

**PROJECT DIRECTOR  
REHAB: DHQ/THQ HOSPITALS IN SINDH  
HEALTH DEPARTMENT,  
GOVERNMENT OF SINDH  
(SHAHEED MOHTARMA BENAZIR BHUTTO SINDH HEALTH INITIATIVE)**



BIDDING DOCUMENTS FOR PROCUREMENT OF MEDICAL EQUIPMENT/ INSTRUMENTS FOR THE FINANCIAL YEAR 2017-18, UNDER ADP SCHEME NO. 735 EXPANSION & IMPROVEMENT OF DHQ HOSPITAL @ MIRPURKHAS.


  
Project Director  
Rehab: DHQ/THQ Hospitals  
Health Department  
Government of Sindh, Karachi

Issued to M/s. \_\_\_\_\_

**Due on: 09-01-2018 AT 12:00 Noon**

## INDEX

1. (a) Invitation for Bids & (b) Knock Out Clauses
2. Name of Equipment, Name & Manufacturer (Annex A, B & C)
3. Terms and Conditions
4. Notification of Award / Advance Contract
5. Contract Agreement
6. Performance Security
7. Payment Term:
8. Stamp Duty
9. Undertaking
10. Certificate
11. Criteria For Evaluation Of Bids
12. Quality and Assessment Parameter
13. Bid Form And Price Schedule
14. Bid Security Form
15. Contract Form
16. Performance Security Form
17. Manufacturer's Authorization Form
18. Schedule of Requirement Specifications

  
Project Director  
Rehab: DHQ/THQ Hospitals  
Health Department  
Government of Sindh, Karachi

## 1(a) INVITATION FOR BIDS

Date: \_\_\_\_\_

ADP NO 735 \_\_\_\_\_

Bid Reference No.: \_\_\_\_\_

1. The Project Director, Rehabilitation of DHQ/THQ Hospitals in Sindh of (the "Employer") has received credit from the Government of Sindh towards the cost of Expansion & Improvement of DHQ Hospital @ Mirpurkhas. And it is intended that part of the proceeds of the credit will be applied to eligible payments under the Contract for the Purchase of Machinery Equipment/Instrument for the financial year 2017-18 under ADP Scheme 735. Bidding is open to all eligible Bidders.
2. The Employer invites sealed bids (the Technical & Financial envelope should be separated), from eligible firms a foreign Bidder is entitled to bid only in a joint venture with a Pakistani contractor having manufacturing facility in Pakistan.
3. Bidders may obtain further information from, inspect at and acquire the Bidding Documents from the Office of the Employer, at D-62/2, Opp. Beacon House School KG II near Kausar Medicos, Block 9, Clifton Karachi.
4. A complete set of Bidding Documents may be purchased by an interested Bidder on submission of a written application to the above office and upon payment of a non-refundable fee of Rs. 2000/-.
5. All bids (Technical) must be accompanied by Earnest Money in the amount of 2% of Bid Amount in the form of Bank Guarantee, Pay Order or Demand Draft in favor of Employer, and must be delivered to D-62, Opp. Beacon House School KG II near Kausar Medicos, Block 9, Clifton Karachi, at or before 12:00 Noon, on 09-01-2018. Bids will be opened at 01:00 PM on the same day, in the presence of Bidders' representatives who choose to attend at the same address

Address:

OFFICE OF THE PROJECT DIRECTOR  
 REHAB: DHQ/THQ HOSPITALS IN SINDH,  
 D-63 OPP. BEACON HOUSE SCHOOL KG II  
 NEAR KAUSAR MEDICOS BLOCK-9,  
 CLIFTON, KARACHI.  
 TEL: 021-35822317-



PROJECT DIRECTOR  
 Rehab: DHQ / THQ Hospitals in Sindh  
 Karachi

Project Director  
 Rehab: DHQ/THQ Hospitals  
 Health Department  
 Government of Sindh, Karachi

# 1(b) CHECK LIST

The provision of this checklist is essential prerequisite along with submission of tenders.

S/No.	DETAILS	YES / NO	PAGE#/ Annex.
<b>KNOCK OUT CLAUSES</b>			
1	Original receipt for purchase of tender. Original receipt for purchase of tender for each alternate.		
2	The financial envelopes should be separated of each item, clearly marked the company name and quoted serial item No. and Name.		
3	Copy of Bid Security without amount in technical bid		
4	Sole agency certificates [as per annex at clause 18] or nominee of manufacturer or sole agent		
5	Copy of GST certificate		
6	Copy of NTN certificate		
7	Copy of last three years paid income tax Challan		
8	Copy of registration with chamber of commerce		
9	Copy of registration with PNRA in case of x-ray, before submission of bid.		
10	Price should not be mentioned on technical bid.		
11	Certificates regarding quality of production for conformity with International Standards (copy of certificate FDA, CE, JIS) [as per annex. C]		

Signature & seal (bidder): \_\_\_\_\_

*Project Director*  
*Rehab: DHQ/THQ Hospitals*  
*Health Department*  
*Government of Sindh, Karachi*



### Annexure "A"

[illegible]

Project Director  
Reliab: DHQ/THQ Hospitals  
Health Department  
Government of Sindh, Karachi

06[illegible]

Signature & seal (bidder): \_\_\_\_\_



### **3. TERMS AND CONDITIONS:**

- 3.1 Bid shall remain valid for 90 days from the date of Bid opening.
- 3.2 Bidders shall quote their prices either on CIF Karachi or on free Delivery at Consignee's end DHQ Hospital Mirpurkhas basis excluding custom duties, as project office shall arrange letter of exemption of custom duties.
- 3.3 Price shall be quoted in Figure & words failing which the offer will be ignored. In case of discrepancy in two the price in words shall prevail and shall be taken as final
- 3.4 Free installation along with all accessories including labor charges/Demonstration at consignee's end must be borne by the bidder.
- 3.5 03 year free service from the date of installation and undertaking regarding availability of spare parts for at least 10 years may also be confirmed by the bidder through their principle or manufacturer
- 3.6 manufacture and their Sole agent are authorized to participate in case of sole agent he must provide warranty and Guarantee, free after sales service for 3 years and availability spare parts for 10 years from manufacturer.
- 3.7 Bidders are required to submit proof of past import of quoted items from Manufacturer by submitting copy of bill of entry (custom clearance documents), bill of lading /Air way bill and etc. along with their technical bid.
- 3.8 The supplier will be bound to train nominated technical personnel to operate /repair and maintain the supplied equipment.
- 3.9 Bidders should confirm the presence of Manufacturer's/sole agent's trained service/installation engineers/technicians and also provide the detail of their working experience, Manufacture's training certificate, list of tools and test equipment, approximate area of workshop in the premises of their office and address along with the bid.
- 3.10 List of hospitals, name of department, contact numbers of the end users, in which the quoted equipment are working must be attached. Copy of previous installation report in a reputed Govt./Private Teaching Hospitals/repair certificate if any, of the similar quoted items from the end user should be attached along with the bid.
- 3.11 Evaluation of equipment will be carried out in accordance with specifications of the equipment and evaluation criteria as mentioned in the bid documents



