toothed tissue holding forceps	Delicate, extremely fine teeth 15cms, 6”
9	Gerald toothed tissue holding forceps	17.5 cms, straight
10	Waugh toothed tissue holding forceps	20 cms, straight
11	Mc. Indoe tissue holding forceps, non	6”, 15 cm

		toothed	
	12	Cushing's tissue holding forceps, non toothed.	18 cms, serrated tips, non-toothed 20 cms 25 cms
	13	DeBakey's atraumatic vascular forceps	Vascular forceps, atraumatic jaws, 1.0 mm wide tip 15 cm 19.5 cm 24 cm
	14	Micro tissue forceps	Round handles, soft spring tension, platform tip, straight. 15 cms. Straight tip 21 cms. Straight tip
	15	Micro forceps jeweller type	110mm
	16	Toothed forceps	Medium size Long heavy
	17	Thumb forceps long heavy	
	Needle holders		
	18	Needle holder TC converse	130mm
	19	Needle holder-Crile Wood	Delicate pattern 15 cms
	20	Jameson needle holder	23 cms
	21	De Bakey's needle holder	Tungsten –carbide inserts, gold plated ring handles, slender pattern 18 cms 23 cms 25cms
	22	Ryder (very delicate,suture size 5/0 &smaller)	1 mm jaw, diamond dust coating /tungsten carbide inserts on the inside of jaws, gold plated ring handles, serrated jaws 14 cms, 18 cms, 22 cms, 25 cms
	23	Castroviejo needle holder	Straight, diamond dust coating/tungsten carbide inserts on the inside of jaws, gold plated ends 14.5 cms 18.0 cms
	24	Micro-needle holder	Round handle, straight tip, with ratchet, diamond dust coating/tungsten carbide inserts on the inside of jaws. 15cm 18cm 21 cm
	25	Needle holder long heavy	20 cms
	Vascular clamps, hemostatic forceps, vessel clips		
	26	Bull dog clamp-Dieffenbach	Curved 38 mm total length,12 mm length of jaw serrations 48 mm total length, 16 mm length of jaw serrations
	27	Bull dog clamp, Diethrich	Curved, 48 mm total length, 10 mm length of jaw serrations
	28	Mini Bull dog clamp CVD 35mm	CVD 35mm
	29	Mini Bull Dog Clamp CVD 45 mm	CVD 45 mm
	30	Bull dog clamp-De Bakey	Curved 78 mm, 18 mm length of jaw serrations 86mm, 26 mm length of jaw serrations
	31	Cooley vascular clamp(coarctation patent ductus clamp)	Gentle curve of the jaw, Total length : 18cms

			Length of serrated jaws:63mm
	32	Debakeys vascular clamp (patent ductus clamp)	Gentle curve of the jaw Total length: 20 cms Length of serrated jaws: 92.5 mm
	33	Cooley vascular anastomosis clamp (single angle curve of jaw)	16.5 cms length, 30 degree jaw angle
	34	Cooley vascular clamp (ring handle bull dog clamp)	Double angled curved jaw, length 11.5 cms
	35	Baby-Satinsky vascular anastomosis clamp	Double angle curve jaw, length 150mm
	36	Cooley vascular anastomosis clamp (double angle curve jaw)	double angle curved atraumatic jaws, Length 16 cms, jaw width: 24 mm
	37	Cooley vascular anastomosis clamp	Double angle curved jaw, Length: 17.5 cms, jaw width: 20mm
	38	De- Bakey –Satinsky tangential occlusion clamp	Double angle curved jaw Total length: 23.5 cms Jaw length: 68 mm Width of jaw: 32mm
	39	DeBakey tangential occlusion vascular clamp (double angle curve jaws)	Total Length 22 cms, jaw width 38mm
	40	DeBakeys dissecting & ligature forceps, profunda clamps	Atraumatic jaws, smooth rounded curve. Total length 19 cms Length of serrated jaws: 77 mm
	41	Artery c lip-Micro Hartmann	Very delicate pattern 9 cm-straight 9 cm-curved
	43	Micro-Halstead-mosquito	12.5 cms. Straight 12.5 cms. curved
	44	Artery forceps	16mm, curved 16mm, straight
	45	Roberts artery forceps	22.5 cm-curved
	46	Crafoord artery forceps	24.5 cm-light curved
	Dissecting and ligature forceps		
	47	Mixter right angle dissecting & ligature forceps	Right angle dissecting and clamping forceps, very delicate jaws with longitudinal serrations, cross serrated tips 18 cms 22 cms 25 cms
	48	Lahey dissecting & ligature Forceps	Fully curved jaws with longitudinal serrations 20 cm 23 cm
	49	Micro-Adson dissecting &ligature forceps	14 cms.
	Tissue holding clamps, sponge holding forceps, towel clips		
	50	Desjardins gall duct & cystic forceps	22 cms
	51	DeBakey atraumatic Intestinal & tissue holding forceps (clamp)	Intestinal & tissue holding forceps (clamp) , jaws with atraumatic serrations Jaws 20 mm wide, 25 cms
	52	Backhaus Towel clamp	8.0 cms 11 cms
	53	“Simplex” tubing clamp	12 mm width
	54	GROSS” dressing and sponge forceps with catch	Atraumatic, serrated jaws with slender oval fenestration, with catch 14.5 cms, curved 18 cms, curved
	55	“Foerster-ballenger” Sponge holding forceps	Small loop jaws, serrated 18 cms-straight 24.5 cms-curved

	56	Baby Allis	13 cms length, 4x5 teeth
	57	Boys-Allis	15.5 cms length, 5x6 teeth
	58	Allis	19 cms length
	59	Babcock organ & tissue holding forceps	15.5 cms. Length 20 cms length
	60	Baby Kochers atraumatic intestinal clamp	Curved,13 cms length
	61	Kochers atraumatic intestinal clamps	Curved, 21 cms
	62	Blake gall stone holding forceps	Curved, 20.5 cms
	Retractors		
	63	Kocher-Langenback retractor	Blade:6 mm wide-25 mm deep Blade: 11 mm wide-41 mm deep Blade: 15 mm wide-35 mm deep
	64	Masing vein retractor	Blade 6x12 mm, length 14 cms
	65	Cushing Vein retractor	Length 17.5 cms, blade 10X10 mm
	66	Nerve and tendon hook	16 cms length, 7 mm wide, semi-circular curved blunt tip
	67	Adson dura and nerve hook	Right angled end, blunt tip Length: 19 cms, blunt tip
	68	Malleable retractors (Stomach & intestinal spatulas)	Ribbon retractors, malleable, stainless steel 12 mm width, 20 cms length Ochsner ribbon retractors, malleable, stainless steel 30 mm width, 33 cms. length 50 mm width, 33 cms. length 75 mm width, 33 cms.length
	69	Sargent abdominal spatula	All sizes
	70	Volkmann hand retractors	2 prongs,semi-sharp, blade: 8.5x8 mm 3 prongs, semi-sharp, blade 8.5x 13 mm 4 prongs,semi-sharp, blade 8.5x19 mm
	71	Harrington retractor	Blades:123x45 mm Blades: 123x64 mm
	72	Allison lung spatula	40 mm blade width, 255 mm length 54 mm blade width, 320 mm length
	73	Morris retractor	Total length: 24.5 cms Blade: 70 x 50 mm Blade: 70 x 65
	74	Doyen retractors for deep pelvic surgery	Length 24 cms Blades:35 mm wide, 90 mm deep Blade:45 mm wide, 120 mm deep Blade:60 mm wide, 160 mm deep
	75	Doyen bladder retractor	Length: 25 cms Blade:53mm depthx80mm width
	76	Daever retractors	Standard pattern, flexible 18 cms. long, 19 mm wide 23 cms long, 25 mm wide 30 cms long, 38 mm wide
	77	"MIKULICZ" abdominal retractors for deep abdominal surgery , 26 cms	Blade:35 mm wide x 91 mm deep, length: 24 cms Blade:55 mm widex 86 mm deep, length: 25.5 cms Blade:50 mm widex 121 mm deep, length: 25.0cm
	78	St. Marks pelvic retractor	Blade: 174x60mm, length: 330mm
	79	Rochard table mounted self retaining abdominal retractor	Mounted frame for fastening to the lateral bars (both sides)of the operating table Blade sizes: 48 x 90mm 48 x 120mm
	80	Weitlaner self retaining retractor	Standard pattern with prongs Length 11 cms, semi-sharp prongs Length 13 cms, semi-sharp prongs

			Length 16.5 cms, semi-sharp prongs
	81	Balfour –baby self retaining abdominal retractor	Lateral blades: 27mm deep, central blade: 21 x 24 mm
	82	Balfour self retaining abdominal retractor	Lateral blade: 60mm deep, central blade:47 x 80mm Lateral blade: 60 mm deep, central blade: 80 x 80 mm
	83	Denis Browne self retaining retractor	Frame: 175 x 150 mm 4 blades: 40 x 30 mm 4 blades : 20 x 30 mm
	84	Finechietto rib retractor	Blades: 12x15 mm Shaft length: 95mm, blades:18 x 21 Shaft length:180 mm,blades:28 x 32 Shaft length:200mm, blades:36x45 Shaft length: 260mm, blades:65 x 65
	85	Table mounted self retaining abdominal retractor system	For infants & smaller children For older children & adolescents Table mounted self retaining retractor system with assorted types and sizes of retractor blades (Retractor blades: Richardson, Kelly, malleable, baby Harrington, Daever etc.)
	86	Benson's pyloric muscle spreader	Length: 155 mm
	Rectal surgery instruments		
	87	Killian rectal speculum for children	Length 145 mm, blade 70 mm x 7 mm
	88	Sims rectal speculum for children	Length 19cm, blade 60 x 20 mm
	89	Parks rectal spreader	Consisting of spreader, 2 lateral blades, one central blade with cold light carrier. Lateral blades: 70mm deep
	90	St. Marks, Modif. Girona perineal spreader	Perineal spreader
	91	Rectal suction biopsy forceps	For taking rectal mucosal & submucosal biopsies in newborns & infants. Has 3 detachable tips
	92	Punch biopsy forceps for rectum	Handle 140mm, Shaft 250mm
	93	Fistula probes	Straight tip Curved tip, 45 degree angle
	94	Uterine Hegar dilator set	Diameter ranging from 1 mm-26 mm
	Electrosurgical instruments		
	95	Electrosurgical Metzenbaum dissecting scissors	180 mm length, fine tip
	96	Electrosurgical monopolar forceps	130 mm length 200 mm length
	97	Electrosurgical bipolar forceps	16 cms length, straight tip 9 mm
	Suction instruments		
	98	Pool sump suction tip	Suction canula with outer tube to be screwed off. Length: 22.5 cms
	99	De Bakey suction canula	With finger cut off & stylet Olive diameter: 9 mm Length: 160mm
	100	Adson suction canula	With finger cut off &stylet Olive diameter: 8mm Tip diameter: 3 mm Length: 16.5 cm
	101	Barron suction canula	With finger cut off & stylet, Tip Diameter:2mm Length: 16cms
	102	Zoellner suction canula	Diameter: 2.5 mm Length: 180mm
	Miscellaneous trays and bowls		
	103	Kidney tray set	All sizes

104	Round bowls set	All sizes
105	BP handle	For all sizes of blades

PGI/MM/PMSSY/09-10/N.B.-28

Pediatric Thermal blanket (Paediatric Patient Warming System)

Specifications:

To prevent intra operative hypothermia in paediatric patients during major surgeries.

Consist of active warming arm-cum-shoulder section, pair of leg segments and 1 double segments to cover the entire body.

Size	Double Segment	:	(30-35) cm x (65-70) cm
	Arm & Shoulder Section	:	(130-135) cm x (25-30) cm
	Leg Segment	:	(30-35) cm x (50 – 55) cm

Double segment and arm cum shoulder segment should have two temperature sensors each for precise temperature control

Double segment and arm cum shoulder segment should be divided in two sections capable of being switched ON or OFF independently depending upon the nature of surgery and condition of patient.

Should have a control unit to regulate warmth to every area precisely by use of carbon fibers

Control unit should be capable of warming at least three segments at a time.

Should offer precise digital temperature control with selectable temperature range of 30 to 40 ºC in steps of 0.5ºC

Control panel should display intended and actual temperature

Should have safety features such as Automatic check, Precise temperature control between warming system and patient, Autostop on detecting any problem

Should have non latex anti-bacterially coated, blood and fluid Resistant covers

Covers should be washable, autoclavable and replaceable

The control unit should be light weight not more than 2.5 kg, small in size (25x10x20 cm approx.) and easily attachable to IV rod/OT table with fixing claw.

Should have low energy consumption and noiseless operation

PGI/MM/PMSSY/09-10/N.B.-29

Paediatric Thermal mattress

Specifications:

To prevent intraoperative hypothermia in paediatric patients undergoing major surgical procedures.

- Double layered polyurethane mattress with washable cover to eliminate the leakage of fluids etc. into the mattress.
- Flexible mattress with insulation resistance of more than 3KV.
- Sophisticated digital control system to detect even minor variations in mattress temperature with continuous monitoring with dual sensor system.
- User-friendly soft-touch panel with Bar Graph display of percentage of Heater Power Output.
- Resolution : 0.1°C.
- Over temperature alarm, Under temperature alarm, cut off alarm, power failure alarm (Audio-Visual).
- Operating voltage : 230VAC +/-10%. Mattress operating voltage 24VAC.

PGI/MM/PMSSY/09-10/N.B.-30

Neonatal intensive care incubator:

Specification:

-Intensive care incubator with infant mode and air mode operational facility for prevention and clinical management of neonatal hypothermia. Especially useful in the management of preterm, low birth weight babies.

-Continuously curved rounded hood for easy observation.

-Air circulation system to reduce the infant's heat loss.

-Digital display panel.

-Mattress with a smooth continuous tilt mechanism.

-X-ray cassette tray.

-Adjustable height from aprox. 90 to 109cm.

-Storage drawers.

-Movable on four lockable castor wheels.

	-Servo double microcomputer for thermal and other controls. -Automatic servo-humidity control to maintain preselected relative humidity with setting range of 40-95% (in 1% increment) and display range of 15-99%. -Skin temperature setting range of 35.0-37.5^{0}C with override mode of 37.6-39.0^{0}C. -Air temperature setting range of 23.0-37.0^{0}C with override mode of 37.1-39.0^{0}C. -Inbuilt weight monitoring facility with memory and provision of print out having measuring range of 300 – 7000gm -Servo-controlled oxygen controller with oxygen concentration setting range of 22-65%. -Audio/visual alarm for following: -Humidity Chamber off, low water level, relative humidity set point alarm, humidity sensor alarm, high temperature, skin temperature probe, set point, system failure, power failure, oxygen sensor, set oxygen concentration. -It should be CE marked -It should be supplied with following accessories:- -I.V. Pole, safety flow meter for oxygen with adjustment range of 1-15 L/min, storage drawers, skin temperature probe, electrostatic filter, dust cover, oxygen Sensor.
PGI/MM/PM SSY/09-10/N.B.-31	**Neonatal Transportation incubator:** **Specification:** Essential for transporting newborns safely from one area to another within the hospital. Prevents hypothermia during transport. Allows administration of Oxygen and intravenous fluids during transport. wall transparent hood section with electronic servo temperature control system. Temp. setting range from 29deg C to 37 deg C with audible & visual high temperature alarm. Standby heating mode to keep incubator ready for use. Low power voltage alarm Supplied with 12 V DC rechargeable power pack compatible with 230 V AC/ 50-60 HZ Auto – cut facility when heater gets over heated. Supplied with incorporated IV pole Sould be 93(W) x 41 (D) x 36(H) cm in size and approx 15.7 kg in weight. Fixed on movable trolley with lockable castors & storage space for battery & gas cylinder
PGI/MM/PM SSY/09-10/N.B.-32	**Mobile Neonatal radiant heater on stand:** **Specifications:** -Mobile radiant warmer on swivel castor wheels -For preventing hypothermia in operation theatres and while performing certain bedside procedures -Servo controlled temperature -Microprocessor based electronic control -Thermistor based temperature probe -Adjustable heights suits different heights of beds -Overhead dazzle free observation light -Built-in IV stand -Working temperature range: 25 degree C to 40 degree C -Accuracy of display: +/- 0.2 degree C -Heating element: Quartz encapsulated heater with parabolic reflectors -Bright numerical LED temperature display -All standard alarm systems: high/low temp, temperature probe failure, heater failure, system failure
PGI/MM/PM SSY/09-10/N.B.-33	**Pediatric Operating table:** **Specifications:** -Dimensions: Length: 60 inch,Width: 16 inch,Min. Height: 30 inch, Max. Height: 40in -Electro-hydraulically operated -Full length x-ray translucent top and x-ray cassette tunnel. -Slidable table top towards head end and legend, to facilitate unequalled access for C-arm image intensifier. -Anti-static mattress and castor wheels with locks -Operating positions: height adjustment, Tredelenburg, lateral tilt, reverse Tredelenburg, kidney elevation. -Removable head and leg sections -Attachments for lithotomy position for small children and infants .Removable and folding arm position supports. -Side bars for fixing other attachments like Mayo table and anaesthesia screen -Separate accessory fixing clamps of sliding nature on the side bars: both circular socket clamp and circular rotary clamp -Stainless steel base and columns.

PGI/MM/PM SSY/09-10/N.B.-34	**Portable procedure light** **Specification:** Mobile lights on Castors. For bedside procedure and minor operation procedures.Gives Cold bluish, white light of high intensity Xenon lamps. Parabolic reflectors. Swivel neck and dome. Height adjustment by spring collet. Easy manoeuvrability. Built in transformer.
PGI/MM/PM SSY/09-10/N.B.-35	**Portable electrical slow suction machine:** **Specification** To provide continuous controlled low pressure negative suction to (i)facilitate lung expansion in patients with intercostals chest tubes and (ii) upper esophageal pouch suctioning in esophageal atresia to prevent aspiration. - Light weight,less noisy,compact -Non motorised electric magnetic pump -Stepless power adjustment facility -Provided with 500 ml liquid bottle -Work on 220 v ac -Pressure range 0 to 220 mm hg
PGI/MM/PM SSY/09-10/N.B.-36	**Pediatric laparoscopy set** **Specification:** 1. **Camera:** 2. Full high definition(HD) camera, Progressive scan technology, 1920x1080 pixels (or better) resolution, 16:9 format with integrated image processing modules Parfocal zoom lens with optical and digital zoom, focal length 14-30mm (2X) Digital input and output connectors 2 freely programmable camera head buttons **3. Monitor:** 23 inch (or better) HD flat screen medical grade monitor, 16:9 Aspect Ratio, Color system PAL/NTSC Resolution max. 1920x1200 SDI, Multimodality image viewing with S-video, RGB, BNC/DVI/VGA cable connection.. 23" HD TFT flat screen. **4. Telescopes:** Straight forward telescope 0 degree, diameter 5 mm, length 24-30 cm, autoclavable, fibre optic light transmission incorporated Forward oblique telescope 30 degree, enlarged view, diameter 5 mm, length 24-30 cm, autoclavable, fibre optic light transmission incorporated Straight forward telescope 0 degree, diameter 10mm, length 30-31 cms, autoclavable, fibre optic light transmission incorporated Forward oblique telescope 30 degree, diameter 10 mm, length 30-31 cm, autoclavable, fibre optic light transmission incorporated **5. Hand instruments:** Veress needle with spring mounted blunt inner cannula, luer-lock, length 10 cms Trocar: Diameter: 3.9 mm, working length 5 cms pyramidal tip,silicone leaflet valve, LUER-Lock connector For use with instrument size 3/3.5 Trocar Diameter: 3.9 mm, working length 7.5 cms pyramidal tip,silicone leaflet valve, LUER-Lock connector For use with instrument size 3/3.5 Trocar: Diameter 6 mm., working length 5.0 cm, Pyramidal tip. Silicone leaflet valve, LUER-Lock connector. For use with instruments size 5 mm Trocar: Diameter 5.5-6 mm., working length 8.5-10 cm, Pyramidal tip. Silicone leaflet valve, LUER-Lock connector.

	For use with instruments size 5 mm Trocar: Diameter 10-11mm . , pyramidal tip working length 8.5-10 cms. for use with telescope size 10mm. Reduction sleeve 11/5 Reduction sleeve, reusable, instrument size 3 mm, trocar canula size 6 mm Scissors, rotating,diameter 3 mm., curved, double action jaws, connecting pin for unipolar coagulation. Metzenbaum scissors: diameter 5 mm. Micro hook scissors, rotating, diameter 3 mm & 5mm, connector pin for unipolar coagulation, single action jaws. Kelly dissecting& grasping forceps: Diameter 3mm & 5 mm, double action jaws, connector pin for unipolar coagulation, handle without ratchet. Maryland dissector: grasping & dissecting forceps, curved with fine horizontal serrations, double action jaws, diameter 5 mm. Reddick & Olsen dissecting &grasping forceps: Diameter: 3 mm and 5 mm, connector pin for unipolar coagulation, heavy, double action jaws, handle without ratchet. Right angled dissecting & grasping forceps: Diameter; 3 mm and 5 mm Bowel grasping forceps with ratchet: Fine atraumatic serrations, single action jaws, fenestrated, Diameter: 3mm and 5 mm, hemostat style ratchet. Babcock grasping forceps: Atraumatic fenestrated, diameter 3mm & 5 mm DeBakeys grasping forceps: diameter size 3 mm & 5 mm Coagulating and dissecting electrode: L-shaped, insulated, with connector pin for unipolar coagulation, Diameter: 3 mm and 5 mm, Dissecting spatula blunt: coagulating & dissecting electrode, with connector pin for unipolar coagulation, diameter 5 mm. Needle holder: Straight handle with ratchet, diameter: 3 mm & 5 mm. Suction & irrigation tube with 2-way stopcock: Diameter 3 mm & 5mm Suction & coagulation cannula with trumpet valve, size 3 mm, insulated with connector pin for coagulation. Single clip applicator for Titanium clips: Diameter 10mm for Medium-large clips Single clip applicator for Titanium clips: Diameter 10mm for Medium clips Pylorotome: Size 3 mm, length 20 cm. Pyloric muscle spreader: Size 3 mm, length 20 cms Bipolar cautery forceps: 5mm Bipolar Fenestrated Forceps with Spring Handle 5mm Bipolar Micro Tip Forceps with Spring Handle 6. **Light source**: Xenon Cold light fountain, one 175-180 Watt XENON lamp 7. **Fibre optic light cable**: length 250 cm, heat resistant 8. **Endoflator**: Electronic endoflator, adjustable flow rates of 0-20 litres/min, pressure range 0-30mm Hg., pressure reducer valve. Provided with silicon autoclavable tubing with luer attachment. 9. **Suction-irrigation system**: consisting of suction-irrigation handle, sealing cap for irrigation & suction handle, sealing attachment with opening & membrane valve for auxillary instruments upto 5 mm, suction irrigation tube length approx. 310 mm, diameter 3.5mm-5.0mm. 10. **Mobile video trolley** including at least 4 shelves, 4 anti-static castor wheels, camera head holder, infusion bottle holder, CO2 cylinder holder, integrated cable ducts.
PGI/MM/PM SSY/09-10/N.B.-37	**<u>Pediatric cystoscope-resectoscope set</u>** **<u>Specification</u>** **1. Telescopes:** Miniature compact fibre cysto-urethroscope, 4.5/6 Fr. For neonates and children.

