

GOVERNMENT OF SINDH
JINNAH POSTGRADUATE MEDICAL CENTRE
KARACHI-75510

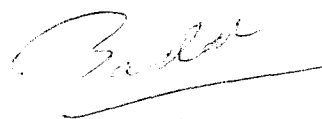
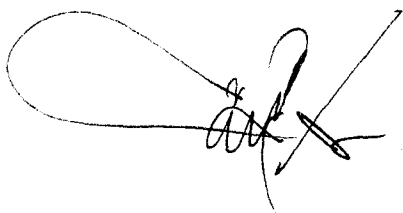
TENDER DOCUMENT

TENDER NO.F.1-6/2015-16-AD(M)/JPMC

TENDER FOR THE PURCHASE OF INSTRUMENTS - JPMC, KARACHI
DUE ON 18th JANUARY, 2016

COST OF TENDER	Rs. 300/= (Rupees Three hundred only) non refundable
TENDER SELLING DATE	From 28th December, 2015 to 16 th January, 2016
TENDER SUBMISSION PLACE	AD(M) Office
TENDER SUBMISSION DATE	18 th January, 2016
TENDER SUBMISSION TIME	9.00 am to 10.30 am
TENDER OPENING PLACE	Committee Room, Administration Block, JPMC, Karachi
TENDER OPENING DATE	18 th January, 2016
TENDER OPENING TIME	11.00 am

**Note : No tender will be accepted after closing the Tender box,
What so ever reason may be.**



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NO.F.1-7/2015-16-ADM/JPMC
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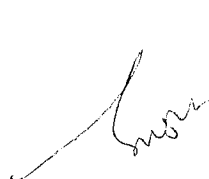
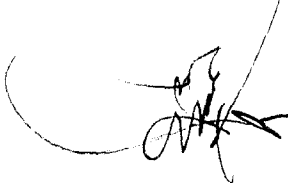
TERMS AND CONDITIONS

TENDER FOR THE PURCHASE OF INSTRUMENTS - JPMC, KARACHI

**Note : No tender will be accepted after closing the Tender box,
What so ever reason may be.**

Bidders are required to comply all the clauses mentioned in the Terms and Conditions of the Tender and any deviation will forbid them in competing for the tender

1. Single Stage – Two Envelopes procedure as per SINDH **PPRA-2010 Rule 46(2)** will be followed (single stage two envelopes procedure) i.e. **TECHNICAL** and **FINANCIAL PROPOSAL** will be placed in separate sealed envelopes and marked accordingly These two envelop should be placed in one envelop addressed to the Executive Director, JPMC Karachi with Tender number and inserted in the tender box on scheduled date and time
2. The **Technical Proposal** must contain original data sheet, technical brochure and all other relevant documents as mentioned in Annexure-I and photo copy of pay order/bank draft after hiding the amount..
3. In **Financial Proposal**, the vendor should submit only rate of the instrument/ items and a pay order of earnest money amounting to 2.50% value of the quoted items in favor of Executive Director, JPMC, Karachi otherwise, the bid will be rejected.
4. Earnest money should be in shape of pay order/bank draft. CDR/Bank guarantee or any other form as earnest money is not acceptable.
5. The disclosure of firm's quoted rate in any manner at the time of opening of technical bid will result in the rejection of the item/bid.
6. The successful bidder will deposit security money in shape of pay order @ 10% of the total value of order in the name of Executive Director, JPMC, Karachi within Seven (7) days after the issue of award letter, which will be kept in Accounts Section of JPMC till the completion of the warrantee period of equipment or execution of purchase order in case when item has no warrantee.
7. The earnest money will be forfeited to Government Accounts in case of non-submission of security money within seven (7) days of receipt of the award letter.
8. Only manufacturer or sole agent can participate in the tender. In case of local manufacturer or his authorized agent can participate in the tender. Copy of authority letter in original for local manufacturer must be submitted. In case of non-submission tender will be rejected.
9. The rate should be quoted in local currency on the FOR JPMC basis for local manufactured items and should be valid up to 30-06-2016. No escalations in rates are allowed in any case after submission of the tender.
10. The purchaser will initially open only the envelope marked "**Technical Proposal**" in the presence of vendors or their representatives who chose to be present at the time of bid opening date, time and place specified in the tender documents. The envelope marked

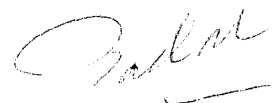
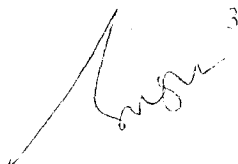
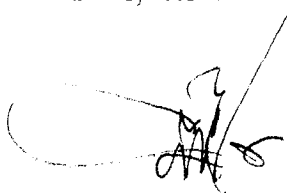


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“Financial Proposal” shall be retained in the custody of Purchaser without being opened till completion of the technical evaluation.

- 11 The bidder or their representative should be present at the time of opening of tender and shall sign the attendance sheet.
- 12 Delivery should be completed within allocated time from the date of issuance of purchase order.
- 13 The first scrutiny of technical bids will be performed by the procurement committee on the basis of the data sheet. literature and sample should be provided. Financial Proposal of only technically qualified firms will be opened.
- 14 Bids will be evaluated with following evaluation criteria:-
 - Only manufacturer / Sole agent and authorized agent for local manufacturer.
 - Financial standing of **02m** (sealed envelope) from bank.
 - Specification compliance.
 - All mandatory document (as per Annexure-I)
- 15 Hand written tenders or any over writing, cutting, erasing will not be accepted and will be rejected.
- 16 The bidder will provide one (1) year warrantee along with parts free of cost, and further one year free service (without spare parts) (if applicable).
- 17 The warranty period will commence from the date of receiving of the instrument.
- 18 The bidder shall submit with the bid, an **UNDERTAKING** on judicial paper of Rs. 100/= duly attested by Oath Commissioner, stating that the instrument to be supplied is brand new and of latest generation.
- 19 If bidder doesn't supply the Instruments in accordance with supply order or fails to supply according to terms and conditions or in case of any other breach of terms and condition of the tender, necessary action will be taken as per decision of competent authority.
- 20 If the vendor fails to supply the instrument within the stipulate period according to the terms and condition of the purchase order (delivery period), penalty will be imposed @ 0.1 % of the total value of equipment per day, subject to a maximum of 10 %. Otherwise their security money will be forfeited to Government Account and/or the firm will be black listed by the competent authority
- 21 After satisfactory supply the vendor submit the Bill/Invoice in triplicate, along with three copies of delivery Challan, two copies of Inspection reports, copy of purchase order for payment.
- 22 Income tax and other taxes (if any) will be deducted according to existing Government Rules. JPMC is exempted for the payment of GST.
- 23 Conditional tender(s) will not be entertained.
- 24 Tender which does not fulfill the prescribed conditions according to the tender is liable to be rejected.



21 The Chairman, Procurement Committee reserves the right to reject or accept any / all tender(s) under the relevant provisions of SPPRA Rules 2010.

22 The Executive Director, JPMC, Karachi, reserve the right to increase or decrease the quantity mentioned in the tender and the decision will be final.

I / we agreed above mentioned terms & conditions:

Name of Contractor _____ Signature _____

Full address _____

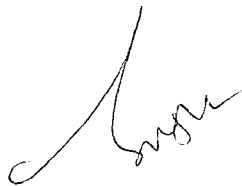
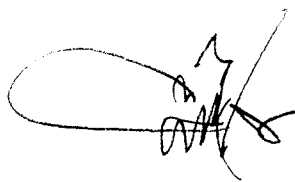
Witness : _____

NIC # _____

Annexure-I

Following documents should be attached with Technical Proposal :

- i) Tender purchase receipt.
- ii) Technical Bid
- iii) Sole agency certificate from the foreign manufacturer or authorized agent of local manufacturer..
- iv) Active GST Registration Certificate
- v) Income Tax Registration Certificate.
- vi) Last year paid Income Tax Challan
- vii) Photocopy of pay order of earnest money after hiding the amount in the technical bid.
- viii) Financial position of firm (sealed bank letter)
- viii) Undertaking that firm has never been blacklisted or having pending litigation.
- ix) Good Performance Certificate Good from JPMC, in case of new vendor from other institution.



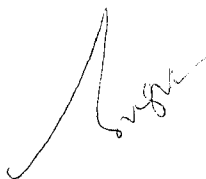
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KARACHI 75510

**TENDER FOR THE PURCHASE OF INSTRUMENTS FOR VARIOUS
DEPARTMENT, JPMC, KARACHI.**

Item No.	NAME OF ITEM (SPECIFICATION)	Req. Qty.
Column 1	Column - 2	Column - 3
	UROLOGY O.T.	
1.	Sponge Holding Forceps	50 Nos
2.	Mosquito Artery Forceps Curved	100 Nos
3.	Needle Holder	50 Nos
4.	Micro Needle Holder	50 Nos
5.	B.P. Handle Size No.3	12 Nos
6.	B.P. Handle Size No.4	10 Nos
7.	Allis Forceps	50 Nos
8.	Bab Cock Forceps	50 Nos
9.	Curved Dissecting Scissors	100 Nos
10.	Straight Scissors	100 Nos
11.	Dissecting Forceps Plain	50 Nos
12.	Dissecting Tooth Forceps	50 Nos
13.	Adison Forceps Plain	25 Nos
14.	Adison Forceps Tooth	25 Nos
15.	Jeweler Forceps	20 Nos
16.	Bulldog Clamp Curved	25 Nos
17.	Bulldog Clamps Straight	25 Nos
18.	Watson Chain	10 Nos
19.	Devers Retractor	04 Set
20.	Urethral Dilators	04 Set
21.	Self Retaining Retractors	05 Nos
22.	Stone Holding Forceps	04 Set
23.	Curved Fine Long Artery Forceps	50 Nos
	EYE DEPARTMENT	
24.	Cataract Surgery Set	01 Set
	a) Scissor Straight Sharp	01
	b) Wire Speculum	01
	c) Silk Cock Needle Holder	01
	d) Single Tooth Forceps	01

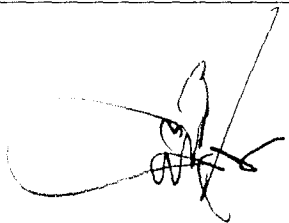
	e) Mosquitoes Artery Forceps	01	
	f) Conjunctival Scissor	01	
	g) Conjunctival Forceps	01	
	h) B.P. Handle	01	
	i) Corneal Scissor	01	
	j) Yamas Scissor	01	
	k) Micro Needle Holder	01	
	l) Micro Corneal Forceps	01	
	m) Micro Tying Forceps	01	
	n) Mic Person Forceps	01	
	o) Lens Expressor	01	
	p) Wire Vicus	01	
	q) Simlox two way Cannula	01	
	r) Lens Dialer	01	
	s) Lens Chopper	01	
	t) Hydro Dissection Cannula	01	
	u) Kidney Tray (M) Size	01	
25	Squint Surgery Set		01 Set
	a) Straight Scissor Sharp	01	
	b) Self Retaining Forceps Speculum	01	
	c) Silk Cock Needle Holder	01	
	d) Single Tooth Forceps	01	
	e) Mosquito Forceps Artery	01	
	f) Conjunctival Scissor	01	
	g) Conjunctival Forceps	01	
	h) Muscle Hook	02	
	i) Caliper	01	
	j) Micro Needle Holder	01	
	k) Micro Tying Forceps	01	
	l) Kidney Tray (M) Size	01	
26	Glaucoma Surgery Set		01 Set
	a) Scissor Stright Sharp	01	
	b) Wire Speculum	01	
	c) Silk Cock Needle Holder	01	
	d) Single Tooth Forceps	01	
	e) Mosquitoes Artery Forceps	01	
	f) Conjunctival Scissor	01	
	g) Conjunctival Forceps	01	
	h) B.P. Handle	01	
	i) Corneal Scissor	01	

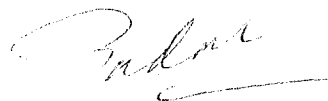




	j) Vinas Scissor	01	
	k) Micro Needle Holder	01	
	l) Micro Corneal Forceps	01	
	m) Micro Tying Forceps	01	
	n) Hydro Dissection Cannula	01	
	o) Kidney Tray (M) Size	01	
27	DCR Surgery Set		01 Set
	a) Nasal Speculum	01	
	b) Sinus Forceps	01	
	c) Straight Scissor	01	
	e) B.P. Handle	01	
	f) Silk Cock Needle Holder	01	
	g) Single Tooth Forceps	01	
	h) Mosquitoe Forceps Artery	01	
	g) Conjunctival Scissor	01	
	h) Conjunctival Forceps	01	
	i) Clover Retractor	02	
	j) Periastem Elevator	01	
	k) Rujen Elevator	01	
	l) Micro needle Holder	01	
	m) Corneal Forceps	01	
	n) Functum Dialer	01	
	o) Syringing Probes Set	04	
	p) Bone Neebler	01	
	q) Bone Trephine	01	
	r) Fine Scissor Curved Blunt	01	
	s) Kidney Tray (M) Size	01	
28	Orbitotomy Surgery Set		01 Set
	a) Abdominal	02	
	b) Right Angle Detector	02	
	c) Right Angle Detector (Small)	02	
	d) Cat Poop	02	
	e) Round Body	02	
	f) Anuresum Needle	01	
	g) W.C Detector	01	
	h) Sinus Forceps	01	
	i) Quirt	01	
	j) Spunching Holding Forceps	02	
	k) Needle Holder	02	
	l) Surgeon Scare	02	

	m) Suture Cutting Scissor	01	
	n) B.P. Handle	02	
	o) Tooth Forceps	02	
	p) Non Tooth Forceps	02	
	q) Sinus Nasal	01	
	r) Towel Clip	04	
	s) Mosquito Artery Forceps Curved	10	
	t) Mosquito Artery Forceps Straight	10	
	u) S.S. Ball (Small)	02	
	v) Kidney Tray (M) Size	01	
29	Vitreoretinal Surgery Set		01 Set
	a) Straight Scissor	01	
	b) Self Retaining Eye Speculum	01	
	c) Conjunctival Scissor	01	
	d) Conjunctival Forceps	02	
	e) Silk cock Needle Holder	01	
	f) Single Tooth Forceps	01	
	g) Mosquito Artery	06	
	h) Muscle Hook	02	
	i) Eye lids Retractor	02	
	j) Micro Needle Holder	01	
	k) Micro Corneal Forceps	01	
	l) Micro Tying Forceps	01	
	m) Caliper	01	
	n) Sleeve Forceps	01	
	o) Kidney Tray (M) Size	01	
	THORACIC MEDICINE		
30	Bronchial Biopsy Forceps FB-21C-1		02 Nos
31	Biopsy Forceps FB-55CR-1 for Pleuroscopy		02 Nos.
	NEUROSURGERY DEPARTMENT		
32	Craniotomy Set		03 Sets
	a) Bowel Large (2) & Small (1)	12	
	b) Towel Clips	24	
	c) Plain Forceps (Dura)	04	
	d) Bone Elevator	04	
	e) Sponge Holder	08	
	f) Gigly Saw Handle	12	
	g) Brain Needle	08	

	h) B.P. Handle No.4	08	
	i) B.P. Handle No.7	04	
	j) Guide or Passer	02	
	k) Suction Nozle No.7	06	
	l) Suction Nozle No.12	06	
	m) Plain Forceps	08	
	n) Tooth Forceps	08	
	o) Tooth Forceps Dura	08	
	p) W/C Dissector	02	
	q) Bone Nibler Double Action	04	
	r) Needle Holder	06	
	s) Self Retaining Retractor	08	
	t) Brain Retractor	16	
	u) Crescent Punch	04	
	v) Scissors Straight	02	
	aa) Scissors Dura Curved	06	
	ab) Rubber Washer	16	
	ac) Artery Hanger	08	
	ad) S.S. Tray (Large)	04	
	ae) Plain Forceps (Dura)	04	
	af) Yankauer Suction Nozle	05	
33	Laminectomy Set		03 Sets
	a) Double Action Bone Nibler	04	
	b) Double Action Bone Duck Bell	04	
	c) Narrow Bone Nibbler	04	
	d) Self Retaining Retractor(Straight)	03	
	e) Self Retaining Retractor(Curved)	04	
	f) Self Retaining Retractor(large)	04	
	g) Kidney Tray	04	
	h) Bowl	08	
	i) B.P. Handle No.4	04	
	j) B.P. Handle No.7	04	
	k) Fowel Clip	12	
	l) Sponge Holding Forceps	04	
	m) Scissors (Curved) Large	04	
	n) Scissors Dura	04	
	o) Scissors Straight	04	
	p) Plain forceps	04	
	q) Tooth Forceps	04	
	r) Austitone Large	04	
	s) S.S. Tray (Large)	02	





	t) Self Retaining Retractor (Deep) 04	
34	Shunt Rod Set	03 Sets
	i) Sinus Forceps 02 Nos	
	ii) Fine Retractor Cut P & R 02 Nos	
	MAIN OPERATION THEATRE	
35	GTM SET	20 Sets
	a) Spunch Holding Forceps 01	
	b) Kidney Kray 02	
	c) Bowl 02	
	d) Niddle Holder 02	
	e) B.P. Hande No3 & 7 02	
	f) Surgeon Scissor Curved 02	
	g) Straight Cutting Scissor 01	
	h) Dissecting Forceps Non Tooth 02	
	i) Dissecting Forceps Tooth 02	
	j) Artery Curved 15	
	k) Straight Artery 05	
	l) Sinus Forceps Curved Forceps 01	
	m) Anurysum Needle 01	
	n) W/C 01	
	o) Right Angle (Large (2) & Medium2) 01	
	p) Round Muscle Retector 04	
	q) Skin Retector Large 02	
	r) Towel Clip 06	
	s) S.S. Tray 01	
	t) Depaky Forceps 10	
	u) Catpaw 01	
36	LAPAROTOMY SET	10 Sets
	a) S.S. Tray 01	
	b) Morris Retector 02	
	c) Dever Retector Different Sizes 05	
	d) Grashing Clam 04	
	e) Non Crshing Clam Different Sizes 06	
	f) Rebbit Artery 06	
	g) Long Straight Artery 06	
	h) Long Dissecting Forceps 01	
	i) Long Curved Scissor 01	
	j) Lehy Forceps 02	