- 3.12 The bidder shall bear the charges of clearing agent, Godown rent, DO Charges and all other charges including transportation to Consignee end excluding custom duty and tax of whatsoever, Certificate will issued by this office to clarify that the import has been made for the hospital in Question so as to avail the facility of exemption of duties / taxes as per Government Rules
- 3.13 In this tender single stage two envelopes procedure as per SPPRA 2010 amended 2013 shall be followed i.e. Technical and Financial proposal separately, i.e. single stage two envelopes procedure. The envelope must contain tender enquiry no. on the top and **TECHNICAL/FINANCIAL PROPOSAL** clearly in order to avoid any confusion. The tenders shall be submitted with all documents, drawing literature & catalogue (in equipment) in Technical proposal, with sealing wax. The name of manufacturer or supplier should be affixed on the face of envelope at the left side, moreover, financial envelope should contain financial bid for each item separately,
- 3.14 The bid must be free from erasing, cutting and over writing. In case of erasing, cutting and over writing, authorized person shall initial it and affix the firm's stamp.
- 3.15 Conditional/Optional tenders will be ignored and will not be considered entertained/accepted.  
Late bid received after the closing time shall not be entertained and shall be returned unopened
- 3.16 Tender shall be accompanied by Bid Security @ 2% of the value of stores quoted by bidder in form of call deposit/pay order/demand draft/ irrevocable Bank guarantee up to 28 days after expiry of bid validity period in the name of Project Director, Rehabilitation of THQ/DHQ Hospital, in Sindh,
- 3.17 Copy of Bid Security (without amount) must be attached along with the technical bid. In case of disclosure of price or amount of bid security in the technical bid, the bid shall be rejected.  
However the original bid security showing amount of bid shall be furnished with financial bid/proposal.
- 3.18 For the X-Ray Equipment, bidders must submit a valid copy of registration with PNRA (Pakistan Nuclear Regulatory Authority) Firm shall have registration with PNRA before submission of bid.
- 3.23 The original printed catalogue/technical brochure showing detail technical specification, clear photo/picture of the quoted item, Manufactures address, phone number, e-mail address and website must accompany with offer.
- 3.19 The equipment to be imported comply/certified at CE/FDA /JIS standards Certificate shall be attached along with the technical offer.

- 3.20 If the Contractor fails to complete the supply or installation within delivery period, he shall pay to the purchaser liquidated damages at the rate of 2% per month (0.5% per week) of the Contract Price, or the relevant part thereof. The aggregate amount of such liquidated damages shall in no event exceed 10% of the bid amount. Once the "Maximum limit" is reached, the Purchaser shall termination of the Contract, forfeit performance security and black list the bidder for specific or indefinite period.
- 3.21 Tenderers are required to furnish a detail technical quotation on their letter head and specify the standard and optional items /accessories as required in the tender specification with price if any. Bidder should clearly mention make, model, and country of origin of the quoted items.
- 3.22 Tenders shall purchase separate tender documents and furnish purchases receipt for each alternate offer in case they want to submit alternate offer for any item. All the bids with alternate offers without separate purchase receipt (original) are supposed to be rejected.
- 3.23 No Manufacturer shall authorize their distributor/agent/any firm or person to quote the same item which manufacturer quoted it-self in any tender. Manufacturer or sole agent shall not authorized more than one supplier to quote same item in this tender, failing which offers of the manufacturer as well as other bidders shall be ignored.

#### **4. NOTIFICATION OF AWARD/ADVANCE CONTRACT:**

- 4.1 Prior to the expiration of the period of bid validity, the purchaser will notify the successful bidder in writing, delivery by hand or by register letter by cable to be confirmed that their bid has been accepted.
- 4.2 The notification of award will constitute the formation of the contract.

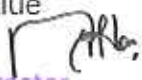
#### **5. CONTRACT AGREEMENT**

Subject to the fulfillment of all codal formalities, the purchaser will award the contract to the successful bidder whose bid has been determined to be qualified to perform the contract satisfactory.

#### **6. PERFORMANCE SECURITY**

The successful bidder will have to deposit with the performance security in shape of call deposit/pay order/bank guarantee at the rate of 5% of the value of contract before agreement.

#### **7. PAYMENT TERM:**

  
Project Director  
Rehab: DHQ/HQ Hospitals  
Health Department  
Government of Sindh, Karachi



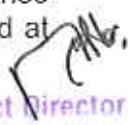
- 7.1 In case of purchase on CIF this office will establish Letter of Credit for 80% of contract value in favor of manufacturer. Remaining 20% payment will be released in equivalent to Pak Rupees of CIF amount after successful completion of delivery of equipment at consignees' end, and the difference in currency fluctuation will be borne by bidder.
- 7.2 Terms of payment for FOR(free delivery at consignee end) Part Delivery, Part Payment may be allowed if applicable.

## **8. Stamp Duty:**

8.1 Stamp duty @0.3% shall be borne by the suppliers.

## **9. UNDERTAKING**

- 9.1 That I/We agree whether our tender accepted for total, partial or enhanced quantity for all or any single item. I/We also agreed to supply and accept the said item at the rates for the supply of contracted quantity with in the stipulated period shown in the contract.
- 9.2 I/We understand and confirm the refund of cost different if the same goods is/was supplied at lower rates to any other Govt. /Semi Govt. institution in the province in the same fiscal year.
- 9.3 I/We undertake that; if any of the information submitted in accordance to this tender enquiry found incorrect our contract may be cancelled at any stage on our cost and risk.