	Miniature 0 degree fibre telescope 2.4 Fr instrument channel Straight forward telescope 0 degree, diameter 1.2 mm, working length 20 cms, autoclavable, fibreoptic light transmission incorporated. Straight forward telescope 0 degree, diameter 1.9 mm, autoclavable, fibre optic light transmission incorporated. Forward oblique telescope 30 degree , diameter 1.9 mm, , autoclavable, fibre optic light transmission incorporated. Straight forward telescope 0 degree, 1.9/2.1 mm, autoclavable, fibre optic light transmission incorporated. Forward oblique telescope 30 degree, 1.9/2.1 mm, autoclavable, fibre optic light transmission incorporated. 1.**Cystoscopes:** Cystoscope-urethroscope sheath, for examination and irrigation, 7 fr. Or 7.5 Fr. With obturator and 2 LUER-lock adaptors. Working channel for accessory instruments upto 4 Fr. Cystoscope-urethroscope sheath, 8 fr. Or 8.5 fr., with instrument channel 4 fr. with obturator and 2 LUER-lock adaptors. **Resectoscopes:** Resectoscope sheath 9 Fr. With obturator, with LUER-Lock stop cock with the following: Working element set with working element, cutting loop, coagulating electrode, high frequency cord & protection tube. Telescope bridge with one instrument channel Resectoscope sheath 11 Fr. With obturator with LUER-Lock stop cock with the following: Working element: with cutting loop, coagulating electrode. Telescope bridge with one instrument channel Cutting loop, angled Coagulating electrode, angled, blunt. Coagulating electrode, hook shaped, ball end 1. Monopolar high frequency cord 2. Grasping forceps, 5 Fr., length 30 cms, double action jaws 3. Biopsy forceps, double action jaws, 5 Fr. Length 30 cms 4. Coagulating electrode, 3fr., unipolar, length 53 cms 5. Deflux needle with obturator. 6. Camera, monitor, light source as specified in the laparoscopy set-the same would be used for

	cystoscopy.
PGI/MM/PMSSY/09-10/N.B.-38	**Pediatric bronchoscopy set** **Specification:** **1. Rigid ventilating bronchoscopes:** Bronchoscope, size 2.5 or 2.8mm diameter Bronchoscope, size 3 Bronchoscope, size 3.5 or 3.7 mm diameter Bronchoscope, size 4 or 4.7 mm diameter Bronchoscope, size 5 or 5.2 mm diameter Bronchoscope, size 6 or 6.2 mm diameter 2. Prismatic light deflector, autoclavable, with connection for fibreoptic cable **3. Telescopes:** Straight forward telescope 0 degree, diameter 2.7 mm/2.9 mm, autoclavable, fibreoptic light transmission incorporated Forward –oblique telescope 30 degree, diameter 2.7 mm/2.9 mm, autoclavable, fibreoptic light transmission incorporated Straight forward telescope 0 degree, diameter 3.4 mm, autoclavable, fibreoptic light transmission incorporated Forward-oblique telescope 30 degree, diameter 3.4 mm. Straight forward telescope 0 degree, diameter 4.0 mm Forward –oblique telescope 30 degree, diameter 4.0 mm 4. Optical alligator forceps for pediatric bronchoscope, for removal of hard foreign bodies. 5. Optical forceps for pediatric bronchoscopes, for removal of peanuts and soft foreign bodies. 6. Optical forceps for biopsy 7. Optical universal forceps 8. Optical suction tube, outer diameter 2.5 mm, 3 mm. 9. Glass window plug 10. Rubber telescope guide 11. Adaptor, with sliding glass window plug, sealing cap, notched lens & keyhole opening 12. Guide piece for suction catheter 13. Adjustable magnifier 14. Adaptor for respirator 15. Magnetic extractor for removal of magnetisable foreign bodies 16. Corkscrew extractor for removal of soft, difficult to grasp foreign bodies. 17. Camera, light source and fibre-optic light cable as per specifications given in pediatric laparoscopy set—same would be used for bronchoscopy.
PGI/MM/PMSSY/09-10/N.B.-39	**Urodynamic study equipment** **Specifications**: Flow transducer: Measuring range: 0-50ml/sec Resolution: <0.03ml/sec Patient safety ensured by galvanically isolated flow channels. Pressure transducer: 4 Inputs: P1 (Pves), P2 (Pabd), P3 (Pura) and P4 Measuring range:-50 cm H2O to +350 cm H2O Resolution: 0.2 cm H2O Puller with arms: Speed range: 0.5-5 mm/sec Accuracy: +/_ 0.03 mm/s Usable length: 300 mm. Water pump: Infusion Rates: 2-10ml/min. in steps of 1ml/min 10-100 ml/min. in steps of 5 ml./min Accuracy: <50ml/min: 3% of actual value +/_ 1ml/min >50ml/min: 5% of actual value +/_1ml/min Patient safety: Software controlled Autostop if the Intra-vesical Pressure exceeds a particular preset limit.
PGI/MM/PMSSY/09-10/N.B.-40	**Ultrasonic cutting & coagulating device for open and laparoscopic surgery :** **Specification** Ultrasonic generator with a frequency of 55.5 KHz, capable of incising tissue and providing hemostasis with minimal thermal injury For both open &laparoscopic surgery

	Both 5mm & 10mm instruments Vibration range: 50-120microm. Range of laparoscopic & open shears: 10 mm coagulating shear capable of working in 3 modes: flat, blunt & sharp Hand activated 5 mm curved coagulating shears, 360 degree rotatable, having min/max switches to enable precise operation Open & laparoscopic shears capable of coagulating vessels upto 5 mm Rotating hand switch adapter with bilateral min/max switches to enable precise operation of system by hand for hooks and blades. Dual foot receptacles to connect two footswitches, to allow simultaneous use by two surgeons Power entry filters to suppress electromagnetic disturbances to other monitors and is defibrillator protected. System diagnostics & trouble shooting guide to pinpoint & to resolve alert/alarm conditions. Confirms to required safety standards Hardware: Generator, foot switch, cart Accessories: Handpiece, 5mm blade adapter system, adapter for shears **Open surgery instruments:** Coagulating shears: 10mm diameter. Hand activated coagulating shears with clicker-5mm diameter, curved mode Hand activated scissor grip coagulating shears-16 mm curved tapered blade capable of sealing blood vessels upto 5 mm, 5 mm curved blade with grip. **Laparoscopic surgery instruments:** Laparoscopic coagulating shears, 10 mm diameter, approx. 34 cms long Laparoscopic hand activated coagulating shears with clicker-5 mm dia, curved mode, approx.36 cm. Long Hand activated coagulating shears with clicker-5 mm dia. Curved mode, approx. 23 cms. long
PGI/MM/PM SSY/09-10/N.B.-41	**Instrument Washer & Disinfector Instrument Washer and Disinfector:-** **Specifications:** • Ergonomically designed disinfecting washing machine to clean all type of surgical instruments. • Peristaltic dosing pumps for chemicals, Mircroprocessor controlled. • Level control with minimum level alarm for chemical containters of about 10 ltrs. • Multiple pre – set programme. • Total control of cycle parameters. • Exhaust air connection & drying unit with double filter. • Heating power of 03 KW. • Washing chamber made up of AISI 316L Steel. • Self cleaning chamber with rounded corners. • Three level water filtering system. • Manual operated bottom hinged door. • Automatic rack coupling system for injector cleaning and drying. • Thermal decontamination up to 93°C. • External dimension – 600 X 660 X 1700mm • Rack Dimension – 505 X 570 X 530mm. • Maximum basket capacity – 160 ltrs. • Electrical tank heating/boiler for pre – heating. • Front loading. • The equipment should comply EN ISO Specifications. • Inserts designs should hold different type of surgical instruments and tubular scopes and appliances, anesthesia tubings etc. • The warranty of equipment will be five years. • Comprehensive AMC charges should also be offered. • The firms to give installation requirement for the equipment in their technical officer.

PGI/MM/PM SSY/09-10/N.B.-42	**Bilirubinometer** **Specifications:** -Analyses bilirubin in sample of blood taken in a micro-capillary -Sample volume required <70 microlitres -Measurement system: photometric double beam -Reading time: 3 secs -Detectors: silicon photodiodes -Optical filters: 450-575 nm -Data storage: last 1000 readings -Results: On LCD display & printers
PGI/MM/PM SSY/09-10/N.B.-43	**Pediatric resuscitation kit** **Specifications:** -Ambu bags: 250 ml, 500ml, 1600ml -Self inflating silicon resuscitation bags with facilities to DIRECTLY connect Oxygen-Reservoir - The bag is provided with spring loaded Pop off valve set to 35-40 cms of water-pressure. -Mask sizes: 00, 01, and 02 -Laryngoscopes with blades -Blades: Straight: 0, 1 size (Miller), Curved: 2, 4, 5 (Mac) -Guedal airways: 000, 0, 1, 2, 3, -Pediatric Stethoscopes
PGI/MM/PM SSY/09-10/N.B.-44	**Oxygen hoods**: **Specifications:** -Sizes: Neonatal, Infant, Pediatric -Single piece, unbreakable, polycarbonate 3mm thickness (min)., autoclavable Oxygen Hood with humidification port and silicon autoclavable flap for neck height adjustment. -CE Certified
PGI/MM/PM SSY/09-10/N.B.-46	**Infant transport trolley:** **Specifications**: Mobile trolley with 4 swivel castor wheels Transparent side panels with hinges Bed can be tilted along its horizontal axis Provided with an extra shelf underneath the baby's bed for placing oxygen cylinder, infusion pumps, drugs etc.
PGI/MM/PM SSY/09-10/N.B.-47	**Table top autoclave for Operation Theatre** **Specification:** • Multiple programmed for instruments, textile, liquids etc with pre and post vacuum dry cycle. • Microprocessor controlled cycle time & temperature • Microbiological (in built) air filter • Digital Display/LED of Operations in sequence and temperature and timer cycle documentation through a printer/serial port connection for PC/USB storage unit. Front loading with Deionizer for connection to water. • Chamber volume 20 – 25Ltrs. • Temperature control – 121°C to 134°C • Operating pressures: 15 PSI to 30 PSI • Class – B sterilizer designed to meet EN 13060. • The warranty of equipment will be five years. • AMC charges should also be offered. • The firms to give installation requirement for the equipment in their technical offer.
PGI/MM/PM SSY/09-10/N.B.-48	**Fluid incubator for warming fluids in the operation theatre:** **Specifications:** System: natural convection Outer dimensions approximately: 730Wx635Dx870H Capacity approximately: 153 litres Exterior cabinet: Baked-on acrylic finish in galvanized steel Interior cabinet: stainless steel Door: baked on acrylic finish on galvanized steel Insulation material: glass wool Inner door: tempered steel Shelves: stainless steel, stainless wire Temperature controller: Electronic temperature controller, sensor platinum resistance, digital

	indication system Timer: digital time indication system, Auto temperature off Overheat warning system: Flickering warning, inner thermister Over heat protection system: Thermal lead switch Heater: 240W Attachments: 3 shelves, 6 supports Temperature range: +5 degree C to +60 degree C Reaching time to the highest temperature: +20 degree C to +60 degree C about 80 mins.
PGI/MM/PMSSY/09-10/N.B.-49	**Phototherapy Unit** **Specifications of LED Phototherapy** • Should have approx. 18 nos high power LED • Should have Intensity : > 30 µw / cm2 / nm • Variation in intensity over 6 hours : <10% • Light Source Life time : minimum 20,000 hr • Should have Effective Area : 50 X 25 cm • **Should have Audible noise <60dB** **Dimension:** • Cart approximately: 1460 mm(H) X 430 mm(L) X 520mm(D) • Main : 75mm(H) X 340 mm(L) X 210 mm(D) • Should have Electrical Leakage current : <100 µA • Should have Electrical Input : AC 100 ~ 240 V (50/60 Hz) • Should have Electrical Consumption : about 80 VA • Should have CE Certification • Should have height adjustment. • Should have temperature adjustment. • CED based phototherapy for newborn using 18 high power LED sources in the range 460-480 nm and having output intensity > 30µw/cm2/nm at 45 cm. • Should conform to all standard safety standards
PGI/MM/PMSSY/09-10/N.B.-50	**Specifications for ultrasound machine for intraoperative ultrasound:** **Applications:** System should be the latest state of art fully digital DICOM compatible colour Doppler system. Capable of producing images of high diagnostic quality for whole body clinical application (both adult & paediatric) Should have facility for imaging abdomen, pelvis, small parts (thyroid, breast, testis), musculoskeletal, transcranial, neonatal cranial & spinal, cardiovascular, peripheral vascular, endocavitary (TV/TR). Facility for ultrasound guided interventions like image guided drainage and biopsy with clear visualization of the needle. Suitable for intra-operative imaging of solid organs like liver and intraoperative Doppler for vessels. **Imaging modes:** Should have the following modes: 2D, B/B mode, B/M mode, 4B mode, M mode, spectral Doppler, pulse wave (PW), continuous wave (CW), Doppler colour flow imaging, colour power angio, directional colour power angio imaging, 3D with multiplanar reformatting, Doppler Tissue Imaging (DTI), Colour M-mode, Duplex mode, Triplex mode, Virtual format, Dual from freeze, split/Zoom, anatomical M-mode live, cine loop and DIMAQ image review, Colour Doppler velocity mode, ECG trace in all modes. **System specifications:** System should be compact & ergonomically designed latest state of art. Please mention the year when the system was launched. System should be easy to use and with facility to to upgrade to keep pace with rapidly changing technology-please mention the option of such upgradability. All software up gradation should be supplied free of cost for next 5 years. System CART should be of high durable quality with locking wheel device.

	Vendor should mention the weight of the system. System should have user-centric control panel with home base layout and control customization. System should have On/Off task light and back illumination of control panel. Should have thumb-nail menu which provides on-screen thumb nails of images and dynamic clips during exams. Should have height adjustment of control panels up/down with lock lever Should have multi-directional articulating monitor arm to help improve ergonomics, wheel lock mechanism. Should have quick set –vendor should quote the number of quick sets. Should have 2D mode line density upto 512 lines. System should have 2048 or more digital processing channels-mention the number of channels and give details System should have at least 8 TGC (time gain compensation), more will be preferred. Should have 256 gray shades or more. Dynamic range should be 180 dB or more-higher dynamic range would be preferred. Should have a frame rate of >500 frames per second. Please specify the frames per second in 2D mode and colour mode. Higher frame rate would be preferred. Should have a minimum of 4 transmit focal zones. Higher focal zones will be preferred. Should support broad band/multi-frequency probe scanning 2-18 MHz. Vendor should specify the range of band width. The system should be able to capture all frequency in single probe without the need for user selection. System should have a high PRF (pulse repetition frequency)ranging from 2-15 Should have automatic quantification of Doppler parameters to display user selected measurements Should have 2D imaging depth of at least 28 cms-more will be preferred. System should have Tissue Harmonic Imaging (THI) with all transducers. Please specify the harmonic frequencies. System should have facility for 3D Gray with MPR for convex and endo-cavitary probe. Should have facility for real time compound imaging preferably with all transducers. Power Doppler angio-imaging for perfusion studies should be available for visualization of flow in small vessels. Should have trapezoidal imaging & steerable imaging for 2D, color and Doppler with linear probe. Should have tissue specific pre-sets for individual clinical applications-presets should be compatible with multiple probes. Should have multi-view spatial compounding. Pan & Zoom facility with high resolution results in both live and frozen images with facility for pre & post processing with cine loop review in all modes-should have a min. 1x6 times zoom facility. Vendor should specify the zoom capacity. System should have scrolling facility in basic & zoom images. Cine loop facility frame by frame and in cine mode with a memory of at least 2000, 2D/colour images review and at least 60 seconds or more of Doppler & M mode data. System should have advanced image processing algorithms to reduce the speckle and artefacts for improved image quality. Minimum screen distortion of image-vendor should qualify the screen distortion of image Vendor should specify the resolution, error margins, incorrect calculation of hard copy-provide test pattern. Should be having panoramic imaging or equivalent-please specify details. Should have a minimum of 3 active ports with direct switching from console. More active ports would be preferred. Transducers should be interchangeable between ports. Six or more configurable transducer holders to support all transducer designs & provide gel storage Special transducer holder provides secure storage & easy access to endocavitary transducer-facility to remove transducer holders for cleaning purposes Should have foot switch, serial port RS-232C connector, USB 2.0 ports Direct connectivity to B/W printer and inkjet colour printer for printing images & report. Should be DICOM ready with send, receive, store, print and worklist enabled. Should be environment friendly and should perform satisfactorily between ambient temperature range: +5 degree C to +45 degree C and humidity : 20-85%, non-condensing during operation. Should be ISO & CE certified. **Monitor:** High resolution, minimum eye strain, LCD/TFT monitor, 15 inches which should have tilt & swivel facility and rotate along with control panel. Vendor should mention the resolution of monitor-higher resolution will be preferred.

	Measurements, calculations & software packages System should have facility to enrol complete patient information like Name, age, Sex, Reg. No. U/S No., type of study, date, hospital name, text and anatomical site marking. System should have multiple cursor sets on frozen, live, dual screen and cine playback images Minimum 8 distance measurement per screen –distance measurement, depth measurement from skin line, angle measurement. volume, area and circumference:ellipse trace. Should autotrace measurements & calculations including PS, ED, TAMx, TAMn, PI, RI, S/D, Time average velocity max (TAV), VTI, acceleration/deceleration, flow volume, Doppler angle correction. Should have exhaustive software with report formats for specific measurements and calculations for abdomen (adult & paediatric), obstetrics, gynaecology, cardiac (adult, pediatric), cerebrovascular, transcranial, peripheral vascular, venous, thyroid, urology, testis, orthopaedics & intra-operative imaging. Should have package to calculate IMT (Intima media thickness) **Storage & archiving:** Should have internal hard drive of 160 GB or more. Image storage capacity of upto 150,000 images or more Should be DIMAQ-IP integrated workstation which should allow digital acquisition, storage, and review of complete ultrasound studies, including static images and dynamic clips, measurements, calculations and reports. Should have advance DICOM facility (DICOM ready) & capable of networking and communicating images to PACS/HIS Images should be exported to PC compatible TIFF format or DICOM format Patient database should be sorted by name, registration no., and study date The system should have facility to connect with multiport laser camera. Should have inbuilt image management facility with built in hard drive facility for digital storage and retrieval of B/W and color image data (both frozen & cine loops) and on removable media (CD, DVD) in all standard medical formats like DICOM. Archive should have multi-session built in CDRW. Please give storage capacity of built in hard drive of the system. **Peripherals:** B/W thermal printer of high quality latest model of reputed company for image print outs. Colour inkjet printer of high quality latest model for image print outs Online UPS with 30 mins. Back up to support all functions of the equipment. Hydraulic patient couch of reputed model 100 transducer jelly bottles 100 transducer covers 100 print rolls and 100 cartridges for B/W thermal printer 100 print rolls and cartridges for colour inkjet printer 2 operating chairs for radiologist **Transducers:** Transducers should be broad band width beam former technology for extreme high resolution 2D and other mode imaging. Should be ergonomically designed, light weight, comfortable to handle. Durable, easy to change. Vendor should specify the weight, foot print size, FOV, Band width, viewing angle in degree, depth of scan, 3D facility, facility of biopsy attachment, cost of each transducer Vendor should specify the mode of sterilization of each transducer Other probes to be quoted: Broadband convex/curved 2-5 MHz with biopsy attachment Broad band linear probe 5-10 MHz with biopsy attachment **Other probes to be quoted:** Microconvex probe for paediatric abdominal use Microconvex probe for neonatal head Wide band width linear probe 5-13 MHz Wide band width phased array transducer 4-8 MHz Wide band width phased array transducer 2-4 MHz Wide bandwidth micro curved array transducer having a frequency bandwidth of 5-8 mHz Transrectal probe-biplane rectal probe Wide bandwidth volume probe Probe for intraoperative imaging **General instructions for vendor:** Supplier must ensure availability of expertise service and maintenance at Lucknow Supplier must ensure spares availability including transducer and repair for next 10 years after expiry of warranty.

	Comprehensive maintenance contract rates including spare parts and probes should be quoted for next 5 years after expiry of warranty Supplier should provide two sets of user manual, CD/DVD in English Supplier will be asked to demonstrate its quoted model when and where required along with quality control program for system performance Supplier must attach list of quoted model installation in reputed government institute along with performance certificate Supplier will arrange training at academic institute of repute of one doctor of the dept. at their cost
PGI/MM/PM SSY/09-10/N.B.-51	**Choledochoscopes** **Specifications:** 1. Scope **a.** Flexible, fibreoptic, 5mm, forward viewing (120 degree field of view) with four-way angulation; working length 350-400mm with instrument channel 2. Accessories **a.** Compatible light source with spare bulbs **b.** Compatible cables **c.** Biopsy forceps **d.** Grasping forceps **e.** Cleaning brushes
PGI/MM/PM SSY/09-10/N.B.-52	**Air Mattress for Bedsore Prevention** **Specifications:** 1.Pneumatically controlled alternating pressure pad system for prevention of pressure sores 2.On an alternating basis, number of uniform sacks in the mattress inflate and deflate 3.Alternating pressure pad device aids in the movement of body fluids 4.Gradual pressure changes with no vibration or noise. 5.Power supply: 220 V, 50 Hz, 5 amps 6.Dimension of mattress: 1metre X 2.5 metre approx.
PGI/MM/PM SSY/09-10/N.B.-53	**Specification of Operating Head Light:** LUXTEC 300 WATT XENON LIGHT SOCE- LUXTEC DPRCIFICATION Xenon Light source 300 Watt provides bright white light Removable Lamb module the unique built in intensity wheel allows to control the amount of light desired to suit the specific procedure Guaranteed Lamp life 650 Hrs. Light source has ability to attach a Varity of Head Light system. Automatic Lamp shut off increase safety and lamp color Temp- 6000 Kelvin, 10-80 mm variable spot at a working distance of 40 cm Operating Voltage 200-240VAC 50-60 Hz includes Head band (Light weight) Bi furcated cable approx 9ft joy stick
PGI/MM/PM SSY/09-10/N.B.-54	**Volumetric Infusion Pump** **Specification:** Ambient temptreture:50-400 C-Power supply:AC(220 V,50Hz)-Operating principle:Linear Peristalsis-Infused display:1-9999 ml-Flow option:10-3000 ml/hr-Time limition option:1 min-24 hrs-Infusion accuracy:Error not more than 10% for a range of 10-3000 ml/hr-Alarms:Infusion completion, Bubble, Block, Open door, Low battery-Battery backup:4-6 hrs.- Mountable on standard IV stand(low weight machine preferable)-Adaptable to generic IV sets used for all IV fluids and TPN(high osmolar fluid). Pediatric utility.
PGI/MM/PM SSY/09-10/N.B.-55	**Sleep Laboratory** **Specification:** 1- Capability to records both AC and DC signals 2-Facility to record the following patient parameters • Heart rate • ECG • Bipolar EEG (with atleast 4 channels) • EOG (with separate tracing for each eye) • EMG • Thoracic and abdominal respiratory effort • Intensity of snoring sound • Body position • Limb movement • Oxygen saturation by finger oximetry • Nasal / oral airflow