	k) Kidney Tray	01	
	l) Bebeock	02	
37	THYROID SET		06 Sets
	a) S.S. Tray	01	01 No.
	b) Kidney Tray	01	01 No
	c) Bowl	02	02 Nos
	d) Spounge Holding Forceps	02	02 Nos
	e) B.P. Hande No3 & 7	02	02 Nos
	f) Needle Holder	02	02 Nos
	g) Fowel Clip	06	06 Nos
	h) Curved Scissors	02	02 Nos
	i) Straight Scissor	01	01 No
	j) Non Tooth Forceps	02	02 Nos
	k) Tooth Forceps	02	02 Nos
	l) Artery Curved	20	20 Nos
	m) Artery Staright	05	05 Nos
	n) Anurysum Needle	01	01 No.
	o) Cat Paw	02	02 Nos
	p) Skin Retector	02	02 Nos
	q) Right Angle Retector	02	02 Nos
	r) Round Body Retector	02	02 Nos
	s) Double Hook Retector	02	02 Nos
	s) Self Retaining Thyroid Retector	02	02 Nos
	t) Thyroid Dissector	01	01 No.
	u) Lahey Forceps	02	02 Nos
38	LAPCHOLE SET		05 Sets
	a) S.S. Tray	01	
	b) Kidney Tray	02	
	c) Spounge Holding Forceps	02	
	d) Curved Scissors	02	
	e) Straight Scissor	01	
	f) Non Tooth Forceps	02	
	g) Tooth Forceps	02	
	h) Various Needle	01	
	i) Morris Retector	02	
	j) Dever Retector Different Small size	05	
	k) Disjoin store holding Forceps (Straight or Curved)	02	
	l) Catpaw	02	

	m) Artery	06	
	n) Straight Artery	06	
39	VERICOSE VEIN SET		02 Sets
	Verisose Vein Stapptener with jar	02	
40	DRESSING SET		10 Sets
	a) Kidney Tray	01	
	b) Artery Curved	02	
	c) Bawl	01	
	d) Plain Forceps	01	
41	GALL BLADER SET		05 Sets
	a) S.S. Tray	01	
	b) Morris Retector	02	
	c) Dever Retector	05	
	d) Long Curved Scissor	01	
	e) Long Dissecting Forceps	01	
	f) Needle Holder Long	01	
	g) Monium Forceps	06	
	h) Long Straight Artery	06	
	i) Common By Duck Dialator Different with Curved	11	
	j) Bebeock	02	
	k) Lehy Forceps	02	
	l) Disjoin Stone Holding Forceps	02	
	m) Sisso Latomy Stone Holding Forceps	01	
	n) Long Kidney Tray	01	
42	FISTULA SET		05 Sets
	a) S.S. Tray	01	
	b) Proctoscope	01	
	c) Anal Retector with Blade	01	
	d) Probe	01	
	e) Dissecting Forceps	01	
	GYNNAE LABOUR ROOM		
43	Clamp Forceps		50 Nos
44	EPI Scissors		100 Nos

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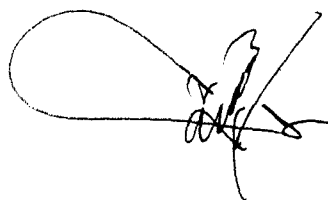
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TENDER FOR THE PURCHASE OF MACHINERY/ EQUIPMENT THROUGH(SNE) FOR
VARIOUS DEPARTMENTS OF JPMC, KARACHI
DUE ON 18TH JANUARY, 2016

COST OF TENDER	Rs. 1000/= (Rupees One thousand only) non refundable
TENDER SELLING DATE	From 28 th December, 2015 to 16 th January, 2016
TENDER SUBMISSION PLACE	AD(M) Office
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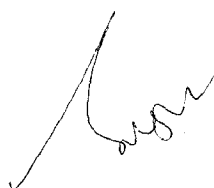
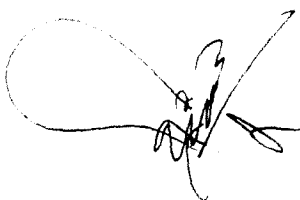
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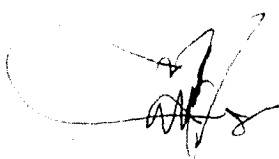
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4. Earnest money should be in shape of pay order/bank draft. CDR/Bank guarantee or any other form as earnest money is not acceptable.
5. The disclosure of firm's quoted rate in any manner at the time of opening of technical bid will result in the rejection of the item/bid.
6. The successful bidder will deposit security money in shape of pay order @ 10% of the total value of order in the name of Executive Director, JPMC, Karachi within Seven (7) days after the issue of award letter, which will be kept in Accounts Section of JPMC till the completion of the warrantee period of equipment or execution of purchase order.
7. The earnest money will be forfeited to Government Accounts in case of non-submission of security money within seven (7) days of receipt of the award letter.
8. The rate should be quoted in local currency on basis for FOR (JPMC) basis for local manufactured items and should be valid up to 30-06-2016. No escalations in rates are allowed in any case after submission of the tender.
9. Only manufacturer or sole agent (for foreign manufacturer) can participate in the tender. In case of local manufacturer authorized agent can participate in the tender. Copy of Sole agency certificate for foreign manufacturer and authority letter in original for local manufacturer must be submitted. In case of non-submission, tender will be rejected.



- 10 The purchaser will initially open only the envelope marked "Technical Proposal" in the presence of vendors or their representatives who chose to be present at the time of bid opening date, time and place specified in the tender documents. The envelope marked "Financial Proposal" shall be retained in the custody of Purchaser without being opened till completion of the technical evaluation.
- 11 The bidder or their representative should be present at the time of opening of tender and shall sign the attendance sheet.
- 12 Delivery should be completed within allocated time from the date of issuance of purchase order.
- 13 The Vendor should submit Data Sheet according to the Tender Specifications Format mentioned in the tender document and highlight the tender specifications in their Technical Data Sheet/Literature. Additional Feature can be recorded separately.
- 14 The first scrutiny of technical bids will be performed by the procurement committee on the basis of the data sheet and literature provided. Financial Proposal of only technically qualified firms will be opened.
- 15 Bids will be evaluated with following evaluation criteria:-
 - Only manufacturer / Sole agent and authorized agent for local manufacturer.
 - The vendor should have proper workshop, office and list of trained Engineers & tools and Biomedical equipped with necessary have skilled staff.
 - Financial standing of 100m (sealed envelope) from bank.
 - Specification compliance.
 - All mandatory document (as per Annexure-I)
 - After sale services facility.
- 16 The equipment offered must be the latest version/generation and in case the old model is offered, it will not be considered, even though it is as per the tender specifications.
- 17 The bidder will provide two (one) year warrantee along with parts free of cost, and further one year free service (without spare parts).
- 18 The warranty period will commence from the date of commissioning of the equipment, as per report of the end user and technical person.
- 19 The bidder must provide complete details of their financial standing, and list of similar equipment supplied in Pakistan, bio-data of engineers with training certificates/ test equipment, details of local stock of spare parts for similar equipment and details of office with number of personnel.
- 20 All equipment to be supplied should be accompanied with operation and service/ maintenance and schematic diagram (if any) and spare parts list, manual in English language.
- 21 Hand written tenders or any over writing, cutting, erasing will not be accepted and will be rejected
- 22 The bidder shall submit with the bid, an **UNDERTAKING** on judicial paper of Rs. 100/- duly attested by Oath Commissioner, stating that the equipment to be supplied is brand new and of latest generation, free from defects in design material and workmanship and




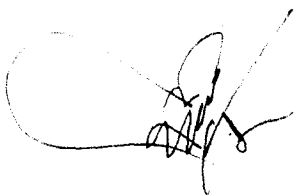
3



will bind himself for availability of spares for a period of 8 years from the date of supply. In case of winding up of business, the supplier shall be bound to make an alternate arrangement of spares and maintenance of equipment. In case of default, necessary action will be taken as per decision of competent authority.

- 23 Vendor will be responsible for routine pre-requisite installation free of cost.
- 24 Equipment will be handed over to the Instrument Section, JPMC, Karachi, through end-user with Delivery Challan to the Deputy Director (Medical).
- 25 If bidder doesn't supply equipment in accordance with the supply order or fails to supply according to terms and conditions or in case of any other breach of terms and condition of the tender, necessary action will be taken as per decision of competent authority.
- 26 If the vendor fails to supply, install and commissioning the equipment according to the terms and condition of the purchase order within the stipulated period (delivery period), penalty will be imposed @ 0.1 % of the total value of equipment per day, subject to a maximum of 10 %. Otherwise their security money will be forfeited to Government Account and/or the firm may be black listed by the competent authority.
- 27 After satisfactory installation and commissioning of the equipment the vendor submit the Bill/Invoice in triplicate, along with three copies of delivery Challan, three copies of installation/commissioning reports, copy of purchase order and a copy of Bill of Entry (for imported items) for payment (if applicable).
- 28 The payment will be made after receiving the satisfactory installation and commissioning report from the HOD/Incharge of User Department through AG Sindh, Karachi.
- 29 Income tax and other taxes (if any) will be deducted according to existing Government Rules. JPMC is exempted for the payment of GST.
- 30 Conditional tender(s) will not be entertained.
- 31 Equipment should be FDA approved or CE marked where applicable.
- 32 Tender which does not fulfill the prescribed conditions according to the tender is liable to be rejected.
- 33 The service manual with circuit diagram must be provided with quoted mentioned item.
- 34 The supplier will be bound to train nominated technical personnel to operate the supplied equipment.
- 35 Profile of the technical staff and address of the Bio-Medical workshop as well as list of hospitals in which the quoted equipment are working must be attached.
- 36 The Executive Director, JPMC, Karachi, reserve the right to increase or decrease the quantity mentioned in the tender and the decision will be final.
- 37 The Chairman, Procurement Committee reserves the right to reject or accept any/all tender(s) under the relevant provisions of SPPRA Rules 2010

I / we agreed above mentioned terms & conditions:



Name of Contractor _____ Signature _____

Full address _____

Witness : _____

NIC # _____

Annexure-1

Following documents should be attached with Technical Proposal :

- i) Tender purchase receipt.
- ii) Technical Bid
- iii) Sole agency certificate from the foreign manufacturer or authorized agent of local manufacturer..
- iv) Active GST Registration Certificate
- v) Income Tax Registration Certificate.
- vi) Last year paid Income Tax Challan
- vii) Original literature.
- viii) Photocopy of pay order of earnest money after hiding the amount in the technical bid.
- ix) List of Institutions to whom similar equipment/instrument is supplied in Pakistan.
- x) Undertaking on judicial stamp paper of Rs. 100/- as per clause # 22.
- xi) Financial position of firm (sealed bank letter)
- xii) Undertaking that firm is not blacklisted or having pending litigation.
- xiii) Good Performance Certificate from JPMC, in case of new vendor from other institution.

INSTRUCTION FOR PURCHASE ON CIF (cost, insurance and freight) BASIS.

Following instructions will be followed. If purchase order place on CIF basis

- i) JPMC will issue contract/purchase order. The vendor will carry out all works regarding the import of equipment i.e. from opening of L/C to delivery and installation of equipment
- ii) The vendor have to open Letter of Credit in the name of Executive Director, JPMC, Karachi for item(s) as per purchase. A copy of all documents should be submitted to JPMC time to time. JPMC is duly consignee of the equipment.
- iii) JPMC will assist the vendor in clearing the consignment. JPMC will provide Undertaking and other letter for the exemption of the payment of Sale Tax, Customs charges, Income Tax and other taxes applicable on such import.
- iv) The rate of conversion will be decided on the opening of the tender.

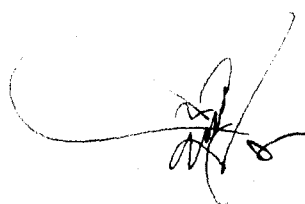
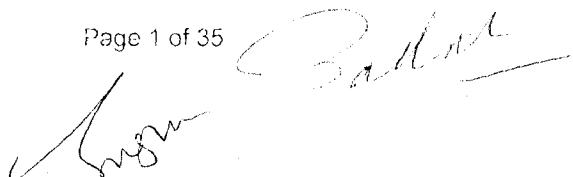


TENDER NO.1-7/2015-16-AD(M)/JPMC

GOVERNMENT OF SINDH
JINNAH POSTGRADUATE MEDICAL CENTER
KARACHI 75510

TENDER FOR THE PURCHASE OF MACHINERY/ EQUIPMENT THROUGH (SNE) FOR VARIOUS DEPARTMENT, JPMC, KARACHI. DUE ON 00-12-2015

Item No.	NAME OF ITEM (SPECIFICATION)	Req. Qty.																																						
Column	Column - 2	Column - 3																																						
	LIST-A																																							
1	<p>CEILING LED O.T. LIGHT</p> <p>Light System: High Performance LEDs of different chromaticity provided for illumination of the surgical site. The light head ensures shadow-free illumination while providing deep-cavity light at the same time.</p> <p>Mechanical Design: Ceiling-mounted operating light consisting of a ceiling tube, horizontal tracking arm and spring arm with cardanic joint and a light head. The spring arm shall allow full adjustability in height and unrestricted movability. Depending on site conditions (ceiling structure) a ceiling anchor plate or an intermediate ceiling assembly shall be used for mounting the light.</p> <p>TECHNICAL DATA</p> <table border="0"> <tr> <td>Central illuminance (at a distance of 1m)</td> <td>160,000 lx</td> </tr> <tr> <td>Turbulence degree (standard value 37.5%)</td> <td>27%</td> </tr> <tr> <td>Power input</td> <td>45 W</td> </tr> <tr> <td>Color Temperature</td> <td>4300 K</td> </tr> <tr> <td>Effective Life of light source</td> <td>40,000 h</td> </tr> <tr> <td>Soft start option (light does not start immediately with full brightness)</td> <td>Yes</td> </tr> <tr> <td>Electronic system meets requirements acc. To VDE and IEC</td> <td>Yes</td> </tr> <tr> <td>Dimmability (Electric dimming from/to)</td> <td>30-100%/5% in endo mode</td> </tr> <tr> <td>Light field diameter (d10, distance of 1m)</td> <td>170-220 mm</td> </tr> <tr> <td>Color rendering index (CRI) (Ra1-8)</td> <td>95</td> </tr> <tr> <td>Color temperature</td> <td>3,600/4,300/4,600 K</td> </tr> <tr> <td>Illumination depth (without refocusing) L1L2</td> <td>180/200mm</td> </tr> <tr> <td>Permissible ambient temperature range during operation</td> <td>5 degree to + 40 degree C</td> </tr> <tr> <td>Power module incl. mounting plate</td> <td>200x130x105mm</td> </tr> <tr> <td>Classification acc. To MPG (Medical Devices Act/MDD)</td> <td>1</td> </tr> <tr> <td>Protection class acc. To IEC 601</td> <td>1</td> </tr> <tr> <td>Degree of protection light head</td> <td>IP 42</td> </tr> <tr> <td>Conformity</td> <td>CE</td> </tr> <tr> <td>Country of Origin:</td> <td></td> </tr> </table>	Central illuminance (at a distance of 1m)	160,000 lx	Turbulence degree (standard value 37.5%)	27%	Power input	45 W	Color Temperature	4300 K	Effective Life of light source	40,000 h	Soft start option (light does not start immediately with full brightness)	Yes	Electronic system meets requirements acc. To VDE and IEC	Yes	Dimmability (Electric dimming from/to)	30-100%/5% in endo mode	Light field diameter (d10, distance of 1m)	170-220 mm	Color rendering index (CRI) (Ra1-8)	95	Color temperature	3,600/4,300/4,600 K	Illumination depth (without refocusing) L1L2	180/200mm	Permissible ambient temperature range during operation	5 degree to + 40 degree C	Power module incl. mounting plate	200x130x105mm	Classification acc. To MPG (Medical Devices Act/MDD)	1	Protection class acc. To IEC 601	1	Degree of protection light head	IP 42	Conformity	CE	Country of Origin:		2
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2	<p>ELECTRO HYDRAULIC O.T. TABLE</p> <p>Five sections electro hydraulic operating table</p> <p>It is designed to support the patient during all surgical procedures and operations: general surgery, vascular surgery, endoscopy, gynecology, urology</p> <p>SPECIFICATION FEATURES</p> <p>Tabletop segment are entirely X-Ray translucent</p> <p>High class antistatic poly-urethane mattresses are covered with antibacterial cover Biocote</p>	2																																						