  
Project Director  
Rehab: DHQ/THQ Hospitals  
Health Department  
Government of Sindh, Karachi

## 10. CERTIFICATE


We guarantee to supply the sores exactly in accordance with the requirement specified in the invitation to this tender.

Signature of Tenderer: \_\_\_\_\_

Name & Designation: \_\_\_\_\_

Address: \_\_\_\_\_

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

  
Project Director  
Relph: DHO/HQ Hospitals  
Health Department  
Government of Sindh, Karachi



## 11. CRITERIA FOR EVALUATION OF BIDS

Quality and the following evaluation factors/ criteria will be employed on technical proposals. The number of points allocated to each factor shall be specified in the Evaluation Report. Only bids securing minimum of 70% marks would be considered for further process.

**EVALUATION CRITERIA  
(ELECTRO-MEDICAL EQUIPMENTS)  
ASSESSMENT PARAMETER MARKS**

12	12. ASSESSMENT PARAMETER	Marks
12.1	Availability of technical staff of the company/firm in reference to the product	15
<p>Following two components shall be considered in ascertaining the availability / expertise of technical staff:</p> <p>A. Number of technical staff</p> <p>i) At least two technical staff members</p> <p>ii) 01 additional number for every additional technical member shall be granted with maximum up to 04</p> <p>B. Technical Staff's academic qualification</p> <p>MSC or BE. degree in (Bio-Medical/Electronic) Engineering from recognized institution shall be granted two (02) additional mark. However, B.Tech shall not be considered for additional mark.</p>		
12.2	Manufacturer's local agent capacity for technical services with reference to the product.	15
<p>1. Repair work shop facility with the diagnostic tools and test equipment as submitted along with the quotation 07</p> <p>4. Service manual and other technical documentation List 03</p> <p>5. Availability of spare parts for 10 years and accessories at workshop List 05</p>		
12.3	Financial soundness	12
<p>1. The Bank certificate or credit limit over double of estimated Cost 08</p> <p>4 additional marks shall be given to firms having more than double credit limit</p>		
12.4	Overall reputation in reference to the product (Cliental)	10

Project Director  
Rehab: DHQ/THQ Hospitals  
Health Department  
Government of Sindh, Karachi

Overall reputation of the product shall be envisaged by following criteria:

- A. References/certificates provided regarding performance of the product from head of teaching hospitals. 2 each Teaching Hospital one mark each for secondary hospital.

12.5	General overall sale turnover of the Organization	10
	A. 60% or more sales proportion of Medical Equipment (quoted items)	07
	B. 40% or more sales proportion of scientific instruments	03
12.6	International Sales and country of origin of quoted item	15
	A. Sale of product in two or more continents	10
	B. Sale of product in single continent	05
12.7	Product Certification	10
	FDA approved product	04
	CE approved product	03
	JIS	03
12.8	Exclusive Agency Certificate, Attested by Embassy, & Chamber of Commerce from Native Country of Manufacturer	08
	A. 10 years or more for each products or	08
	B. 5 years or more for each products	05
	C. 3 years or more for each products	03
12.9	Other	05
	Submission of original brochures and required certificates as per tender terms and Conditions.	05

Firms are require to fill in following performa for key staff

Project Director  
Rehab: DHQ/HQ Hospitals  
Health Department  
Government of Sindh, Karachi





**Assessment Parameter: 13.1.1**

**Manufacturer's local agent capacity for technical services in reference to the product**

Physical size and facility of workshop \_\_\_\_\_  
(Please attach photograph or picture of your workshop)

Details of Test and diagnostic tools: \_\_\_\_\_  
(Please attach a separate sheet describing the test and diagnostic tools):

Details of Service manual and other technical documentation: \_\_\_\_\_  
(Please attach a separate sheet describing the details of Manuals and other supporting documents)

Details of spare parts and accessories available at workshop: \_\_\_\_\_  
(Please attach a separate sheet mentioning the list of spare parts and accessories)

**Assessment Parameter: 13.2.1**

**Financial soundness**

Copy of Income Tax Paid Challan for last three years: \_\_\_\_\_

Copy of audited Balance sheet by a recognized audit firm: \_\_\_\_\_  
OR

Copy of Bank statement for the last financial year: \_\_\_\_\_

**Assessment Parameter: 13.3.1**

**Overall reputation in reference to the product (Cliental)**

No. of references \_\_\_\_\_  
(Reference will be verified)

No of Certificates, regarding performance of the product from head of the concerned institute/hospital \_\_\_\_\_

Project Director  
HQ Hospitals  
Health Department  
Government of Sindh, Karachi

Signature: \_\_\_\_\_

Seal: \_\_\_\_\_





**Assessment Parameter: 13.5.1**

Quality certification of the quoted products:

Tender Item no	Name of Equipment	Make	Model	Certificate (FDA/CE(MDD)/JIS)

**Assessment Parameter: 13.6.1**

Details about Exclusive Rights of the product represented in Pakistan:

Tender Item no	Name of Equipment	Manufacture /Origin	Number of years for exclusive rights

Signature: \_\_\_\_\_

Seal: \_\_\_\_\_

Project Director  
 Rehab: DHQ/THQ Hospitals  
 Health Department  
 Government of Sindh, Karachi



### 13. BID FORM AND PRICE SCHEDULE

Date: \_\_\_\_\_

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

To: [Name and address of Procuring Agency]

Gentlemen and/or Ladies:

Having examined the Bidding Documents including addenda nos: [insert numbers], the receipt of which is hereby duly acknowledged, we, the undersigned, offer the supply and deliver [description of goods and services] in conformity with the said Bidding Documents for the sum of [Total Bid Amount in words and figures], or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this bid.

We undertake, if our bid is accepted, to deliver the goods in accordance with the delivery schedule specified in the Schedule of Requirements.

If our bid is accepted, we will obtain a guarantee of a bank in the sum of equivalent to \_\_\_\_\_ percent of the Contract Price for the due performance of the Contract, in the form prescribed by the Procuring Agency.

We agree to abide by this bid for a period of [number] days from the date fixed for bid opening as per bid terms and condition, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal Contract is prepared and executed, this bid, together with your written acceptance thereof and your notification of award shall constitute a binding Contract between us.

Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to contract execution if we are awarded the contract, are listed below:

Name and address of agent gratuity	Amount and Currency	Purpose of commission or
_____	_____	_____
_____	_____	_____

We understand that you are not bound to accept the lowest or any bid you may receive

Dated this \_\_\_\_\_ day of, \_\_\_\_\_ 2017

Signature : \_\_\_\_\_

(In the capacity of: \_\_\_\_\_

Duly authorized to sign bid for and on behalf of. \_\_\_\_\_

*Project Director*  
*Behtar Bimarin Hospitals*  
*Health Department*  
*Government of Sindh, Karachi*



#### 14. BID SECURITY FORM

Whereas [name of bidder] (hereinafter called the Bidder") has submitted its bid dated [date of submission of bid] for the supply of [name and /or description of goods] (hereinafter called the bid").

KNOW ALL PEOPLE by these presets that we [name of bank] of [name of country], having our registered office at [address of bank] (hereinafter called "the bank"), are bound unto [name of procuring agency] (hereinafter called "The procuring agency") in the sum of for which payment well and truly to be made to said procuring agency, the bank binds itself, its successors and assigns by these presents. Sealed with the common seal of the said bank this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

The conditions of this obligation are:

1. If the bidder withdraws its bid during the period of bid validity specified by the bidder on the bid form;  
Or
2. If the bidder, having been notified of the acceptance of its bid by the procuring agency during the period of bid validity:
3. Fails or refuses to execute the contract form, if required; or
4. Fails or refuses to furnish the performance security, in accordance with the instruction to bidders.

We undertake to pay to the procuring agency up to the above amount upon receipt of its first written demand, without the procuring agency having to substantiate its demand, provided that in its demand the procuring agency will note that the amount claimed by it is due to it, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including twenty eight (28) days after the period of bid validity, and any demand in respect thereof should reach the bank not later than the above date.

\_\_\_\_\_  
[Signature of bank]

*Project Director*  
*Rehab: DHQ/THO Hospitals*  
*Health Department*  
*Government of Sindh, Karachi*

## 15. CONTRACT FORM

THIS AGREEMENT made at \_\_\_\_\_ day of 20 \_\_\_\_\_ between [name of procuring agency] of [country of procuring agency] (hereinafter referred to as the "Procuring Agency") of the one Part; and [name of supplier] of [city and country of supplier] (hereinafter called the "Supplier") of the other Part

WHEREAS the Procuring Agency invited bids for certain goods and ancillary services, viz [brief description of goods and service] and has accepted the bid by the Supplier for the supply of those goods and service in the sum of [contract price in words and figures] (hereinafter called "the contract price").

### Now This Contract Witnessed As Follows:

1. In this agreement words and expressions shall have the same meanings as are respectively assigned to them in the General Conditions of this Contract hereinafter referred to :
2. The following documents shall be deemed to form and be read and construed as part of this agreement , viz :-
  - a. The Bid form and Price Schedule submitted by the Bidder,
  - b. The Schedule of Requirements;
  - c. The Technical Specifications;
  - d. The terms and Conditions of Contract
  - e. The Procuring Agency's Notification of Award;
3. In consideration of the payments to be made by the Procuring Agency to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Procuring Agency to provide the Goods and Services and to remedy defects therein in conformity in all respects with the provisions of this Contract.
4. The Procuring Agency hereby covenants to pay the Supplier in consideration of the provision of the Goods and Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of this Contract at the time and in the manner prescribed by this Contract.

IN WITNESS, Whereof the Parties hereto has caused this agreement to be executed in accordance with their respective laws the day and year first above written.

Signed, sealed, delivered by \_\_\_\_\_ the \_\_\_\_\_  
(For the procuring agency)

Signed, sealed, delivered by \_\_\_\_\_ the \_\_\_\_\_  
(For the supplier)

*Project Director*  
*Rehab. UN/WHO Hos. Itals*  
*Health Department*  
*Government of Sindh, Karachi*





## 17. MANUFACTURER'S AUTHORIZATION FORM

To: [name of Procuring Agency]  
[Tender no.]

WHEREAS [name of the Manufacturer] who are established and reputable Manufacturers of [name and/or description of the goods] having factories at [address of factory]

Do hereby authorize [name and address of Supplier/ Agent] to submit a bid, and subsequently negotiate and sign the Contract with you against IFB No. [Reference of the Invitation to Bid] for the goods manufactured by us.

We hereby extend our full guarantee and warranty as per Clause 15 of the General Conditions of Contract for the goods offered for supply by the above firm against this Invitation for Bids.

Project Director  
Rehab: DHQ/HQ Hospitals  
Health Department  
Government of Sindh, Karachi

---

[Signature for and on behalf of Manufacturer]

**Note:**

This letter of authority should be on the letter head of the Manufacturer and should be signed by a person competent and having the power of attorney to bind the Manufacturer. It should be included by the Bidder in its bid.





## 18. Schedule of Requirement

# SPECIFICATIONS



Project Director  
Rehab: DHO/FHO Gov. Hqs.  
Health Department  
Government of Sindh, Karachi

**List of Medical Equipments/Instruments for DHQ Hospital Mirpurkhas  
the Financial Year 2017-18  
Under ADP Scheme No. 735**

27

Item No.	Item Name	QTY.
	Cassettes with Screen various sized	
1	08x10"	7
2	10x12"	7
3	12x15"	7
4	14x17"	9
5	X-Ray Illuminator	51
6	Echo Cardiographer (Color Doppler)	1
7	Hot Air Oven	2
8	Centrifuge machine 24 head	1
9	Ultrasonic water bath	3
10	Dressing set	15
11	Portable Spot Light / OT Light	9
12	Hysterotomy set	4
13	L.S.C.S set	6
14	D & E set	4
15	General Surgery Set Complete in All Respect	1
16	Instrument Trolley (Fixed)	13
17	Instrument Trolley Adjustable	9
18	Instrument Tray SS	20
19	OT Table / Hydraulic OT Table	2
20	Normal delivery set SS	12
21	Epiostomy set	8
22	Vacuum Extractor	2
23	CTG Machine	1
24	Infusion Pump	10
25	Suction Machine Heavy Duty	27
26	Glucometer	31
27	Ambu Bag Adult	12
28	Ambu bag paed's	12
29	Emergency Resuscitation Trolley	13
30	Cardiac Monitor	10

Project Director  
Rehab. DHQ/HO Hospitals  
Health Department  
Government of Sindh, Karachi