	• Nasal pressure • CPAP pressure 3-At least six spare DC channels 4-Two sets each of all necessary sensors, electrodes and leads 5-Compatible reader for flash or other media used for data storage 6-Compatible software for data acquisition, real time graphical data display, sleep stage scoring, interpretation of neurological and respiratory events; the software should be compatible with Microsoft XP operating system 7-Facility for both automatic and manual analysis of data 8-Facility to set filter levels and sample rate for EEG, EOG 9-Facility for electrode impedence testing 10-Facility to create customized templates for printing patient reports 11-Powered by rechargeable batteries, or by 220 V 50 Hz AC current with battery backup; batteries in either case should have capability to run the system for atleast eight hours 12-Weight less than 5 kg 13-Pentium IV computer with 2.8 GHz processor or better, at least 100 GB hard disk, at least one GB DDRAM, CD and DVD writer, 3.5" floppy drive, keyboard, optical mouse, 17" monitor, RS232 port, atleast six USB 2.0 ports, preloaded Windows XP Professional, online UPS 14-All necessary cables, software CDs and manuals 15-Warranty for two years 16-AMC / CMC rates to be quoted for five years after expiry of five years warranty
PGI/MM/PMSSY/09-10/N.B.-56	**Spirometry system** **Specification:** 1. Capability to measure FVC, IVC, VC, MVV, VT, FEV1, FEV6, FEV1/FEV6, PEF, PIF, FEF 25-75, FEV1/VC%, MEF25%, MEF50%, MEF75%, MVV 2. Interface with standard desktop/laptop computer using Windows XP operating system 3. Meets current ATS recommendations on equipment accuracy 4. Volume measurement 0 to 10 litres 5. Flow measurement 0 to 15 L/sec 6. Real-time Flow/Volume and Volume/Time traces on computer screen 7. Overlaying of previous test curves for comparison 8. Capability to store pre- and post-bronchodilator measurements in the same record 9. Capability to store atleast 500 patient test results 10. Capability to select and modify prediction equations 11. Automatic diagnosis facility 12. Facility for report generation through an external printer 13. Customizable report printout format 14. 50 reusable mouthpieces 15. 10 Noseclips 16. 10 spare air filters 17. Facility for external calibration using a large volume syringe or similar method 18. All necessary adapters, tubings, calibration syringes, cables, software CDs, manuals 19. Power 2020 V 50 Hz AC 20. Capability to work on rechargeable NIMH or Li-ion batteries; battery charger to be provided 21. Pentium IV computer with 2.8 GHz processor or better, at least 100 GB hard disk, at least one GB DDRAM, CD and DVD writer, 3.5" floppy drive, keyboard, optical mouse, 17" monitor, RS232 port, atleast six USB 2.0 ports, preloaded Windows XP Professional, online UPS 22. Two year warranty 23. AMC / CMC rates to be quoted for five years after expiry of five years warranty
PGI/MM/PMSSY/09-10/N.B.-57	**Body Plethysmograph system and Pulmonary Diffusion system** **Specification:** 1. Airtight transparent box of atleast 700 litre volume 2. Data collection – flow, volume, mouth pressure, box pressure 3. Facility for calibration using large volume syringe 4. Measurements – spirometry, flow volume loops, static lung volumes, airway resistance, lung compliance 5. Intercom for communication with patient 6. Capability to measure pulmonary diffusion capacity using single breath technique 7. Capability to measure static lung volumes using helium dilution technique 8. Pneumotach system for flow measurement 9. Online helium, carbon-monoxide and oxygen analyzers 10. Fully computerized calibration procedure foe flow sensors and gas analyzers 11. Carbon-monoxide analyzer – range 0-0.4%, accuracy 0.0003% 12. Helium analyzer – range 0-9.5%, accuracy 0.05% 13. Two cylinders each of helium and diffusion gas mixtures 14. Windows XP compatible diagnostic software 15. Pentium IV computer with 2.8 GHz processor or better, at least 100 GB hard disk, at least one GB DDRAM, CD and DVD writer, 3.5" floppy drive, keyboard, optical mouse, 17" monitor, RS232 port, atleast six USB

	2.0 ports, preloaded Windows XP Professional, online UPS 16. Colour inkjet printer 17. All necessary catheters, cables, adapters, software CDs and manuals 18. Power 220 V 50 Hz AC 19. Warranty for five years 20. AMC/CMC for five years after expiry of warranty
PGI/MM/PMSSY/09-10/N.B.-58	**Thoracoscopy System** **Specification:** A. Two forward viewing rigid telescopes with instrument channel and fibreoptic light transmission, and diameters 7-8 mm (one) and 9-10 mm (one) B. Essential accessories 1. Metal trocars and cannula (two, one each compatible with the two telescopes in section A) 2. Insulated biopsy forceps with handle (one) 3. Insulated grasping forceps with handles (two) 4. Insulated straight cutting scissors with handle (one) 5. Insulated curved cutting scissors with handle (one) 6. Injection cannula (one) 7. Palpation probe (one) 8. Insulated suction tubes with valves (two) 9. Tissue retracter (one) 10. Pleural abrader (one) 11. Straight needle holder (one) 12. Curved needle holder (one) 13. Surgical knot pusher (one) 14. Insulated coagulating electrode with its high frequency cord (one) 15. Mobile trolley compatible with the whole system (one) 16. All necessary adapters, connectors and cables 17. All metallic instruments and accessories should be reusable and autoclavable C.Light source 1. Xenon light source (atleast 175 Watt) with fibreoptic light cable (one) 2. Extra spare xenon bulb for use with this light source (one) D. Video system 1. Endoscopic camera (one CCD), with minimum zoom range 21-36 2. Colour monitor with minimum 14 inches screen 3. Facility for digital storage of images on removable media (either CD or flash media) E. Power 220 V 50 Hz AC F. Warranty for five years AMC/CMC for five years Individual price for all item nos. 1 to 14 under section B and nos. 1 to 2 under Section C should be quoted separately

PGI/MM/PM SSY/09-10/N.B.-59

NERVE STIMULATOR

Specifications
Should Have • RECHARGEABLE ACCUMULATOR • BUILT-IN BATTERY CHARGER • Should be able to Stimulate Motor Cerebral Nerves and Peripheral Nerves, during the Intra Cranial Operation and Peripheral Nerve or Plexus Injuries. • The Unit Can be applied on fresh Nerve Injuries to locate the peripheral stump of the nerve as long as the wallerian degeneration has not taken place. • The Unit Can be used On Old injuries showing considerable scars • The Unit can also be used to locate those motor nerves with only a partial loss. • The unit should be able to determine the success of neurolysis ,whether the scar of a nerve has to be resected and the removed part replaced by a transplant • TECHNICAL DATA • Portable ,preferably hand held • Light Weight, 500g -1 kg • Working time: Atleast 48hrs after full charging • Mains Voltage240Volts.(compatible with Indian standards) • Electrical mains cord for Charging -2(one backup) • Accumulator • Extra battery backup free of cost • Stimulator Cable – 2 in number • Coagulation and stimulator Forceps • Insulation with Connector, Total Length: 200mm, TIP: 0.9mm and finer • Facility for temporary replacement of instrument by same model for next three years during repairs at no extra cost. • Carrying case for storage of equipment

PGI/MM/PM SSY/09-10/N.B.-60

SURGICAL OPERATING MICROSCOPE

Specifications	Quantity	Reason
MICROSCOPE BODY : -Motorized zoom magnification system with apochromatic optics, zoom magnification factors : 0.4x…2.4x, activation by handgrip and foot control panel, manual override -Internal motorized fine focusing system, activation by handgrip and foot control panel, continuously adjustable working distance from 200 mm to 415 mm or more without exchange of objective lens, manual override, integrated continuously variable illumination field spot sizes -Motorized XY coupling, range 40 x 40 mm or more with automatic resetting at press of a button BINOCULAR TUBE : 180-degree tilt able binocular tube with focal length of 200 mm Graduated knob for continuous adjustment of inter pupillary distance from 45 mm to 75 mm EYEPIECES : Pair of high eyepoint ,widefield push-in eyepieces 12.5x with magnetic locks, diopter setting from 8D to +5D, also suitable for spectacles wearers ILLUMINATION SYSTEM : Coaxial xenon illumination 180W or more with quick-action lamp changer and back-up xenon lamp 180W or more HANDGRIPS : Easily removable handgrips with adjustable keys for zoom and focus Four freely programmable keys for setting illumination intensity, controlling the video camera FOOT CONTROL PANEL : -Foot control panel with 14-functions, control keys for zoom and focus, XY movements, light intensity FLOOR STAND : Rollable floor stand on base with lockable castors, motorized adjustable column with	**1**	**Essential equipment for all types of Microvascular, Perpheral Nerve, Cleft palate and reconstructive surgery**

	height from 1.88 m to 2.40 m, carrier and swivel arms with large reach of 1.30 m, suitable for connection to 230V 50Hz single phase mains supply, free float magnetic system, release of magnetic brakes by handgrips Liquid crystal display (LCD) with user prompts, quick set up of different parameters and their Activation at press of a button such as automatic speed adjustment or automatic brightness setting depending on magnification, brightness of video image, magnetic brakes on/ff SUPPLEMENTARY EQUIPMENT FOR FACE-TO-FACE SURGERY : Stereo bridge with two additional output ports for connection of co-observation device and video Camera, 180-degree tiltable binocular tube with focal length of 200 mm, pair of high eyepoint push-in eyepieces 12.5x with magnetic lock, pair of rotable adapters +/- 22.5 degrees DIGITAL VIDEO CAMERA SYSTEM : -Advanced digital 3CCD video camera system with digital video output suitable for connection to PC, color monitor, DVD recorder, speed focus system Good quality voltage stabilizer 2 set of Ergonomically Designed Chair with adjustable height for surgery			
PGI/MM/PMSSY/09-10/N.B.-61	**HAND HELD VASCULAR DOPPLER** **Specifications** The instrument should have - LCD display, 8 MHz Bi-directional doppler probe -PPG(Photoplethysmograph probe) -CD software,Computer Interface cable, and its standard accessories. -Set of rechargeable batteries with charger **Specifications** Power: DC 9V. 9 V alkaline battery Battery life: Approx. 2.5 hours Automatic shut-off Speaker output: 200 mW or more Multi frequency: 2, 4, 5, 8, 10 MHz Waveform memory: 30 waveforms Mode settings: Memory (store, read & clear), Direction, Scales (time & unit), Language, etc. LCD display: 128 x 64 dots, STN LCD Waveform, Numerical data & Heart Outputs: Headset: Speaker cut off Serial port: RS-232C Dimensions: [redacted] Weight: 350 grams (including battery and pr Electrical safety: Conform to IEC 60601-1			
PGI/MM/PMSSY/09-10/N.B.-62	**BASIC PLASTIC SURGERY SET** **This will include general plastic surgery instruments and instruments for specialized surgery.** **1.General Instrument Set** **Quantity required -2** **Total cost of 2 sets –Rs 10,00,000.00** **GENERAL INSTRUMENTS** MAIER POLYPUS FORCEPS, WITH RATCHET, CVD BACKHAUS TOWEL HOLDING FORCEPS, 110MM, TOWEL CLAMP, 115 MM LENGTH SCALPEL HANDLE, NO. 3 IRIS AND LIGATURE SCISSORS, STR., 110 MM KILNER DISSECTING SCISSORS, 150 MM REYNOLDS SCISSORS, CVD., 175 MM DISSECT.SCISS.,METZENBAUM,145MM,CVD.DURO DISSECT.SCISS.,METZENBAUM,180,CVD.DUROTP DUROTIP-LIGATURE SCISSORS, 180MM LONG DUROTIP DISS.SCISS.,MAYO-LEXER,CVD,165MM OP. SCISSORS, STR., BL/SH, 145 MM, S DISSECTING FORCEPS, SLEND. PATT., 145 MM ADSON FORCEPS, FINE SERRATED JAWS, 120MM ADSON FORCEPS, 1X2 TEETH, 120 MM NON-TRAUMATIC VESSEL FORCEPS 150 MM TISSUE FORCEPS, AM. PATT., 1X2 T., 145MM BABY-MOSQUITO ARTERY FORCEPS, CVD, 100MM MICRO-HALSTED HEMOST.FORC., CVD., 125 MM			

	MICRO-MOSQUITO FORCEPS, STRAIGHT, 1X2 T. KOCHER FORCEPS, STR., 1X2 TEETH, 140MM PEAN ARTERY FORCEPS, STRAIGHT, 140 MM POLYPUS A. SPONGE A.DRESSING FORC.,175MM CZERNY TUMOR FORCEPS, 4X4 TEETH, 200 MM BABY-MIXTER ARTERY FORCEPS,180MM DUROGRIP-NEEDLEHOLDER,RYDER,135MM,DELIC. DUROGRIP HALSEY NEEDLE HOLDER, 130 MM DUROGRIP CRILE NEEDLE HOLDER, 150 MM DUROGRIP HEGAR-MAYO NEEDLE HOLDER, 185MM LANGENBECK RETRACTOR, 28X14MM, 210MM LANGENBECK RETRACTOR, 40X10MM, 210MM LANGENBECK RETRACTOR, 63X20MM, 210MM VOLKMANN RETRACTOR, SEMI-SHARP,4-PRONGED VOLKMANN RETRACTOR, SEMI-SHARP,6-PRONGED SENN-MILLER RETRACTOR, DOUBLE-ENDED WOUND AND TRACHEAL HOOK, SHARP, 1 TOOTH WOUND AND TRACHEAL HOOK, BLUNT, 1 TOOTH DESMARRES, LID RETRACTOR DESMARRES, LID RETRACTOR FINE SKIN RETRACTOR GILLIES,180MM, SMALL FINE SKIN RETRACTOR GILLIES,180MM, LARGE VOLKMANN SPOON, SHARP, SIZE 00 VOLKMANN SPOON, SHARP, SIZE 1 VOLKMANN SPOON, SHARP, SIZE 3 STEEL RULER,GRAD. IN MM A. INCHES, 300MM PROBE, DOUBLE ENDED, 145 MM, DIAM. 1,0MM PROBE, DOUBLE ENDED, 160MM, DIAM. 1,5 MM PROBE, DOUBLE ENDED, 180MM, DIAM. 2,0 MM INTERIOR BOX FOR BL 930 NEEDLE CASE, PERFOR., 7 COMP,150X90X10MM LABORATORY DISH, 0.16 L LABORATORY DISH, 0.4 L KIDNEY TRAY, 250 MM
PGI/MM/PMSSY/09-10/N.B.-63	**MICRO VASCULAR SET**

Microsurgical instruments specially designed in consideration with the depth of the operating field, for free tissue transfer / nerve repair .
The instruments should be balance in design to put the centre of gravity between webspace & index finger.
Instruments should be curved to facilitate needle driving .

The micro scissors should be specially designed for minimum closing pressure and for equal pressure distribution along the blades.

Handles should be round with spring instrument configuration & with curved blades. They should be rounded at the tips with radius of 0.2mm & adventitia scissors should have very sharp tips that are pointed for fine trimming & suture cutting.

All instruments should have special ergonomic design & have well made tips for high durability.

The vessel dilator should have special ball point form of the tips so that the dilating pressure is evenly distributed over the entire area of the vessel.

Needle holder should be specially designed for secure grip due to parallel closure over the entire jaw length and closing pressure precisely calibrated for minimising fatigue. They should have stronger tips to withstand higher pressure tip dia 0.3mm or 0.4mm

Micro clamps should be light , compact robust corrosion resistant & have unique gripping surface . They should have smooth sliding bar action on all approximator clamps for vessel diameter of 0.4mm to 5.0mm, pressure of 5 gm/mm2 to 15gm/ mm2.

Forceps 15cm round handle 8mm dia st
Forceps 15cm round handle 8mm dia cvd tip
Forceps 15 cm long , round handle 8mm dia angulated 45 dig.

Forceps 11cm long, flat handle, 9mm wide st.
Forceps 12cm long, flat handle, 9mm wide .
Forceps 13.5 cm long, flat handle, 9mm wide st.
Forceps 18cm long, flat handle 9mm wide st. , balance
Forceps 18cm long round handle, 8mm dia st.
Clamp applying forceps for vessel 0.4 to 2.25
Clamp applying forceps for vessel 1.5 to 5.0mm
Dissecting Scissors 18cm long round blade handle 10mm dia , 10mm long cvd

Dissecting Scissors 15cm long round blade handle 8mm dia , blade 9mm long cvd

Dissecting Scissors 12cm long round handle, 7mm dia , blade 8mm

Adventita Scissors 15cm long round handle 8mm dia , blade 9mm long St.

Adventitia scissors 15cm long round handle 8mm dia, blade 7mm long vanas pattern

Needle Holder 14cm long, Flat handle 8mm wide
Needle Holder 12cm long, round handle 7mm dia
Needle Holder 13cm long, round handle 8mm dia
Needle holder 18cm long round handle, 8mm dia
Needle Holder Forceps 15cm long round handle 8mm dia
Vessel dialator balance 11cm long flate handle 9mm wide angulated 10 dig. Tip dia 0.2mm
Vessel dilator 15cm long, round handle 8mm dia st.
Arteriotomy Clamp (set of 3)
Instrument beaker with silicone bottom
Instrument rack for 8 instruments 9-15cm with Clamp box
Instrument case 13x23x5cm for 16 instrument

Nerve approximator
B-1V Microvascular Single clamp8mm for Veins

	B-2V Microvascular Single clamp11mm for Veins B-3V Microvascular Single clamp17mm for Veins HD-S For vessel size 1.5 to 3.5mm Approximator ABB-IIV Double approximator without frame 8mm, for Veins ABB-22V Double approximator without frame 11mm, for Veins ABB-33V Double approximator without frame 17mm, for Veins HD-D For vessel size 1.5 to 3.5mm approximator CAT NO. 03179 10/0 TAPER POINT, 100 MICRON NYLON BLACK 4MM, CIRCLE 3/8 (BOX OF 12) 03180 9/0 TAPER POINT,100 MICRON NYLON BLACK LENGTH 15CM, CHORD 4MM, CIRCLE 3/8, (BOX OF 12) 03188 9/0 TAPER POINT, 140 MICRON NYLON BLACK LENGTH 15CM, , CHORD 4MM, CIRCLE 3/8, ARCH 5MM (BOX OF 12) 03186 8/0 TAPER POINT, NYLON BLACK LENGTH 15CM, MICRON 140, CHORD 3MM, CIRCLE 3/8, ARCH 3.8MM (BOX OF 12)
PGI/MM/PM SSY/09-10/N.B.-64	**TOURNIQUET SET** **Specifications** • The Tourniquet should be an automatic one With instant increase in pressure, auto regulator to control pressure in the cuff, automatic time setting with auto alarm. • Should have battery back-up system automatically engaged if AC current is interrupted. Should have computerized memory. • Should have microprocessor monitors and gives alarm both by audible & visual indicators. • Should have alarm for Low pressure, Low battery, Leaks, Kinks elapsed time and start up checks. • Should be able to operate either as single or double cuff (IVRA) function • Should be provided with autoclavable tourniquet cuffs with silicone bladder. Single and double for baby, child & adult for arm & thigh.
PGI/MM/PM SSY/09-10/N.B.-65	**Specification for Magnifying Loupe** 4.5 X Loupes with Head Band 2.5 X Loupes with Head Band • The loupe should be light weight with adjustable working distance
PGI/MM/PM SSY/09-10/N.B.-66	**POWER ASSISTED LIPOSUCTION SET** Aspiration should operate as stand alone aspirator unit & to power a variety of pneumatic infiltration devices for tumescence, infiltration & Power assisted suction lipectomy. It should be able to power additional modalities including the infiltration system, power reciprocating cannualle and infusion pumps. Should be operable on two positive displacement pump, which should be dual headed to relieve back pressure, allowing each pump to pull directly against the patient, so that a deep vacuum is quickly reached & maintained. The two pumps should be able to continue functioning, independent of each other. The pumps should be mounted on shock absorbers to eliminate vibrations. Should have a shock proof muffler & insulation system. Should be able to operate both through hand & foot pedal. The machine should operate on 220-volt A/c mains. Should be provided with aspiration kit including the tubing 8ft long, 3/8" - ID, Canisters along with filter connection. The Kit should be provided with Implosion proof high impact canisters, provided with disposable liner

& absolute micro fibered filters for efficiency of 0.3 microns particle size.
Should have facility for temporary replacement by a same or lower model machine and accessories during repairs free of cost.
The Infiltration Device should be provided as standard accessory to the power assisted suction.

1. Should allow the use of any size of infiltration Bag from 500cc to 3000cc.
2. Should eliminate the use of Y-connectors
3. Should be operated with Power Pack Platform electrically OR by gas.
4. Should quickly depressives and exhaust the inflation bladder at the touch of a switch.
5. Should have ease of adjusting the constant pressure by a simple turn knot.
6. Should have large monitoring gauge for easy monitoring.
7. Should have large door and automatic deflation of bladder for easy opening and closing of door.

of Cannullae as standard part of the equipment to be provided:

I	Electrical Console with Foot Pedal Option with facility for dual hand piece
II	Power Assisted Electrical Hand Piece
	Electrical Cable
III	**Cannula tips**
a)	Mercedes 5mm, 26cm length
b)	Mercedes 4mm 32cm length
c)	Mercedes 2mm 26cm
d)	Keel Cobra 4mm , 26cm
e)	Sterilization Tray for cannula and tubing
(IV)	**COLEMAN INFILTRATION CANNULLAE**
1	Coleman infiltration Cannula
2	Coleman Concave infiltration Cannula -9cm
3	Coleman Convex Infiltration Cannulae - 9cm
4	Coleman “S” Infiltration Cannulae -9cm
5	Hunsted handle for Coleman
6	Standard two slot cannula tip

PGI/MM/PM SSY/09-10/N.B.-67

DRESSING SET FOR WARD

Item-
Straight Mosquito Forceps
Curved Mosquito Forceps
Thumb Forceps Medium size
Suture Cutting Scissor
Small Bowl
Container for instruments

PGI/MM/PM SSY/09-10/N.B.-68	**POWER DRILL FOR MAXILLOFACIAL AND SMALL BONE SURGERY** • Microprocessor controlled power Driver system should provide complete functions of bone harvesting drilling & fixation of small bone & helps in osteosynthesis. • Should have computerised control with touch screen facility having options of digital display of speed & to preselect acceleration & beraking of handpiece speed, • Should be provided with cable & footswitch & should be provided with complete set of following accessories. • Universal Drill Multiple handpieces 1:5 speed upto 30,000 rpm • Micro Saggital Saw with blades with speed of 20000 cycles /min • Micro Oscillating saw with blades with speed upto 15000 rpm • Micro reciprocating saw with blades with speed of 20000 cycle/min • Wire driver with max peed 2500 RPM • Cutting burrs & twist drill
PGI/MM/PM SSY/09-10/N.B.-69	**TITANIUM OSTEOSYNTHESIS PLATING SYSTEM** it should be a complete Titanium Implant System with Micro , Mini & Fracture plating of 1.2mm 2.0mm & 2.3mm The plates and screws provided should be suitable for Reconstructive Hand & Craniomaxillofacial Surgery The system should be supplied complete with the Container, Racks, and Instruments & Implants. Screws and plates should also be supplied on demand basis in Hospital HRF also at reasonable cost **MICRO SYSTEM 1.2** A) **INSTRUMENT FOR TITANIUM IMPLANT SET** 1 Container, 280 x 195 x 65 mm 2 Instrument Rack 3 Teflon Implant Tray 4 Plate Bending Plier, 11.5cm 5 Plate Cutting plier, TC, 11.5cm 6 Plate and screw holding forceps, angled 7 Screw driver with gripping device, 13cm 8 Metal Handle only for Screw driver 9 Spare screw blade, cross lock for screw driver 10 Twist drill with stop 1.0 x 50mm for screws up to 8mm 11 length, strycker shaft 12 Twist drill with stop 1.0 x 30mm for screws up to 4mm length, Dental shaft 13 Drill bit 1x83mm 14 Drill bit 1x66mm **IMPLANT SET (PLATE & SCREW)** 1. 4 hole plate , straight, 0.55mm profile 2. 6 hole plate, straight, 0.5mm profile 3. 16 hole plate , straight, 0.55mm profile 4. T-plate, 5 holes, 90^0, 0.5mm profile 5. Y- plate, 6 holes, 0.55mm profile 6. Double Y plate, 6 holes,0.55mm profile 7. Orbital Plate, 8 holes, cvd., 0.55mm profile 8. 5 hole T Plate Rt 9. 5 hole T Plate Lt 10 2x2+2 hole plate 11. 4x2 hole replent plate 12. Titanium Screws, cross lock, 1.2 x 5mm 13. Titanium Screws, cross lock, 1.2 x 7mm 14 Titanium Screws, cross lock, 1.2 x9mm 15. Titanium Screws, cross lock, 1.4 x3mm 16 Titanium Screws, cross lock, 1.4 x5mm 17 Titanium Screws, cross lock, 1.4 x7mm