Possibility of assembly for wide range of additional equipment supporting proper placement of patient		
Functional movements of table column are provided by reliable electro-hydraulic system		
Functional movements of table top are supported with gas, springs, longitudinal shift mechanically		
TECHNICAL PARAMETER:		
Total length of the tabletop	2100 mm	
Width of the tabletop	500 mm	
Total width of the tabletop	560 mm	
Height adjustment (with mattress)	750-1080 mm	
Backrest adjustment	85 degree +- 45 degree	
Footrest adjustment	20 degree +- 90 degree	
Footrest abduction	max 180 degree	
Lateral tilts	+ - 30 degree	
Head rest adjustment	+ - 45 degree	
Kidney Bridge	~120 mm	
Trendelenburg / Reverse - Trendelenburg	+ - 40 degree	
Table weight	240 kg	
Permissible load	225 kg	
Power	24 V	
Batteries (sealed, maintenance free)	12 V, 7 Ah, 2 pieces	
Battery charger	Built-in	
Working time without battery charging	approx 60 operations	
Batteries charging time	<12 hours	
Power supply of charger	230 V, ~ 50 / 60 Hz	
Degree of protection against electric paralysis	IP-X4	
Application part type	B	
Class of protection against electric paralysis	I	
INCLUDING FOLLOWING ACCESSORIES		
i	Anesthetic frame / with one-position clamp	1
ii	Infusion holder / with one-position clamp	1
iii	Arm Support / with one-position clamp	2
iv	Anesthetic frame / with one-position clamp	1

v	Knee Support (1 pair) / with one-position clamp	2
vi	Bowl	1
	Country Of Origin : UK, USA & Europe or Similar	
3	Anaesthesia Machine with Built in Ventilator	3
	<ul style="list-style-type: none"> Three Gas Anaesthesia machine with integrated TFT touch screen ventilator Adult Paeds and neonate modes Two station selectatec backbar with upto 4 cylinder yokes Central gas driven unit Pipeline & cylinder gauges for O2, N2O & Air Hoses for O2, Air & N2O Power Socket outlets Base lockable, 6 inch Drawer unit and top monitor shelves work surface : 3 drawer unit Low O2 pressure Alarm Oxygen failure device: Nitrous cuts of with low oxygen Pressure (Air/Oxygen remain) Mechanical anti hypoxic device Oxygen failure alarm sounds prior to nitrous cut out 	
	Manometer gauges:	
	<ul style="list-style-type: none"> O2:10 bar N2O:0-10 bar Air: 0-10 bar 	
	<ul style="list-style-type: none"> Built in suction operating on vacuum On/Off Switch 	
	Cascade rota meter	
	<ul style="list-style-type: none"> Oxygen flow range upto 10 liters Nitrous oxide flow range upto 12 liters Air flow range upto 15 liters CO2 absorber capacity : 1.6 liter Sevo OR Isoflurance vaporizer 	
	Ventilator modes :	
	<ul style="list-style-type: none"> Touch screen control with easy to read color screen Control mechanical ventilation, pressure control ventilation, Synchronized intermittent mandatory ventilation, pressure support ventilation modes Positive end expiratory pressure Option 3 hours battery backup Color coded waveform Automatic alarms 	
	FDA Approved or CE Marked	
	Country of Origin : UK / USA or similar	
4	Diathermy Machine WITH Digital Display	5

Electrosurgery Unit is a microprocessor controlled, universally applicable electrosurgical unit with outstanding performance characteristics. It also incorporates the latest safety technology		
Safety Features		
Monopolar Spray Coagulation		
Endo Mode Time Control cutting		
Bipolar ON/OFF automatic function		
Integrated Patient control system (PCS)		
Power Peak the power boost for "cutting under water"		
Monopolar cutting and coagulation using the foot switch		
Forced prep "Forced Coagulation current enabling fast coagulation"		
Technical Specification:		
Cutting 1 (Pure)	400W	
Cutting 2 (Blend)	300W	
Cutting 3 (Super blend)	200 W	
Forced Prep	120W	
Endo Mode	100W	
Contact Coagulation	250W	
Spray Coagulation	120W	
Bipolar Coagulation	100W	
Sound level	HF Current activation: 40-65	
db (adjustable)	Alarm: 65 dB(A)	
Weight	8.6 kg	
Interference suppression	Limits in conformity with EN	
EMC Interference immunity in conformity with IEC 801		
CE marking	According to 93/42/EEC	
Power Requirements	220-240V, 50-60 Hz	
Protection Class	I	
Classified acc to MDD	IIB	
Leakage Current	LF/HF in compliance with IEC 601, Part 2-2	
Type	CF, defibrillation-proof	
Nominal frequency	450 kHz	
Modulation frequency	30 kHz	
Consisting of		
a	Electrode handil 2 Switch, 5 M Cable	1
b	Knife Electrode	1
c	Rubber Patient Plate (NE Electrode) 15x26cm, Cable 3m	1
d	Non Stick red forceps straight, blunt, 2,0mm, 20mm	1
e	Bipolar Cable 5 M	1
f	Foot switch (double pedal Explosion & anesthetics proof)(AP tested)	1
g	Trolley (Local Best Quality)	1
Trolley: Powder Coated Rides on 4 antistatic dual wheels		
Equipped with locking (front) 2 fixed shelves, 1 drawer unit with lock		
Country of Origin:UK/USA/Germany or similar		
b	Multi Mode Monitor (for O.T & SICU)	10
PHYSICAL FEATURES		

The display should be color TFT 1024x768 15"
 Numerical Parameters should include HR, PVCs, ST, Pulse Rate, SPO2, RR, Dual Temp, CO2, NIBP, and alarm limits
 The operation method should be based on Rotary knob and Membrane
 The sweep speed should be 12.5, 25 and 50mm/sec

The wave forms should include ECG, PLETH, RESP/GAS, IBP, EEG; all should be freezable

ECG

Should have standard 3 leads extendable upto 5 leads with a dynamic range upto + - 5mV, leakage current of < 10 uA, Lead off current of < 90 uA
 The gain should be 4, 2, 1, 1/2, 1/4 and auto gain calibration should be 1mV, 0.5 sec
 Lead choice I, II, III, aVR, aVF, aVL, T, ST
 The heart rate range for adults to be 15 - 300 bpm and 15 - 350 bpm in neonates
 Accuracy: 1 bpm or 1% which ever is greater
 The tall T wave reject upto 1.2mV Amp.
 Should be protected against defibrillation and electro surgery

HR can be measured from ECG, SPO2 & IBP with displaying color coding of source parameters
 Response time after cardiac arrest should be within 10 secs

ARRHYTHMIA ANALYSIS

The types should include ASYS, VFIB, VTAC, RUN, AIVR, COUPLET, BIGEMINY, TRIGEMINY, TACHY, BRADY, PAUS, FREQUENT PVCs
 The rapid learning should be only 20 sec for the recognition of dominant rhythm
 Post time arrhythmia detection with innovative feature and storage of atleast the latest 80 ARR events including wave forms and parameters

SpO2

The method should be 2 wavelength pulse wave type
 Anti motion SPO2
 SPO2 masimo (Option)
 SPO2 range: 0-100%
 SPO2 accuracy: + 2%
 Pulse Rate Range: 30-250 bpm
 Pulse Rate Accuracy: + 2 bpm
 Alarm limit setting: upper limit 70-100%
 lower limit 70-100%
 SPO2 Probe: Red light LED wavelength 660nm, infrared light led 940 nm

NIBP

Measurement method should be Oscillometric with manual and automatic measurement modes (intervals between 1 min - 24 hours) and the measurement time from 20 to 25 set the cuff pressurization time is not included
 Measurement range should be as follows

ADULT

SYS: 25 - 250 mmHg, DIA: 10-220 mmHg & MAP: 15 - 250 mmHg

NEONATES

SYS: 25 - 135 mmHg, DIA: 10-110mmHg & MAP: 15-125 mmHg
 Pulse rate range: 30-250 bpm
 The pressure transducer accuracy should be +/- 3 at full range
 Initial Inflation Target for adults to be 150 mmHg while for neonates=85 mmHg
 The memory should hold minimum 100 records
 Over pressure protection: Adult mode-300mmHg
 Neonatal mode-160mmhg
 Alarm limit setting: SYS 50-240 mmhg
 DIA: 15-180 mmhg

RESPIRATION:

The method should be impedance based, the base resistance ranges should be from 250 to 1250 ohm

	<p>The dynamic range should be from 0.2 till 2 ohm & breath rate range should be till 150 BPM</p> <p>TEMPERATURE: The probe should be YSI-400/YSI-700 compatible compatible And the temperature range should from 0 to 50 degree C accuracy +/- 0.2 centigrade Alarm limit setting - 0-50 centigrade Channels-2 channels</p> <p>ALARMS: The alarms should include the error messages, all other parameter limits The alerts should be blinking on display and volume adjustable with light indicator</p> <p>BATTERY & AC POWER SPECIFICATIONS: The internal battery should be sealed lead acid type with more than 1 hour continuous use DC 24V AC 50/60 Hz</p> <p>ENVIROMENTAL SPECIFICATIONS: Temperature range 5 - 40 degree C (for gas module: 10 to 35 degree C), -20-60 degree C (for gas module: 20 to 50 degree C) Humidity: 20 - 90 (non condensing) Country Origin: USA/U.K/MALAYSIA/ JAPAN/ EEC or similar</p>	
6	<p>Pulse Oximeter</p> <p>(Waveform) Display Type Dot Matrix, Cold Cathode Display Size 5" W x 1.5" H (12.7x3.08 cm) Battery Sealed Lead Acid Gel cell 3 Hour life 12 hour recharge Complete with Finger Clip Probe FDA approved/CE marked or similar</p>	10
7	<p>Ventilator for ICU</p> <p>Ventilation Modes : (microprocessor controlled ventilator) Controlled Mechanical Ventilation, Pressure Control Ventilation, Synchronised Intermittent Mandatory Ventilation, SPONT, Adaptive Support Ventilation, Pressure SIMV (S)CMV+/APVcmv, PCV+ (biphasic), SIMV+/APVsmv, SPONT, ASV, P-SIMV+, NIV, NIV-ST Dual PAP and APRV</p> <p>Special Functions: Special functions should include nebulizer, manual breath, 100% O2, standby sign, apnea backup ventilation, screen-lock and inspiratory hold</p> <p>Patient Type should include adult to paedts (males and females), height ranging from 30cm upto 250cm</p> <p>Technical Specifications : (S)CMV+ PCV+SIMV+rate: from atleast 4 b/m till 80 b/m Tidal volume starting from 20 ml up to at least 2000 ml PEEP and CPAP ranges from 0 cmH2O not less than 35 cm H2O Oxygen from minimum range of 21% to 100% The inspiratory to expiratory ratio starting from 1:9 up to 4:1 Flow range from 0l/min not less than 240 l/min % minute volume in ASV from 25% uptill 350%</p> <p>Alarms Operator adjustable alarms should include low/high minute volume, low/high pressure, low/high tidal volume, apnea time, low/high oxygen, low/high PetCO2 Special alarms should include Oxygen concentration, disconnection, loss of PEEP, exhalation obstruction, flow sensor, ASV, power supply, batteries, gas supply alarms should be added features</p>	3

	Event Log : Storage and display of not less than 1000 events with date and time Ventilation Cockpit : Dynamic Lung Should show real time visualization of the lungs with representations of tidal volume lung compliance resistance and patient activity Vent Status Visual representation of the ventilator dependency Adaptive Support Ventilation target graphics Not less FE monitoring parameters Real time waveforms simultaneous display of Paw, Flow, Volume, P(trachea) Loops Display of atleast 2 loops Trends Simultaneous display of 4 parameter trends for 1, 6, 12, or 24hours Power Supplies: Up to 240 V at 50/60Hz Should have back up batteries with at least 2 - 5 hours functionality Operating temperature from 5 - 40 degree C Storage temp from -20 - 60 degree C STANDARD Should comply with IEC, EN standards Physical Dimensions : Should have TFT color disply, backlit with touch screen Built in Turbine system Country Origin : USA/ UK/Europe or similar	
8	Syringe Pump Specification a Syringe pump should be programmable, user friendly and safe to use b Should have adjustable occlusion pressure and fast occlusion alarm c Infusion rate range should start from 0.1 ml/hr up to at least 999.9 ml/hr d Should be compatible with different syringe types like BD Plastipak, Braun Omnifix, etc e Ability for neonatal infusion f Should have sealed lead acid (Cyclone) back up battery with battery life not less than 2.5 hours g Should function on 220 - 240 VAC or 100 - 120 V AC, 50/60 Hz h The totalizer should allow infused volume to be recorded i The pump should have automatic syringe size sensing j The pump should have the ability to carry out self testing routines every time it is switched on k Display of the drug name with provision of memorizing 10 to 15 names by operators l The volumetric accuracy should be + or - 2% m Mechanical accuracy +/- 1% n Should show visual and audible alarms for all types of errors o The pump should be class II (double insulated) device p Light and compact design q Should comply with EMC and IEC Standard Country of Origin : UK/USA/Japan or similar	10
9	Infusion Pump Specification: a Infusion pump should be programmable, user friendly and safe to use b The pump should have feature of Infusion rate automatically calculated between rate, time and volume with ability to automatic exchange between two flow rate units "ml/h"and "drop/min"	10

	The Detect System Pressure feature should be able to detect atleast three levels of occlusion pressure	
c	The flow rate must be adjustable	
d	The range of flow rate range should not be less than 1200 ml/hr with 1ml/hr increments	
e	Must have a fast mode of infusion independent of set flow rate	
f	The purge rate should not be less than 1000ml/hr	
g	Display of the drug name with provision of memorising 10 to 15 names by operators	
h	Infusion volume upto 9999 ml	
i	Alarms should include empty, near empty, block, Air in line and more	
j	Should function on 220 - 240 VAC or 100 - 120 V AC, 50/60 Hz	
k	Power rating to be 100 - 240 VAC, 50/60 Hz	
l	Built in Battery up to at least 5 hours back up time	
m	Light and compact design	
n	All kinds of infusion set of different brand should be used	
o	Comprehensive warranty	
p	Country of Origin : UK/USA/Japan/China or similar	
10	Capnograph	3
	Vacuum fluorescent Display, Graphical display, user-selectable sample rate, user-selectable trend upto 16 hr, display at 12 Sec. sample rate, upto 10 hr, display at 4 sec. sample rate	
	Flow Rate 150 ml/min, + - 20	
	CO2 Measurement	
	Non-dispersive IR absorption	
	0-10% CO2 STPD (Standard Temperature Pressure Dry)	
	Display Range	
	0-100 mmHg or 0-10% CO2 or 0-13.3 kPa	
	Accuracy	
	+ - 2 mmHg, + - 0.3% + 0.3% kPa, or 4% of reading, whichever is greater, 0-10% CO2	
	Resolution 1 mmHg, 0.1%, 0.1 kPa	
	Averaging 4 breath average, or breath by breath, user selectable	
	Range 0-150 bpm	
	Averaging 4-breath average	
	Accuracy + - 3 bpm	
	SpO2, Range 0-100% functional SpO2, Accuracy + - 2% at 70-100%, + -3% at 50-69%	
	Averaging 4, 8, or 16-beats, user selectable	
	Nickel Cadmium battery 6 VDC, internal rechargeable, not user-replaceable, fully charged continuous-use life 2 hours approximate, maximum full charge time of 4 hours	
	Supplied with 5 pcs of sample line and CO2 adapter, power cord and operating manual	
	Origin : USA/Japan/Europe or similar	
11	Suction Machine with Heavy Duty (for O.T)	9
	Feature	
	Manufactured in grey white ABS (RAL 9002) high strength	
	4 extra strong casters (1 of them antistatic and 2 of them with brakes)	
	Gauge 0-100 Kpa/ 0-760mmHg	
	ON/OFF switch	
	Suction Control Knob	
	Cable Length - 3	
	Membrane Vacuum Regulator	
	Heavy duty suction	

	Pump	
	Long life piston type, oil free maintenance not required	
	Collection Jar	
	02 Polycarbonate collection jar (5 liters Scale) with safety valve to prevent overfilling	
	Collection jar support according to: EN 12218: 1998	
	Bacterial Filter	
	1 with each collection jar Hydrophobic PTFE filter. It guarantees a particle retention efficiency of 999.95% and bacterial challenge efficiency of 99.99%	
	Suction Tube	
	3m PVC Suction Tube (Q13mm out side)	
	Technical Specification:	
	Maximum Pump Flow : 70L/min	
	Maximum Vacuum : 0-93 kPa -933 mbar-700 mmHg	
	Noise Level : 45 db (A)/1 m	
	Power : 200 W	
	Voltage : 200-240 Vac (50-60 Hz)	
	Norms : EN ISO 10079-1 : 1999	
	93/42/Cee, Class IIa	
	EN 60601-1, Class I, Type BF, IPX	
	Weight : 25 kg	
	Country of Origin: UK/USA/Europe or similar	
12	SUCTION MACHINE (for Wards)	9
	Electric High Suction machine	
	Low noise 1 with jar	
	Complete with two autoclavable Jars	
	Movable Suction Unit with handle and 4 Antistatic castor	
	Main construction: cast aluminum and ABS	
	2pcs x 2,000cc Plastic Bottle or more	
	Suction Pressure Range 0-50cm H2O	
	Vacuum flow: 60 liter/min or more	
	Max HP: 200-250W 1/3HP	
	Safety device: water stop device & floating control water	
	Foot Control: yes (ON for press, OFF for release) Noise: 51.7 dB	
	Pump: oil-less single piston	
	One set of 2 extra jar with each unit	
	10 filters with each unit	
	All standard accessories must mentioned in the quotation	
	FDA approved or CE Marked	
	Country of Origin: UK/USA or Similar	
13	ECG Machine 6 channel with standard accessories	8
	With Interpretation	
	Standard 12 lead of signal acquisition	
	Real time display of electrocardiogram wave,	
	6-channel synchronous recording, ECG regular index analysis	
	Display: 5.7" color LCD or more	
	Display resolution: 320 x 240 pixels	
	Battery: Intelligent Rechargeable Battery: 170 minutes of Battery Back-up	

	Standard 12 leads	
	Anti-interference filter AC sine filter	
	MS interference filter LF/HF/DF filter	
	Power 220V 50 Hz	
	Complete with standard accessories including 12 lead ECG Cable	
	Chest electrode bulbs and 04 colored clamps	
	20 pieces of ECG Paper Roll/A4 Type	
	Power Cord	
	Operation Manual	
	FDA approved/CE marked	
	Country of origin : Japan/UK/Germany or similar	
14	Orthopaedic O.T Table	2
	Multipurpose Electro Hydraulic Operation table with table top slid function	
	System operatable with hand control switch for all electrical function and foot pump for hydraulic function	
	In case of complete failure of electrical power, table will work on manual hydraulic system	
	Hand switch control with a back lit illumination for convenient and ease of operation	
	Patient weight capacity upto 454 Kg	
	Built in x ray cassettes channel	
	Radio translucent table top	
	Self diagnosis system with instant error code display	
	USB port to integrate with OR system	
	Safety side rail, emergency stop button, hand switch with a special function of patient positioning, up and down, left and right tilt, up and down back, up and down leg, sliding function.	
	Essential function such as lock/unlock, level, flex/reflex incorporated	
	In reverse orientatin with longitudinal slide function, the joint of flex table travel over the table base allowing the C-Arm to go deep underneath of the table for imaging of total hip	
	Normal orientation slide to head end 52"	
	Normal orientation slide to leg end 15"	
	Reserve orientation slide to leg end 25"	
	Range of table movement	
	Head up : 90 degree	
	Head down 90 degree	
	Back +80 degree/-50 degree	
	Leg up 80 degree	
	Leg down 105 degree	
	Trendelungburg +/-30 degree	
	Lateral tilt +/- 20 degree	
	Patient weight	
	Longitudinal slide 12.2 inch	
	Height from floor 48 inch	
	Slide 12.2 inch	