31	Weighing Machine	16
32	Portable BP Apparatus	53
33	Dental chair with all accessories	4
34	Dental Instrument Set	8
35	Dental X-Ray	1
36	Ophthalmoscope	3
37	Centralized Medical gases supply system	1
38	Split Air condition 1.5 Ton (Energy Sever) with Stabilizer	64
39	Autoclave Vertical	3
40	Baby Running Trolley with Warmer	2
41	Defibrillator	6
42	Digital video Colposcope.	1
43	Laryngoscope	2
44	Over Head Operating Light	2
45	Nebulizer Machine Heavy Duty	14
46	Phaco Machine	1
47	Refrigerator	5
48	Retinoscope	2
49	ABG Machine / Arterial Blood Gases	1
50	Centrifuge Machine 12 head	1
51	Electronic Balance	1
52	Microscope	3
53	Diathermy Machine	8
54	Minor OT Table	4
55	Pulse Oximeter	7
56	Multiparameter Monitor / Patient Monitor	27
57	ECG Machine	8
58	Baby Incubator	2
59	Auto Refractometer	1
60	Nitrous Oxide Cylinder	28
61	A Scan	1
62	Oxygen Cylinder with Flow Meter	29
63	Electric water cooler	2
64	Modified Microtome	1
65	Multi Media Projector	1
66	Computer with LCD complete set	8
67	Fax Machine	4
68	Laser Jet Printer	3

Project Director  
 Rahim Yar Khan Hospitals  
 Health Department  
 Government of Sindh, Karachi



69	Weighing Scale	2
70	Plaster Cutter	1
71	Surgical Drum	62
72	Emergency Resuscitation Trolley With Defibrillator	2
73	Diagnostic Set	4
74	Surgical Instrument set	4
75	Blood Bank Refrigerator	1
76	Digital blood shaker / Flow & Weight Monitor	1
77	Precision Calibration Weight For Shaker	1
78	Centrifuge Cell Washer (Electronic)	1
79	Spring scale 500ml	1
80	Ordinary Fridge 11CFT / Refrigerator 11cft	1
81	Spot Light	2
82	Spirometer	1
83	Slit Lamp	1
84	Refraction Set	1
85	Otoscope	1
86	Audiometer	1
87	Impedance meter	1
88	Auto Processor Heavy Duty	1
89	Ultrasound Machine (Color Doppler Portable )	2
90	Juster Fixed	4
91	Juster Adjustable	2
92	Glass wares	1
93	Wax bath	1
94	Laptop	1
95	Multi Media Screen	1
96	Central Monitor Station	2
97	BP Monitoring apparatus Wall Mounted	3
98	Cholecystectomy Set	2
99	Appendectomy Set	5
100	Surgical instrument set (Orthopedic Surgery)	2
101	Air Drill With Attachement	1
102	Astinmoor	2
103	Basic Instrument Set	14
104	Chisel Impecal Set	1
105	Hand Drill With Attachement	1
106	Humbles knife	1

29

Project Director  
Rehab: DHO/HQ Hospitals  
Health Department  
Government of Sindh, Karachi

107	Instrument Set for DHS/DCS	1
108	Screw Box	1
109	Total Hip Set	1
110	Laryngo Endoscope (Rigid)	1
111	Direct Laryngoscopy Fiber Optic Set	1
112	Otoscope	1
113	Tonsillectomy Set	4
114	Mastroid and middle ear surgery set	2
115	SMR, Septoplasty Set	4
116	Skin grafting knife	2
117	Skin Graft Masher	2
118	Pneumatic Dermatome	2
119	BP Knife Handle	2
120	Met Scissor	4
121	Mayo Scissor	2
122	Tenotomy Scissor	2
123	Iris scissor (CVS)	2
124	Iris scissor (St)	2
125	Mayo Needle Holder	3
126	Dissecting Forcep Tooth	6
127	Macindo Diathermy Forcep	3
128	Debekary D / F	3
129	Lengenback Retactor (Small)	2
130	Lengenback Retactor (Medium)	2
131	Lengenback Retactor (Large)	2
132	London Retactor	2
133	Waste Self Retaining Retactor	2
134	Killner Retactor (Sharp)	2
135	Senn retractor (Blunt)	2
136	Gillies Skin Hook ( Single)	3
137	Double Ended Hook Retactor	3
138	Mosquito Artery Forceps (CVD)	12
139	Mosquito Artery Forceps (St)	12
140	Cril Artery forcep (CVD)	4
141	Cril Artery forcep (St)	4
142	Kocher Artery forcep	8
143	Artery forcep (CVD)	4
144	Artery forcep (St)	4

  
 Project Director  
 Peshawar District Hospitals  
 Health Department  
 Government of Sindh, Karachi

145	Robert Clam	4
146	Lahey Artery Forcep	2
147	Spong Holder Set	2
148	Allies Tissue Forcep	4
149	Bab Cock Tissue Forcep	4
150	Yanker Suction Nozzle	1
151	Frazier Suction Nozzle	1
152	Scale	2
153	watson Chine	1
154	Curette	1
155	Prob with eye	1
156	Towel Clip	5
157	K Dish	2
158	Galli Pot	3
159	Portable BP Appratus	12
160	Diathermy Bipolar	1
161	D & C set	4
162	Delivery table	4
163	Basic Instrument Set for LC / DC	1
164	Cold Storage Facility	1
165	PABX	1
166	Laundry Plant	1
167	Electrolyte Analyzer	1
168	Incubator	1
169	Safety Cabinet	1
170	Weighing Machine	14
171	Kitchen Items	1
172	Hematology Analyzer	1
173	Ventilator with all Standard Accessories	5

Project Director  
 Rehab: DHQTHO Hospitals  
 Health Department  
 Government of Sindh, Karachi

**Schedule of Medical Equipments/Instruments for DHQ Hospital Mirpurkhas the  
Financial Year 2017-18 Under ADP Scheme No. 735**