TITANIUM MID SYSTEM 1.7

1 Screw Driver with gripping device
2 Twist drill 1.4 x 94mm
3 Twist drill 1.4 x 77mm
4 4 hole plate , straight, 0.55mm profile
5 4 hole plate with gap, straight, 0.55mm profile
6 16 hole plate , straight, 0.55mm profile
7 L plate 6 hole Right oblique
8 L plate 6 hole Left oblique
9 T-plate, 6 holes, Rt oblique
10 T-plate, 6 holes, Lt oblique
11 2x2+2 hole
12 4x2 replent plate
13 Titanium Screws, cross lock, 1.7 x 6mm
14 Titanium Screws, cross lock, 1.7 x 8mm
15 Titanium Screws, cross lock, 1.7 x 11mm
16 Titanium Screws, cross lock, 1.9 x5mm
17 Titanium Screws, cross lock, 1.9 x7mm

MINI - SYSTEM 2.0
INSTRUMENT FOR TITANIUM IMPLANT SET

1 Container, 300 x 300 x 150mm
2 Instrument Rack
3 Teflon Implant Tray
4 Plate Bending Plier with pin 13.5 cm
5 Flat plier 13.5cm
6 Plate cutting plier, 18cm
7 Plate cutting scissors, TC, 12cm
8 Plate & screw holding forceps, angled
9 Screw driver with gripping device, 18cm for single-slot screws
10 Screw driver handle, none rotatable, for all blades
11 Spare blade, cross lock, press-fit
12 Spare blade, squre lock, press-fit
13 Twist drill, 1.5 x 50mm for screws up to 7mm length
14 Twist drill, 1.5 x 50mm for screws up to 20mm length
15 Twist drill, 1.5 x 70mm for screws up to 7mm length
16 Twist drill, 1.5 x 105mm for screws up to 20mm length

TITANIUM IMPLANT SET (PLATE & SCREW 2.0)
TITANIUM-FLAT-LINE-PLATE

1 4 Hole Plate, without stem, 0.6mm profile
2 4 Hole Plate, short stem, 0.6mm profile
3 4 Hole Plate, long stem, 0.6mm profile
4 6 Hole Plate, without stem, 0.6mm profile
5 8 Hole Plate, without stem, 0.6mm profile
6 L-plate, 4 Holes, right, without stem, 0.6mm
7 T-plate, 6 Holes, without stem, 0.6mm profile
8 Y-plate, 5 Holes, without stem, 0.6mm profile
9 Orbital plate, 6 Holes, curved, 0.6mm profile

TITANIUM SCREWS FLAT LINE (Single Slot)

1 Screws 2.0x 5mm
2 Screws 2.0x 7mm
3 Screws 2.0x 9mm
4 Screws 2.0x 11mm
5 Screws 2.3x 5mm
6 Screws 2.3x 7mm

TITANIUM FRACTURE - SYSTEM 2.3
INSTRUMENT FOR FRACTURE SYSTEM

	1 Container, 300 x 300 x 150mm 2 Instrument Rack 3 Teflon Implant Tray 4 Plate Bending Plier 13cm 5 Plate and screw holding forceps, angled 6 Tuffno-Screwdriver Handle, only, for all blades 7 Spare blade, hexagon-lock, press-fit 8 Twist drill, 1.8 x 98mm **IMPLANT** **TITANIUM PLATES, PROFILE HEIGHT 1.5mm** 1 4 Hole Plate, short stem 2 4 Hole Plate, medium stem 3 6 Hole Plate, short stem 4 6 Hole Plate, medium stem 5 8 Hole Plate, medium stem 6 14 Hole Plate, without stem 7 4 Hole Plate, C-shape, medium stem 8 Mandibular angle Plate, 6 Hole 9 4 Hole Plate, for alveolar compression, short stem 10 4 Hole Plate, for alveolar compression, medium stem **TITANIUM SCREWS, 2.3 mm , Hexagon-lock** 1 Screws 2.3 x 8mm 2 Screws 2.3 x 10mm 3 Screws 2.3 x 12mm
PGI/MM/PM SSY/09-10/N.B.-97	**SEQUENTIAL COMPRESSION DEVICE FOR LYMPHEDEMA** Should be a sequential compression Device for providing graduated sequential compression and rapid impulse inflation to Calf foot & thigh. It should have sequential pulse frequency with choice of treatment of one or two limbs simultaneously It should not require DVT sleeves below cuffs It should delivers constant preset pressure rang 20-80mm of Hg. Should be portable, electrically operated , with good battery backup with universal size of sleeve to cover Calf, Thigh & Foot, **Standard Accessories should include** Connecting tube Universal sleeve for thigh calf & foot Small Universal sleeve for thigh calf & foot Medium Universal sleeve for thigh calf & foot Large
PGI/MM/PM SSY/09-10/N.B.-71	**Electric Dermatome** **Specification**: • Should be able to cut graft of various width • Should be provided with variable Guards to adjust the width of the Graft to 2", 3" or 4 ". • Should not need any carrier to lift the Graft from the donor site. • The cut graft should automatically fold into the pocket of the Dermatome. • The graft should be server by simply lifting of the Dermatome up & away from the donor site without a carrier. • The thickness of the graft should be adjusted with a carrier. • The Thickness of the graft should be adjustable to thousandths of an inch. • Should be supplied complete with motor unit in the handle, set of guard , calibration guide, power plug cord, screwdriver & should be supplied complete with a carrying case for proper maintains and 20 blades. • Should have facility for temporary replacement with same model during repairs.
PGI/MM/PM SSY/09-10/N.B.-72	**Skin Graft Mesher** • To mesh the skin graft to expand for coverage of large surface new areas. • Mesher should have a full range of meshing ratios, with adjustable meshing drum allowing meshing ratios from 1:1 to 4:1 • Should have two sets of oscillating blades, rolling over each other. • The oscillating blades should be operated with a hand grip knob for ease of operations.

	• Blades should have piercing function & not cutting edge to have long life. • The set of oscillating blades, should be mounted on an inclined platform, with a front loading & a rear holding plate. • The rear holding plate should be detachable, for easy maintenance & cleaning. • The mesh graft should be loaded without any carrier sheets to prevent recurrent costs. • Variable Mesher should be able to operate both as powered or manual mesher • Should be able to use any sterile smooth plastic of 0.5mm thickness as skin graft carrier. • Should be simple & ergonomic design. • Should be provided with a) Sterillizing container b) Skin Graft Carrier c) Power pack including motor gear, d) Batteries e) Ratchet.
PGI/MM/PMSSY/09-10/N.B.-73	**Wash Trolley/Burn Shower Trolly** **Specification:** The shower trolley should have a highy low bath tub. Hydraulic power should raise or lower the tub, converting it to a tub from a level platform The bottom should be softly padded and covered with thermally insulated vinyle Should have separate hydraulic pedals for raising & lowering the working height & for tub into a platform Shower trolley should be helpful for bathing all physically handicapped patients The trolley should have total capacity of 120 liters. The total length of 2 mtrs with maximum height of 940 mm Should be moving on castors with arrangement of stopping Should be electrically operated.
PGI/MM/PMSSY/09-10/N.B.-74	**Basic Plastic Surgery Set** **Specification** **This will include general plastic surgery instruments and instruments for specialized surgery.** **1.General Instrument Set** **GENERAL INSTRUMENTS** MAIER POLYPUS FORCEPS, WITH RATCHET, CVD BACKHAUS TOWEL HOLDING FORCEPS, 110MM, TOWEL CLAMP, 115 MM LENGTH SCALPEL HANDLE, NO. 3 IRIS AND LIGATURE SCISSORS, STR., 110 MM KILNER DISSECTING SCISSORS, 150 MM REYNOLDS SCISSORS, CVD., 175 MM DISSECT.SCISS.,METZENBAUM,145MM,CVD.DURO DISSECT.SCISS.,METZENBAUM,180,CVD.DUROTP DUROTIP-LIGATURE SCISSORS, 180MM LONG DUROTIP DISS.SCISS.,MAYO-LEXER,CVD,165MM OP. SCISSORS, STR., BL/SH, 145 MM, S DISSECTING FORCEPS, SLEND. PATT., 145 MM ADSON FORCEPS, FINE SERRATED JAWS, 120MM ADSON FORCEPS, 1X2 TEETH, 120 MM NON-TRAUMATIC VESSEL FORCEPS 150 MM TISSUE FORCEPS, AM. PATT., 1X2 T., 145MM BABY-MOSQUITO ARTERY FORCEPS, CVD, 100MM

MICRO-HALSTED HEMOST.FORC., CVD., 125 MM
MICRO-MOSQUITO FORCEPS, STRAIGHT, 1X2 T.
KOCHER FORCEPS, STR., 1X2 TEETH, 140MM
PEAN ARTERY FORCEPS, STRAIGHT, 140 MM
POLYPUS A. SPONGE A.DRESSING FORC.,175MM
CZERNY TUMOR FORCEPS, 4X4 TEETH, 200 MM
BABY-MIXTER ARTERY FORCEPS,180MM
DUROGRIP-NEEDLEHOLDER,RYDER,135MM,DELIC.
DUROGRIP HALSEY NEEDLE HOLDER, 130 MM
DUROGRIP CRILE NEEDLE HOLDER, 150 MM
DUROGRIP HEGAR-MAYO NEEDLE HOLDER, 185MM
LANGENBECK RETRACTOR, 28X14MM, 210MM
LANGENBECK RETRACTOR, 40X10MM, 210MM
LANGENBECK RETRACTOR, 63X20MM, 210MM
VOLKMANN RETRACTOR, SEMI-SHARP,4-PRONGED
VOLKMANN RETRACTOR, SEMI-SHARP,6-PRONGED
SENN-MILLER RETRACTOR, DOUBLE-ENDED
WOUND AND TRACHEAL HOOK, SHARP, 1 TOOTH
WOUND AND TRACHEAL HOOK, BLUNT, 1 TOOTH
DESMARRES, LID RETRACTOR
DESMARRES, LID RETRACTOR
FINE SKIN RETRACTOR GILLIES,180MM, SMALL
FINE SKIN RETRACTOR GILLIES,180MM, LARGE
VOLKMANN SPOON, SHARP, SIZE 00
VOLKMANN SPOON, SHARP, SIZE 1
VOLKMANN SPOON, SHARP, SIZE 3
STEEL RULER,GRAD. IN MM A. INCHES, 300MM
PROBE, DOUBLE ENDED, 145 MM, DIAM. 1,0MM
PROBE, DOUBLE ENDED, 160MM, DIAM. 1,5 MM
PROBE, DOUBLE ENDED, 180MM, DIAM. 2,0 MM
INTERIOR BOX FOR BL 930
NEEDLE CASE, PERFOR., 7 COMP,150X90X10MM
LABORATORY DISH, 0.16 L
LABORATORY DISH, 0.4 L
KIDNEY TRAY, 250 MM

2.SET FOR LARGE BONE SURGERY

HAMMER, COTTLE
CHISEL, LEXER, 220MM LONG, 5 MM WIDE
LEXER OSTEOTOME, 220MM, 10 MM WIDE
LEXER OSTEOTOME, 220MM, 15 MM WIDE
GOUGE, LEXER, 220MM LONG, 5 MM WIDE
LEXER GOUGE, 220MM, 10 MM WIDE
LEXER GOUGE, 220MM, 15 MM WIDE
WILLIGER RASPATORY,160MM LONG,6,0MM WIDE
RASPATORY W.HARTPR.HDL,CVD.,STR.BL., 6MM
RASPATORY,HARDPR.HANDLE,CVD.,RND CUT,6MM
FREER ELEVATOR, SHARP/BLUNT,185MM
SEBILEAU ELEVATOR, 173MM, 5,0 MM WIDE
BEYER BONE RONGEUR, 180 MM
BONE CUTTING FORCEPS, 175 MM
BONE HOLDING FORCEPS,SLENDER PATT.,200MM
BONE GRAFTING
SCALPEL HANDLE, NO. 4

VOLKMANN RETRACTOR, SEMI-SHARP,2-PRONGED
LANGENBECK RETRACTOR, 40X10MM, 210MM
WEITLANER RETRACTOR,3X4 TEETH,SEMI SHARP
FARABEUF RASPATORY, CURVED
DOYEN RASPATORY, ADULT SIZE, LEFT SIDE
DOYEN RASPATORY, ADULT SIZE, RIGHT SIDE
DINGMANN BONE HOLDING FORCEPS, 185 MM
LANGENBECK BONE HOLDING FORCEPS
GIERTZ-STILLE RIB SHEARS, 250 MM
GOUGE, WALTHER, 203 MM LONG, 10 MM
GOUGE, WALTHER, 203 MM LONG, 15 MM
STILLE OSTEOTOME, STRAIGHT, 15 MM
STILLE OSTEOTOME, STRAIGHT, 20 MM

3.OTOPLASTY (EAR SURGERY) SET

OTOPLASTY SET

GROSS POLYPUS, SPONGE AND DRESS.FORCEPS
BACKHAUS TOWEL HOLDING FORCEPS, 110MM,
TOWEL CLAMP, 115 MM LENGTH
SCALPEL HANDLE, NO. 3
SCISSORS, DELICATE, CURVED, 120 MM
DISSECT. AND STRABISMUS SCISS.,CVD,115MM
OP. SCISSORS, STR., BL/SH, 145 MM, S
ADSON FORCEPS, FINE SERRATED JAWS, 120MM
ADSON FORCEPS, 1X2 TEETH, 120 MM
DISSECTING FORCEPS, SLEND. PATT., 145 MM
TISSUE FORCEPS, AM. PATT., 1X2 T., 145MM
MICRO-HALSTED HEMOST.FORC., CVD., 125 MM
PEAN ARTERY FORCEPS, STRAIGHT, 140 MM
COTTLE SEPTUM KNIFE, 140 MM
FREER ELEVATOR, SHARP/BLUNT,185MM
COTTLE SKIN HOOK, CURVED 180 DEGR.
JOSEPH HOOK, 2 SHARP PRONGS, 165MM
FERGUSSON SUCT.CANN,D:2,5MM,WORK.L.110MM
FERGUSSON SUCT.CANN,D:3,0MM,WORK.L.110MM
DUROGRIP HALSEY NEEDLE HOLDER, 130 MM
LABORATORY DISH, 0.16 L

4.CLEFT LIP SET

REPAIR OF HARELIP

GROSS POLYPUS, SPONGE AND DRESS.FORCEPS
BACKHAUS TOWEL HOLDING FORCEPS, 110MM,
TOWEL CLAMP, 115 MM LENGTH
STEVENS TENDON SCISSORS,CVD.,BLUNT,110MM
KILNER DISSECTING SCISSORS, 150 MM
IRIS AND LIGATURE SCISSORS, STR., 110 MM
OP. SCISSORS, STR., BL/SH, 145 MM, S
ADSON FORCEPS, FINE SERRATED JAWS, 120MM
ADSON FORCEPS, 1X2 TEETH, 120 MM
GRAEFE FIXATION FORCEPS, 110MM
MICRO-HALSTED HEMOST.FORC., CVD., 125 MM
PEAN ARTERY FORCEPS, STRAIGHT, 140 MM
DUROGRIP HALSEY NEEDLE HOLDER, 130 MM
JOSEPH HOOK, 2 SHARP PRONGS, 165MM
FERGUSSON SUCT.CANN,D:2,5MM,WORK.L.110MM

	LABORATORY DISH, 0.16 L **5.CLEFT PALATE SET** **REPAIR OF CLEFT PALATE** BACKHAUS TOWEL HOLDING FORCEPS, 110MM, TOWEL CLAMP, 115 MM LENGTH FRAME ONLY TONGUE SPATULA, RUSSEL-DAVIS, 67X29MM TONGUE SPATULA, RUSSEL-DAVIS, 75X33MM TONGUE SPATULA, RUSSEL-DAVIS, 85X38MM HARTMANN TONGUE DEPRESSOR, 150 MM SCALPEL HANDLE, NO. 7 KILNER DISSECTING SCISSORS, 150 MM JOSEPH SCISSORS FOR RHINOPLASTIC, 150 MM OP. SCISSORS, STR., BL/SH, 145 MM, S DISSECTING FORCEPS, SLEND. PATT., 145 MM FORCEPS, STRAIGHT, 2MM JAW, ATRAUM.150MM TISSUE FORCEPS, AM. PATT., 1X2 T., 145MM MICRO-HALSTED HEMOST.FORC., CVD., 125 MM ROCHESTER-PEAN ARTERY FORCEPS,STR.,160MM DUROGRIP CRILE NEEDLE HOLDER, 150 MM FINE SKIN RETRACTOR GILLIES,180MM, LARGE FREER ELEVATOR, SHARP/BLUNT,185MM HOWARTH ELEVATOR,DOUBLE-ENDEN,CURVED PALATE RASPATORY, CURVED TO LEFT PALATE RASPATORY, CURVED TO RIGHT FERGUSSON SUCT.CANN,D:2,5MM,WORK.L.110MM **6.BLEPHAROPLASTY (Eye Lid Surgery) SET** **BLEPHAROPLASTY** GROSS POLYPUS, SPONGE AND DRESS.FORCEPS BACKHAUS TOWEL HOLDING FORCEPS, 110MM, TOWEL CLAMP, 115 MM LENGTH SCALPEL HANDLE, NO. 3 STEVENS TENDON SCISSORS,CVD.,SHARP,110MM STEVENS TENDON SCISSORS,CVD.,BLUNT,110MM DISSECT.SCISS.,METZENBAUM,145MM,CVD.DURO OP. SCISSORS, STR., BL/SH, 145 MM, S IRIS /VERY FINE FORC., 1X2T., STR.,100MM IRIS /VERY FINE FORC., 1X2T., CVD.,100MM ADSON FORCEPS, FINE SERRATED JAWS, 120MM ADSON FORCEPS, 1X2 TEETH, 120 MM MICRO-HALSTED HEMOST.FORC., CVD., 125 MM DIEFFENBACH ARTERY FORCEPS, STR., 38 MM DIEFFENBACH ARTERY FORCEPS, STR., 48 MM BARRAQUER MICRO NEEDLE HOLDER,120MM,CVD. DUROGRIP CRILE NEEDLE HOLDER, 150 MM GRAEFE IRIS HOOK, SHARP GUTHRIE IRIS HOOK, SHARP COTTLE SKIN HOOK, CURVED 180 DEGR. LABORATORY DISH, 0.16 L **7.KELOPLASTY (Hand & Tendon Surgery) SET** **KELOPLASTY** GROSS POLYPUS, SPONGE AND DRESS.FORCEPS BACKHAUS TOWEL HOLDING FORCEPS, 110MM, TOWEL CLAMP, 115 MM LENGTH

SCALPEL HANDLE, NO. 3
STEVENS TENDON SCISSORS,CVD.,BLUNT,110MM
IRIS AND LIGATURE SCISSORS, STR., 110 MM
OP. SCISSORS, STR., BL/SH, 145 MM, S
GRAEFE FIXATION FORCEPS, 110MM
IRIS /VERY FINE FORC., 1X2T., STR.,100MM
MICRO-HALSTED HEMOST.FORC., CVD., 125 MM
ROCHESTER-PEAN ARTERY FORCEPS,STR.,160MM
DUROGRIP CRILE NEEDLE HOLDER, 150 MM
CASTROVIEJO EYE CALIPER
LABORATORY DISH, 0.16 L

8.RHINOPLASTY (Nasal Surgery) SET

RHINOPLASTY (COTTLE)

SCALPEL HANDLE, NO. 3
COTTLE SEPTUM KNIFE, 140 MM
MASING CARVING KNIFE 130MM
SCISSORS,COTTLE,SHARP,CVD.,105MM
COTTLE NASAL SCISSOR, 105MM, CURVED
FOMON NASAL SCISSORS, 135MM
DORSAL SCISSOR,COTTLE, ANGULAR, 165MM
GRAEFE IRIS SCISSORS, ANGL.ON FLAT,100MM
JOSEPH SCISSORS FOR RHINOPLASTIC, 150 MM
COTTLE COLUMELLA FORCEPS, 100 MM
COTTLE NASAL FORCEPS, 145 MM
ADSON-BROWN ATRAUMATIC FORCEPS, 120 MM
GRUENWALD FORCEPS,BAYON.SHAPE, 8"
DUROGRIP-NEEDLEHOLDER, CONVERSE 130 MM
NEEDLE HOLDER,SENNING,170 MM
LATHBURY-FARRELL COTTON CAR.,160MM,1,2MM
ALAE PROTECTOR, COTTLE
KNIFE GUIDE AND RETRACTOR
RETRACTOR COTTLE'S, SHARP, 5 1/4 ZOLL
COTTLE SKIN HOOK, CURVED 180 DEGR.
FOMON NOSTRIL ELEVATOR, 145 MM
HOOK, COTTLE, RIGHT TIP
HOOK, COTTLE, LEFT TIP
AUFRICHT NASAL SPECULUM, 160 MM
NASAL SPECULUM, COTTLE, SI.2
NASAL SPECULUM, COTTLE, SI. 4
COTTLE NASAL SPECULUM, DETACHABLE
COTTLE NASAL SPECULUM, DETACHABLE
SEPTUM CHISEL, COTTLE, 4MM BROAD
SEPTUM CHISEL, COTTLE, 7 MM BROAD
SEPTUM CHISEL, COTTLE, 9 MM BROAD
SEPTUM CHISEL, COTTLE, 12 MM BROAD
SEPTUM CHISEL, COTTLE, CURVED, 6MM
GOUGE FOR LATERAL OSTEOTOMY, LEFT
GOUGE FOR LATERAL OSTEOTOMY, RIGHT
OSTEOTOMY CHISEL, STRAIGHT
HAMMER, COTTLE
COTTLE SEPTUM ELEVATOR
COTTLE DOUBLE-ELEVATOR
MCKENTY RASPATORY, SHARP, 150 MM
JOSEPH RASPATORY, SHARP, 160 MM

SUCTION RASPATORY W.MANDRIN, 4 MM
FERGUSSON SUCT.CANN,D:2,5MM,WORK.L.110MM
FERGUSSON SUCT.CANN,D:3,0MM,WORK.L.110MM
DOUBLE-ENDED FILE,FOMON,210MMLONG
DOUBLE-ENDED RASP,FOMON,210MMLONG
JOSEPH NASAL SAW, CURVED TO RIGHT, 170MM
JOSEPH NASAL SAW, CURVED TO LEFT, 170 MM
BONE AND CARTILAGE CRUSHER,W.METAL CLAMP
WEIL-BLAKESLEY ETHMOID FORCEPS, 4,2MM
WATSON-WILLIAMS ETHMOID FORCEPS,TOOTHED
COTTLE-WALSHAM SEPTUM STRAIGHTENING FORC
BONE CUTTING FORCEPS,FINE,170 MM
JANSEN-MIDDLETON NASAL COTT. FORC.,210MM

9.MASTOPLASTY (Breast Surgery) SET

MAIER POLYPUS FORCEPS, WITH RATCHET, CVD
BACKHAUS TOWEL HOLDING FORCEPS, 110MM,
TOWEL CLAMP, 115 MM LENGTH
SCALPEL HANDLE, NO. 4
SCALPEL HANDLE, NO. 3
DISSECT.SCISS.,METZENBAUM,145MM,CVD.DURO
DISSECT.SCISS.,METZENBAUM,180,CVD.DUROTP
DUROTIP DISS.SCISS.,METZENBAUM,CVD.200MM
DUROTIP-LIGATURE SCISSORS, 180MM LONG
DUROTIP DISS.SCISS.,MAYO-LEXER,CVD,165MM
OP. SCISSORS, STR., BL/SH, 145 MM, S
DISSECTING FORCEPS, SLEND. PATT., 145 MM
TISSUE FORCEPS, AM. PATT., 1X2 T., 145MM
TISSUE FORCEPS, 1X2 T.,200MM MEDIUM SIZE
ADSON-BROWN ATRAUMATIC FORCEPS, 120 MM
FORCEPS, STRAIGHT, 2MM JAW, ATRAUM.150MM
FORCEPS, STRAIGHT, 2MM JAW, ATRAUM.200MM
HALSTED MOSQUITO FORCEPS, CURVED, 125MM
HALSTED FORCEPS, CURVED, 1X2 TEETH,125MM
KOCHER FORCEPS, STR., 1X2 TEETH, 140MM
ROCHESTER-PEAN ARTERY FORCEPS,STR.,160MM
GROSS POLYPUS, SPONGE AND DRESS.FORCEPS
OVERHOLT DISSECTING FORCEPS,FIG.1, 209MM
OVERHOLT DISSECTING FORCEPS,FIG.2, 220MM
CZERNY TUMOR FORCEPS, 4X4 TEETH, 200 MM
LANGENBECK RETRACTOR, 40X10MM, 210MM
KOCHER-LANGENBECK RETRACTOR, 80X16 MM
HABERER ADOMINAL SPATULA, MALLEAB., TAP.
BRUNNER RETRACTOR, BLADE 120X25 MM
VOLKMANN RETRACTOR, SEMI-SHARP,4-PRONGED
DUROGRIP CRILE NEEDLE HOLDER, 150 MM
DUROGRIP HEGAR-MAYO NEEDLE HOLDER, 185MM
DUROGRIP DE BAKEY NEEDLE HOLDER, 180 MM
STEGMANN CUTTER MARKER, Ø 33MM
STEGMANN CUTTER MARKER, Ø 38MM
STEGMANN CUTTER MARKER, Ø 42MM
STEGMANN CUTTER MARKER, Ø 48MM
INTERIOR BOX FOR BL 930