	Orthopedic Traction Attachment	
	Abductor and other crucial parts made of radiolucent carbon fiber for optimum C-Arm use	
	Top grade stainless steel or aluminum alloy material are corrosion resistant and easy to clean and disinfect	
	Accessories for traction unit	
	Universal Pelvis rest with pad	
	Traction unit	
	Traction boot adult	
	Straight traction extension	
	Patient transfer board	
	Permal post with pad	
	Tibia and lateral counter action support	
	Abductor bar	
	Supporting stand	
	Necessary Mounting bracket, rails sockets etc	
	Country of Origin: USA/UK/Germany/Japan or similar	
15	Ophthalmoscope	3
	Direct Ophthalmoscope	
	For Ultimate control of Lenses, Graticules and Filters	
	By a touch of finger tip without the need to pull away from the patient	
	Positive action Maywheel and comprehensive lens range	
	Xenon Illumination for a brighter and whiter long lasting light	
	Swing over filters. Red Free filter for enhanced vessel examination can be used in conjunction with any of the 6 diagnostic beams.	
	Integrated Brow rest	
	3.6 V Rechargeable Lithium Battery handle	
	With Lithium-ion Battery charger. For fast charging	
	To provide over 2 hours of continuous use.	
	FDA approved/CE marked	
	Country of Origin: UK/USA/Japan or similar	
16	Defibrillator	2
	The defibrillator should be built on Biphasic concept. The modes of operation should be Synchronous and asynchronous	
	The minimum energy should not be less than 2 Joules while the maximum energy should be 270 Joules	
	ECG Derivation range should be DI, DII, DII, AvR, AvL, AvF and V1 till V6	
	The monitor screen color displayed and monitor speed should be 25mm/sec	
	Max Discharging upto 100+	
	ECG monitoring time not less than 4 hours	
	Main voltage supply should be AC 230V/1A, 50/60 Hz	
	SPO2, NIBP facility	
	Supplied with :	
a	Adult External Paddle	
b	Paeds External Paddles	

c	ECG Cable	
d	SPO2 Sensor	
e	NIBP Cuff	
f	Gel and Paper	
g	Power Cable	
h	Operation Manual	
	Country of Origin: UK/USA/Japan/Turkey/Europe or similar	
17	BIPAP Machine Invasive Non-Invasive	2
	Real-time onscreen monitoring, iVAPS (intelligent Volume-Assured Pressure Support) Pressure upto 40cm H2O at the mask, Vsync and Ti control IM, Real-time monitoring Oxygen upto 50 L/min with FiO2 monitoring, SpO2 monitoring fixed and adjustable alarms	
	Range of modes iVAPS, ST (Spontaneous-Timed), PAC (Pressure Assisted Control), S (Spontaneous), T (Timed), CPAP (Continuous Positive Airway Pressure)	
	High flow capacity: 1.5 L at 40cm H2O. Real-time data in the Monitoring menu can be viewed on the device LCD. Flow and pressure curves can be viewed simultaneously.	
	Ti bar graph offers convenient monitoring of ventilator-triggered and cycled breaths	
	SpO2 (Oxygen saturation) and FiO2 (inspired fraction of oxygen) can	
	MODES: iVAPS, ST, PAC, S, T, CPAP	
	Pressure range iPAP: 2-10cm H2O, EPAP: 2-25cm H2O	
	Ti control Ti Max 0.3-1.0 sec, Ti Min 0.1-Ti Max	
	Respiratory Rate 5-60 bpm	
	Rise Time Min. 100-100 msec (close approximate)	
	Fall Time Min. 100-100 msec (close approximate)	
	Trigger and Cycle Time sensitivity settings	
	Screen dimensions (L x W) 70mmx54mm	
	Air Filter Electrostatic Fibre mesh	
	Air outlet 22mm taper, compatible with ISO 5356-1:2001	
	Internal battery Lithium-ion, up to 2 hours at full capacity	
	Power supply AC 100-240V 50-60Hz, 2.2A, AC 110V 400Hz, 2.2A, DC 24 V/3A	
	IEC 60601-1 Classification Class II (double insulation) Type BF Continuous operation	
	Main Unit, Tube, Full face Mask, Operation Manual Power cont, Carrying Bag	
	Country of Origin : Australia/ USA/Germany	
18	Nebulizer Machine	20
	One button operation	
	Produces a fine mist as small as 5 um MMD	
	Lightweight, weight less than 3 oz.	
	Runs quietly	
	Pediatric and adult use	
	Ideal for patients experiencing asthma, allergies, COPD or other respiratory conditions	
	Kits includes	
	NEC 800 Nebulizer	
	AC Adaptor	
	5 Air Filters	
	Instruction manual	
	Storage bag	
	Air tube 100cm length	

	Mouth Piece	
	Country of Origin: UK/USA/Europe or similar	
19	Mobile Light for suturing episiotomy	2
	Illuminance 12'000	
	Color temperature 4000 - 5000 K	
	Main Voltage 220V ± 10% 50 Hz ± 1Hz	
	Rated Voltage Bulb 24V	
	Rated Power of Bulb 25W	
	FDA approved/CE marked	
20	Baby Resuscitator with Infant Warmer	1
	Infant Warmer	
	Environment temperature ± 18 C - + 30 C	
	Environment Relative Humidity 30% - 75%	
	Environment air velocity of flow <0.3m/s	
	Power requirement <1000 VA	
	Temperature control mode Pre-head, auto and manual	
	Temperature Control Range 25C - 37C	
	Temperature override mode to 38 C	
	Temperature sensor accuracy <0.3 C	
	Mattress temperature uniformity <2.0 C	
	Temperature rise time <45 min	
	Heat output indicate 0 - 100 %	
	Radiant box horizon angle adjust range 0- +90 degree step-less	
	Mattress Tray Size 68cmx56cm	
	Mattress tilt adjust range 0 - +10 degree step-less	
	Mattress tray max load 10 kg	
	Transfusion pole Max. load 2 k.g	
	Shell Max Load 2 K.g	
	X-Ray Yes	
	RS-232 Connector Yes	
	Mattress to Radiant box 81 cm	
	Heater infrared wavelength 1 - 3 um	
	APGAR Timer Yes	
	Alarm	
	Power Failure Yes	
	Sensor failure alarm Yes	
	Temperature deviation alarm ±1.0 C	
	Over temperature alarm <38.0 C < 39.0 C	
	System failure Yes	
	Packing Size 110x90x110cm	
	Net weight 85 K.g	
	Gross weight 115 K.g	
	RESUSCITATOR	
	Operating Instructions English Language	
	Manometer Range -10 to 80cm H.D (mbar)	
	Manometer Accuracy ±1-2.0% of Full Scale Deflection	

Max Pressure Relief	@ 8L/min 5 to 70 cmH ₂ O (mbar) Factory Set @ 40 cmH ₂ O (mbar)
Peak Inspiratory Pressure (PIP)	@ 5 L/min 2 to 70cmH ₂ O (mbar) @ 8 L/min 3 to 72 cmH ₂ O (mbar) @ 10L/min 4 to 73 cmH ₂ O (mbar) @ 15 L/min 8 to 75 cmH ₂ O (mbar)
Positive End Expiratory Pressure (Peep)	@ 5 L/min 1 to 5 cmH ₂ O (mbar) @ 8 L/min 1 to 9 cmH ₂ O (mbar) @ 10L/min 2 to 15 cmH ₂ O (mbar) @15 L/min 4 to 25 cmH ₂ O (mbar)
Height	250mm (9.8")
Width	200mm (7.9")
Depth	104mm (4.1")
Weight	1.9 Kg (4.2 lb)
Delivered Oxygen Concentration	upto 100% depending on gas supply
Input Gas Flow Range	5L/min (min) to 15L/min (Max)
Operation Time (400L cylinder)	@8L/min 50 minutes
Recommended Patient Body Weight	upto 10 Kg (22 lb)
Storage Temperature Range	-10 to 50 C (-14 to 122 F) upto 95% humidity
Operating Temperature Range	-13 to 50 C (9.4 to 122 F) upto 95% humidity
Country of Origin:	Newziland or similar

21 **Blood Bag Mixer/Scales** 2

100-1000 donations can be stored and later transferred to PC or Host computer
Network connection for On-Line"registration
Data registration with barcode reader
Homogeneous mixing of blood and anticoagulant with a well tested mixing procedure
Suitable for all blood bags on the market
Continuous display of collection time, flow and volume during collection
Automatic check of blood flow and collection time
Automatic counterbalancing at start of collection
Manual or automatic operating tube clamp
Preprogrammed standard volumes
Automatic calibration
Battery status on display
TECHNICAL DATA :
Power supply : 90-264 VAC or internal battery for 10 hours operation between charges
Power consumption : Max 10 VA
Fuses (built in) : PTC (Self recovery or overload protection)
Max volume (collected blood) 800ml
Accuracy : <1% of max weight
Taring range : 0-600g
Mixing cycle : 16 cycles/min
Data memory : 32000 characters (100-1000 donations or more)
PC connection : RS232 for programming, 9-pole Dsub male
Network connection: RS485 (multidrop), RJ11 6/4 modular (optional blue tooth)
Barcode reader connection: RS232, 9-pole Dsub male

	<p>Extra output External display, RJ11 6/6 modular (optional)</p> <p>Dimensions 290 (L) x 253 (W) x 150 (H) mm</p> <p>Weight 4.8 kg incl. battery</p> <p>Symbol Protection type B equipment</p> <p>CE Marked or FDA approved</p>	
22	<p>Microscope (LED Illumination)</p> <p>Dual Head Face to Face</p> <p>Specification :</p> <p>Main Body</p> <p>Optical System CFI 60 Infinity Optical System, Parfocal distance : 60mm</p> <p>Illumination High Luminescent white LED illuminator (Eco-illumination)</p> <p>Eye pieces (D.O.F) CFI E 10x(20mm) CFI E 15 x (12mm)</p> <p>Tubes E2 TB Binocular Tube</p> <p>E2 TF Trinocular Tube, Eye piece/Port 100/0, 0/100, 360 degree rotatable</p> <p>E2 TE Ergonomic Binocular Tube, Inclination: 10-30 degree, Extension: upto 40mm</p> <p>Nosepiece Quadruple nosepiece (within main body)</p> <p>Stages Rectangular stage (within main body) with specimen holder, Cross travel: 78 (X) x 54 (Y) mm</p> <p>Objectives (NA / W.D. (mm)) CFI E Plan Achromat 4x (0.10 / 30)</p> <p>CFI E Plan Achromat 10x (0.25 / 7.0)</p> <p>CFI E Plan Achromat 40x (0.65 / 0.65)</p> <p>CFI E Plan Achromat 100x oil (1.25 / 0.23)</p> <p>CFI Achromat DL and other high grade CFI 60 Objectives</p> <p>Condensers E2 Abbe condenser NA 1.25</p> <p>E2 Phase condenser NA 1.25</p> <p>Observation methods Bright field, Epi-fluorescence, Dark field, Phase contrast, Simple polarizing</p> <p>Intermediate attachment Y-THF Teaching Unit (Face to Face)</p> <p>Power consumption (max) Normal value: 3 W (LED model)</p> <p>CE Marked or FDA approved</p>	7
23	<p>Plasma Thawing Bath Large Size (Water Bath)</p> <p>Specification:</p> <p>Thawing Capacity: 8 bags</p> <p>Chamber Volume (gal / liter) : 8.5 / 32</p> <p>Chamber material: Stainless steel</p> <p>Baskets: Stainless steel</p> <p>Chamber Drain Time (minutes): 5.5</p> <p>Exterior Dimensions (W x H x D) (in / mm): 18.5 x 16.25 x 22</p> <p>470 x 413 x 559</p> <p>Chamber Dimensions (W x H x D) (in / mm): 15.5 x 11 x 15</p> <p>394 x 280 x 381</p> <p>Electrical: 100 V / 50Hz / 12A</p> <p>115V / 50/60Hz / 10A</p> <p>230V / 50/60Hz / 5A</p> <p>Net Weight: 74lb / 34 kg</p> <p>CE Marked or FDA approved</p>	2
24	<p>Blood Bag Sealer/Tube Sealer</p> <p>Specification :</p>	2

Technical Data :

Voltage demands: 100/115/230/240 VAC 50/60 Hz

Power Consumption: 220 VA

Internal fuse: Protection for high current, type PTC

Sealing time: Adjustable 0.5 - 5 sec

Frequency 40.68 MHz

Output rf power: 70W

Dimensions: 290(L) x 220 (W) x 88(H) mm (incl. rf-outlet)

Weight 4.1 kg

Operation: Continuously

Classification: Protection against electrical shock: class I type B

Safety approval: emission EN55011 group 2 class B

Bench unit: 180(L) x 75(W) x 75(H)mm

Weight 1 kg

Length of cable: 1.9 m

Sealing handle: 206(L) x 35(H) x 27(W) mm

Weight: 0.3 kg

Length of cable: 1.9 m (4.3 m or 9.2 m cable is available as an option)

CE marked or FDA approved25 **Blood Bank Refrigerator**

2

Specification :

Capacity: 51.1 Cu.Ft. (1447 Liters)

Temperature Range: +1 degree C to +6 degree C

Cabin: Upright

Door: Single/Double Glass

Drawers: 12

Interior Dimensions (H x D x W) : 58.0 x 29.0 x 52.5 inches

Exterior Dimensions (H x D x W) : 70.2 x 36.4 x 56.5 inches

Electricals: 230 V

Features:

Heat free defrost for maximum uniformity

Stainless steel interior (rustproof)

Four casters, front two are lockable

Bright LED interior lighting

Temp test electronic probe/alarm test

Built in remote alarm contacts

Optional equipment:

Additional Shelf (to the standard equipment)

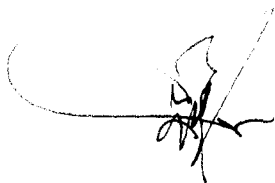
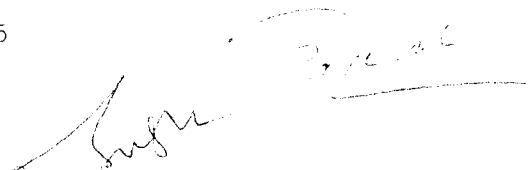
Capacity per drawer app. 60 blood bags, each 450 ml size (drawer inner dimensions: w x d x h = 58.0 x 29.0 x 52.5 inches)

Additional cross and length dividers.

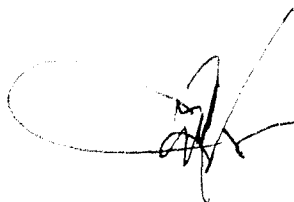
Antifreeze against sub-zero temperatures.