Item No.	Item Name	DHQ HOSPITAL MIRPURKHAS	CLF PRICE		F.O.R PRICE	
			QTY.	Unit Price	Unit Price	Total Price
	Cassettes with Screen various sized					
	Cassettes with Screen various sized					
1	08x10" Warranty period shall be of three years starting from date of supply of equipment to the Consignee End Must be CE / FDA approved Country of origin should be UK/USA/ EEC./Japan	7				
2	10x12" Warranty period shall be of three years starting from date of supply of equipment to the Consignee End Must be CE / FDA approved Country of origin should be UK/USA/ EEC./Japan	7				
3	12x15" Warranty period shall be of three years starting from date of supply of equipment to the Consignee End Must be CE / FDA approved Country of origin should be UK/USA/ EEC./Japan	7				
4	14x17" Warranty period shall be of three years starting from date of supply of equipment to the Consignee End Must be CE / FDA approved Country of origin should be UK/USA/ EEC./Japan	9				
5	X-Ray Illuminator	51				
	X-Ray Illuminator					
	Illuminator for viewing of x-ray film.					
	Size: 8x10 ~ 14x17"					

Project Director  
Rehab: DHQ/HQ Hos...  
Health Depart...  
Government of Sindh, Karachi

32



*[Handwritten signature]*

Project Director  
Rehab: DHQ/THQ Hospital  
Health Department  
Government of Sindh, Karachi

6	Single view acrylic sheet of 2mm.	1	
	Fluent tube light with heavy duty switch.		
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End		
	Local / imported / or Equivalent		
6	Echo Cardiographer (Color Doppler)		
	Echo Cardiographer (Color Doppler)		
	Original Trolley mounted Fully Digital multi beam former 128 or more physical channels.		
	Fast image processor and at least three active connectors.		
	Gray shades 256 gray shades or better.		
	Image depth: Image depth: 30 cm or more.		
	Monitor: 15" or more high resolution, Non flicker TFT/LCD/LED. 7" inch or more touch command screen.		
	Imaging modes: B mode (2 D), Color flow mapping, M mode, Doppler Audio, PW must be continuously steerable, Power Doppler Imaging (PDI) Tissue harmonics, Compound imaging, Trapezoid imaging, Beam steering etc 3D/4D upgrade possibilities.		
	Data management facility & measurements package: Digital acquisition, storage and preview of complete Ultrasound studies including static and dynamic clips, studies can be review and output to CD/DVD. Integrated internal hard disk (320GB) and CD/DVD writer/reader and USB storage memory. Comprehensive measurements package for general ultrasound color Doppler and echocardiography.		
	Convex probe Multi frequency between 2~6 MHz or better		
	Linear probe Multi frequency between 5~10 MHz or better		
	Endo cavity probe between 5~10 MHz or better		

Choice upto 4 transducers B- Mode imaging Advance Color Doppler, Black & White digital Ultrasound printer, Sine wave on line UPS Must be CE / FDA approved Country of origin should be UK/USA/ EEC./Japan Warranty period shall be of three years starting from date of supply of equipment to the Consignee End	2 <b>Hot Air Oven</b> <b>Hot Air Oven</b> <ul style="list-style-type: none"> <li>• Volume: max 55 Liters.</li> <li>• Maximum W×H×D (mm):400X400X330</li> <li>• Timer Control.</li> <li>• Temp: 50C above ambient to 300 CC.</li> <li>• Microprocessor Control with LED display.</li> <li>• Adjustable Ventilation Slide.</li> <li>• ISO-9001 Certified.</li> </ul> Must be CE / FDA approved Country of origin should be UK/USA/ EEC./Japan Warranty period shall be of three years starting from date of supply of equipment to the Consignee End	1 <b>Centrifuge machine 24 head</b> <b>Centrifuge machine 24 head</b> Capacity: 32 tubes Speed: 5000 – 7000 RPM RCF : 4000 – 5000 x g Entry of parameters can be carried out fast and conveniently via the waterproof foil-keypad. LED Display should be clear and easy to read Actual values should be displayed during centrifugation Input in increments of 100 min-1 Time, t/min: Input in minutes. Timer: 1 to 59min or continuous
---	---	--


Project Director  
 Rehab: DHQ/THQ Hospitals  
 Health Department  
 Government of Sindh, Karachi

<p>Must be CE / FDA approved Country of origin should be UK/USA/ EEC/Japan</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>							
<p>9</p> <p>Ultrasonic water bath</p> <p>Ultrasonic water bath</p> <p>Tank Volume : 5.75</p> <p>ultrasound frequency : 37</p> <p>Heating power : 400</p> <p>Accessories:</p> <p>basket mesh size : 9x1 mm</p> <p>basket dimension : 255 x115x 80</p> <p>Must be CE / FDA approved</p> <p>Country of origin should be UK/USA/ EEC/Japan</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>	3						
<p>10</p> <p>Dressing set</p> <p>Dressing set</p> <p>Forceps, dissecting, Straight, 1/2 teeth, 130 mm x 2</p> <p>Forceps, sinus, 180mm x 1</p> <p>Forceps, Dissecting, Straight, Plain, 115 mm x 1</p> <p>Forceps, Sponge holding, 200mm x 1</p> <p>Scissors, Mayo, Straight, 150mm x1</p> <p>Scissors, dressing, Straight, 165mm x 1</p> <p>Scissors, ligature, spencer, 130mm x 2</p> <p>Bowls, lotion, s/s, 5 liter x 1</p> <p>Bowl lotion, s/s, 0.2 liter x 2</p> <p>Kidney Dish, 24cm x 2</p>	15						<p>Project Director</p> <p>Rehab: DHQ/THQ Hospitals</p> <p>Health Department</p> <p>Government of Sindh, Karachi</p>



[illegible]

13	<p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>																																												
		6																																											
	L.S.C.S set																																												
	L.S.C.S set																																												
	Tray kidney shape with Lid S/S 200x30mm (02 Nos)																																												
	Tray instrument with Lid 225x125x50mm Deep (02 Nos)																																												
	Forceps Artery Spencer Wells Straight B.I.S/S 125mm (12 Nos)																																												
	Forceps Artery Spencer Wells Straight B.I.S/S 200mm (02 Nos)																																												
	Forceps Dissecting Plain serrated jaws S/S 150 mm ( 02 Nos)																																												
	Forceps Dissecting Treves, 1x2 Teeth 150 mm (02 Nos)																																												
	Forceps Tissue Allis fine 4x5 Teeth B.I.S/S 150 mm (02 Nos)																																												
	Forceps Tissues little wood 2x3 Teeth (b).s/s 150 mm (03 Nos)																																												