	NEEDLE CASE, PERFOR., 7 COMP,150X90X10MM LABORATORY DISH, 0.16 L LABORATORY DISH, 0.4 L KIDNEY TRAY, 250 MM **10.LARGE RETRACTOR SET** HANDLE WITH COLD LIGHT, FOR BT801-820 VAGINAL BLADE, 110X14 MM, FOR BT 800 VAGINAL BLADE, 110X23 MM, FOR BT 800 WOUND RETRACTOR BLADE F. BT800R, 55X14MM WOUND RETRACTOR BLADE F. BT800R, 75X14MM WOUND RETRACTOR BLADE F. BT800R, 95X14MM WOUND RETRACTOR BLADE F. BT800R, 55X18MM COLD LIGHT FOUNTAIN STD.,150WATT, 220 V. MAINS CORD, 5 M LONG FIBER OPTIC LIGHT CABLE, 4,8MM,1,8M LONG
PGI/MM/PM SSY/09-10/N.B.-75	**Hand Held Dermatome** **Specification:** The instrument should be of improved steel with high precision quality with CE, TUV or ISO 9002 certification. Each set should contain : • 3" Baby Dermatome • 4" Regular Dermatome • 5" Dermatome • Sterile Throw Away Blades, all sizes, Box of 10 • Strerile sturdy container for all dermatomes • Container should be autoclaveable
PGI/MM/PM SSY/09-10/N.B.-76	**Watson & Silverman Skin Grafting Knife/ Handle** The instruments should be improved steel with high precision quality with CE, TUV or ISO 9002 certification. All instruments should have it ' s own carrying case which should be autoclaveable set of disposable blades
PGI/MM/PM SSY/09-10/C.-1/77	**Specifications for Nano-drop Spectrophotometer (1)-DNA/RNA Protein estimation** Cuvetteless optical fibre based spectrophotometer for full range UV/visible spectrophotometry. Xenon flash lamp. Wavelength range 220-750 nm. Absorption precision 0.003.
PGI/MM/PM SSY/09-10/C-1/47	**Specifications for Temporary Pacing box** - Dual chamber pacing with all the modes of pacing available - Battery operated - With connecting cable for external & internal pacing leads.
PGI/MM/PM SSY/09-10/C-2/ 05	**Steam Sterilizer Horizontal High Pressure** **High Vacuum Steam Sterilizer** • QUANTITY: 01 NO SPECIFICATION. • SIZE: 24 CUBIC FEET • SHAPE: HORIZONTAL RECTANGULAR. • CHAMBER DIMENSION: 600X900X1200 MM • STANDARD: ISI AND COMPATIBLE TO INTERNATIONAL STANDARDS • CAPACITY: 640 LTS • WORKING TEMPERATURE: 121°C AND 134°C. • WORKING PRESSURE: 1.2KG. /CM2 TO 2.2 KG./CM2 • HYDRAULIC TEST: DOUBLE OF WORKING PRESSURE • DOOR: SINGLE RADIAL ARM

- CARRIAGE: 1 NO. EACH

THE STERILIZERS SHOULD BE CONFIRMING TO IS: 3829 WITH ISI MARK (VALID CERTIFICATE FROM ISI). SUITABLE FOR STERILIZATION OF WRAPPED AND UNWRAPPED S.S. INSTRUMENTS & OTHER DEVICES, LINEN, GLASSWARE, RUBBER GOODS & LIQUID IN OPEN BOTTLES AND CAN BE OPERATED ON BOTH STEAM FROM CENTRAL STEAM FACILITY AND INBUILT STEAM GENERATOR.

(B) MATERIAL OF CONSTRUCTION

(xii) CHAMBER: STAINLESS STEEL OF 316 OF IS 6911 OF 1992

(xiii) JACKET: CARBON STEEL

(xiv) DOOR: STAIN LESS STEEL OF 304 OF IS 6911 OF 1992.

(xv) DOOR GASKET: HIGH TEMPERATURE RESISTANT SILICONE ELASTOMER TYPE SUITED FOR AUTOCLAVING OPERATION. MATERIAL SHOULD BE NON-TOXIC AND COMPLIES WITH THE REGULATIONS FOR AUTOCLAVING USE.

(xvi) INSULATION: NON FIBER SHREDDING RESIN BONDED GLASS WOOL WITH S.S. COVERING OF 304 OF IS 6911 OF 1992.

(xvii) DOOR HINGED TYPE WITH RADIAL ARMS WITH PROCESS LOCK TO PREVENT OPENING OF DOOR DURING THE PROCESS AND DOOR OBSTRUCTION SAFETY TO PREVENT CLOSING OF DOOR IN CASE OF AN OBSTRUCTION.

(xviii) MOUNTING: ON STAINLESS STEEL TUBULAR STAND WITH LEVELING LUGS OF 6".

(xix) VACUUM SYSTEM: WATER RING TYPE VACUUM PUMP. THE SHELL AND TUBE TYPE CONDENSER SHOULD BE FABRICATED FROM STAINLESS STEEL OF 304.

(xx) STEAM SUPPLY: THE STEAM GENERATOR SHOULD HAVE HEATERS OF REQUIRED ELECTRICAL LOAD, AUTOMATIC PRESSURE CONTROLLER WITH GAUGE, LOW WATER LEVEL CUT OFF, SAFETY VALVES AND WITH UTMOST SAFETY FEATURES SHOULD BE OF STAIN LESS STEEL 316 WITH ARGON WELDING.

(xxi) STEAM TRAP: BOTH CHAMBER AND JACKET SHOULD HAVE STANDARD STEAM TRAPS. LOADING CAR (CARRIAGE): STAINLESS STEEL 316 GRADE OF IS 6911 OF 1992 WITH TWO SHELVES ENSURING A FLEXIBLE LOADING ARRANGEMENT.

(xxii) TROLLEY: THE TROLLEY FOR LOADING AND UNLOADING OF MATERIAL.

(F) PROCESS

INDIVIDUAL STAINLESS STEEL CONTROL VALVES FOR PROCESS OF AUTOCLAVING AND ALSO FOR MANUAL OPERATION AS.

(1) STEAM TO JACKET THROUGH PRV

(2) JACKET TO CHAMBER

(3) EXHAUST – FAST & SLOW

(4) VACUUM AND DRY

(5) DIRECT STEAM DISCHARGE LINE.

(G) OPERATION OPTION (AUTOMATIC)

THE SYSTEM CYCLE SHOULD INDICATE THE FOLLOWING PARAMETERS ON LED DISPLAY.

1. (A) CYCLE NUMBER
   (B) LOADING INFORMATION
   (C) DATE
   (D) STERILIZATION DURATION
   (E) TOTAL PROCESS TIME
   (F) ALARMS FOR MALFUNCTION
2. CHAMBER AIR LEAK TEST.
3. PULSING AIR REMOVAL SYSTEM WITH DETECTION BY BOWIE DICK TEST.
4. REAL TIME DATA – REAL TIME TEMPERATURE AND GRAPH OF TEMPERATURE INDICATION DEGREE CENTIGRADE VERSUS TIME IN MINUTES WITH SET POINT SHOWING THE SELECTED STERILIZATION TEMPERATURE ON STRIP CHART RECORDER.
5. RETRIEVAL OF DATA –STORAGE OF ALL-IMPORTANT INFORMATION IN THE COMPUTER OF RECORD AND RETRIEVAL PURPOSE OF AT LEAST LAST 1000 ENTRIES.
6. PRINTER PROVIDED FOR HARD COPY.

(H) OTHERS

1. VACUUM PUMP: ISI MAKE HIGH CAPACITY WATER RING VACUUM PUMP OF STANDARD COMPANY OF REQUIRED CAPACITY COMPLETE WITH CONDENSER AND FITTINGS FOR MECHANICAL AIR REMOVAL I.E. VACUUM (PRE-VACUUM) AND DRYING (POST VACUUM).
2. NOISE CONTROL: ANTI VIBRATION MOUNTING
3. ALL PIPES, FITTING, CONNECTION & STAND: STAINLESS STEEL OF GRADE X 4 CR 19 NI 9 (ISS 304 SI) OF IS 6911

	4. STEAM GENERATOR: S.S. STEAM GENERATOR WITH AUTOMATIC PRESSURE REGULATION & OVER PRESSURE SAFETY & MEETING ALL NECESSARY REQUIREMENTS. 5. PLUG SCREEN : ONE REMOVABLE PLUG SCREEN FOR CHAMBER DRAIN LINE TO BE PROVIDED 6. BAFFLE : S.S. BAFFLE PLATE FOR EVEN DISTRIBUTION OF STEAM TO BE PROVIDED. **(I) TERMS AND CONDITIONS** 1. INSTALLATION ON TURNKEY BASIS I.E. ONLY WATER, ELECTRIC AND STEAM SOURCE AT SITE WILL BE PROVIDED. ALL CONTROL LIKE ICPT SWITCH, INPUT VALVES AND PRV IF REQUIRED SHOULD BE PROVIDED/INSTALLED BY THE SUPPLIER. 2. ISI CERTIFICATE AND LIST OF USERS INSTALLATIONS OF RECTANGULAR STERILIZER MAY BE PROVIDED. 3. THE SUPPLIER WILL PROVIDE 2 SETS OF OPERATING MANUAL AND CIRCUIT DIAGRAM AND A SERVICE MANUAL. 4. GUARANTEE/WARRANTY OF 05 YEARS. 8. OFFER FOR BOTH COMPREHENSIVE (LABONR & SPARE) MAINTENANCE AND NON-COMPREHENSIVE. (ONLY LABOUR AND PRICE LIST OF SPARE PART WITH VALIDITY OF RATES TO BE PROVIDED. 9. 95% UPTIME DURING WARRANTY AS WELL AS DURING MAINTENANCE CONTRACT. FINE/PENALTY AS PER INSTITUTE TERMS. 10. A COPY OF CERTIFICATE FROM BIS SHOULD BE ATTACHED. ALL TESTING CERTIFICATES FOR THE JACKET CHAMBER AND ALL OTHER COMPONENTS USED SHOULD BE PROVIDED **(F) Safety** 4. IBR APPROVED PRESSURE-REDUCING VALVES WITH GAUGES; THE TENDERER SHOULD PROVIDE TRAPS IN LINES AND SAFETY VALVES FOR JACKET AND CHAMBER FOR OVER PRESSURE SAFETY. 5. DOOR SAFETY TO PREVENT STARTING OF PROCESS UNLESS THE DOOR IS CLOSED AND OPENING OF DOOR WHEN THE CHAMBER IS PRESSURIZED. 6. INSULATED SURFACE TO AVOID SCALDING TO OPERATOR.
PGI/MM/PMSSY/09-10/C-1/37	**Sterilization & Storage Container** **Specification:** f) Double lid system g) B)Thermoloc sealing of lid self acting by temperature h) C)Lid stainless steel/aluminum, base aluminum i) Bio-Barrier-stainless steel valve j) Thermostatic condensation drain in the bottom k) Two handles one at either end of container with silicone rubber covering l) Minor variation in size can be considered m) The offer should indicate the number of sterilization cycles a container can undergo(life) n) If available the containers must display the number of time the container has undergone sterilization cycles. o) Sizes:60x30x30 cms p) 60x30x15 cms q) 30x30x30cms
PGI/MM/PMSSY/09-10/C-2/08	**Electrocautery+ Argon Plasma coagulator** **Specification:** Electrsurgery unit with forced APC mode 0 Upgrade ENDO cut; V 1.0 Two pedal footswitch, AP & IP X8 Equipment APC 2 Unit for VIO System

	Argon gas bottle, 5 ltrs, 200 bar Pressure reducer with sensor Silicon-electrode, conductive area 17,5x29,5 cm=516 cm suare, with rubber strap and ECG connection Patient plate cables international for silicon plate, length 4 m Monopolar connecting cable(Bovie jack) for CUT and COAG MIS instruments, length 4 m Connecting cable for flexible APC-probes,2.5 m long APC probes 2200 A; OD 2.3 MM; L 2.2 m APC probes 2200 SC; OD 2.3 mm; L 2.2 m.
PGI/MM/PMSSY/09-10/C-2/09	**Endoscope Disinfection System** 1. Mixed oxidant solution generator with electrolyte pack-1 2. Endoscope washer system-2 3. Ethylene oxide sterilizer with vacuum chamber-1 4. Air purification system for at least 4,000 cu ft air -3 5. Hand sanitizers with solution -5 **Detailed specification are mentioned below :** **1. Specifications for mixed oxidant solution generator** • Mixed oxidant solution generation system for on site generation of non toxic biocidal agent should have capacity to produce 800 L of mixed oxidant solution per day a concentration of more than 400 ppm. • Solution should be generated at low current of < 10 amp. • Mineralization of the generated solution should not exceed 5 / liter and ph should be almost neutral . • Power consumption should not be more than 350 watts. • Electrolyte Pack for item 1 : Concentrated electrolyte pack for the mixed oxidants solution generator **2. Specifications for Endoscope Washer** • Fully automated endoscope washer for fully immersible endoscopes • Programmable cycles for disinfection, water rinsing and air- drying programs and with timers • Proper alarm system for any blockages endoscope channels • Self cleaning and sterilization option • Full set of accessories needed for system **3. Specifications for Ethylene Oxide sterilizing unit** • ETO sterilizing unit with inbuilt vacuum and aeration chamber and with a capacity of approximately 50-60 liters • Fully automated and programmable cycles for disinfection and aeration • ETO leakage warning alarms desirable **4. Specifications for Air Purification and Sterilization system** • Air Purification System for killing bacteria and fungi, stopping regeneration of bacteria and for deodorizing air. • Should have user selectable program for fumigation and purification modes.

PGI/MM/PM SSY/09-10/C-1/125	**Specifications for Laser Resectoscope set** 25 degree telescope 4 mm Light cable
PGI/MM/PM SSY/09-10/C-1/120	**Table Top Sterilizer(Table top autoclave for Operation Theatre):** • Multiple programmed for instruments, textile, liquids etc with pre and post vacuum dry cycle. • Microprocessor controlled cycle time & temperature • Microbiological (in built) air filter • Digital Display/LED of Operations in sequence and temperature and timer cycle documentation through a printer/serial port connection for PC/USB storage unit. Front loading with Deionizer for connection to water. • Chamber volume 20 – 25Ltrs. • Temperature control – 121°C to 134°C • Operating pressures: 15 PSI to 30 PSI • Class – B sterilizer designed to meet EN 13060. • The warranty of equipment will be five years. • AMC/CMC charges should also be offered. • The firms to give installation requirement for the equipment in their technical offer.
PGI/MM/PM SSY/09-10/C-1/112	**Specification for Table top high speed refrigerated microcentrifuge** Table top model Refrigerated centrifuge (4^0 C) Micro processor controlled Max capacity 24 tube, tube sizes 200 ul to 2ml Max G-Force 16,000 – 17,000g Max speed > 12,000rpm Rotor Fixed angle, 2 types, for tube and PCR strips Motor Brushless Frequency controlled induction drive
PGI/MM/PM SSY/09-10/C-2/17	**Specifications for MR compatible stereotactic frame** Stereotactic head frame with localization accessories 1. Coordinate stereotactic frame 2. Stereotactic arc with clamp 3.CT and MR adaptor with table fixation device 4.Backward biopsy kit including accessories for fine needle biopsy, spiral biopsy and aspiration kit. 6.Side cutting biopsy needle kit 7.Haematoma evacuator kit 8.Endoscopic adaptor 9.Neurogenerator 10.Brain lesion electrodes & bipolar kit 11.Electrodes for pain treatment
PGI/MM/PM SSY/09-10/C-1/45	**Walk In Cold Room** **Specification:** • Size:10x10x10 feet, Temp.4-8 deg. Centrifuge flush type door with cooling, pre fabricated panel of SS with floor panel, internal side should be of SS dull finish, outer pre painted SS sheet, powder coated, alarm system with internal opening safty device, can and lock system • Racks for stainless steel for cold room; 4 tiers made up of 16 gauge SS sheet and SS angle for keeping vegetable, milk, egg, butter, fruits, paneer etc.
PGI/MM/PM SSY/09-10/C-2/ 11	**Clinical Scale Magnetic cell Sorter for Isolation of CD -34+Stem Cell** 1.Automated immuno- magnetic cell separation system with high purity and yield. 2. Minimal or no handling of cells in the operation of the system. 3. Compatible for clinical or sterile grade cell sorting with no effect on cell viability. 4. Portable sorter compatible to be placed in laminar flow hood. 5. High cell sorting capacity ranging from 0.5×10^6 to 5×10^9 per run.

	6. Should have positive and negative selection systems of sorting applicable simultaneously. 7. Compatibility for sorting of $^{CD34+}$ haematopoietic and $CD34^{-}$ non- haematopoietic cells 8. The system should be capable of sorting at least two sample simultaneously. 9. Flexibility to meet multiple immuno- selection per rum 10. The system should have data storage device and up- gradable software and procedures. 11. Should be a user friendly system with low running and maintenance cost. 12. Power Supply : AC 100 – 240 V/ 50- 60 Hz.
PGI/MM/PMSSY/09-10/C-1/121	**Flexible Ureteroscope** **Specification:** Instrument channel. Stone holding flexible forceps. Flexible biopsy forceps.
PGI/MM/PMSSY/09-10/C-2/20	**Automated Immunostainer** Open, optimum protocol, flexible system Capability to accommodate multiple protocols Priority slide handling, dedicated desktop computer Ease to use with concentrated & pre-diluted ready to use primary antibodies and different visualization systems. Start and finish runtime display with delayed start option. Slide labeling system.Seperate waste container with non-spillage. Immunostaining of formalin fixed paraffin embedded tissue, frozen seelion, cytospins, cell smears and fine needle aspirates.
PGI/MM/PMSSY/09-10/C-1/130	**Flexible Cystoscope** **Specification**: Instrument channel.
PGI/MM/PMSSY/09-10/C-1/36	**Water Purification System** **Specification:** Water purification system for delivering up to 5 L/ h of Type II water + 15 % (Analytical grade : as defined by ISO 3696/3997) from tap water (certified for feed water quality at SGPI) which would fulfill requirements for feed water of an ultra filtration system ; > 5 M Ω. cm resistively and < 0.2 µ s/ cm conductivity of product water compensated to 25 deg C; TOC of < 30 ppb ; bacteria count of < 1 cfu / ml ; silicate content <99.9% retention and min water recovery of 15 % maintenacene free with storage tank of min 30 L capacity. Water purification system for producing upto 1.0 L/ Min of ultrapure Type water from feed water of type II with > 10 M Ω.cm receptivity of product water compensated to 25 deg c; TOC of 5- 10 ppb; pyrogens < 0.001 Eu / mL; bacteria count of < 1 cfu / mL 230 VAC, 50 Hz cycle.
PGI/MM/PMSSY/09-10/N.B/78	**Microfuge Centrifuges-Refrigerated Centrifuge (**Specifications as below) 1. Capacity : 24 x 1.5/2 ml microtubes. 2. Minimum speed : 15, 000 rpm 3. Minimum RCF : 21,500 xg 4. Temperature Range : - 9 to $+40^0$ C 5. Display: With self- diagnostic system and error message. 6. Rotor : Autoclavable single microlitre rotor with 45^0 angle. 7. Breaking profile : Nine at least. 8. Running Time : >9h for continuous operation **Safety Device:** Lid interlock, imbalance Detector Over-current Circuit Breaker (Power Switch) Lid

	Open/Close Detector, **Other Functions**:Memory storing a last-used operating value FLASH (momentary spin) function, **Power Requirements:** Single phase 220,230,240V AC, 50/60Hz, 7A
PGI/MM/PM SSY/09-10/N.B/79	**Table Top Centrifuges High speed** **Specification** Maximum Speed: 25,000 rpm**,** Max Centrifugal Force: 60,000G**,** Max Capacity:250ml x 4, Temp Setting:-9ºC to 35º C, Safety Mechanism :Imbalance Detector, Door interlocks, Door/open Close detection, over Speed detection, Circuit detector, Temp error detection, Rotor ID, Electronic breaking, Speed, Force, Temp and Time Control: Digital Microprocessor Control Angle rotor with adaptors for 10 ml to 50 ml tubes Power requirements: AC220/230/240V, 50Hz, 30A Warranty for 5 years
PGI/MM/PM SSY/09-10/N.B/80	**Vacuum Concentrator(Speed Vac Centrifuge)** Unit to include everything we need to dry alcohol or water based precipitates of DNA/RNA yet occupies only 8 x 10 inches of bench space. Built-in pump and a by-pass switch to allow the use of a stronger pump to shorten drying time. Features a heating function to accelerate evaporation, acrylic lid and a stainless steel chamber. Centrifugal Vacuum Concentrator, Complete system should include the Concentrator, pump and rotor. Compact and complete unit, 20x 25x 23 cm. Suitable for DNA/RNA work, Should have heating function to accelerate evaporation, Speed 200rpm,vacuum pump is mantled inside of body, Rotor 1.5ml x 12 places, Stainless Steel chamber.
PGI/MM/PM SSY/09-10/N.B/81	**Low Speed High Capacity Refrigerated Centrifuge** Maximum Speed: 9000rpm**,** Max Centrifugal Force:9600G**,** Max Capacity:250ml x 4, Temp Setting:-9ºC to 35º C, Safety Mechanism:Imbalance Detector, Door interlocks, Door/open Close detection, over Speed detection, Circuit detector, Temp error detection, Rotor ID, Electronic breaking, Speed, Force, Temp and Time Control: Digital Microprocessor Control With **Swing Out Rotor** with different buckets for tubes ranging from 5 ml to 250 ml volume Power requirements: AC220/230/240V, 50Hz, 30A Warranty for 5 years
PGI/MM/PM SSY/09-10/N.B/82	**Digital Analytical Balance(Monopan Balance)-Specification** Compact chamber with wind drift shield provided with three slinind doors, Digital LCD display, Automatic calibration with built in motorized weights, built in motor driven touch key, Range 0.0001 gm to120 gm, provided with large triangulate pan. MODEL 124S 230V AC;50Hz cycle
PGI/MM/PM SSY/09-10/N.B/83	**Refrigerators---Specification** 1**.** Frost-free system with Volume of 300-345 L. 2 .Te sssmp Range: 2^{o}C to 14^{o}C. 3. Microprocessor controlled temperature system with digital temperature display. 4. Fan – Forced air circulation 6. Double-layered glass door with heat reflective filter and sliding doors. 7. Door open alarm and abnormal (Hi/Low) temp alarm. 8. Interior made of backed on acrylic finish on galvanized steel. 9. Warranty: 5 years.
PGI/MM/PM SSY/09-	**A-40 deg. C Deep Freezer**