Visual and audible alarm signal, even in the case of power failure (the monitoring unit remains in operation for approx. 72 hours on battery power)

LED illumination on top

	Glass door with lock	
	Door fitting	
	Equipped with castors	
	Condensate container can be emptied manually if no condensation is required (e.g. in an operating theatre)	
	GSM Module for alarm text message transmission (e.g., to a mobile phone)	
	Temperature documentation:	
	4 pin PT 100 / PT 1000 temperature sensor, class 1/3 B, including built in Reference body	
	Disc type pen recording thermometer, with 7 day measuring cycle	
	Incorporated with 100 recording discs and 5 felt tip pens	
	Mechanical pen-recording thermometer with two waxed paper strips	
	CE marked or FDA approved	
26	Arthroscope (full system)	1
	HD TELESCOPE	
	HD Arthroscopic 4mm, 30° Eyecup for Shoulder, Knee and Hip with Sapphire lenses which provides greater resistances to scratching, resulting fewer repair. Enhanced distribution light which provides the ultimate resolution and over all image quality	1
	HD Arthroscopic 4mm, 70° Eyecup Scope with Sapphire lenses which provides greater resistances to scratching, resulting fewer repair. Enhanced distribution light which provides the ultimate resolution and over all image quality	1
	SHEATH FOR 4mm HD TELESCOPE WITH DUAL STOPCOCK	
	50MM / STOPCOCK SHEATH SET	1
	HD CAMERA SYSTEM	
	HD Camera System With Camera Head	
	HD CAMERA CONTROL UNIT	1
	HD CAMERA HEAD	
	HD EYECUP CAMERA HEAD, 720p, 1080i, 1080p selectable	1
	FULLY AUTOCLAVABLE	
	Technical Features	
	HD Camera (Generation, Enhanced / High Definition, NTSC - preferably PAL Camera System)	
	Resolution: 1920 x 1080 Pixels, Sensitivity 0.1 lux	
	A keyboard for reporting / teaching purpose.	
	Electronic Zoom Up to 1.5x, all progressive video outputs, controllable by camera head	
	* Fully Autoclavable	
	Picture in picture (feature as per usage / requirement)	
	Networking interface port and image storage facility	
	Camera Head with multiple remote buttons	
	Protection against electric shock	
	Upgradable FPGA platform, True Autoclavability	
	IEC 60601-1 Equipment Classification: Type BF, Class I, continuous operation when used with a Type BF Camera Head.	
	Type Operating Requirements:	
	Input Voltage 100 -240	
	Frequency 50 / 60 Hz	




Power Consumption	300 W Fuse: 11.0A/250V	
Line Frequency Leakage	Chassis to Ground (L20VAC) < 100 A	
Video Outputs	1 Composite 1.0 Vp-p, Sync Negative, 75 ohms 1 Y/Cb/Cr 1.0 Vp-p, Sync Negative, 75 ohms 1 (NTSC) 286 Vp-p, Burst, 75 ohms 1 (PAL) 300 Vp-p, Burst, 75 ohms 2 DVI-D (Digital) 2 HD-SDI per SMPTE292M (High Definition Television (HDTV))	
HD Output Resolutions	1280 x 720, 1920 x 1080	
Scanning Frequency	Vertical - 59.94 Hz (NTSC) 50 Hz (PAL)	
Shutter Speed	1/60 sec. to 1/10,000 sec.	
Remote Output	Isolated contact closure, signal duration = 0.5 +/- 0.1 sec.	
White Balance	Automatic, triggered by front panel or camera head button	
White Balance Range	2800K to 6500K	
Digital Enhancement	All video outputs	
DIMENSIONS		
Controller	14.0" [H] x 14.0" [W] x 14.0" [L], 10.2 cm [H] x 35.6 cm [W] x 35.6 cm [L]	
Camera Cable	10 ft [3 m]	
XENON LIGHT SOURCE		
100W XENON LIGHT SOURCE		1
SPECIFICATIONS		
	100 Watt Xenon bulb	
	Manual light intensity adjustment	
	Olympus style light guide receptacle	
	Improved light distribution	
Light Guide Cable (Autoclavable)		
UNIVERSAL LIGHT GUIDE 5MM 10 FEET		1
	Superior Fiber Optic Light Transmission	
	Light Weight and Flexible	
	5mm Thick and 10 feet Long	
Universal Fitting		
	GUIDE FITTING COPTA/STORZ/OLYMP	1
	LT GUIDE FITTING WOLF/DYONICS	1
MEDICAL GRADE MONITOR		
HD LCD MONITOR WITH FIBER INPUT, 26IN., 66CM		1
LCD Panel Type	TFT Active Matrix LCD w/ On AR-coated protection panel	
Resolution (W x H)	1920 x 1200 (WUXGA)	
Picture Size (W x H)	Approximately 21.7 x 13.6 Inches (551 x 345 mm)	
Picture Size (Diagonal)	26 inches (660 mm)	
Aspect	16:9	
Contrast Ratio	1000:1	
Luminance	100 cd/m ²	
Viewing Angle	89 / 89 / 89 / 89	
Dimensions (W x H x D)		
Inches	24.5 x 16.6 x 4.0	
mm	622 x 422 x 102	
Weight	18.2 lbs (8.5 kg)	
ARTHROSCOPIC SHAVER SYSTEM		
POWER CONSOLE 230 VOLT		
Capable of operate 24 different hand pieces		
Capable to operate 2 Hand pieces simultaneously with		

built in pump for irrigation	
Foot control	
SHAVER HANDPIECE	
2 BUTTON SHAVER HANDPIECE	1
Forward Speed 500 - 12,000 RPMs	
Oscillate Speed 500 - 2500 RPMs,	
Single and Multi - turn oscillate	
Weight 1.8 oz (505 g)	
BURS FOR SHAVER HANDPIECE	
4.2MM FULL RADIUS RESECTOR, (BX/6)	1 BX
4.2MM STERLING MAKO, (BX/6)	1 BX
4.2MM MENISCUS CUTTER, (BX/6)	1 BX
4.2MM STERLING SPHERICAL BUR, (BX/6)	1 BX
4.2MM STERLING TAPERED BUR, (BX/6)	1 BX
FLUID SYSTEM	
Irrigation Console 10K	1
Specifications of Pump	
Maximum Flow 2000 ml / min	
Pressure Range 30 - 150 mm Hg	
Weight 7 lbs	
Dimensions 17.5"w x 6.5"h x 8"d	
Voltage 90 - 240V	
Includes 10' (3m) power cord	
Autoclavable Remote Hand Control	1
Arthroscopy In/Out Flow Tube Set	1 BX
ARTHROSCOPIC HAND INSTRUMENT SET	
SST BLUNT 2.75MM STRAIGHT	1
SST BLUNT TIP 3.4MM STRAIGHT	1
45° FORCEPS 2.75MM BLUNT LEFT UP 15°	1
45° FORCEPS 3.4MM BLUNT, RIGHT	1
MICRO SCISSOR 2.75MM STRAIGHT	1
MINI TIP 2.75MM STRAIGHT	1
MINI TIP 2.75MM UP CURVE 15°	1
INSPECTOR 3.4MM STRAIGHT	1
MINI AGGRI SSOR UP CURVE 15° 2.75MM	1
LIFE FORCE SSOR FORCEPS STRAIGHT 3.4MM	1
AGGRI SSOR 3.4 FORCEPS STRAIGHT	1
AGGRI SSOR 3.4 FORCEPS 15° UP	1
AGGRI SSOR 3.4 FORCEP 15° RIGHT	1
AGGRI SSOR 3.4 FORCEPS 15° LEFT	1
90° ROTARY FCPS 3.4 MM BLUNT RIGHT	1
90° ROTARY FCPS 3.4 MM BLUNT LEFT	1
ALLIGATOR GRASPER 3.4 MM STRAIGHT	1
ALLIGATOR GRASPER 4.5 MM STRAIGHT	1
STRAIGHT 3.4MM LEFT BITE	1
15° UP 3.4MM RIGHT BITE	1
INSTRUMENT CASE	
SHUTT MASTER SET INST. CASE	1
MOBILE CART	
VIDEO CART 230V	1
Basic Mobile cart rides on 4 antistatic dual wheels,	
2 equipped with locking brakes	

	5 adjustable shelves	
	1 Camera mount Power Box socket board with 12 plugs	
	Dimensions: 52" H x 27" W x 29" D (135 cm H x 69 cm W x 73 cm D)	
	COUNTRY OF ORIGIN: USA / EUROPE / JAPAN or similar	
27	Pneumatic Tourniquet (including Paed Cuff)	2
	Electronic Tourniquet	1
	Features of the 2nd Dual Channel Electronic Tourniquet with	
	internal power supply which requires no external compressed	
	air supply, comes with mobile stand & cuff supply hoses	
	Technical Specifications	
	Visual and Audible Warnings for battery, leaks and calibration	
	Battery Back up 8 hours	
	Pressure range: 0 - 600 mmHg	
	Positive feet push buttons - Inflate / deflate functions	
	Easy to clean - Low maintenance	
	Dual Channel System - Single or Dual Channel operation	
	Quick release hosing, for easy of storage	
	Colour coded channels from controls to cuff	
	TOURNIQUET CUFFS:	
	Cuff for Paediatric (305mm x 60mm)	1
	Cuff for Adult Arm (460mm x 100mm)	1
	Cuff for Small Leg (610mm x 100mm)	1
	Cuff for Adult Leg (860mm x 100mm)	1
	Cuff for Xi Adult Leg (1070mm x 100mm)	1
	Cuff for Paediatric Double (305mm x 60mm) Bier's Block	1
	Cuff for Adult Arm Double (460mm x 150mm) Bier's Block	1
	Cuff for Large Adult Arm Double (610mm x 150mm) Bier's Block	1
	Rhys Davies Exsanguinator	1
	Esmarch Bandage 5.5m Latex Free	1
	COUNTRY OF ORIGIN: USA / EUROPE / JAPAN or similar	
28	Pneumatic Drill with accessories	1
	Pneumatic Handpiece with	1
	Forward, Safe and Reverse Activated on Handpiece	
	Speed & Torque Variable with Different Attachments Gear System.	
	Twist Lock Quick Change Attachment	
	Progressive Trigger Action	
	Cannulations 5.1mm	
	1/4 JACOBS CHUCK ATTACHMENT	1
	AO SMALL ATTACHMENT	1
	AO REAMER ATTACHMENT	1
	DHS REAMER ATTACHMENT	1
	REAMING ADAPTOR HUDSON	1
	HIGH SPEED DRILL ATTACHMENT	1
	Wire Driver Attachment Cannulations 0.71 mm- 1.57 mm dia.	1
	Pin Driver Attachment, Acceptance of Wire Sizes (1.98 - 3.17mm)	1
	UNIVERSAL HOSE 10'	1

	NITROGEN REGULATOR	1
	STERILIZATION CONTAINER	1
	COUNTRY OF ORIGIN: USA / EUROPE / JAPAN or similar	
29	CPAP/BIPAP Mask USA or similar	5
30	C-Arm Image Intensifier High Frequency (40 KHz) Mobile C-Arm/9" Image Intensifier/100 Frame Image Memory/2 Nos 17" Monitors Image Intensifier: Image Intensifying Tube : 9 inch, triple Field Normal - 9", Z1=6", Z2=4.5" Field Size : 23 cm Output Image diameter : 20mm CCD Camera Half Inch in size, High Resolution Compact CCD Camera Monitor 2 Nos 17 inch Monitor alongwith a trolley C-Arm Mobile Stand Rotation : ± 180 Degrees Motorised Up/Down :130 mm Horizontal Travel :200mm Arc Orbital Movement 90 Degrees + Degrees Wig Wag 25 Degrees total X-Ray Generator Tube Head 40 KHz Stationary Anode Tube focal spot 0.6mm (FLR) & 1.5mm (RAD) Max Voltage 120 KV Fluoroscopic mA 0.1-4mA Radiographic mA 30mA to 100mA Invertor AC/DC Converter for H.F X-Ray Generator Mains Voltage 230V AC +-10%, 50 Hz Max output power 6 KW Control Digital Display of KV-40 to 110. User Selectable Technic Selection: Fluoro & Rad. Mode Selection Radiographic Timer: An inbuilt Rad. Timer enables to select mAs in steps up to 200mAs max Fluoroscopic Timer : 5 minutes cumulative Timer with Buzzer Fluoro Ma: 0.1-5 mA, continuously variable. Monoblock Temp. Sensor : Thermal Safety cut off provided Fault Status: Various LED's indicate the faults Automatic Brightness Control Digital image memory systems 100 Frame Digital Memory with following features	1

	Feature of livepulseLHF	
	Averaging 1 to 16 frame	
	Contrast enhancement function	
	Temp. & permanent storage upto 100 frame	
	Negative Image feature	
	Zoom feature (x2&x3)	
	Mirror feature	
	Image rotation feature	
	PAN drive provision	
	Keeps date & time	
	PC connectivity through LAN port	
	Quad View	
	CE Certified	
31	3-D OCT with Latest Swept Source Technology included Built-in Non-Mydriatic Retinal Camera, Anterior Segment OCT and Fluorescein Angiography + Auto Fluorescein with branded computer	1
	Features:	
	Specifications:	
	Scan Mode OCT, Color, Red-free (Digital), FA Photography, FAF Photography	
	Scan Speed 100,000 A-Scans per second	
	Picture angle -43 degree	
	Diopter Scale range -13D to +12D (in Fundus Photography)	
	Photography method Flash photography	
	Operating Distance 40.7mm (Fundus Photography) 63.7mm (Anterior Segment Photography)	
	Photography diameter of Pupil : (for OCT) 4mm or more small pupil diameter 3.3mm or more	
	Photographable diameter of Pupil : (for OCT) 2.5mm or more	
	Tracking 3D IR Tracing Function	
	Enhanced Choroidal Visualization	
	3D Wide (12x9mm) Scanning Mode	
	Scan Range : Horizontal direction 3-12mm Vertical direction 3-12mm	
	Lateral Resolution : 20 μ m	
	In depth Resolution 8 μ m	
	Fixation target Adjustable Internal Matrix LCD External Fixation Device	
	Touch Screen LCD	
	Light source Swept Source	
	Wave Length 1050nm	
	Auto Focus/auto Shoot/auto Central detection for Retinal Camera	
	Auto focus/auto Z and Z lock/auto polarization for shooting OCT	
	Country of Origin: USA/UK/Japan/Germany or similar	
32	Ocular B Scan Ultra Sonography Machine	1
	PC based device compatible with Windows operating system, portable, easy to use, up to date IOL calculation	

	with post refractive formula	
	Upgradable for Pachymeter	
	Patient data record	
	A Probe Frequency 11MHz	
	Contact and Immersion method	
	Electronic resolution 0.03mm	
	Types of measurement: Anterior chamber lens, vitreous, total length, automatic	
	Number of measurements : 10	
	6 Formulas for implant calculation: SRK-T, SRK II, HOLLADAY, BINKHORST-II, HOFFER-Q, HAIGIS	
	Pre-Op and Post-Op and Post-Op keratometry	
	6 different methods for keratometry correction implant calculation: history derived, retraction derived, and contact lens method, ROSA regression, SHAMMAS regression, double K, SRK-T (Dr. ARAMBERRI's formula)	
	B Probe 10MHz	
	Adjustable Gain upto 110dB	
	Unlimited Image storage	
	Axis resolution 200 micron	
	Lateral resolution 600 micron	
	Automatic video recording with Cineloop	
	Adjustable gain at frozen Image	
	Post process, markers, calipers, Area, Angles and comments	
	CV adjustment on B Scan Image	
	Movie of 100 B Scan images	
	Country of Origin : USA/ EU, or similar	
33	Phacoemulsification Machine	1
	SPECIFICATION :	
	U/S Power U/S power is defined as being proportional to ultrasound displacement	
	Ultrasound Modes (Fix/Linear) Range	
	U/S continuous 0-100%	
	U/S Pulse (0-100%) 5-100 pps (depending upon % Time on)	
	U/S I/A U/S Epi mode 0% 100%	
	U/S Burst (0-100%) 5 to 500ms	
	U/S Intini Hand Piece 4 Piezo electric crystal, 20gm light weight	
	Frequency 40 KHz (39.0+- 1.9KHz)	
	Irrigation mode Through Foot Switch/Fred Flow (Irrigation Continuous)	
	Vacuum 0-650mmHg+(Fix/Linear)	
	Fluidic System Enhanced Fluidics	
	Low compliance membrane technology for improved Chamber stability, surge supression & Quick responses	
	Aspiration (Aspiration flow rate) 5-60cc/min (Fix/Linear)	
	Pump Advanced Peristaltic	

	Irrigation Gravity Valve controlled	
	Irrigation/Aspiration modes	
	I/A Cortex 0-650mmHg+, range available	
	I/A Cap Vac 0-650mmHg+, range available	
	I/A visco 0-650mmHg+, range available	
	Anterior Vitrectomy Electrically driven	
	Greshaber cutter 20-Gauge guillotine (Auto Claveable)	
	Sub modes Cut I/A, I/A Cut	
	Cut rates 10 to 1500 cuts/minutes	
	Vacuum	
	Coagulation 10 watt max, 75 ohm	
	Power required 220-240V, 50/60 Hz	
	Graphic Interface User's guide programmed	
	Customised Foot Switch Programmable four switch with treadle	
	Micro coaxial capability Enhances surgeon's capabilities	
	Vacuum pressure sensor Non invasive optical vacuum pressure sensor for quick responses Designed to minimize surgical complications	
	Phaco Tip options A full line of phaco tip design including Kelman, ABS, Flared & tapered	
	Laureate Word Phaco System Includes	
	Laureate Console	
	Anfiniti U/S Hand Piece	
	Ant, Vitrectomy hand Piece	
	Greshaber Vitrector	
	Foot Swith	
	Dust Cover	
	I & A coaxial hand piece	
	Cassettes for Phaco Machine	
	Sleeves for hand piece	
	Stabilizer	
	Country of Origin : USA/Europe or similar	
34	Fiber Optic Sigmoidoscope Set	1
	Includes:	
	15 mm x 15 cm Pediatric/Stricture Speculum only with Obturator	
	19 mm x 25 cm Standard Sigmoidoscope, Speculum only with Obturator	
	23 mm x 7 cm Fiber Optic Anoscope, Speculum only with Obturator	
	Light Handle with 3 ft Cord	
	Transformer with 5 ft Cord	
	Complete Insufflation Bulb	
	6 V Halogen Lamp	
	50 cm Suction Tube (standard)	
	Carrying Case	
	Features:	
	Halogen light for true tissue color and consistent, long-lasting illumination	
	Fiber optics provide a cool distal ring of light with no reflection, no obstruction	
	Made from autoclavable stainless steel for convenience and durability	
	Hinged window with a neoprene seal avoids fogging during insufflation.	