14	Scissor: Mc Indoe/Metzenbaum CO Flat S/S 190mm (01 No)	4	Project Director Rehab: DHQ THO M- Health Dept Government of Sindh, Karachi	
	Retr: Doyen Ring Handle blade 95 mm Length 280 mm (01 No)			
	Retr: Lange beak H/H 13x44 Blade, 210 mm Long (01 No)			
	Retr: Morris Double-ended (52x38) & (52x64) mm (01 No)			
	Pin Safety Mayo, forceps holding, 120mm (03 Nos)			
	Suction Tube Pool's S/S 225mm (01 No)			
	Forceps Haemostasis Green Armitage 200 mm (05 Nos)			
	Sterilizing and storing case St. St. with filters 260x150x50 mm (02 Nos)			
	Made from imported stainless steel, Rust resistant and satin finish			
	Must be CE Marked Product/ Export Quality			
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End			
	D & E set			
	D & E set			
	Scalpel Handle # 3 x 1			
	Scalpel Handle # 7 x 1			
	Scalpel Handle # 3L x 1			
	Crite Forceps Str 5 1/4" x 6			
	Crite Forceps Cvd 6 1/4" x 6			
	Dressing Forceps 8 x 1			



Tissue Forceps 1 x 2 Teeth 8" x 1
TC Crile-Murray NH Serr 6" x 1
TC Mayo-Hegar NH Serr 7" x 1
Backhaus Towel Clamp 5 1/4" x 6
Bozeman Forceps Double Curved 10" x 1
Foerster Sponge Forceps CvdSerr 9 1/2" x 2
Jackson Retractor Small Blade 3" x 1 1/2" x 1
Jackson Retractor Medium Blade 3 1/2" x 1 1/2" x 1
Auvard Weighted Speculum Medium 2 1/2 lbs. x 1
Graves Vaginal Speculum Medium 1 1/4" x 4" x 1
Graves Vaginal Speculum Large 1 3/8" x 4 1/2" x 1
Pederson Vaginal Speculum Small 1 1/2" x 3" x 1
Kogan Endospeculum w/ Gauge and Screws x 1
Goodell Dilator Large 13" x 1
Hegar Dilators (Set of 8) x 1
Sims Sound Plain 12 1/2" x 1
Sims Curette Sharp 11" #2 x 1
Sims Curette Sharp 11" #3 x 1
Sims Curette Sharp 11" #4 x 1
Sims Curette Sharp 11" #5 x 1
Kevorian-Young Endocervical Curette w/ Basket 12" x 1

Project Director  
Rahab: DHQ/HQ Hospital  
Health Department  
Government of Sindh, Karachi

for

Schroeder Tenaculum Forceps 9 1/2" x 1					
Javerts Forceps Serr 9 1/2" x 1					
Made from imported stainless steel, Rust resistant and Satin finish					
Export Quality Material					
Must be CE Marked Product/ Export Quality					
Warranty period shall be of three years starting from date of supply of equipment to the Consignee End					
15	1				
General Surgery Set Complete in All Respect					
General Surgery Set Complete in All Respect					
Bowl Lotion 250 mm (2 Nos)					
Gallipot/Cup S/S 180 ml (2 Nos)					
Gallipot/Cup S/S 250 ml (2 Nos)					
Tray Kidney shape with Lid S/S 200x30 mm (2 Nos)					
Tray Kidney shape with Lid S/S 300x50 mm (2 Nos)					
Forceps artery Kocher COF BLS/S 180 mm (20 Nos)					
Forceps artery Spencer Wells CO Flat (bj). S/S 200 mm (15 Nos)					
Forceps Dissecting Plain serrated jaws S/S 150 mm (6 Nos)					
Forceps Dissecting Plain serrated jaws S/S 250 mm (1 Nos)					
Forceps Dissecting narrow , serrated jaws S/S 200 mm (1 Nos)					
Forceps Dissecting Lane's 2x3 teeth 180 mm (3 Nos)					
Forceps Dissecting Waugh, fine serrated jaws 1x2 Tth 200 mm (1 Nos)					

Project Director  
Rehab. DHO THO  
Health Dept  
Government of Sindh, Hqs-201

*[Handwritten signature]*

Forceps Tissue Allis fine 4x5 Teeth B.J.S/S 150 mm (4 Nos)
Forceps Towel Holding cross Action S/S 100 mm (8 Nos)
Forceps Towel Moynihan, Double Teeth (b.) 190 mm (4 Nos)
Forceps Sponge Holding Rampley B.J.S/S 240 mm (5 Nos)
Handle size 3 for scalpel blades size 10-15 (1 Nos)
Handle size 4 Scalpel blades size 20-24 (1 Nos)
Needle Holder Kilner's 165 mm (1 Nos)
Needle Holder Mayo Hegar B.J.S/S 180mm (2 Nos)
Scissor Blunt Point Straight S.J. S/S 180mm (1 Nos)
Scissors Mayo's CO Flat 200 mm S/S (1 Nos)
Scissors Mayo's Straight 200 mm S/S (3 Nos)
Scissors McIndoe's CO Flat 190 mm S/S (1 Nos)
Retr. Deaver #1-Blade 25mm, Length 305mm (1 Nos)
Retr. Lange beck, H/H 26x64 Blade, 210 mm Long (2 Nos)
Retr. Deaver #5-Blade 75mm, Length 305mm (1 Nos)
Retr. Morris Double-ended (52x38) & (52x64) mm (2 Nos)
Retr. Waton, malleable copper 13mm length 305mm (1 Nos)
Needle Aneurysm S/S, Small 146 mm (1 Nos)
Pin Safety Mayo, forceps holding, 120mm (4 Nos)
Suction Tube McIndoe (1 Nos)
Suction Tube Pottle's S/S 225 mm

Project Director  
Rehab: DHQ/HQ Hospitals  
Health Department  
Government of Sindh, Karachi