10/N.B/84	Ultra low temperature freezer upright type, made of sturdy galvanized material and internal casing of SS; with operating temperature of -10 °C to -40°C at ambient temperature of up to 35 °C; approx 380 to 400 L capacity (not less than 350 L); CFC, HCFC, HFC refrigerant free; air cooled hermetic compressors with dual condenser fans; mounted on 4 castors; Micropressor controlled with touch pad data entry and digital display of all functions; key operated main switch; battery powered independent operating temperature and high/low limit alarm functions for high low temp -10 K to set temperature; automatic voltage boost to compensate for low voltage; onboard power monitoring with display of incoming voltage. Heated door sealing, sturdy inner doors and minimum of 4 independent inner compartments; high-density door insulation; door provision for padlock. Compressor warranty of 5 years Optional: Provision for vaccum release assembly for rapid opening of door for re-entry; racks, boxes of different sizes and dividers for half the freezer.230V AC; 50 Hz cycle **B-80 C Deep Freezer** Ultra low temperature freezer upright type, made of sturdy galvanized material and internal casing of SS; with operating temperature of -5°C to -86 °C at ambient temperature of up to 35 °C; approx 380 to 400 L capacity (not less than 350 L); CFC, HCFC, HFC refrigerant free; air cooled hermetic compressors with dual condenser fans; mounted on 4 castors. Microprcessor controlled with touch pad data entry and digital display of all functions; key operated main switch; battery powered independent operating temperature and high/low limit alarm functions for high low temp 10 K to set temperature; automatic voltage boost to compensate for low voltage; onboard power monitoring with display of incoming voltage. Heated door sealing, sturdy inner doors and minimum of 4 independent inner compartments; high-density door insulation; door provision for padlock. Compressor warranty of 5 years Optional: Provision for vacuum release assembly for rapid opening of door for re-entry; racks, boxes of different sizes and dividers for half the freezer230V AC; 50 Hz cycle
PGI/MM/PM SSY/09-10/N.B/85	**Hybridization Oven/shaker---Specification** Temperature controlled oven containing rotisserie and shaking platform for hybridization and incubation of Northern, Southern and Western blots; shaker platform and rotisserie for 6 bottles; min capacity of 15.1 temperature range from ambient +5° C to 80° C; temperature precision of 0.5 °; C temp fluctuation of 0.1° C; auto cut off at 1°deg C over set temp; retosserie speed 5-50 r/m230V AC 50 Hz cycle
PGI/MM/PM SSY/09-10/N.B/86	**Fully automated Thermocycler---Specification** Automated, programmable thermal cycler capable of performing, gradient PCR, block holding capacity of 48 tubes of 0.5 ml each and with inbuilt dynamic gradient sofrware; thermal range 5 -105º C; temperature variation 1º C across the entire block. Ramping speed of 2 degree C per second, heated lid, simple to program with capacity to hold at least 100 programs each program should allow upto 8 segments. Operation on 230 V, 50 Hz power supply; auto-restart option in cased of power failure.Optional Features (a) block to hold 0.2 ml tubes (b) block to hold 96 well plates
PGI/MM/PM SSY/09-10/N.B/87	**Gel-Documentation System---Specification** UV and white light transilluminator with CCD camera (with UC filter and zooming facility), dark room hood, and image viewing facility and image acquisition softare should allow integration of

	image over a variable duration of time. Image analysis software with possibility of rotation, mirror inversion, brightness and contrast alteration, identification of bands and lanes calculation of MW and intensity, etc. Should allow integration of image over a variable duration of time. Operation on 230V, 50 Hz power supply 2-year warranty.230V AC; 50 Hz cycle
PGI/MM/PM SSY/09-10/N.B/88	**Microwave Oven** **Specifications:** Fully automatic with digital time and temperature display, Capacity should be 32 Litre. Bio-ceramic Enamel coated interior Power supply: AC line, 50 Hz,220-240 volts
PGI/MM/PM SSY/09-10/N.B/89	**Ph Meter---Specification** Should be versatile, simple to use pH, mV and temperature meter that is ideal for routine analysis. With up to three decimal place resolution and a choice of up to three calibration points ,Should have pH resolution to 3 decimal places, Calibration for 1, 2 or 3 point,RS232 connection to printer or PC via Data Way,pH calibration buffers to DIN, JIS and NIST standards can be used for automatic calibration, as well as manually entered buffer values, pH range: –2.000 to +19.999,pH resolution: 0.001/0.01 0.1,pH accuracy: ±0.003,Automatic buffer recognition: Jenway (2.00, 4.00, 7.00, 9.20 and 10.00), DIN, NIST, JIS,Calibration: User selectable 1, 2 or 3 point,mV range: ±1999.9mV,mV resolution: 0.1/1mV,mV accuracy: ±0.2mV,Temperature range: ±10 to 105°C,Temperature resolution: 0.1°C,Temperature accuracy: ±0.5°C,ATC range: 0 to 100°C,Outputs: Analogue and RS232,Connector: BNC,Should operate on 230 V ;50 Hz
PGI/MM/PM SSY/09-10/N.B/90	**Vortex Mixer---Specification** 1. Variable speed for gentle to vigorous mixing with timer function. 2. Attachment for pop-off cup. 3. Attachment for micro plates, small and large ampoule/tubes 4. Attachment for single-multiple microtubes, and various size tubes 5. Attachment for bottle/ beakers. 6. Attachment for violent mixing for cell disruption and homogenization. 7. Base dimention: 160-165x 120-125x 160-165mm (D x W x H) 8. Operation system: hands free and touch on, 9. Power supply: AC line, 50 Hz, 220-240 volts
PGI/MM/PM SSY/09-10/N.B/91	**Homogenizer---Specification** Rotor and stator-quick coupling, autoclavable, easily cleanable and resistant to routine lab disinfectants. Electronic speed regulation of rotor, continuously variable from 5000 to 30,000 rpm (minimum or higher).Motor power range 250 to 300 W. Easy clean interchangeable dispersing aggregates with volume range from 0.5 to 250 ml (2 or 3 Nos. depending upon the volume of the dispersing aggregates).Integrated control knob and speed scale. Plate stand, vessel holder with head for hand free working. Safety positioning ring

PGI/MM/PMSSY/09-10/N.B/93	**Specifications Of Microarray System** **Specs for Microarray Workstation** 1. Whole workstation should be capable to do microfluidics based electrophoresis system as quality control for DNA, RNA, and Protein as well as cell analysis. 2. System should capable to give RIN (RNA Integrity number) for assessment of small RNA and total RNA for further microarray and real-time PCR analysis. 3. System should provide resolution up to 5bp and should also be capable of analyzing RNA in pico gram levels. 4. Should come with dedicated software data analysis software algorithm dedicated for above mentioned applications 5. This system should go in tandem with Microarray system. 6. Workstation should be capable to do applications like **Micro RNA, Comparative Genomic Hybridization, DNA Methylation studies, Splice variants, Gene expressions, Chip on chip** for protein-DNA interaction with the help of different dedicated softwares. 7. Workstation should have the essential feature of **Dynamic Auto focus**. 8. This workstation should use LASER as a source for excitation for analysis. 9. System should have the capabilities to stabilize the LASER. 10. Workstation should capable to analyze 48 arrays in one time with time of 8 min. to 15 min. 11. The system should have high throughput 48 position **auto loading carousel** with a capacity of 384 samples using a multiarray format. 12. Software of this workstation should capable to analyze applications like Gene expressions, Chip on chip for protein DNA interactions. 13. Sensitivity should be at the level of **0.05 cpsm** (Chromophore per square micron) or 5 molecules of dye per 10 micron pixel. 14. The system should have capability for simultaneous and sequential scanning. 15. The manufacturer should provide multi array format slide with own manufactured & optimized chemistries. 16. Workstation should be **CFR11** compliance 17. System should be capable to do 5micron scan 18. Workstation should also come with hybridization Rotator, chamber, Washer. 19. Workstation should also come with Electronic Array (e- array) facility so that custom designing of array will be **Free of cost**. 20. Work station should be an **Open Platform** so that any 1x 3" slides can be analyzed and open to any present and future applications. 21. Supplier should have fully functional Genome wide Application Workstation application support and service lab facility in India.
PGI/MM/PMSSY/09-10/N.B/94	**CO2 Incubator:** Shall be size 12 to 14 cubic feet Quotes on 2 units totaling 12 to 14 cuff acceptable Water Jacketed Double Doored 12 Shelves Stainless steel interior and shells Temperature Range: 5 above ambient to 60 degrees C Temperature Conotrol +/-0.1 Degree C Humidity Control Infrared or Thermal Conductivity CO2 Control Temperature, CO2 and Humidity, Digital Display Over Temperature Control Built in on demand sterilizer facility for automatic decontamination at 140C Net Volume :- 230 Lit (Approx.) Microprocessor control for all functions Temperature range:- 5C above ambient to 50C CO2 range :- 0-20% Digital display and control of CO2 with auto-zero calibration Dual beam IR sensor for CO2 Control CO2 Accuracy :- better than +/- 0.1% Digital display and control of humidity form ambient to 95% Active humidification system with capacitive sensor and external humidity reservoir Visible and audible alarm for deviation of temperature, CO2,Rh and power failure.

	UL,CE and ISO Certified 100% HEPA filtered air circulation with class 100 air quality Stainless steel perforated shelves :- 5 Nos. Double stage and double gauge CO Gas regulator with safety valve.
PGI/MM/PM SSY/09-10/N.B/95	**HPLC (High Protein Lipid Chromatography)** **Specifications** Dual Solvent Delivery Modules to provide precision, flexibility, and reliability for the most demanding HPLC applications. Solvent Delivery Modules to deliver highly reproducible results over a wide range of flow rates. Built-in time events to allow contact closure of external devices such as column switching valves.The system should be upgradable for Micro and semi micro **The solvent delivery system should have following technical features** **Flow Accuracy** : ± 2 µL (0.01 to 0.10 mL/min.) : ± 2 % (0.101 to 8.000 mL/min.) **Flow Precision** : ± 0.075% RSD **Flow rate range** : 0.001 to 9.999 mL/min **Composition range** : 0 to 100% (0.1 increments with CDS; 1% increments with front panel control **Composition Accuracy** : ± 1% **Composition Precision** : 0.1% RSD System should have organizer for power supply and High gradient kit **UV-Vis Detector with s**uperior signal-to-noise even at the fasted response times and a selection of flow cells make the for different application Advanced optics and active electronics combine to provide a new level of performance for UV and UV/Vis detection. Pre-aligned flow cell options to access from the front of the instrument to allow the user to easily switch from micro-bore to conventional or high throughput. Active noise filters for a wide range of response times produce superior signal-to-nose while maintaining peak shape in high flow rate applications. Automatic wavelength calibration and documentation to to comply with government regulations for system suitability. Should be Available with a wide range of flow cell, External inputs for lamp off switching and auto zero, Variable signal output for best peak presentation **Optics** : Double beam and ratio mode, **Calibration** : Built-in Hg lamp, **Range** : 190 – 600 nm, **Light source** : D_2 lamp , **Accuracy** : ± 1 nm, **Bandwidth** : 6 nm, **Noise** : < 0.6 x 10^{-5} AU, **Drift** : < 1.0 x 10^{-4} AU/h, **AUFS range** : 0.25, 0.5, 1, 2 AU, **Response** : 0.05, 0.1, 0.5, 1, 2, 4, 8 s,, **Programs** : 9 programmable steps, **Max. Steps** : 100 (in 9 programs), **Available functions** : Wavelength, time, auto zero, and hold, **Should have GLP functions** **Fluorescence detector:** Should operate at 200 nm to 900 nm Innovative flow cell designed for less dispersion, less stray light, less volume, and more pathlength for maximum sensitivity **Three-dimensional spectral scanning** for faster method development and optimization, and enhanced peak identification **Single or multi-channel operation monitors** fluorescence at one or more discrete wavelength pairs **Axially illuminated flow cell** – Allows for better light absorption resulting in highest sensitivity. **Advanced optical design** - Maximizes light throughput, and reduces light scatter, allowing for better signal-to-noise performance. **Low noise performance** - Less stray light due to orthogonal optics and the use of mirrors, not lenses, minimize scatter. **Multiple detection modes** - 2D, 3D, and on-the-fly spectral scanning – can greatly reduce the time needed to develop fluorescence detection methods by quickly determining wavelength maxima. **Integral erbium calibration reference** – Ensures wavelength accuracy. Software Data System Package HPLC System to include USB I/F Board and following function Should have simultaneous display of a contour map, 3-D display, chromatogram, and spectrum in a single window. Display of information on one screen allows easy confirmation of the spectrum of the target peak. **Multi-chromatogram**

	Information about the entire wavelength range can be obtained with one measurement, permitting extraction of an arbitrary number of chromatograms of any wavelength in 1-nm increments. The chromatogram can be used for on-line quantitative calculation **Peak purity calculation function** The peak purity should be displayed in the form of correlation coefficients, enabling easy comparison between samples. Use of similarity curves shows the location of impurities at the peak, which is effective in examining the purity in detail **Spectral library search function** A spectrum that resembles the spectrum of the target peak is automatically searched. Spectra are displayed in the descending order of similarity, which is effective for discriminating unknown peaks. This function permits recalculation, as well as searching during data collection, to improve efficiency of analysis. Note:- The system should be provided with following accessories form Indian Market 1) Suitable PC and printer 2) Rheodyne injector 3) 25µl syringe 4) C-18 column (5u, 250 x 4.6mm) **Optional Accessories** Auto sampler with direct injection method with 200 numbers 1.5ml vials and optional feasibility for 3 or more (384 micro plates) to allow measurement of 1152 samples
PGI/MM/PMSSY/09-10/N.B/96	**Gel Electrophoresis system (Horizontal)** Easy & convenient to use, Various selections of trays and combs, UV Transparent acrylic material for real time monitoring of sample migration Uni directional pegs for easy lid removal, safety and orientation. Removable L form electrode platinum wire kit, Tape free casting, Dams claw for fitting different length of tray. Ability to cast gel in advance while the tank is in use. Fixed electric cable attached to safety lid; enforce correct operation of with lid and for protection of operator. Injection mold design, CE certified, ISO certified manufacturer. Tray size of 15x15cm or 15x10cm or 15x7 cm. Comb of 15 or 20 wells and thickness of combs 0.75/1.0/1.5mm.Run unto 40 samples at once, Buffer volume 650 to 1000 ml. Should be supplied with Suitable Power unit with following technical specification: Compact space saving stackable, light weight and user-friendly design; Should have at least four output terminals to meet versatile requirements; Real time display of running conditions; including voltage, current and time; Easy touch panel for all condition setting; Adjustable setting while running, Audiovisual alarm, Status Alarm; Automatic recovery after power failure, Voltage Range: 10-300V in 1-Volt Steps, Current Range: 4-500 mA in 1 mA STEPS, 90W MAX, Output terminals: 4 Set in parallel; Operating temp: 0-40˚CTimer Control: 0-999 minutes; Display: 3 digit 7 segment LED
PGI/MM/PMSSY/09-10/C-1/40	**Heavy duty cooking range** Heavy Duty single burner LPG cooking range, stove size 24”x24”x24” SS body. The range will have a burner with burner control valve and a pilot lamp, spillage collection tray and adjustable bullet feet for specified food preparation such as preparation of low potassium lentils and vegetable and low fat seasoned lentils and vegetable for individual groups of patients and dietary specification
PGI/MM/PMSSY/09-10/C-1/41	**Internal air circulation system** Vendors are required to submit their own offer / specification which will be decided on the basis of technical specification and demonstration. The vendors may visit the site on any working day between 10.30 to before submitting their offer.
PGI/MM/PMSSY/09-10/C-1/42	**Heavy duty mobile storage drum(Assorted)** (a) Heavy duty plastic (food grade) storage mobile drum/ or mobile bins with lid capacity 150kg. 100kg, 50kg, 25kg, 10kg,. These storage drums are required for storage of grocery items and dry ration storage. (b) Heavy duty plastic (garbage) collection and disposal mobile drum/ or mobile bins with lids-cap 150kg, 50kg,25kg, 10kg (c) Waste food mobile drums/ bins with lids for transportation of waste food. The drum/ bins should have space for holding and transporting approximate 150-200 kg of waste food material in plastic drums having heavy duty wheels so as to play on mettled roads
PGI/MM/PMSSY/09-10/C-1/43	**Exhaust hood**

	Fabricated from GI sheet over MS frame provided with grease filters with multiple layer of different meshes of wire gauge in corrugated shape
PGI/MM/PMSSY/09-10/C-1/44	**Miscellaneous Kitchen equipment** (a) LPG cylinder transport trolley for transportation of LPG cylinders domestic as well as commercial the trolley should be having space for holding and transporting a single unit heavy duty wheels so as to ply on mettled roads (b) Weighing scale dial type- 100 kg capacity. The frame, livers and platform made up for stainless steel size 24x24 minimum graduation dial chart to 100 grams. (c) LPG operated tilling frypan of 10 lit capacity. All body made up of stainless steel (food grade) (d) Mixture grinder (commercial) ISI with attachment or made up of stainless steel (e) Mixture Grinder & juicer (domestic) – ISI, all body and attachment made up of stainless steel. (f) Plastic crates- heavy, duty ISI to hold 20-25 kg perishable food items (g) Electrical commercial juicer- all body made up for SS, motor ISI for extraction of juice in bulk quantity (h) Food processor/ vegetable cutting machine; all body made up of food grade SS, IS electric motor, cap.25 kg with slicing/ chopping, dicing, grating, attachment (i) Luggage trolley; tuber fame work of MS pipe duly painted, to casters (heavy duty on bearing) with collapsible flaps
PGI/MM/PMSSY/09-10/C-1/56	**Alignment software for sequencer** **Specification:** Sequencing analysis software ver.3.7(MAC OS to window NT OS Upgrade). The important features of this software are as follows: Basecalling. Factura software based feature assignments Date filtering. Sequence assembly Sequence alignment Sequence comparison Report generation.
PGI/MM/PMSSY/09-10/N.B./109	**Laparoscopic Equipments:** 1) **Optic Chain** : **Camera:** High definition 3 –chip camera, Medical grade digital 3 –chip camera Horizontal resolution > 1100 lines SXGA technology (1280 X 1024) 3.93 million pixels Progressive scan technology (not interlaced) In-built 16 steps digital enhancer 1/3 " interline transfer Hyper HAD CCD Electronically controlled digital zoom Remote control on camera head to control four step gain, zoom & white balance controls Graphic disply of activated functions Automatic brightness control Multiple pure digital output

	Signal to noise ratio of 70 dB Electronic flexible scopes filer to adapt with flexible scopes Standard aspect ratio of 4:3 Brightness,image sharpness, colour balancing automatically adjusted to attain the best possible picture for the selected speciaility **Light Source** Xenon light source Fully automatic 300 watt Jaw mechanism for fixing the Fiberoptic cable Minimum bulb life of >500 working hours **Fiberoptic cables** Atleast 5mm diameter over 6.5 feet length **Monitor** – 26" one each , flat panel custom designed with the colour depth & enhancement requirements High resolution appropriate to the offered camera system SXGA technology (1280 X 1024) Capable of displaying SVHS, VHS, XGA, & DVI signals **Carbon Dioxide Insufflator** : Preferably >12 litres , high flow Insufflator wiyh heating Touch sreen controls **Telescope** : 10 mm 30 degree &0 degree autoclavable laparoscope 05 mm 30degree **Video recorder** – digital video recorder 2) **Operating Instruments** : Veeres Needle 6 " long Trocars pyramidal tip, 5.5mm & 11mm cannula -11mm, 5.5mm automatic valve stop cock, without trocar Reducers - 10/5 5 mm instruments : 33cm PEEK monopolar handle Maryland dissector Nontooth grasper with spoon DeBakey grasper Aspiration needle – 5mm PCOD needle scissors- Metzenbaun scissors(5 mm, 10mm) straight & curved atraumatic double action grasper 5mm myoma screw Curved left needle holder Curved rightle holder 5mm bipolar fenestrated forceps with spring handle 5mm bipolar microtip forceps with spring handle Suction irrigation canula 5mm & 10 mm Suction irrigation machine Knot pusher Sterilizating tray for instruments sterilization Trolley for equipments Uterine manipulators
PGI/MM/PMSSY/09-10/N.B./111	**<u>Hysteroscopic Equipments</u>** **4mm, o degree** autoclavable hysteroscope **4mm,** hysteroscope diagnostic sheath (outer)

PGI/MM/PM SSY/09-10/N.B/97	**Sequential Compression Device for Lymphedema** **Specification**: Should be a sequential compression device for providing graduated sequential compression and rapid impulse inflation to Calf & thigh.It should have sequential pulse frequency with choice of treatment of one or two limbs simultaneously. It should not require DVT sleeves below cuff. It should delivers constant preset pressure range 20-80 mm of Hg. Should be portable, electrically operated with good battery back up with universal size of sleeve to cover calf, thigh & foot. Standard Accessories should include the followings: Connecting tube Universal sleeve for thigh calf & foot small Universal sleeve for thigh calf & foot medium Universal sleeve for thigh calf & foot large
PGI/MM/PM SSY/09-10/C-3/06	**Electrophysiology ablation apparatus** **Specification:** 1-12-Body Surface ECG 2-Number of Intra- Cardiac Channels-Atleast 70 3-Two channel intra-cardiac pressure recording & display 4-Digital stimulator with key board operation. Two channels with at least 25mAout put 5-Off line software/hardware system to “Review Data”-one installation outside 6-Review software to upload in any computer 7-Compatible laser printer 8-Operating system 9-HDD minimum 160 GB, atleast 2.5 Ghz CPU,512 MBRAM 10-Data storage, patient data writable 11-Ease of use with preferred single key board commands 12-ECG triggered mode display of single beat with stable display 13-User programmable screen configuration 14-User programmable stimulation protocols 15-Real time beat-by-beat display 16-Continuous suface ECG visualization 17-Split screen display for template viewing & matching

18-On-line view of real-time & review data simultaneously

19-Selectable amount of data to be stored per patient

20-Computer based display of RF parameters

21-Adequet filtering

22-UUser configurable reporting format

23-Data transfer to power point, JPEG or similar formats

24-Free of cost software upgrade

25-Single party supply of all components.

PGI/MM/PM SSY/09-10/C-3/07

Specifications for Isocentric Brachytherapy Simulator

1 Description of Function

1.1	The therapy simulator serves the purpose of simulating, verification and planning of brachytherapy & teletherapy treatment.

2 Operational Requirements

2.1	The simulator should be able to provide orthogonal and variable angle isocentric views / films for brachytherapy planning of various sites and also teletherapy equipment (cobalt & linear accelerators). The offered tabletop should be carbon fiber with indexing facilities replicating the existing treatment units in the department. The unit should have at least four lasers – one ceiling mounted, two lasers mounted on the sidewalls, and one more laser facing the gantry mounted on the wall. The system should be compatible for upgrade to a cone beam CT and Table top should have minimal attenuation and compatible for cone Beam CT Imaging. The simulator is to be digitally x- ray controlled with a workstation for planning and calculation of the treatment time with DICOM RT capability to export the plan to the treatment units.
2.2	Turnkey installation including civil, electrical and air-conditioning works should be included as per the turnkey scope.