	<p>Graduated tube with removable tip for fiber cleaning (metal only)</p> <p>Compatible with available adapters to fit most Welch Allyn power handle</p> <p>FDA approved/CE marked</p> <p>Country of Origin : USA/UK/Japan or similar</p>	
35	<p>Operating Drill Machine with Hand Piece and Bur</p> <p>Motor control unit with two motor connectors and integrated irrigation pump power supply 100-240 VAC, 50/60 Hz</p> <p>Consisting of</p> <p>Motor control unit</p> <p>Power cord</p> <p>Silicone tubing set Sterilizable</p> <p>Clip set Sterilizable</p> <p>Clip set Sterilizable</p> <p>High Performance Micro Motor for use with Shaver and connecting Cable</p> <p>Connecting Cable to connect High-Performance Micro Motor</p> <p>Drill Handpiece angled length 12.5cm, transmission 1:1 (40,000 rpm) for use with high-performance micro motor and straight shaft burs</p> <p>Tungsten Carbide Shaft Burs, stainless, Size 006-070, length 7cm set of 15 (Reusable)</p> <p>Cleaning Instruments:</p> <p>Oil dropper</p> <p>Special lubricant for stopcocks</p> <p>Oil for instruments, Bottle of 50ml</p> <p>Cleaning Brush, length 58cm, O.D 16mm</p> <p>DUKw.L.H. for polishing metal sheaths and instruments</p> <p>Cleaning Brush, length 35cm, O.D 11mm</p> <p>Cleaning Brush, length 35cm, O.D 7mm</p> <p>Cleaning Brush, for outer Sheaths length 50cm</p> <p>Brush for Cleaning sharp jaws</p> <p>Footswitch</p> <p>Country of origin USA/Europe/Japan or similar</p>	2
36	<p>Multiheaded Microscope (5 Headed)</p> <p>Minimum of five headed Microscope with 45 degree binocular tube</p> <p>Objective Hi plan or Achromat 4x, 10x, 20x, 40x, 100x</p> <p>Abbe condenser for bright field and phase contrast</p> <p>All stations 360 degrees rotatable with ergonomic tubes</p> <p>Coarse and fine focusing</p> <p>LED illuminated</p> <p>Photomicrography attachment required with digital camera alongwith all accessories</p> <p>Over head projection system</p>	1
37	<p>Immunoflourescen Microscope</p> <p>Infinity optical (for Fish Technique as well)</p>	1

condenser lens CL/LS
 Built in filter system dual filter orange blue Dapi
 LED illuminator
 Ergostage
 Hi plan objective or Plan Achrom infinity objective
 Coarse and fine focusing
 Standard tube (tricolor for eyepiece)
 Bright light and fluorescence for visualization (epifluorescence)

38 **Centrifuge Machine 12 Hole** 6
 High speed centrifuge machine
 More than 10,000 pm (12 Holes)
 Standardized centrifuge machine
 with 4000-5000 pm (12 holes)

39 **Centrifuge Machine 24 Hole** 6
 High speed centrifuge machine
 More than 10,000 pm (24 Holes)
 Standardized centrifuge machine
 with 4000-5000 pm (24 holes)

40 **Cell Separator** 2
 Fully automated microprocessor controlled continuous flow centrifugal based cell separator floor
 top
 Preferable single/double needle operation with continuous flow
 Mobility should be very easy
 Extra Corporeal Volume should be lesser than 200ml
 Monitors & Alarm Systems
 There should be pressure sensors and air detector to prevent air in return line
 Must have integrated tube sealer
 Optical sensors to monitor density in the plasma/collect line or red blood cell spillover
 Display panel providing instructions and system messages
 Centrifuge chamber with interlocking door and cover
 Programmable fluid balance and automated procedure endpoint calculations
 Low total blood volume (TBV) application
 Can perform following procedures:
 a) Therapeutic Plasma Exchange (Single and Dual Needle) with automated fluid balance controlled
 by system
 b) RBC Exchange with automated fluid balance controlled system
 c) Stem Cell(MNC) Collections
 d) Granulocyte Collection
 e) Bone Marrow Processing
 f) Platelet/WBC Depletions
 g) Therapeutic Plasma Exchange with Secondary Plasma processing
 Platelet collection

41	Platelet Agitath with Incubator Chamber 2 pc PS 54 Platelet Agitator Temperature range: 20 C to 35 C Interior Chamber: Stainless steel Door window with triple glass Programmable microprocessor control system Digital display with 0.1 C resolution High density injected polyurethane insulation Alarm system for high and low temperature power failure temperature sensor failure and open door Re-chargeable battery for alarm system Remote alarm outlet NC contact for alarms Battery operated 7 days chart recorder Int. Dim.s (WxDxH): 535x545x1050 mm Ext. Dim.s (WxDxH): 665x845x1735 mm 230 V 50/60 Hz CE Marks Country of Origin : USA/UK/Europe/France/Turkey/Korea	2
42	Hematology Analyzer (for Blood CBC Test) Analysia samples by one button Aspiration probe cleanable automatically avoid the carry-over Changing from the mode of peripheral blood to venous blood by one key The appropriate calibrate programme can calculate the peripheral blood and venous blood respectively and save the results automatically Internal Real-time monitoring system (continual supervise the micro hole, liquid circulating system and reagent residue) automatically. apparatus timely. increasing the reliability of operation avoid and remove the jam Open shell to help maintain the liquid circulating system Special WBC analysis category menu sieve the abnormal samples Safe reagent without any harm to environment Fully automatic automatization Capable of blanking at automatic zero setting Samples Volume: 10 ul (distal blood) 20ul (venous blood) Through Put: 60 test/hour Measurement Theory: Electro impedance, photometric analysis Display: LCD displaying all the reading results of sample Storage: 200 000 results including histograms Printing Mode: Internal thermal printer or interface to external printer Data Input: Keypad (mouse and keyboard available) Output: RS232, USB, Interned access, available for LIS System Dimension: 43cmx32cmx50.5cm Weight: 20 K.g Voltage/Power: AC110-220 unlimited 50/60 Hz 180 VA Country of Origin: USA/UK/Europe or similar	1

Handwritten signatures and initials are present at the bottom of the page, including a large signature on the left, a signature in the middle, and initials on the right.

43	Cell Washer Description : Fully automatic cellwash centrifuge for 24 tubes 12x75 mm or 10x75mm Adjustable cell suspensions "Water-Alarm" (If water is used instead of NaCl solution) Max. Speed: 2500 rpm, max. 780 g (RCF) Speed and g (RCF) are displayed Centrifugation time and speed are adjustable Speed, time and functions are displayed in English, French, German, Italian, Spanish or Portuguese Dimension : (WxHxD): 31cmx27cmx40cm Weight : 9.2 kgs Power Requirement : 110-240 V 50-60 Hz Country of Origin : Switzerland/France/Germany/Europe/USA/Japan	1
44	Head Light LED Headlight, white light, light weight model, control unit and rechargeable battery box on headband, charging unit illumination area adjustable from 30-150 mm in diameter with 40cm working distance Consisting of LED Headlight Control Unit Battery Box 2x Battery Pack Charge USB Headband Country of Origin : Germany/Europe/USA/Japan or similar	4
45	Nerve Stimulator with isolated needle	4
46	Electro Cautry Machine A multi function electrosurgical generator with both monopolar and bipolar modes, self-diagnostics, and recall of stored power settings. Upon installation physicians experience simple use, precise tissue therapy and years of safe, reliable operation Output Power 0 to 20 watts High 0 - 35 Watts Bipolar 0- 35 Watts Standard Accessories	1

	Electrolyse Disposable Sharp Tips/Sterile	5 Pcs	
	Electrolyse Disposable Blunt tip/Sterile	5 Pcs	
	Hand Piece	1 Pc	
	Wall Mounts	1 Pc	
	Power Cord	1 Pc	
	Patient Plate	1 Pc	
	Foot Switch	1 Pc	
	Country of Origin : UK/USA/Europe or similar		
47	Digital EMG/NCV System		1
	System is extremely intuitive user interface as well as the high computation power made the system an outstanding working tool		
	Large variety of basic and advanced tests for the investigation of clinical EMG and nerve conduction are available. In particular, the software shows several key features such as the complete customization of the report in Word format, which is also made available during the exams recording for a quick and effective analysis of the acquired traces, the optimization of the workflow by fast links, which allow to quickly switch between different exams following diagnostic requirements, and the network management of data on Galileo platform.		
	The system is able to record with the best accuracy the electromyography signal of interest		
	SPECIFICATION		
	Number of channels: 2,4,6, (option)		
	Noise: 0.3uVrms (0.1-100Hz) < 20nV/VHz (10-10 KHz)		
	CMRR: >100dB IMRR: >130dB		
	Input Impedance >1000uM mega//8pF		
	Input Dynamics: 250mVpp		
	Bandwidth: from 0.1 to 20 KHz @ -6dB		
	A/D CONVERSION		
	12-bit converter for each channel 24 bits E/A		
	Amplitude Resolution: 164 uV/bit		
	Sampling: 4194 KHz		
	Data storage rate: 32768 Hz		
	Data storage format: Floating Point 32 bit		
	Digital filtering		
	1 degree order IIR high pass filter, -3dB cut-off		
	0.1, 0.5, 1, 2, 5, 10, 20, 50, 100, 200, 500 (Hz)		
	2 degree order IIR high pass filter, -3dB cut-off		
	20, 30, 50, 70, 100, 200, 300, 500, 700		
	1K, 2K, 3K, 5K, 7K, 10K, 20K (Hz)		
	roll: +20% (slope-12dB/oct, digital)		
	Notch filter: 50/60 Hz > 40dB attenuation		
	Max DC Offset (AC mode): + - 500mV		
	Continuous raw data storage		
	Impedance check on all channels with sine wave at 256 Hz		
	High fidelity EMC audio signal using E/A/D conversion at 32 bits		
	Free run, auto trigger (with amplitude threshold), internal, external		
	High/low active selectable TTL signal in input on the		
	"Trigger IN" port and in output on the "Trigger OUT" port		
	2 independent stimulation sites controlled by software/hardware and remotely current: 0-100 mA (resolution: 0.1 mA)		
	Frequency: 0-100 Hz on burst up to 500 Hz		
	Duration: 50-1000 us (resolution 50 us)		
	COMPONENTS:		
	Amplifier		

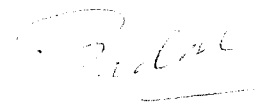
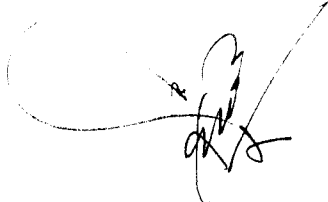
Connection cable to PC
Accessories kit
LCD Color Monitor
CPU Dell
Printer
Trolley (local)
Country of Origin: Italy/UK/USA or similar

48 Endoscope 0 degree 1

49 Endoscope 12 degree 1

50 Endoscope 30 degree 1

51 Endoscope 45 degree 1



LIST - B		
52	Medicine Trolley Size 18x21x36" Constructed completely with stainless steel Grade 304 Two drawers and three shelves are provided to place equipment and store supplies Mobile on four 100mm castors	6
53	BP Apparatus Mobile Mercurial Sphygmomanometer Basement Zinc die-casting Size 43 x 43 x 110 x 140 cm Cuff Cotton 14 x 54 cm (gray) Valve Standard type Glass Tube 3 mm (diameter) x 311 mm Stand height flexibility range 300 mm Master Package 3 unit @ 1152 m, 16 kg OR SIMILAR	12
54	Split Airconditioner 1.5 Ton With Pipe 10 Feet & Fitting with Electric Points, Cut out/Circuit Breaker Wire & Fitting and Bracket One year warranty 3 years compressor warranty Mitsubishi/General or Similar	16
55	Window Airconditioner 1.5 Ton with Electric Points, Cut out/Circuit Breaker Wire & Fitting One year warranty 3 years compressor warranty Mitsubishi/General or Similar	10
56	Geezer 30 Gallon Lamp or similar 2 years lamp warranty	3
57	Refrigerator Large Size Double Door Size 18 Cu Feet One year warranty Dawalance/Waves or similar	3
58	Deep Freezer full size Size 13 Cu ft or more Double Door Horizontal Type Waves/Dalance or similar	3

59	Nitrogen Cylinders Size 6.73 Cum New Brand	10
60	Dressing Trolley Size 18x27x36" Trolley dressing all stainless steel Carriage 2 trays or shelves supporting rings close to top shelf to support round basin-bowl, capacity approx 4 liters support ring to lower self to support round bucket-pail capacity approx 12 L with one Basin & one Bucket, mounted on 4 anti-static swivel wheels 2 wheels with brakes	8
61	Camera Canon DSLR Model 5 D Mark-III Kit 24-105	1
62	Canon Lens 70-200 2.8L	1
63	Canon Flash 600 RT	1
64	Memory Card SD 32 GB	2
65	Try Port	1
66	Kit Bag	1
67	Tower Type Air Conditioner 4 Ton Acson/Daikin/Gree 1 year warranty with installation	5
68	Instrument Trolley Steel Top Frame Square Pipe Powder Coated. Upper Shelf with Side Rails Stainless Steel With Two Stainless Steel Shelves Size W18" x L27" x H36" with 3" wheels	8
69	LED Smart T.V 42 inch Sony/Samsung	3

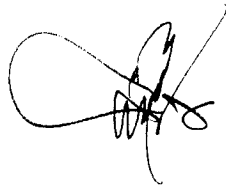
70	NVR Biometric Time Attendance Surveillance Machine IP CCTV NVR System HD IP NVR 16 Channel 2 WiFi Supported WD 3 TB Hard Disk for Recording LED 19 inch	1
71	Biometric System 2K Software Multi Function 5 in 1 Face recognition, Finger Print & RFID Standalone Machine 1 year warranty Acrylic Wall Box Network & Power Cabling including Channel Fitting Installation charges including Biometric Machine Installation Software Support, Network with Attendance Machine connectivity. UBNT Nano Station M5 WLAN 50 Ghz Point to Point Bridge Long Range Wireless Access Point Cat6 S/UTP Network Cable Box 1000 Feet HD IP Camera 2 MP Model IPC-HFWI200 IR Night Vision UPS 750 VA/500 Watts. Uninterruptible Power supply, 15 Minutes Backup Time Maintenance Free Battery 4U Network Wall Mount Rack	5
72	Pharmaceutical Fridge 2 to degree C Double Door	2
73	Electric Water Cooler	3
74	Echo System with Speaker	1
75	Weight Machine Electronic (Large)	7
76	Meat Mixing Machine Large Size	1
77	Roti Plant for (Chapati making)	1
78	Lead Apron	5
79	Hydrocollator	2

Handwritten signatures and initials are present at the bottom of the page, including a large signature on the left and several smaller ones on the right.

81	Hydrocollator hot pack for Neck	12
81	Hydrocollator hot pack for Back(Large)	12
82	Hydrocollator hot pack for Medium	12
83	Short Wave Diathermy	4
84	Electrical Traction (Cervical & Lumbar)	2
85	Ultrasound Machines	5
86	Stimulators	5
87	TENS	10
88	Infrared Lamps	6
89	Infra Red Bulb	15
90	Cold Packs	12
91	Shoulder Pulley Sets	8
92	Static Cycles	4
93	Cervical Traction Kits with weights	6
94	Weighting machine	4
95	Quadriceps Drills	4
96	Treadmills	4

Handwritten signatures and initials are present at the bottom of the page, including a large signature on the left, a signature in the middle, and initials on the right.

97	B.P. Apparatus	4
98	Shoulder Exercise Wheels	4
99	Parallel bars with mirrors	2
100	Stairs for exercises	2
101	Wedge boards	2
102	Balance board	4
102	Dumbbell Sets	6
103	Treatment Couches	16





GOVERNMENT OF SINDH
JINNAH POSTGRADUATE MEDICAL CENTRE
KARACHI-75510

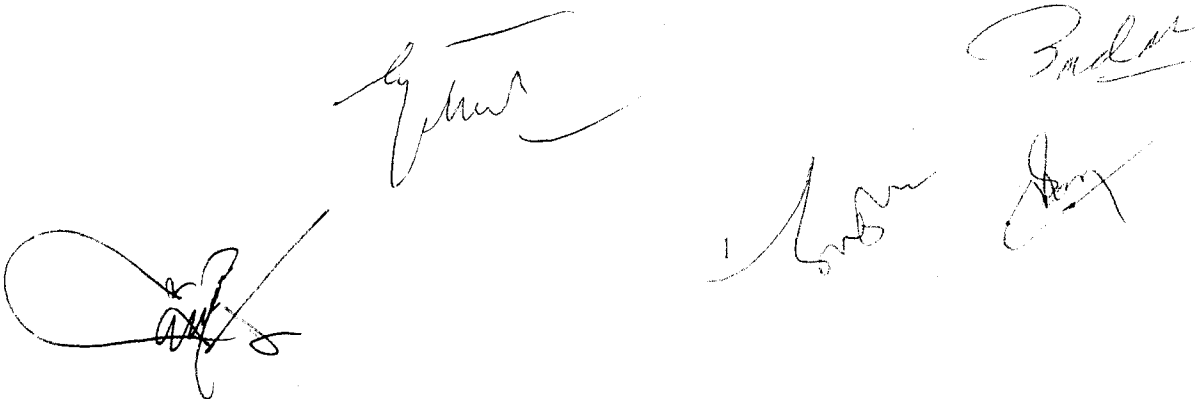
TENDER DOCUMENT

TENDER NO.F.1-8/2015-16-AD(M)/JPMC

TENDER FOR THE PURCHASE OF MACHINERY/ EQUIPMENT THROUGH
DEVELOPMENT SCHEME "STRENGTHENING & IMPROVEMENT OF JPMC,
KARACHI" FOR THE YEAR 2015-16
DUE ON 18 JANUARY, 2016

COST OF TENDER	Rs. 1000/= (Rupees One thousand only) non refundable
TENDER SELLING DATE	From 28th December, 2015 to 16 th January, 2016
TENDER SUBMISSION PLACE	AD(M) Office
TENDER SUBMISSION DATE	18 th January, 2016
TENDER SUBMISSION TIME	9.00 am to 10.30 am
TENDER OPENING PLACE	Committee Room, Administration Block, JPMC, Karachi
TENDER OPENING DATE	18 th January, 2016
TENDER OPENING TIME	11.00 am

**Note : No tender will be accepted after closing the Tender box,
What so ever reason may be.**

The image shows several handwritten signatures in black ink. There are four distinct signatures: one large signature on the left, one in the upper middle, one in the lower middle, and one on the right. The signatures are cursive and appear to be official signatures.

NO.F.1-8/2015-16-AD(M)/JPMC
GOVERNMENT OF SINDH
JINNAH POSTGRADUATE MEDICAL CENTRE
KARACHI-75510

TERMS AND CONDITIONS

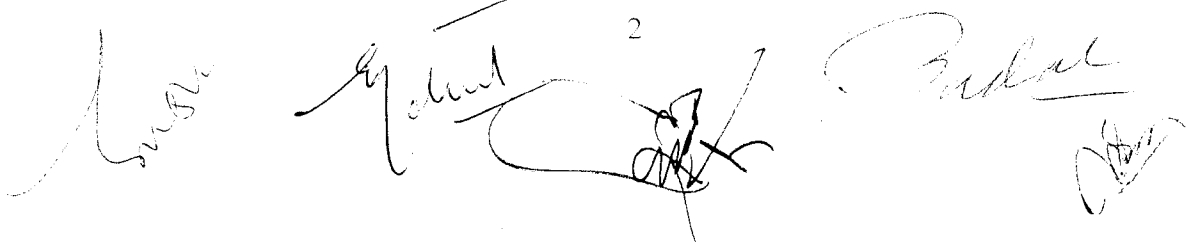
TENDER FOR THE PURCHASE OF MACHINERY/EQUIPMENT THROUGH
DEVELOPMENT SCHEME "STRENGTHENING & IMPROVEMENT OF JPMC,
KARACHI" FOR THE YEAR 2015-16

**Note : No tender will be accepted after closing the Tender box,
What so ever reason may be.**

*Bidders are required to comply all the clauses mentioned in the Terms and Conditions of the
Tender and any deviation will forbid them in competing for the tender*

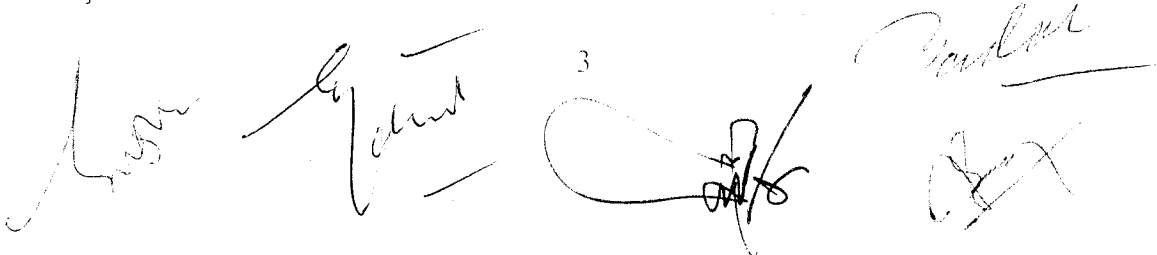
1. Single Stage – Two Envelopes procedure as per SINDH **PPRA-2010 Rule 46(2)** will be followed (single stage two envelopes procedure) i.e. **TECHNICAL** and **FINANCIAL PROPOSAL** will be placed in separate sealed envelopes and marked accordingly These two envelop should be placed in one envelop addressed to the Executive Director, JPMC, Karachi with Tender number and inserted in the tender box on scheduled date and time.
2. The **Technical Proposal** must contain original data sheet, technical brochure and all other relevant documents as mentioned in Annexure-I and photo copy of pay order/bank draft after hiding the amount..
3. In **Financial Proposal**, the vendor should submit only rate of the equipment/ items and a pay order of earnest money amounting to 2.50% value of the quoted items in favor of Executive Director, JPMC, Karachi otherwise, the bid will be rejected.
4. Earnest money should be in shape of pay order/bank draft. CDR/Bank guarantee or any other form as earnest money is not acceptable.
5. The disclosure of firm's quoted rate in any manner at the time of opening of technical bid will result in the rejection of the item/bid.
6. The successful bidder will deposit security money in shape of pay order @ 10% of the total value of order in the name of Executive Director, JPMC, Karachi within Seven (7) days after the issue of award letter, which will be kept in Accounts Section of JPMC till the completion of the warrantee period of equipment or execution of purchase order
7. The earnest money will be forfeited to Government Accounts in case of non-submission of security money within seven (7) days of receipt of the award letter.
8. The rate should be quoted in local currency on CIF (cost insurance and freight) basis for imported items and FOR (JPMC) basis for local manufactured items and should be valid up to 30-06-2016. No escalations in rates are allowed in any case after submission of the tender.
9. Only manufacturer or sole agent (for foreign manufacturer) can participate in the tender. In case of local manufacturer authorized agent can participate in the tender. Copy of Sole agency certificate for foreign manufacturer and authority letter in original for local manufacturer must be submitted. In case of non-submission, tender will be rejected.

2

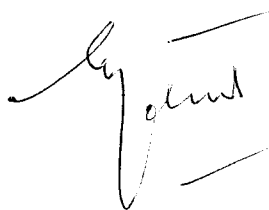


- 10 The purchaser will initially open only the envelope marked "**Technical Proposal**" in the presence of vendors or their representatives who chose to be present at the time of bid opening date, time and place specified in the tender documents. The envelope marked "**Financial Proposal**" shall be retained in the custody of Purchaser without being opened till completion of the technical evaluation.
- 11 The bidder or their representative should be present at the time of opening of tender and shall sign the attendance sheet.
- 12 Delivery should be completed within **allocated time** from the date of issuance of purchase order.
- 13 The Vendor should submit Data Sheet according to the Tender Specifications Format mentioned in the tender document and highlight the tender specifications in their Technical Data Sheet/Literature. Additional Feature can be recorded separately.
- 14 The first scrutiny of technical bids will be performed by the procurement committee on the basis of the data sheet and literature provided. Financial Proposal of only technically qualified firms will be opened.
- 15 Bids will be evaluated with following evaluation criteria:-
 - Only manufacturer / Sole agent and authorized agent for local manufacturer.
 - The vendor should have proper workshop, office and list of trained Engineers & tools and Biomedical equipped with necessary skilled staff.
 - Financial standing of 100m (sealed envelope) from bank.
 - Specification compliance.
 - All mandatory document (as per Annexure-I)
 - After sale services facility / warranty as desired by JPMC.
- 16 The equipment offered must be the latest version/generation and in case the old model is offered, it will not be considered; even it is as per the tender specifications.
- 17 The bidder will provide comprehensive warrantee of the equipment with parts as mentioned in purchase order / tender, absolutely free of charge. Post warranty, cost of maintenance with parts and without spare parts on yearly basis for the life of the equipment (10 Years) in US Dollars/ Pak Rupees should also be mentioned
- 18 The warranty period will commence from the date of commissioning of the equipment, as per report of the end user and technical person.
- 19 The bidder must provide complete details of their financial standing, and list of similar equipment supplied in Pakistan, bio-data of engineers with training certificates/ test equipment, details of local stock of spare parts for similar equipment and details of office with number of personnel.
- 20 All equipment to be supplied should be accompanied with operation and service/ maintenance manuals in English, schematic diagram (if any) and lost of spare parts.
- 21 Hand written tenders or any over writing, cutting, erasing will not be accepted and will be rejected.

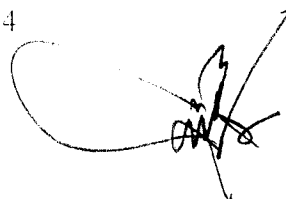
3

The bottom of the page features several handwritten signatures and initials in black ink. From left to right, there are four distinct signatures. The first is a cursive signature, the second is a more stylized signature, the third is a signature with a large loop, and the fourth is a signature with a horizontal line underneath. The number '3' is printed in the center above the signatures.

- 22 The bidder shall submit with the bid, an **UNDERTAKING** on judicial paper of Rs. 100/- duly attested by Oath Commissioner, stating that the equipment to be supplied is brand new and of latest generation, free from defects in design material and workmanship and will bind himself for availability of spares for a period of 10 years from the date of supply. In case of winding up of business, the supplier shall be bound to make an alternate arrangement of spares and maintenance of equipment. In case of default, necessary action will be taken as per decision of competent authority.
- 23 Vendor will be responsible for routine pre-requisite installation free of cost.
- 24 Equipment will be handed over through Instrument Section to the End User.
- 25 If bidder doesn't supply equipment in accordance with the supply order or fails to supply according to terms and conditions or in case of any other breach of terms and condition of the tender, necessary action will be taken as per decision of competent authority.
- 26 If the vendor fails to supply, install and commissioning the equipment according to the terms and condition of the purchase order within the stipulated period (delivery period), penalty will be imposed @ 0.1 % of the total value of equipment per day, subject to a maximum of 10 %. Otherwise their security money will be forfeited to Government Account and/or the firm may be black listed by the competent authority.
- 27 After satisfactory installation and commissioning of the equipment the vendor submit the Bill/Invoice in triplicate, along with three copies of delivery Challan, three copies of installation/commissioning reports, copy of purchase order and a copy of Bill of Entry (for imported items) for payment (if applicable)
- 28 The payment will be made after receiving the satisfactory installation and commissioning report from the HOD/Incharge of User Department through AG Sindh, Karachi.
- 29 Income tax and other taxes (if any) will be deducted according to existing Government Rules.
- 30 Conditional tender(s) will not be entertained.
- 31 Equipment should meet International safety & Quality Standards as desired by JPMC
- 32 Tender which does not fulfill the prescribed conditions according to the tender is liable to be rejected.
33. The supplier will be bound to train nominated technical personnel to operate the supplied equipment through his application specialist.
 34. Profile of the technical staff and address of the Bio-Medical workshop as well as list of hospitals in which the quoted equipment are working must be attached.
 35. The Chairman, Procurement Committee reserves the right to reject or accept any/all tender(s) under the relevant provisions of SPPRA Rules 2010.
36. The Executive Director, JPMC, Karachi, reserve the right to increase or decrease the Quantity mentioned in the tender and the decision will be final.



4



I / we agreed above mentioned terms & conditions:

Name of Contractor _____ Signature _____

Full address _____

Witness : _____

NIC # _____

Annexure-I

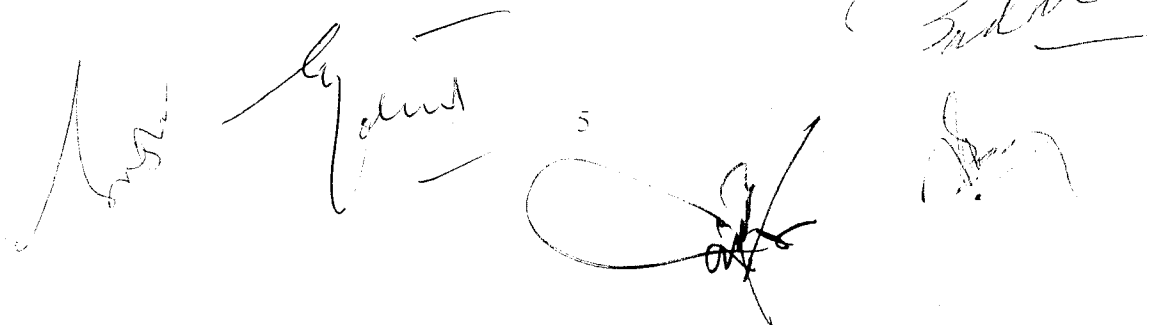
Following documents should be attached with Technical Proposal :

- i) Tender purchase receipt.
- ii) Technical Bid
- iii) Sole agency certificate from the foreign manufacturer or authorized agent of local manufacturer.
- iv) Active GST Registration Certificate
- v) Income Tax Registration Certificate.
- vi) Last year paid Income Tax Challan
- vii) Original literature.
- viii) Photocopy of pay order of earnest money after hiding the amount in the technical bid.
- ix) List of Institutions to whom similar equipment/instrument is supplied in Pakistan.
- x) Undertaking on judicial stamp paper of Rs. 100/=, as per clause # 22.
- xi) Financial position of firm (sealed bank letter)
- xii) Undertaking that firm is not blacklisted or having pending litigation.
- xiii) Letter of satisfaction from three end users from reputable institutions stating that the vendor provided quality equipment and satisfactory after sale services.

INSTRUCTION FOR PURCHASE ON CIF (cost, insurance and freight) BASIS.

Following instructions will be followed. If purchase order place on CIF basis

- i) JPMC will issue contract/purchase order. The vendor will carry out all works regarding the import of equipment i.e. from opening of L/C to delivery and installation of equipment.
- ii) The vendor have to open Letter of Credit in the name of Executive Director, JPMC, Karachi for item(s) as per purchase. A copy of all documents should be submitted to JPMC time to time. JPMC should be the consignee of the equipment.
- iii) JPMC will assist the vendor in clearing the consignment; JPMC will provide Undertaking and other letter for the exemption of the payment of Sale Tax, Customs charges, Income Tax and other taxes applicable on such import.
- iv) The rate of conversion shall be decided on the day of the opening of the financial bid.



NO.F.1-8/2015-16-AD(M)/JPMC
GOVERNMENT OF SINDH
JINNAH POSTGRADUATE MEDICAL CENTRE
KARACHI-75510

TENDER FOR THE PURCHASE OF MACHINERY/EQUIPMENT THROUGH DEVELOPMENT SCHEME "STRENGTHENING & IMPROVEMENT OF JPMC, KARACHI FOR THE YEAR 2015-16. DUE ON 18TH JANUARY, 2016.

S.No.	Description	Quantity
	Laparoscope with HD System and Documenting System (AIDA) & Complete Hand instruments	
1.	Telescope 8° angled eyepiece, O.D. 3.3 × 4.7 mm, working length 18 cm, Autoclavable , with straight instrument channel for instruments diameter 2.5 mm, fiber optic light transmission incorporated, color code green	04
2.	Handle	04
3.	Coagulating Electrode 7 Fr., flexible	04
4.	Brush with handle Consisting of: 3-Ring Handle, Outer Sheath, Three different Brush Inserts: with 4,0 mm; 4,5 mm and 5.0 mm outer diameter.	04
5.	Grasping Forceps Rotating, size 2 mm, length 30 cm, with connector pin for unipolar coagulation, double action jaws, with LUER lock adaptor for cleaning, Consisting of: - Plastic Handle, without ratchet - Outer Tube with insert, insulated	04
6.	Anal Distending Speculum with 3 blades, outer diameter 27 mm, working length 6 cm, with obturator 24981 O, with ratchet	04
7.	Straight Forward Telescope 0°, enlarged view, Diameter 10 mm, length 31 cm, autoclavable. fiber transmission incorporated. Color code: green	04
8.	Trocar, size 11 mm color code: green Consisting of: - Trocar only, with pyramidal tip - Cannula without valve, with insufflation stop- cock, length 10.5 cm Multifunctional Valve	04
9.	Trocar, size 6 mm Consisting of: - Trocar only, with pyramidal tip - Cannula without valve, with insufflation stop- cock, length 10.5 cm - Multifunctional Valve	04

[Signature]

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	Reduction Sleeve, 11/5 mm	
10.	VERESS Pneumoperitoneum Needle with spring loaded blunt stylet, LUER-lock, length 13 cm	04
11.	Dissecting and Grasping Forceps, rotating with connector pin for unipolar coagulation, size 5 mm, length 36 cm, double action jaws, Consisting of: - Plastic Handle, without ratchet - Outer Tube, insulated - Forceps Insert	04
12.	Dissecting and Grasping Forceps, rotating with connector pin for unipolar coagulation, size 5 mm, length 36 cm, heavy, double action jaws, Consisting of: - Plastic Handle, without ratchet - Outer Tube, insulated - Forceps Insert	04
13.	Dissecting- and Grasping Forceps, rotating with connector pin for unipolar coagulation, size 5 mm, length 36 cm, "alligator jaws" double action jaws, Consisting of: - Plastic Handle without ratchet - Outer Tube, insulated - Forceps Insert	04
14.	Claw Grasping Forceps rotating 1.) with connector pin for unipolar coagulation, size 5 mm, length 36 cm, 2 x 3 teeth, single action jaws, Consisting of: - Plastic Handle, with hemostat style ratchet, Outer Tube, insulated - Forceps Insert	04
15.	Dissecting and Grasping Forceps, Rotating with connector pin for unipolar coagulation, size 5 mm, length 36 cm, a traumatic, double action jaws, Consisting of: - Plastic Handle, without ratchet - Outer Tube, insulated - Forceps Insert	04
16.	Grasping Forceps rotating, dismantling, insulated, with connector pin for unipolar coagulation, single action jaws, with especially fine serration, fenestrated, size 5 mm, length 36 cm Consisting of: - Plastic Handle, without ratchet - Outer Sheath, insulated - Forceps Insert	04
17.	Scissors rotating, with connector pin for unipolar coagulation, size 5 mm, length 36 cm, blades curved, double action jaws, length of blades 12 mm,	04

	<p>Consisting of:</p> <ul style="list-style-type: none"> - Insulated Handle, without ratchet - Outer Tube, insulated - Insert 	
18.	Clip Applicator	04
19.	Metal Handle, with ratchet Metal Outer Tube	04
20.	Insert for Ethicon-Clips LT-300 (medium-large)	04
21.	Suction and Irrigation Tube, anti-reflex surface with two-way stopcock, for single hand control, size 5 mm, length 36 cm	04
22.	Coagulating and Dissecting Electrode L-shaped, with connector pin for unipolar coagulation, size 5 mm, working length 36 cm Monopolar High Frequency Cord with 4 mm plug for HF-unit, length 300 cm	04
23.	Electronic Endoflator Set Operating Voltage : 100-240 VAC, 50/60 Hz Consisting of: <ul style="list-style-type: none"> -Electronic Endoflator, with integration facility - Power cord - Silicone tube, sterilizable - Universal wrench - SCB Connecting cable - Sterile filter, Package of 10 pieces 	01
24.	High Pressure Hose	01
25.	High Definition Endovision System Pure HD CCU With ICM Camera-Control Unit (CCU), to use with HD 3-Chip Camera Heads, Max. Resolution 1920 x 1080 Pixel, with integrated ICM (Image Capture Module), integrated Communication Bus and integrated Image Processing Module, Power Supply: 100-240 VAC, 50/60 Hz SPECIAL FEATURES CCU Universal Use for Single Chip, 3-Chip & HD Camera Head Video Output <ul style="list-style-type: none"> - Composite Signal to BNC socket - 5-Video signal to 4-pin Mini DIN socket (2x)- RGB signal to D-sub socket - DV signal to DV socket (only IMAGE1 With DV module) SDI signal to BNC socket (only IMAGE1 with SDI module) (2x)- HDTV signal to DVI-D socket (2x) Certified to : IEC 601-1, 601-2-18, CSA 22.2 No.601, UL2601-1 and CE acc. To MDD, Protection class I/CF Control : Communication Bus at 6-pin Mini DIN socket (2x) Input & Output : 3.5mm stereo jack plug (ACC 1, ACC 2), Serial port at RJ-11 Input : keyboard for title generator, 5-pin DIN socket Aspect Ratio: 16 : 9 Max. Resolution: 1920 x 1080Pixel, Progressive Scan	01

Consisting of:

- Image 1 Pure HD ICM
- Mains Cord
- SCB-Connecting Cable, length 100 cm
- DVI connecting cable, length 300 cm
- 2x AIDA control cables
- Keyboard with US-English character set- Camera case