3 Technical Specifications

3.1	**X-Ray Tube:** 1. High speed rotating anode with dual focal spots 2. The generator is of minimum 150kV, 30kW output system with pulsed fluoroscopy. 3. Automatic exposure and brightness control required. 4. The Kilovoltage control shall range from 40 kV to 120 kV, either continuously variable or in at 1kV steps. The mA control should be continuously variable in the manual mode up to the maximum current rating.
3.2	**Fluoroscopic Imaging System** The imager shall be the state-of-art design with amorphous silicon flat panel detector system. The imaging area to be of minimum 390 x 290 mm with pixel matrix 1024 x 768. Minimum frame rate per second is 6 (Higher frame rate preferred) Limiting spatial resolution 1.25lp/mm

3.3 **Mechanical specifications**

1. The isocentric accuracy should be + 1mm guaranteed for 10 years.
2. Mention procedures to ensure this. Without procedural details the technical bid will not be accepted.
3. Gantry rotation should have a range of ±185 degrees for an FAD of 100cm
4. Congruence between the mechanical and radiation isocentre during rotation ±0.5mm at isocentre.
5. Mechanical and digital readout at local and remote console with accuracy ±0.5 degree
6. Gantry auto stop position at 0 degree, 90 degree, 180 degree and 270 degree
7. Focus to axis distance range scale indicator from 75cm to 140cm.
8. Mechanical and digital readout indicator for gantry, imager and table position to be of accuracy ±1mm
9. Collimator rotation range from ± 180 degree with variable speed and auto stop at 0 degree, 90 degree, 180 degree and 270 degree.
10. Mechanical and digital rotation resolution of ±0.1 degree
11. An optical SSD indicator should be installed to accurately measure distance from 75 to 140cm. Height of the isocentre above the floor should be equal to or less than 130 cms.
12. Field wires for symmetrical and asymmetrical field sizes. Field size to be motorized and provide for a range 0.5 x 0.5 cm to 40 x 40 cm at FAD 100cm Coincidence between the X-ray image and light image for the cross wires is 0.5 mm diameter at 100cm FAD over the full rotation range of the head. Coincidence between the X-ray and light field is 1mm with a 15x15 field at 100cm FAD for all other rotations.

Treatment Couch:

This should be light weight, made of carbon fibre with controls on both sides.

The couch should have following features :

a) The weight capacity should be upto 200Kg.

b) The couch should have following movements :

i) Vertical movement from isocentre – 60-130cm. or more.

ii) Longitudinal movement upto 100cm.

iii) Lateral movements ± 25cm.

iv) Couch rotation about isocentre ±100 degree.

c) All the movements should be both motorized and preferably manual also.

The table should include carbon fibre panel, side rails & tennis racket insert. Should have facility for patient positioning index immobilization system. Couch control should be able to control room light, field light, SSD light and lasers. Two hand pendant having the couch control features mentioned above should be provided.

3.4 **Operational requirements:**

1. The simulator shall include an integrated digital imaging capability, which will allow the acquisition, and display of live fluoroscopy distortion free images from the simulator to display immediately. Anti collision prevention system and anti collision software avoidance system to be provided.
2. Automatically captures and stores images and simulator parameters, patient name and identification. Provide the ability to control pan and zoom. Provide the ability to zoom two or more images by the same amount simultaneously. Include the ability to adjust window and level.
3. Provide the ability for annotation in region of interest (ROI) overlays. Provide digital delineator wire display. Provide the ability to have the live fluoroscopy and a static image displayed alongside. Provide the ability to overlay two images in one window for comparison purposes.
4. It should be possible to perform all movements from the control area as from within the room please indicate which functions are not available if any.

	5. It should be possible to set up a field asymmetrically and then convert this to a symmetrical field automatically. 6. It should be possible to simulate any manufacturer's treatment machine and limitations of movement can be entered for individual machines that may be due to room limitations and not the standard configuration of that machine. At least 2 in room monitors for display of data.	
3.5	**DICOM connectivity:** Full vendor independent connectivity to DICOM RT and integration with the existing network for patient information management systems and treatment parameters of the department. Export of Dicom-SC, CR and RT image with contours. Import and export of DICOMRT Plan (incl. MLC) and image	
3.6	**Workstation hardware and software:** 1. The latest state-of-art hardware to be provided. 2. Automatic treatment machine configuration. 3. Multiple plans per patient, multiple fields per plan, multiple images per field 4. Patient, plan and field information and selection in clear tree-structure overview 5. Light box for clear overview of images with drag-and-drop image movement 6. Live fluoroscopy, last image hold, Automatic opposed field, automatic image merge (up to 10 images) and film exposure acquisition modes Images imports of DRR`s 7. A wide range of image manipulation options including optimized view inverse view full screen view, zoom, pan, multiple view (2, 4,9 images) revert to previous / original image 8. Workstation lay-out with 4 data fields + parameter overview Annotation tools, length and angle measurements Contouring tools 9. Digital MLC shaping and verification with drag-and-drop MLC leaf positioning / adjustment Blocking Trace function for dual-image contour comparison of saved or imported images. For convenience of external beam treatment the workstation should have planning software for beam placement, shaping and treatment time calculation for units such as cobalt and Linac with compatibility of irregular planning and calculation of dose at any point within the prescribed field, MLC overlay and export of plan directly to be transferred to the Linear Accelerator unit and integrated in the record and verify system. 10. Anti Collision software Extensive and advanced collision avoidance software creates a virtual protective shell around the patient and machine parts, which initiates an automatic slow down and movement stop if collision threatens 11. The detector automatically moves away to prevent collision with the patient table, floor or ceiling during movement of the gantry and table Mechanical touch-guards for back-up safety are fitted on the gantry head and the detector 12. An override for individual parameters allows a maximum range of movements	
4 System Configuration Accessories, spares and consumables		
4.1	System as specified. Essential accessories to be included with the unit. One set of maintenance spares for the unit to be provided (list to be enclosed). a. Beam blocking tray accessories. b. UPS: Online full load UPS with 20 minutes back up includes x-ray for whole unit including accessories should be included. c. Lead Glass: 200 cm X 150 cm or more with lead equivalent to meet the AERB's radiation safety requirements. d. Immobilization system: One complete set of imported patient immobilization accessories of Med Tec (head, neck, thorax and pelvis) to be supplied compatible and indexable with the Linear Accelerator table top (Med Tec).	

	For head and neck : U frame, S type head extension, set of Timo and Silverman neck rest, Prone headrest with base plate, prone pillow For thorax: Extended Wing board, Carbon fiber breast board. For pelvis: Vac-Lok (6 nos) with vacuum pump. Knee and ankle support. Others: Table index bars of Minimum 2 Nos. bolus of 1cm thickness (10 nos), Prone pillow.	
4.2	Other Accessories a) Four lasers LAP (green) to be quoted – one ceiling mounted, two lasers mounted on the sidewalls, and one more laser facing the gantry mounted on the wall. b) Additional to the anti collision software, mechanical touch guards for the collimator, imager & couch etc to be provided to ensure complete patient safety. c) Provision for film Cassette Holder of size 35 x 43cm. Option of smaller cassettes of 24 x 30cm, 18 x 24 cm, 30 x 40cm to be provided. d) Also provide laser printer of A3 / A4 paper size for printing e) Quality Assurance Phantom to study organ motion to be provided.	
4.3	Cone Beam Computed Tomography (Optional): All hardware and software for performing cone beam CT for image guided brachytherapy. Also include CBCT phantom and required accessories. CBCT images should be ready for any TPS planning through Dicom RT export. Important note: The prices for CBCT should be enclosed in a sealed envelop separate from the main price bid valid for 1 year.	
5	**Environmental factors**	
5.1	Housing requirements, fire safety and installation should take care of local regulations in mind. All expenses as detailed below should be included in the bid. a. Installation: Included in the cost of main equipment. b. Construction / Modification for housing the unit including supplementary airconditioning. Also include adequate furniture in these rooms. Details of room plan / modification are included in these specifications. Necessary modifications in the room if needed should be discussed and specified in consultation with the department and included.	
5.2	The room plan needs to be approved by AERB and modified accordingly. The supplier will coordinate all the formalities for AERB approval. All the documents required will be provided by the institute	
5.3	The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%	
5.4	The unit shall be capable of operating in ambient temperature of 20-30 deg C and relative humidity of less than 70%	
6	**Power Supply**	
6.1	Power input to be 220-240VAC(Single Phase),/400-440 V (3 Phase)/ 50Hz as appropriate fitted with Indian plug	
6.2	UPS of suitable rating with back up of 20 minutes to be provided.	
7	**Standards, Safety and Training**	
7.1	Training Onsite application training for 15 days.	
7.2	Complete On-site Warranty from the Manufacturer for 5 years to be included. (Conditional warranty i.e. labour + parts is not acceptable). Exclusion of warranty of any part (including consumables, batteries, local items etc) during the warranty period is not accepted. CMC is lieu of	

	warranty period in not acceptable. No customs duty for spare parts imported during the warranty period will be paid by the institute.	
7.3	Post warranty Comprehensive maintenance contract: After the warranty period, Comprehensive maintenance contract with taxes (if applicable) which including all spares, X-ray tube and generator, imaging, Amorphous silicon flat panel and other accessories of the system including local items to be quoted. The supplier should provide comprehensive maintenance contract inclusive of customs duty and all taxes after the warranty period (i.e. years 6 to 10 inclusive). The CMC is to be within the range of 3.5% to 5.0% of the (FOB + Rupees value of all the local items if any) with annual inflation in the range of 8 to 10% of the original CMC value. All the items including local items and consumables for functioning the equipment needs to be included in the CMC and no exclusion criteria will be accepted. The batteries of the UPS will be included in the above CMC quote.	
7.4	GENERAL CONDITIONS: 1. Model offered should the latest and spare parts and service support for 10 years from the date of installation. 2. The supplier shall quote for the most recent model of their machine. If 95 % uptime is not maintained penalty clause of Rs 5,000/- per day will be charged. All service calls should be attended within 24 Hours of receipt of Fax message. The firm should commit to place a properly factory trained service engineer locally for providing up-time of 95% as per standard international norms. 3. Declare separately the FOB, CIF and Indian agency commission (if applicable). The lowest bidder (L1) will be identified by adding up the CIF prices + local items in Indian rupees (if any) + turnkey + Cost of the CMC with taxes (if applicable) for the next five years after the warranty period i.e. items covered under 1 – 7.3 above excluding 4.3 CBCT. The optional item 4.3 Cone Beam Computed Tomography is to be quoted on separate sealed envelope with prices valid for 1 year after installation for subsequent purchase if the Institute desires and this will not be included in the L1 comparison. Incase vendors quote separate foreign currencies for the equipment, the exchange rate will be reckoned on the date of opening of price bid as provided by the State Bank of India, SGPGI branch. 4. The firm should do the custom clearance and pay the custom duty and transportation up to the site for installation. The custom duty as per actual would be reimbursed by the institute. The interior modification for housing the simulator unit, its shipping and installation should be co-ordinated by the firm so that the machine does not lie idle. All papers related to procurement and interior modification will be provided by the institute. 5. Indigenous items should be specified separately and quoted in Indian rupees. 6. The firm would be responsible to meet any unforeseen expenses during the warranty period for maintaining and running the equipment and its accessories. 7. Once the LC is established and acceptable to the vendor, and the site for turnkey handed over, the firm must ensure that the machine is commissioned for clinical use within a maximum period of 6 months from the date of LC or handing over of site, whichever is later. Institute will be committed to provide required power at the battery limits at least two months before completion of the said 6 month period. Any delay in installation and commissioning including turnkey will enable penalty of Rs.25,000 per week upto a maximum of 5% of the FOB value.	
7.5	FDA /CE and AERB Type approval: The offered model must be type approved by FDA /CE & AERB. A copy of the type approval from AERB must be enclosed with the offer	
7.6	Should have local service facility. The service provider should have the necessary equipments recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.	

8 Documentation	
8.1	User/Technical/Maintenance manuals to be supplied in English.
8.2	Certificate of calibration and inspection from factory.
8.3	List of Equipments available for providing calibration, quality assurance and routine maintenance support as per manufacturer documentation in service / technical manual.
8.4	Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

Scope of turnkey jobs for installation of the Isocentric Brachytherapy Simulator

The area enclosed within a dotted line which includes presently the mould room, HEK shield fabricating room and the office needs to be dismantled and modified for housing the Simulator. The area included is encompassed in 6.6 x 6.6 sq. m. Schematic enclosed.

CIVIL WORKS:

1. Existing walls in the mould room and the adjacent rooms to be dismantled for housing the Simulator along with the control console.
2. Existing entrance to be replaced with a larger one for transporting simulator gantry inside the room and for patients along with their bed.
3. New walls to be constructed for control room.
4. Opening to be made in the control room wall to house the lead glass. Necessary frame to fix the lead glass to be made.
5. Pit to be constructed as per the requirement of the simulator base frame.
6. Trenches with cover to be constructed as per the requirement of the simulator installation.
7. New flooring with Marbonite / Vitrified tiles to be made both in the simulator room and the control room.
8. Painting to be done both in the simulator room and the control room.
9. Simulator wall thickness to be of 30 cm brick. Where ever necessary the thickness to be increased as per the AERB requirements.
10. All the windows to be closed with 30 cm brick wall.
11. If any beams are required in ceiling to be provided for the simulator installation.
12. Lead Glass to be provided.
13. Roof – existing ceiling, cleaned, painted and with new lights and switches.
14. The main entrance door and the control room entrance door to be of Lead lining as per AERB specification.
15. False roof to be replaced with gypsum boards which are easily removable for maintenance. These need to be housed in the aluminum frames with necessary AC diffusers and return vents to be provided.

AIR CONDITIONER

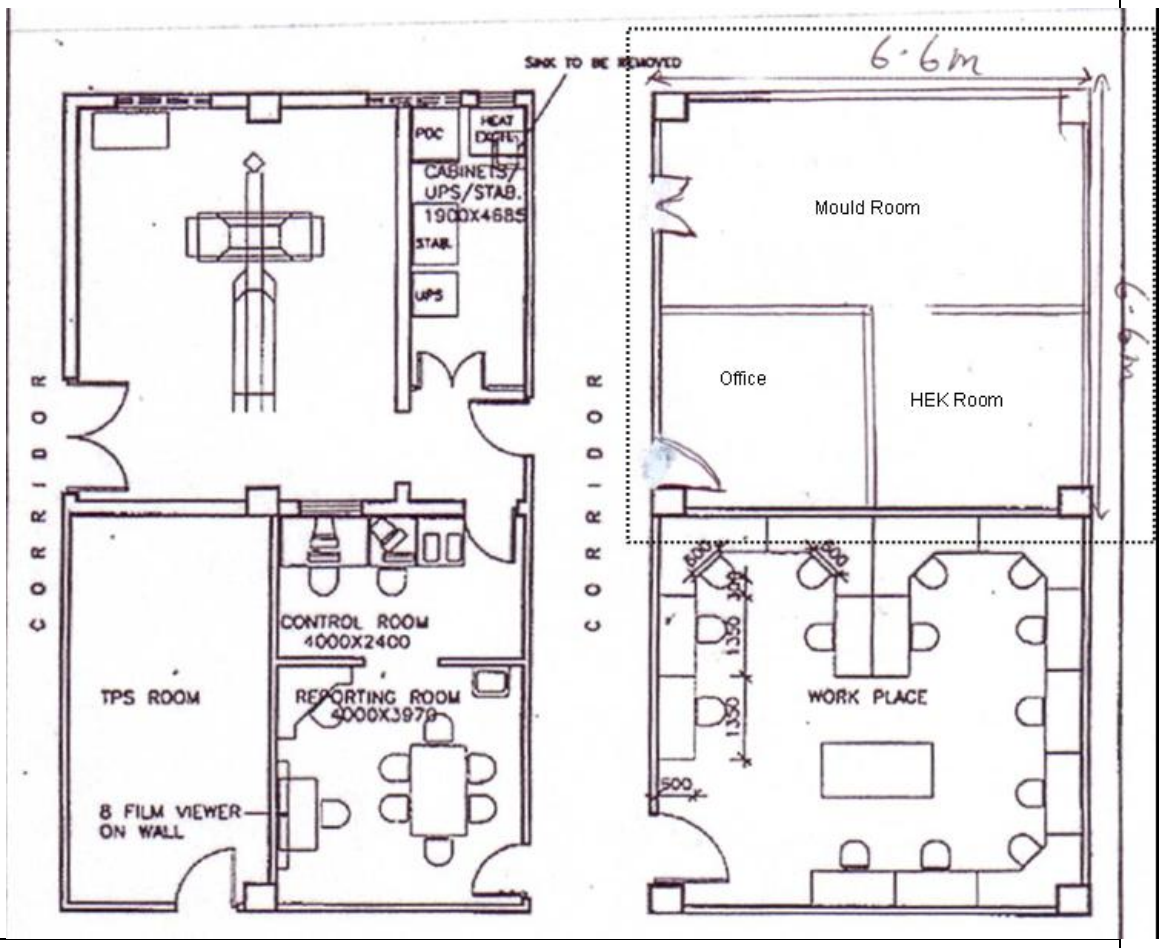
1. Appropriate number of air conditioners to be provided and installed in the simulator room and the control console area. The maintenance of these will be to vendors account and included in the warranty and CMC period.

ELECTRICAL:

1. Required capacity of UPS for operating the Simulator along with X-ray mode with a minimum 20 minutes backup to be provided.
2. Electrical Panel for all the electrical connections with necessary MCBs for the simulator to be provided.
3. Necessary Electrical points for the simulator and its accessories and room lighting controlled by the Simulator and Dimmer controlled spot lights to be provided.
4. Earthing to be provided from a separate earth pit.

TABLES

1. Tables in control room with necessary keyboard drawers to be provided.
2. Four numbers of computer chairs to be provided.

	3. Cupboards in simulator room for simulator accessories and in the control room to be provided. Two additional full size steel almirahs to be provided. 4. Water bath for thermoplastic cast fabrication to be provided. 5. View box to see 4 full size X-ray films simultaneously. 6. Two lead aprons **POWER Requirement for the simulator from the institute:-** 1. Hospital will provide 100KVA 3 phase power and terminate in the simulator room. 
	•
PGI/MM/PM SSY/09-10/C-3/09	**Specification for 44 channel digital video EEG system(Video Telemetry System)** **Digital video EEG system with following feature:-** **2.** capability of recording EEG,EOG, EMG, EKG with built pulse oximetry **3.** LED based impedance display- photic stimulation facility

4. 44 channels
5. **Acquisition software with following feature:**
    a. Even setting, montage setting, sensors, grid electrode alarms, amplifier etc
    b. Individual channel control
    c. Programmable control of montage selection with facility to change filter setting montages, sensitivity of recording.
    d. Graphical review of current montage during EEG recording
    e. Sort able list of all events placed in the recording automatically or manually
    f. Multiple audio and video compressor software to minimize the required space.
    g. Video recording facility which should be optical to minimize the required disc space in long term monitoring
    h. Automatic line counters and event insertion during hyperventilation
    i. Spike and seizure detection software
    j. Spite screen facility for epilepsy monitoring with video (on line patient and previously acquired patients can be review simultaneously
    k. CMRR of the amplifiers> 115 dB analogue/ digital converter 22 bit, ADC resolution voltage 0.153u V.
    l. Noise <1.5 ŭ V PK – PK @0.1-100Hz
    m. Network supported data management
    n. Work flow administration software
    o. User configurable file length of recording from 1-999 hours
    p. The dedication features deducts automatically any number of single/ multiple user defined events.
    q. Facility to undertaking power spectral analysis
    r. Push button for patient/ attendant to register mark an event
6. **Review software:**
    a. one touch prune / trim down EEG/ video data to specified event with provision to preview the separate date
    b. Facility to zoom/ magnify/ EEG trace copy or paste EEG or trends to report and presentation.
    c. Video lock and unlock facility to play audio, and EEG data or individually.
    d. Facility to re-size the video display, magnify(distal zoom), the chosen part of video image both during EEG/Video recording acquisit ion unit and during analysis on review unit with presentation of resolution of good quality.
    e. EEG data export facility in EDF format and video data in relevant video files are compatible with window media player.
    f. Multiple reports customizable in word format.
    g. View several recordings in cascade window.
    h. Parallel comparision of window with respect to previous page, previous record or any other records.
    i. Record the EEG on CD & DVD and review it on any other computer without any additional soft ware.
7. Imported trolley for the system
8. Sony RZ 25 digital video camera with as per above mentioned
9. **Computer configuration for lab acquisition system**

    a. Desktop computer (HP OR IBM) with minimum core 2 due 2.0 GHz, GB DDR2 RAM, DVD RW, 250 GB HDD, licenced window XP.

    b. 19” color TEF monitor (SONY)

    c. Color Laser Printer (HP)

    d. UPS of suitable rating for 20~ 30 minis backup.

PGI/MM/PMSSY/09-10/N.B./98	**ClinicalChemicalAutoanalyzer:** Type: discrete, fully automated Methodology: end point, two points, kinetic, method, turbidimetry Analysis items: analyzing max 45items at the same time Max speed:400text/hour with single reagent Sample setingings:60 sample positions Sample volume:3ul-50ul(step by 0.1ul) Temperature control:1.temperature fluctuation of reaction tray is +0.1; 2.reagent bank in refrigerator Reagent positions:45 Reagent volume:R1:25-300ul;R2:10-150ul(step by 0.1ul) Cuvette:120independent reaction corvettes(optical path length 6mm) Cleaning: automatically cleaning Calibration: one point, multipoint Testing wavelength: single and double wavelength text Wavelength range:340,405,510,546,578,600,660,700 Linear range:0.000-2.500Abs Emergency function: yes Automatic string function: yes Power supply:AC220v+22v 50Hz=1Hz Diemention:1020mm*830mm*1220mm
PGI/MM/PMSSY/09-10/N.B./99	**Syringe Infusion Pump** **Specification**: AC Powered 220 with battery back(up to 2 hour or more),stackable in combination Infusion Mode: continuous, preset volume, preset time and intermittent Programming Modes: volume and mass unit Volume(ml/hr) and mass units infusion programming Infusion Rate Range:0.01-200.0ml/hr Preset Time Range:4seconds to 24 hours or stat Accepts and automatically senses the size of syringes from the major manufacturers In line pressure sensing and occlusion alarm volume infused totalizer Accepts electrical input from one cable for stacked pumps. Automatic anti-free flow locking device. Automatic and manual syringe loading. Accepts all major syringe in sizes from 10 ml to 50/60 ml.
PGI/MM/PMSSY/09-10/N.B./100	**Fibreoptic Videobronchoscopy system** **Specification:** a. Field of view – 120 degrees b. Direction of view – 0 degrees (forward viewing) c. Depth of field – 3-100 mm d. Distal and outer diameter – less than 6 mm e. Working length – around 60 cm f. Inner channel diameter – at least 3.2 mm g. Angulation range – Up 160-180 degrees, Down 110-130 degrees h. Electrocautery compatible i. LASER compatible j. Video monitor with ability to view the bronchoscopy procedure k. Computerized recording system a. to enter patient details b. to record and store the patient data c. Ability to generate avi and mpeg4 videos d. Ability to generate images at least 600 dpi e. Recording system compatible with windows f. vista and above l. Laptop a. operating system - windows vista or better

	b. at least 320 gb hdd c. at least 4 gb ddr3 ram d. weight less than 2 kilograms m. Accessories a. Cup biopsy forceps(5) b. Alligator biopsy forceps(5) c. Rat toothed forceps{One , two and three toothed(Each5)\ d. Dormia baskets(5) e. TBNA needles (5) n. PACS compatibility
PGI/MM/PMSSY/09-10/N.B./101	**Specification For Mobile C–Arm** **Gantry/Carm** The system should have a minimum of 75 cm free space within the C – Arm to provide a large imagine space. The C-Arm depth should be 60 cm or deeper to provide a large imagine space and C-Arm clearance around the patient and the imaging table. The C-Arm should have a manual rotation of ±180° to allow the imaging chain to accomplish angled projections. The C-Arm should have orbital movement of +90/45° for better penetration in Cranio/Caudal movement. The system should have at least 45 cm of motorized vertical C-Arm travel capability to adjust the imaging chain height. The C-Arm should provide side to side (wig – wag) and the horizontal travel movement to allow panning during imaging. **Generator & X-Ray Tube** The Generator should be Micro-Processor controlled converter type output of 15 KW or more and minimum 75 kHz frequency (or Higher) The system should operate in full capacity on 220 volts AC 15 Amps Fluoroscopic kVp range: 40-120 kVp or more Fluoroscopic mA range: 0.10 – 8.8 mA or more Radiographic kVp range: 40-110 kVp or more Radiographic mA range: minimum 60mA The generator should be capable of providing a boost or a high dose fluoroscopic exposure at up to a minimum of 20mA The generator should be capable of providing a boost or a high dose fluoroscopy with pulse rates up to 25 frames/sec. The tube should have additional safety filtration for the stray or scattered radiation i.e. cu filters. Focal spot size should be 0.3mm & 0.6 mm dual focal spots. Anode cooling capacity should be 300Kh.U. or higher Anode heat storage capacity should be 70kHU/min. or higher. The tube housing heat storage capacity should be minimum fo 1900000 HU **Image Intensifier/ Tv System** The system should have a 12”trimode image intensifier The system should have high resolution 1.1. and please mentioned the 1.1. resolution The system shall be equipped with a high resolution CCD camera coupled with a lens for better image quality The camera gain and iris collimator should be computer controlled. The system should be equipped with two high- resolution 18” LCD/TFT monitors The system should provide a last image hold capability so that the last image is displayed on the active monitor after termination on an exposure The system should be equipped with back lit X-Ray control panel The system shall allow the use to change the image orientation on the display screen during a live exposure or using the last image hold. Those functions include image rotation, left to right and top to bottom image reversals. **Digital System & Image Management** The system should have multi patient date base for handling large quantities of image, include dose management report. The system should automatically select proper imaging parameters, kVp and mA during an imaging but also provide the user to over-ride these setting manually. Real time and automatic brightness and contrast should be provided to optimize displayed image. The system should provide a real time post processing edge enhancement capabilities to get better

	image quality according to the density of the tissue. An electronic zoom function, an automatic save function to hard disk, Mosaic Display. The system should be capable of saving more than 10,000 images to internal hard disk and retrieve stored images later The system should provide digital subtraction and roadmap imaging modes for vascular application upto 25 frames/sec with subtraction, Road mapping , Remasking max, Pacification View Trace CO2 imaging, smart masking etc. **3d Reconstruction Capability** The system should be quoted with an additional work station to offer 3D reconstruction by using sequence of 2D images that were acquired with C-Arm by using multiplanar reconstruction and using volume rendering. The system should give detailed reconstructed volumes provide more information on the anatomy, resulting in more precise interventions. The system should with a medical DVD recorder to give the images to the patients. **Remote Control** One cordless remote control for image handling functions. **Essential Accessories** Suitable Sevo Voltage Stabilizer should be quoted with the system **Table** Suitable table for abdominal work shall be quoted preferably imported Should be Dicom compatible
PGI/MM/PM SSY/09-10/N.B./112	**Bilevel positive pressure ventilators(BiPAP)** a-Capability to independently control inspiratory and expiratory pressure levels b-Inspiratory pressure range from 3 upto 25cm H2O or better c-Expiratory pressure range from 3 upto 25cm H2O or better d-Automatic leak compensation e-Apnea back up ventilation f-Numeric display of set inspiratory/expiratory pressure and leak g-Alarm for leak and disconnection h-Compatible integrated humidifier i-Flexible plastic tubing atleast 2 m in length j-Built-in air filter k-Two adult full face mask with their head straps l-All necessary tuubings,connectors,adaptos and cables
PGI/MM/PM SSY/09-10/C-3/05	**SPECIFICATIONS FOR FLOWCYTOMETER** ▪ Latest industry standard computer .Pentium processor The flowcytometer system should be , ultra compact, fully equipped Bench top instrument devoid of any paraphernalia like gas cylinder ,pressure regulator etc ▪ The system optics should be Alignfree , so that time consuming optical checks, realignments of the laser and readjustments of the optical systems are eliminated. ▪ The instrument should be equipped with following laser light sources Blue Solid State Laser 20 mW @ 488nm Red diode laser 25mW @635nm UV diode laser 16mW @ 375nm ▪ System should have 8 Optical parameters. Six Colors (FL1-FL6) Forward Scatter (FSC) Side Scatter (SSC) ▪ The system should have CCD Video camera for Sample flow monitoring ▪ Should have the facility of True Volumetric absolute counting based on precise sample volume measurement ▪ System should have contamination free computer controlled digital syringe pump for sample transport. ▪ Adjustable pump speed and Sheath fluid pressure. ▪ Should be supplied with ≥ 2.0 GHz, ≥512 MB RAM ≥ 160 GB hard disk Workstation ▪ Should be equipped with windows based acquisition and analysis software. ▪ The system should be equipped with cell sorter as built in module for safe closed piezo sorting. Sorting Speed: Input upto 100,000 cell per second and Output upto 300 cells per second. Purity of sorted fraction =99% ▪ The system should have an 96 well plate sampler upgrade option

	▪ The system should have an option for immersion gel coupling(for detection of weak cytokines) ▪ Following items to be provided along with the system. 1. Sample tubes =5000 no 2. Sheath Fluid production kit for 200 Ltrs 3. Cleaning solution-4x 250 ml 4. Decontamination Solution- 2x 250 ml 5. Hypochlorite Solution-1x 250ml 6. Suitable Online UPS to run the entire system 7. LaserJet Printer ▪ Warranty –Five years
PGI/MM/PMSSY/09-10/N.B./113	**<u>Portable Color Doppler Ultrasound Unit</u>:** Fully digital, compact portable Color Doppler Ultrasound machine is required with following technical features • The unit should be compact, lightweight and portable. Specify weight and dimensions. • It should be suitable for Obstetrics and Gynaecological applications . • The unit must have real time compound imaging for improved contrast resolution and eliminating ultrasound artifact to achieve optimum image quality on convex & linear transducers. • The unit must have automatic gain adjustment for B mode. • Scanning depth must be available up to 30 cm or more. • System should support broad band / wide band Transducer Technology. System should have Linear Array, Curved Array, Phased Array, Multiplane TEE transducer; attach detail of all the transducer. • System must have frequency range from 1 – 12 MHz (<u>+</u>1 MHz) • Imaging modes of Real time 2D, Colour Doppler, Pulsed wave Doppler, Continuous wave Doppler, PW-TDI, Power (energy) Doppler should be available. • Controls for 2D mode: Total gain, depth, dynamic range, auto gain • System must have fast start up to scanning in less than 30 seconds as essential in critical and emergency situation in ICU, emergency, OT. • Unit must be sturdy, resistant to breakage & damage on fall/ hit against the wall or hard surface. • Cine memory on all modes. • System should be DICOM ready system with print, save, modality worklist. Ready to connect to PACS. • Inbuilt Flat LCD/ TFT monitor of 10” or more. • Alphanumeric soft keys keyboard with easy access scans controls, system must have sealed keyboard for sanitization. This must be possible to avoid cross contamination • Onboard storage of at least 10000 images. • USB port for connectivity to computer. • System should have extensive calculation package for cardiac, Ob/Gyn, Vascular measurement and calculation provision for distance, area, volume and circumference. • Must be able to operate both on AC and inbuilt battery. Inbuilt battery pack should be self-

	recharging and should last at least for 2 hours when fully charged, need to be demonstrated. • II. Transducers • Convex transducer 2-5 MHz for abdominal applications • Broadband curved array transvaginal 5-8 MHz transducer for Obstetrics and Gynaecological applications with biopsy attachment facility . • Optional Transducer: High Frequency Linear transducer 5-10 MHz for Vascular Imaging, musculoskeletal, breast, small parts. Higher frequency will be preferred, with biopsy attachment • Attach list of installations of the same model in India and also provide performance certificates. IV. The unit and transducers should be covered with comprehensive onsite warranty for five years commencing from the date of issue of installation certificate.
PGI/MM/PMSSY/09-10/C-1/114	**Specification for Biological safety cabinet** Class IIA/B3, suitable for use in safety categories 1 through 3 Aerosol tight, front window of laminated safety glass HEPA filters for supply and exhaust air, providing efficiency of 99.999% for 0.3 micron particles Non-reflecting lacquer coated rear chamber wall Height not more than 83" when positioned upon accessory stand Audio-visual alarm for discrepancies in operating functions
PGI/MM/PMSSY/09-10/N.B./107	**Technical Specification Burns Bath Treatment Unit With Lifting System** Integrated Burns Bath treatment system with lifting system which eliminates manual transfers and heavy lifting of burns patients, minimizing the risk of injury and strain for the carer. • The treatment system should be rectangular in shape with seamless smooth rounded corners • Should have electric Height adjustment 625 mm to 1110 mm • Should have tub size length 1875 mm width 750 mm • Should have handgrip-shaped rim with protective strip • Should have foot support / pillow package • Should have high finish, polished & acid resistant surfaces for disinfection • Should made from High quality stainless steel EN 1.4436/SS2343/ASTM316 for durability. • Should be equipped with Electric control panel with push button operation. • Should have thermostatic cartridge including 3 mixers for quick water filling. • Should have thermostatic mixer for soft showering • Should have thermometer for control of fill water temperature & patient shower. • Should have triple anti-scalding protection with selectable Maximum temperature at 41°C & automatic Electronic shut-off at temperature above 42°C • Should be equipped with Dual patient showers and equipment cleaning shower with trigger control handles. • Should have Built-in disinfecting system including: o Color coded disinfectant shower with trigger control handles o Safety back flow prevention system o Disinfectant solution jar minimum 1Liter o Visual Dilution control with dosimeter and adjustable screw o Disinfection system is deactivated if patient is in the bath • Should have cleaning shower fitted with a dosage device flow meter • Should have copper internal pipes for long life & rust prevention. • Internal pipes should be chemically or thermostatically disinfected • Should have integrated advanced (Hydrosound) ultrasound generated bubbles system with timer & intensity control for gentle message & removing dirt particles & dressing from patients skin. • Should be supplied complete with battery operated Lift bath trolley • Should have powered raising/lowering and adjustment for back. • Should have integrated electronic patient weighing scale

	• Should be suitable for patient pick up from either side of the bed. • Should have single piece moulded stretcher made of Poly Urethane, easy to clean & disinfect with adjustable head pillow & thigh support cushion. • Should be supplied with security grip, side guard & battery charger. • Should have central braking system controlled by waterproof handset or operator panel on pillar. • Should have minimum Patient Lifting capacity of 160 Kgs • Length : 1950mm • Width : 850mm The complete system should meets international quality and patient safety standards like CE/TUV/ISO 9001/BS 5750/EN 29001
PGI/MM/PMSSY/09-10/N.B./108	**Specifications For Patient Hoist With Integrated Weighting Scale** - Should be easy to assemble and disassemble for easy storage and transportation - Should have integrated weighing scale. - Should have battery (detachable) to operate the lift with audio and visual alarm for battery status - Should have electric leg operating for reduced moving & handling risks - Should have both electric & manual emergency lowering system for emergency conditions - Should have emergency stop switch to immobilize hoist in emergency. - Rears castors should be equipped with brakes. - Should have 2 (10 cm) and 2 (7.5 cm) castors for excellent maneuverability. - Should have following technical features. - Overall Width (Leg Opened) : 110 to 115 cm (Leg closed) : 55 to 60 cm Lift range : 50- 160 cm or better - Safe Working load min 150 kg - Should meet international quality directives such as CE, ISO 9001 & ISO 14001. - Should be supplied complete with a. General purpose sling with head support b. Toilet sling c. Neck roll sling d. Long seat sling
PGI/MM/PMSSY/09-10/N.B./106	**<u>Laparoscopic Equipments</u>:** 3) **Optic Chain** : **Camera:** High definition 3 –chip camera, Medical grade digital 3 –chip camera Horizontal resolution > 1100 lines SXGA technology (1280 X 1024) 3.93 million pixels Progressive scan technology (not interlaced) In-built 16 steps digital enhancer 1/3 " interline transfer Hyper HAD CCD Electronically controlled digital zoom Remote control on camera head to control four step gain, zoom & white balance controls Graphic disply of activated functions Automatic brightness control Multiple pure digital output Signal to noise ratio of 70 dB Electronic flexible scopes filer to adapt with flexible scopes Standard aspect ratio of 4:3 Brightness,image sharpness, colour balancing automatically adjusted to attain the best possible picture for the selected speciaility **Light Source** Xenon light source Fully automatic 300 watt Jaw mechanism for fixing the Fiberoptic cable Minimum bulb life of >500 working hours **Fiberoptic cables** Atleast 5mm diameter over 6.5 feet length

	Monitor – 26" one each , flat panel custom designed with the colour depth & enhancement requirements High resolution appropriate to the offered camera system SXGA technology (1280 X 1024) Capable of displaying SVHS, VHS, XGA, & DVI signals **Carbon Dioxide Insufflator** : Preferably >12 litres , high flow Insufflator wiyh heating Touch sreen controls **Telescope** : 10 mm 30 degree &0 degree autoclavable laparoscope 05 mm 30degree **Video recorder** – digital video recorder 4) **Operating Instruments** : Veeres Needle 6 " long Trocars pyramidal tip, 5.5mm & 11mm cannula -11mm, 5.5mm automatic valve stop cock, without trocar Reducers - 10/5 5 mm instruments : 33cm PEEK monopolar handle Maryland dissector Nontooth grasper with spoon DeBakey grasper Aspiration needle – 5mm PCOD needle scissors- Metzenbaun scissors(5 mm, 10mm) straight & curved atraumatic double action grasper 5mm myoma screw Curved left needle holder Curved rightle holder 5mm bipolar fenestrated forceps with spring handle 5mm bipolar microtip forceps with spring handle Suction irrigation canula 5mm & 10 mm Suction irrigation machine Knot pusher Sterilizating tray for instruments sterilization Trolley for equipments Uterine manipulators
PGI/MM/PMSSY/09-10/N.B./114	**<u>Hysteroscopic Equipments</u>** **4mm, o degree** autoclavable hysteroscope **4mm,** hysteroscope diagnostic sheath (outer)
PGI/MM/OT/15/09-10	**<u>Patient Positioning Appliances</u>** Patient positioning devices to minimize potential tissue injuries by absorbing compression forces, redistributing pressure and preventing stretching. The product should be light weight made up of foam and silicon gel in two protective layer. The product should be: • Resistant to OR environment disinfectants • Latex free and non-allergic • Heat resistant • Provided with repair kit Must be guaranteed against the manufacturing defect. Following types are required : • Prone head rest • Supine head rest • Contoured arm board pads • Prone positioning system • Lateral positioner • Flat bottom chest rolls • Crutch stirrup pads • Knee pads • Heel pads • Search protector.

PGI/MM/PMSSY/09-10/N.B./92	**Sonicator (Ultrasonic Disruptor)** Designed for biological and liquid processing applications where precise Control and parameter measurement is required. Front Panel with 80 characters LCD for parameter setting. Alarm message during operation. Stop / pause button on front panel allows for experimental cycles. Setting of Amplitude from 10-100 %.Sample Hold using pulse/pause operation. Auto stops at the end of cycle using limits. Self Diagnostics check at power up.20 presets for different parameter setups. Digital timer (9 hrs. 59 mins. 59 secs.) digital wattmeter. 230V AC; 50 Hz cycle
PGI/MM/PMSSY/09-10/N.B./102	**Advance Neonatal Incubator** **Specification** • Should be a microprocessor controlled system with future expandability / spared for additional functions • Setting range from 35 ºC~ 37 ºC in increments of 0.1ºC • Measurement of near to core temperature. • Servo control for Oxygen and Humidity with integrated monitoring. • Should support kangaroo care with extra low height adjustment (80 cm), Alarm management / continuous monitoring of baby temperature for the time • CO2 flushing , according to IEC 601-2-19/105.1 Maximum CO2 concentration inside incubator 0.2 % • Height adjustable with low noise electrical paddle on either side. • Programmable alarms and safety features • Noise level < 47 Db • Alarms for Probe failure, High temperature & Power failure • Warming time 35 minutes from 20 ºC to 31 ºC . • Air speed over bed < 8 cm / sec. • Continuous bed tilts up to 8 º on either sides. • Optional integral weighing scale (electrical) • Incubator should have special hump ports to give access doors (main doors), side doors (at least two), access canopy , tubing port and sizeable bed area with mattress • Incubator should have double walls on outside (including canopy top) to prevent heat loss • Tilt mechanism/ assembly should be outside infant's compartment to avoid disturbance of infant • X- ray table should be integrate in the matters – to reduce disturbance of baby / opening of canopy • Should have integrated control panel with easy to use rotary knob with controls for and display of Temperature (near and peripheral), Humidity, • Weight trend data , central alarm lamp • Should have integrated trend display variable from three to seven days to track patient's central and peripheral temperature trend • Control panel should display alarm messages with text display of alarm and severity of alarm • Should have a large storage drawer integrated into the main unit. • Incubator should confirm to relevant EN standard for Electrical Safety and should have CE and FDA approvals • Standard scope of supply must include : o Skin temperature probe o Bed tilting faction o Integrated X Ray Drawer o Pullout bet rays o Soft mattress o Central Alarm light o Kangaroo Mode o Skin / Air temp control o Humidity regulation o Oxygen regulation o Optional cost of integral weighing scale o Electrostatic fitter o Dust cover

PGI/MM/PMSSY/09-10/N.B./104	**Infant Open Care System For Nicu** **Specification** - Microprocessor based servo control unit with integrated bed with radiant warming - Integrated phototherapy lamps with quartz halogen lamp central Alarms for temperature etc. - Feather tough key pad - Should have servo control for skin temperature control - Should also have measurement for near to core temperature (Thermoregulation) - Sensor accuracy +(-)0.1 C - Accuracy of adjustment +(-) 0.2 C - Option for heated Gel mattress - Bed tilt on either sides - Integrated X –Ray tray - Electrical height adjustment with foot switch on either sides - The head swivel should be such , so as to maintain uniform heading of bed area even in extreme end positions - The unit should have a CE approval and should confirm to relevant IEC standards
PGI/MM/PMSSY/09-10/N.B./105	**Transcutaneous Bilirubinometer** **Specification** Screening device that provides a fast (on spot) objective index of icterus in infants non – invasively. For Measurement Of Transcutaneous Bill Irubin (TcB). Measuring range 0.0 mg/ dlL to 20 mg/ Dl. Standard error of estimation, based on clinical dara should be proved to have been within +(-) 1mg/Dl, Detectors – Silicon photodiodes. Hand – held (150 – 200 gms) devices for outpatient usage. Pocket size. Should have internal rechargeable battery, lasting 300- 400 Measurements on a single charge Preferable should not need any consumables per check. In case of consumables requirement – consumables for 2 yrs (1000 checks) should be included. **System to conform to standards :** o CE MDD Directives o IEC o FDA
PGI/MM/PMSSY/09-10/N.B./103	**Incubator Transport** **Specification** Integrated incubator, ventilator, suction, and gas supply, with space provision for mounting syringe pumps, patient monitoring & other accessories. The complete unit should be mounted on a good quality trolley for easy mobility and loading unloading in an ambulance. **System to have:** 1. Incubator with Double Wall Canopy, Front and Head End Access Doors With Access portholes and Tubing Access Ports. 2. retractable mattress for emergency procedures and intubations o Digital Displays of Air and Baby Skin Temperatures. o Indicators for Battery Power Capacity. o Examination Light. o AC and 12 VDC Connectors. o Front mounted gas content display o Comprehensive Alarm system. 3. Neonatal time cycled and volume / pressure limited ventilator with IIPPV, IMV and CPAP Modes. o Breath Rate Variable to 120 BPM. o Adjustable Peak Pressure and PEEP o Air / oxygen auxiliary blender for FiO2 from 21 % to 100 % o Cylinder Supply 4. oxygen Analyser with /digital Display of Oxygen Concentration. 5. suction Unit suitable for Neonatal Use. 6. Trolley to be Lightweight on four locking Castors with Handles 7. System must be Capable of being Securely installed in Ambulance. **System to conform to standards**

	○ IEC 601-1 ○ IEC 601-2-20 ○ MIL STD4 61C ○ CE MDD Directives
PGI/MM/PMSSY/09-10/C-1/136	**Data Mining Tools and Server** **Server** **Specification** **Processor** — Intel Xeon E5410-Quad Core 2.66GHz/2x2MB or Higher **Memory Type** — PC2- 3200DDR2 **RAM** — 16GB extendable up to 128GB **Advanced Memory Protection** — Advanced ECC, Online Spare, Plug Mirrored **Storage** **HDD** — 250 GB (15000rpm) Ultra 320 SCSI (3 Nos.) **DVD** — 16 X VD+/-RW Dual- Layer Light Scribe **Storage Type** — Hot Plug 2.5" SAS **Expansion** — 10, 64-bit/100MHz PCL-X **Removable Media Bays** — 3 **Storage Controller** — Smart Array P400 Controller **Deployment** **Networking** — Dual NC371 i multi- faction Gigabit NICs **Ports** — Front: 2 USB 2.0,1 IEEE 1394 (optional) **Remote Management** — Standard Integrated Light- Out 2 (iLO2) technology **Redundant Power Supply** — Hot Plug 910 w/ 1300w **Display** **Monitor** — 17" TFT, 1280x 1024 (Resolution) **Keyboard & Mouse** — Standard **Chassis** — Tower **OS** — Windows XP Server or latest **Warranty- year (S)** — 5 years comprehensive on site **lining Toll (P3 Items)** **(a) SAS Ver. 9.2 or higher, Single user academic license along with media and manuals with following modules:** **SAS Base** SAS / Genetics SAS / Graph SAS/ GIS SAS/ STAT SAS/ OR SAS/ App Dev Studio SAS / Tutor SAS Enterprise Miner **(b) Neuroshell single user academic license with media and user manuals** **(c) Matlab Ver. 14.0 or later single user academic license with media and user manual**
PGI/MM/PMSSY/09-10/C-1/137	**Data Acquisition System(a)Intelligent Character Recognition System(b)Document Scanner with ADF** **Data Acquisition System** **(a) Work Station: Specification** **Processors** — Intel ® Xenon ® 3.60 GHz 800 MHz FSB 2 MB L2 cache, lintel ® Chipset **Memory** — 16 GB extendable up to 128 GB **Drive bays** — 2-3.5" internal 2-5.25" external 1-3.5" external **Hard drive** — 250 GB (15000rpm) Ultra 320 SCSI (2 Nos.) **Optical drive** — 16XDVD+/-RW Dual-Layer Light Scribe **Monitor** — 17" TFT 1280X1024 **Audio** — Integrated AC97 Audio with internal speaker sound blaster X-Fi Xtreme music PCI

	Slots	4PCI slots, full-height, 1PCLe x8 mechanically, x4 electrically, 1PCLe x16 graphic
	Ports	Front: 2USB 2.0,1 IEEE 1394(optional) Rear: 6USB 2.0,1 Serial, 2PS/2,1RJ-45(NIC)
	Graphics Card	NVIDIA Quadro FX 1400PCLe ATI Fire GL V5100 PCLe
	Mouse	USB Optical Scroll mouse
	Keyboard	Standard
	Network	Integrated Broadcom 5751 Net Xtreme Gigabite Eathernet Controller PCLe
	Power Supply	500watt wide-ranging, active power factor correction
	Operating System	Window XP32-bit edition SP2 or Latest
	Warranty	5 years comprehensive on site
	(b) Intelligent Character Recognition Software (P3 Item) Teleform (Elite edition) Version 10.0 or later with media and manuals for Five users license with following modules: From Designer & Publisher Scanning Capture Connect Agents Recognition Document Capture Validation Verification Export Connect Agents	
	(c) Document Scanner with ADF: Specification	
	Scanning speeds	Simplex Duplex
	Black and White	75 ppm 150 ipm
	Grayscale	75 ppm 150 ipm
	Optical Resolution	6000 dpi
	Stacker Capacity	5000 sheets
	Scanning element	Contact image Sensor (CMOS)
	Document Size/ Feeding	Up To A3 Automatic / Manual
	Light Source	RGB LED x 4 Operating Modes Simplex, Duplex, Grayscale, Black and white, and Error.
	Diffusion, Advance Tex Enhancement, Multi Stream	
	Dropout Color	RGB, User- selectable (front/ back / both)
	Interface	At least 2 USB 2.0 and SCSI- III

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