26. **IMAGE 1 H3 3-Chip HD Camera Head max. resolution 1920 x 1080 pixel** 01
Progressive Scan, 50 Hz, with 2 freely programmable Camera Head buttons,
with integrated Partocal-Zoom focal length $f = 14 - 30\text{mm}$ (2x)

27. **24" HD Flat Screen Monitor Desktop version with stand** 01

Color System : PAL/NTSC
Resolution Max. 1920 x 1200 SDI / HD-SDI, Composite, S-Video
RGB, DVI-D and VGA Input
Brightness : 500cd/m²
Contrast Ratio : 1000:1
Response Time: 5-12 ms
Number of Colors 16.8 Millions
Luminance 400 cd/m²
Viewing Angle 178°
Power Supply : 100-240 VAC, 50/60 Hz

Consisting of:

- 24" HD TFT Flat Screen
- Power Supply
- Mains cord
- Stand

28. **For Recording High Definition Surgeries AIDA(Advance Imaging & Data Archiving)** 01

AIDA DVD M compact HD documentation

System for digital storage of still images, video sequences and audio files

Power supply:

115/230 VAC, 50/60 Hz single

Input: HD-SDI, SD-SDI, Y/C Composite, RGBs

Consisting of:

- AIDA control NEO with integrated DVD writer
- AIDA control NEO V3.1 Software with communication interfaces (DICOM & HL7)
- PS/2 Compact Keyboard, US-English, With Cover
- AIDA Compact HD Frame Grabber Board
- Connecting Cable
- Mains Cord
- BNC-Connecting Cable, length 180 cm
- S-Video (Y/C) Connecting Cable, length 180 cm
- Connecting Cable, Mini-DIN Plug to BNC socket

29. **Cold Light Fountain XENON,** 01
with one 300Watt XENON lamp

and one light outlet

Power Supply: 100-125/220-240 VAC, 50/60 Hz

Special Features

-Minimum Color Temperature 6000 K



XENON 15 V, 300 watt
- Certified to: IEC 601-1, CE according to MDD protection class 1/CF
Consisting of:
XENON light source
Mains Cord

- | | | |
|-----|--------------------------------------------------------------------------------|----|
| 30. | Fiber Optic Light Cable, size 4.8 mm, length 250 cm, heat-resistant
Trolley | 01 |
| 31. | Telescope 0° - 120° Angles All In One | 01 |

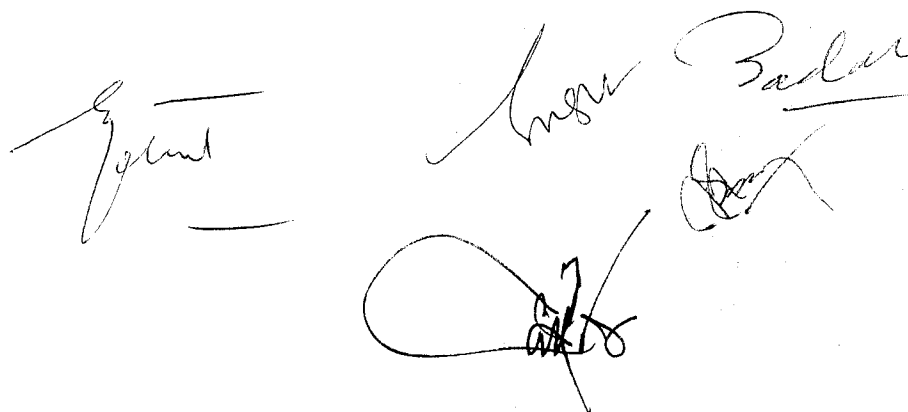
RIGID Telescope with multifunctional capabilities to accommodate in all laparoscopic and endoscopic procedures in general surgery, urology and gynecology Variable direction of view.

Variable view swing prism that changes the viewing angle at least between 0° degrees and 120° degrees.

Standard eyepiece, allowing it to be used with all camera systems.

Rod-lens system, fully compatible with three-chip cameras and FULL HD video systems.

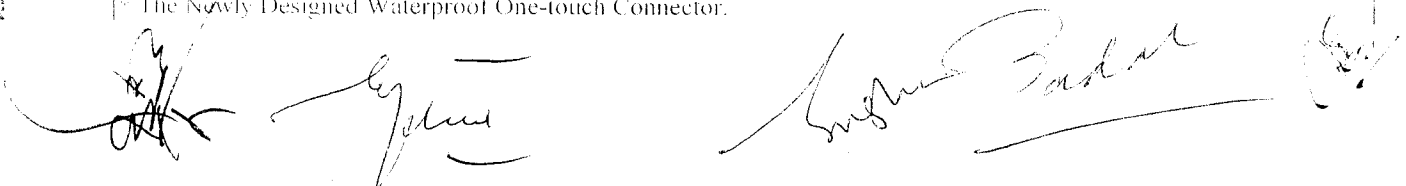
- | | | |
|-----|-----------------------------------------------------------------------|----|
| 32. | Digital Flat Panel Mammography System.
With all accessories | 01 |
|-----|-----------------------------------------------------------------------|----|



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Item No.	NAME OF ITEM (SPECIFICATION)	Req. Qty
TENDER FOR THE PURCHASE OF MACHINERY/EQUIPMENT THROUGH DEVELOPMENT SCHEME "STRENGTHENING & IMPROVEMENT OF JPMC, KARACHI FOR THE YEAR 2015-16. DUE ON 18 TH JANUARY, 2016.		
Requirement of Equipment & Furniture for Newly Build Chest ICU & High Dependency Ward		

1	EBUS FACILITY IN BRONCHOSCOPY SUIT CONSISTING OF:-	
A	ULTRASONIC VIDEO BRONCHOSCOPY SYSTEM FOR LUNGS	
	ULTRASONIC BRONCHOFIBER VIDEO SCOPE	
	With Standard Set Of Accessories	
	"Hybrid" design combines video and fiberoptic technologies in a single scope	
	Channel diameter enlarged to 2.2mm for improved suction capability and device insertion	
	Wider scanning and higher resolution image,	
	TECHNICAL DATA	
	Field of View 80	
	Direction of view 35 degree forward oblique	
	Depth of Field 2 to 50 mm	
	Outer Diameter 6.9mm	
	Angulation Range Up 120°, Down 90°	
	Working Length 600mm	
	Total length 890mm	
	Inner Diameter 2.2mm	
	Minimum Visible Distance 5mm	
	Display Mode B-Mode, Color power dropper mode.	
	Scanning Method Electronic curved linear Array	
	Scanning Direction Parallel to insertion direction	
	Frequency 7.5 MHz	
	Scanning range 50	
	Contacting method Balloon method, direct contacting method	
	COUNTRY OF ORIGIN : EUROPE / USA / JAPAN / UK	
B	INSTRUMENTS FOR EBUS SYSTEM	
C	VIDEO SYSTEM CENTER	
	(HDTV/NBIC compatible)	
	Video Processing Powering Advanced endoscope	
	CV-190 contains the electronic to operate the dual focus that delivers a optimal view	
	whether close up or distant by connecting HQ	
	The Newly Designed Waterproof One-touch Connector.	



Item No.	NAME OF ITEM (SPECIFICATION)	Req. Qty
	* Picture-in-Picture Image. Portable Memory is compatible	
	SPECIFICATIONS	
	Power Supply Voltage 100-240 V AC	
	Frequency 50 / 60 Hz	
	Consumption Elec. Power 150 VA	
	Accpt. Ratio 16:9 and 16:10 Output	
	Analog HD/TV signal output Either RGB (1080/60i NTSC) or (1080/50i PAL) or Y/Pb/Pr (1080/60i NTSC) or (1080/50i PAL) output can be selected	
	Analog SD/TV signal output YBS composite (480/60i NTSC) or (576/50i PAL), Y/C (480/60i NTSC) or (576/50i PAL), and RGB (480/60i NTSC) or (576/50i PAL) simultaneous outputs possible	
	Digital signal output HD-SDI (SMPTE 292M) SD-SDI (SMPTE 259M) DV (IEEE 1394) and DVI (DVI-D 1080p or SXGA) can be selected	
	White balance adjustment White balance adjustment is possible using the white balance button on the front panel.	
	Standard color chart output The "Color bar" or the "50% white" screen can be displayed	
	Color tone adjustment The following color tone adjustments are possible using the color tone level adjustment button and color tone selector button on the keyboard • Red adjustment: ±8 steps • Blue adjustment: ±8 steps • Chroma adjustment: ±8 steps	
	Automatic gain control (AGC) The image can be electronically amplified when the light is inadequate due to the distal end of the endoscope being too far from the object	
	Contrast • F (Normal), f (normal image) • H (High): The dark areas are darker and the bright areas are brighter The auto iris modes can be selected using the "iris mode" switch on the front panel • Auto: The brightness is adjusted based on the brightest part of the central part and the average brightness of the periphery part. • Peak: The brightness is adjusted based on the brightest part of the endoscopic image. • Average: The brightness is adjusted based on the average brightness of the endoscopic image.	
	Image enhancement setting Fine patterns or edges in the endoscopic images can be enhanced electrically to increase the image sharpness. Either the structural enhancement or edge enhancement can be selected according to the user setup. • Structural enhancement: Enhancement of contrast of the fine patterns in the image. • Edge enhancement: Enhancement of edges of the endoscopic image.	
	Switching the enhancement modes The enhancement level can be selected from 3 levels (OFF, 1, 2, and 3) using the image enhancement mode button on the front panel.	
	Image size selection The size of the endoscopic image can be changed using the "IMAGE SIZE" key on the keyboard	
	Freeze An endoscopic image is frozen using an endoscope or the "FREEZE" key on the keyboard The following settings can be reset to their defaults using the reset button on the front panel • Color tone • Iris mode • Image enhancement mode • Color enhancement mode • Optical digital observation • Image size • Contrast • Freeze • Release index • Electronic zoom • Optical digital observation • Arrow pointer • Stopwatch • Characters on screen • PIP/POF	
	Reset to default The following ancillary equipment can be controlled (specified models only)	
	Remote control YBS composite (480/60i NTSC) or (576/50i PAL), Y/C (480/60i NTSC) or (576/50i PAL) The following data can be displayed on the monitor using the keyboard	
	Patient data • Patient ID • Patient name • Sex • Age • Date of birth • Date of recording (time stopwatch) • Comments	
	Displaying the record state The recording state of the following ancillary equipment can be displayed on the monitor • Portable memory and internal buffer • DVR • Video printer • Image filing system	
	Displaying the image information The following data can be displayed on the monitor. • Structure enhancement level • Edge enhancement level • Zoom ratio • Color mode • Focus	
	Advance registration of patient data Up to 50 patient data can be registered. • Patient ID • Patient name • Sex and age • Date of birth	
	Recording format • TIFF: no compression • JPEG (1/5): approx. 1/5 compression • JPEG (1/10): approx.	

Item No.	NAME OF ITEM (SPECIFICATION)	Req. Qty
	LTO compression Number of recording images • HIF: approx. 227 images • JPEG (L5): approx. 1024 images • JPEG (L10): approx. 2048 images User settings Up to 20 user settings can be registered. Memorization of selected setting The following settings are held in memory even after the video system center is turned OFF. • Color tone • Iris mode • Enhancement • Color enhancement mode • Contrast • AGC • Color mode • White balance	
ii	VIDEO XENON LIGHT SOURCE 300 W Emergency halogen lamp with NBI System. One Touch Access to HDTV and NBI Specifications Lamp Xenon short arc lamp 300 W Average Lamp Life Approximately 500 hours of continuous use Luminous Method Switching Regulator Brightness Adjustment Light-path diaphragm control Emergency lamp Halogen Lamp (withih mirror) 12 V 35W Average Emergency Lamp Life Approximately 500 hours Emergency lamp Pressure Switching 4-level available (OFF, LOW, MEDIUM, HIGH) Emergency lamp Indicates absence of emgerency lamp COUNTRY OF ORIGIN : EUROPE / USA / JAPAN / UK	1
C	MONITOR HIGH DEFINITION LCD MONITOR HDTV Compatible High Definition 26" Colour Monitor Specifications: Screen Size 26.0 inches Display devices a-Si TFT active matrix Display dots 1920 x 1080 dots (Full HD) Contrast ratio 1400:01:00 Aspect ratio 16:09 Viewing angle 178 (Horizontal & Vertical) Number of color 1.07 billion Dimensions 626.8 (W) x 395.2 (H) 79.6 (D) mm Weight 7.8 kg INPUT HD SD1 SD1 BNC connector SD2 SD2 BNC Connector with loop - through output and auto Video 4 - pin mini Din HD15 D-sub 15-pin DVI1 DVI-I Connector DVI2 DVI-I Connector AUC in HD, SD, SD-I BNC connector OUTPUT HD SD1 SD1 BNC connector with active through output	1

Handwritten signatures and initials are present at the bottom of the page, including a large signature on the left, a signature in the center, and a signature on the right.

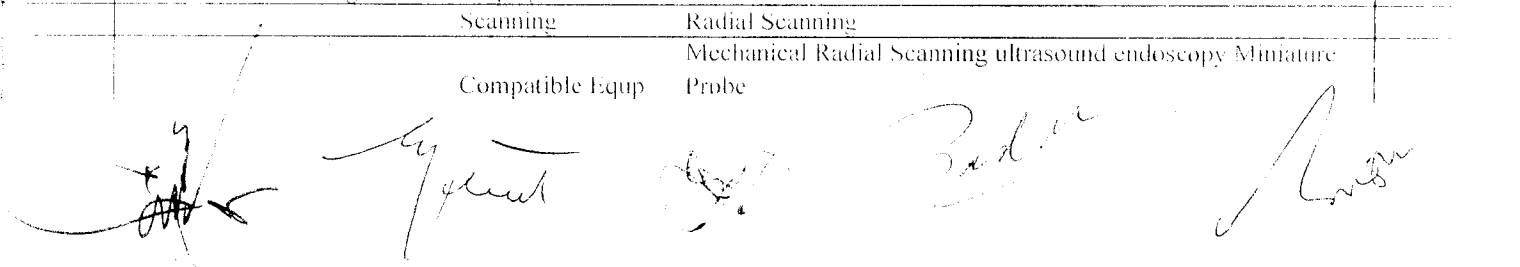
Item No.	NAME OF ITEM (SPECIFICATION)	Req. Qty
	SD2	
	Video	
	BNC Connector	
	4 - pin mini Din with active-through output	
	D-sub 15-pin with active-through output	
	DVI-I	
	DVI-I Connector with active-through output	
	DVI-I	
	DVI-I Connector with active-through output	
	Clone out (3G HD-SDI)	
	BNC connector	
D	COUNTRY OF ORIGIN : EUROPE / USA / JAPAN / UK	
F	MOBILE WORK STATION EBUS SYSTEM	

	Local Mobile Workstation with anistatic castor, Keyboard drawer and scope hanger Locally Supplied	1
ii	Suction Machine For Endoscope	1
iii	Maintenance Unit with Leakage Tester For Endoscope	1
	COUNTRY OF ORIGIN : EUROPE / USA / JAPAN / UK	
F	COLOUR VIDEO PRINTER EBUS SYSTEM	

	Recording System for Digital Documentation & Procedure recording for patient Latest Computer System (3 CPU + LED Monitor 21" + Colour Laser Printer, Key board, Optical Mouse Capture card for digital documentation along with Colour Laser Printer Local Supply	
F	ASPIRATION NEEDLE FOR FNA BIOPSY	

	Aspiration needle for FNA biopsy (FX5) COUNTRY OF ORIGIN : EUROPE / USA / JAPAN / UK	
G	COLOR DROPLER	

COMBINED MECHANICAL & ELECTRONIC SCANNING UNIVERSAL ULTRASOUND CENTER COLOUR DOPPLER			
Specification			
Power Supply	Voltage	100-240 V, 220-240 V AC	
	Frequency	50 - 60 MHz	
Classification	(Type Bf: applied part)		
EMC Compliance	IEC 60601-1-2:2001 CISPR11 GROUP1, Class		
Ultrasound Scanning Format	Mechanical Scanning Electronic Scanning		
Mechanical Scanning	Display Mode	B Mode	
	Scanning	Radial Scanning	
	Compatible Equip	Mechanical Radial Scanning ultrasound endoscopy Miniature Probe	



Item No.	NAME OF ITEM (SPECIFICATION)	Req. Qty
	Frequency	should have C5, C7.5, C12, C20, 7.5, 12, 20Hz
	Display Range	should have 2.3,4.6,9,12 cm
	Image adjustment	should have Gain, Contrast, STC, Enhance
	Rotation	Rotatable (Clock wise / Counterclock wise)
	Display Area	should have Full circle, Balloon Sector, Top Sector, Scroll
	Direction	Normal / Inverse
	Cine memory	should have Maximum 160 Frames, Cine review function
	3D	should have 3D display, MPR display
	Measurement	Distance, Area Circumstance
Electronic scanning	Display Mode	should have B-Mode, Flow Mode, PW Mode
	Scanning	should have Radial scanning, curved linear array scanning
	Frequency	Should have 5,6,7.5,10,12 MHz
	Display range	Should have 2.3,4.5,6,7.8,9,12cm
	Image adjustment	Should have Gain, Contrast, STC, Enhance compound Radial full circle, bottom sector, top sector, scroll curved linear array convex
	Display Area	array convex
	Direction	Normal / Inverse
	Display Pattern	Should have Single screen - Dual screen
	Cine memory	Should have Over 600 frames storable depending on the conditions Cine review function
	Focus	Auto Preset (Near/Far)
	Focus setting	Should have Focus location adjustable, focus, number adjustable
	FLOW Mode	Color Flow Mode, Power Flow Mode, High Flow Mode
	PW Mode	Should have B-PW, COLOR+PW, POWER+PW, II-FLOW+PW
	Measurement	Distance, Area, Circumtance, PW measurement
COUNTRY OF ORIGIN : EUROPE / USA / JAPAN / UK		