*[Handwritten signature]*

16	Sterilizing and storing case St.St. with filers 260x150x50 mm (2 Nos) Wire Cutting, Tungsten, Carbide inserts 180 mm. Made from imported stainless steel, Rust resistant and Satin finish Export Quality Material Must be CE Marked Product/ Export Quality Warranty period shall be of three years starting from date of supply of equipment to the Consignee End	13	Project Director Rehab. DHQ/HQ Hospitals Health Department Government of Sindh, Karachi
17	Instrument Trolley (Fixed) Instrument Trolley (Fixed) Stainless steel trolley with plastic drawer internally divided in 4 sectors. 2 shelves with up stands on four sides. Revolving rubber castors Ø 80 mm (two with brake) Made from imported stainless steel, Rust resistant and Satin finish Export Quality Material Must be CE Marked Product/ Export Quality Warranty period shall be of three years starting from date of supply of equipment to the Consignee End	9	



18	Must be CE Marked Product/ Export Quality						
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End						
20	Instrument Tray SS						
	Instrument Tray SS						
	Set of different size of instrument trays						
	Made from imported stainless steel, Rust resistant and Satin finish						
	Must be CE Marked Product/ Export Quality						
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End						
19	OT Table / Hydraulic OT Table	2					
	OT Table / Hydraulic OT Table						
	Multipurpose Hydraulic Operation table						
	Systems operatable by foot pump for hydraulic function.						
	Movement for Systems by manual gas pistons & hydraulic.						
	Table top Board divided in 05 sections						
	Table Elevation & decrease system, by hydraulic piston commanded by foot panel.						
	Head Rest Detachable & adjustable by piston						
	Surface of the table board in radio transparent material, tunnel with guides for X-ray Cassettes						
	Table Top Dimensions L X W X H: 2000x500mm						

Project Director  
Rehab. DHQ/THQ Hospitals  
Health Department  
Government of Sindh, Karachi

From 650 to 850mm or better	
Lateral Tilt: -20° to +22°	
Back Section, Adjustable from +80° to -25°	
Maximum Patient Weight: 200 or more	
Standard Accessories:	
Anesthesia Screen ARC, in Stainless Steel	
Head Rest Padded, Detachable	
X-Ray Cassette	
Mattress	
Iv Stand	
Must be CE / FDA approved	
Country of origin should be UK/USA/ EEC/Japan	
Warranty period shall be of three years starting from date of supply of equipment to the Consignee End	
20	12
Normal delivery set \$5	
Normal delivery set \$5	
Sponge holding forceps x 2	
Cord clamp	
Straight big artery forceps x 1	
Dissecting forceps tooth x 1	
Dissecting forceps non tooth x 1	
Scissor mayo x 1	
Scissor cord cutting x 1	
Scissor episiotomy x 1	
Outlet forceps x 1	
Low mid cavity forceps x 1	

Project Director  
Rehab: DHQ/THO Hospitals  
Health Department  
Government of Sindh, Karachi

44

21	Silicon cups, 40mm, 50mm and 60mm.	8	Project Director Rehab: OHQ/THQ Hospitals Health Department Government of Sindh, Karachi			
	Complete with cover bag					
	Made from imported stainless steel, Rust resistant and Satin finish					
	Export Quality Material					
	Must be CE Marked Product/ Export Quality					
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End					
	Epistomy set					
	Epistomy set					
	Epistomy Set					
	1 Dressing Forceps, 14.5 cm - 5 3/4"					
22	1 Tissue Forceps, 14.5 cm - 5 3/4"	2				
	- 1 MATHIEU Needle-Holder, 17 cm - 6 3/4"					
	- 1 BRAUN Episiotomy Scissors, 15 cm - 6"					
	- 1 Tissue Scissors, 14.5 cm - 5 3/4", 03.05.14 - 1 KOCHER Hemostatic Forceps, 14 cm - 5 1/2"					
	- 1 Needle Case, rectangular, 46.37.47 - 6 Suture Needles, in assorted sizes					
	Must be CE Marked Product/ Export Quality					
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End					
	Vacuum Extractor					
	Vacuum Extractor					
	Vacuum Extractor with various sizes suction cups					

<p>4 anti-static castors, 2 with brakes</p> <p>Piston type, oil free</p> <p>Pump flow: 40L/min or more</p> <p>overflow prevention</p> <p>Hydrophobic PTFE Filter</p> <p>3 m PVC Suction tube</p> <p>Metallic curved and straight catheter</p> <p>Must be CE / FDA approved</p> <p>Country of origin should be UK/USA/ EEC/Japan</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>	<p>23</p> <p>CTG Machine</p> <p>CTG Machine</p> <p>Dual Channel, 5 inch or more display</p> <p>Trace annotation facility</p> <p>Automatic fetal movement measurement, Automatic detection of all sensor</p> <p>Patient data saving facility</p> <p>Integrated battery</p> <p>USB Connectivity</p> <p>Built-in Thermal printer</p> <p>Complete unit with 2 ultrasound probes</p> <p>Must be CE / FDA approved</p> <p>Country of origin should be UK/USA/ EEC/Japan</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>	<p>24</p> <p>Infusion Pump</p> <p>Infusion Pump</p> <p>Volumetric peristaltic infusion pump.</p> <p>Flow rate 0.1 to 99.9 ml/h.</p>
	<p>1</p>	<p>10</p>

Project Director  
Rehab: DHQTHQ Hospitals  
Government of Sindh, Karachi

*[Handwritten signature]*



25	Unit compatible with most IV set.	27				
	Memory function incase of power failure to retain the most recent flow rate & total volume.					
	Comprehensive alarm for Air in line, occlusion, door open, low battery, infusion complete, empty container.					
	Built in battery charger.					
	Unit complete with IV sets.					
	Must be CE / FDA approved Country of origin should be UK/USA/ EEC./Japan					
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End					
	<b>Suction Machine Heavy Duty</b>					
	<b>Suction Machine Heavy Duty</b>					
	Suction Machine with two polycarbonate collection jars of 2000ml each					
26	4 antistatic castors , 2 with brakes	31				
	Piston type, oil free					
	Pump flow: Minimum 60L/min and more					
	overflow prevention					
	Hydrophobic PTFE filter					
	3 m PVC Suction tube					
	Metallic curved and straight catheter					
	Must be CE / FDA approved Country of origin should be UK/USA/ EEC./Japan					
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End					
	<b>Glucometer</b>					

Project Director  
Rehab. Department  
Government of Jharkhand, Ranchi

47

27	<p><b>Glucometer</b></p> <ul style="list-style-type: none"> <li>Easy operation</li> <li>Method: Glucose Oxidize enzyme electrode method</li> <li>Measuring range: 10-600 mg/dL</li> <li>Sample size: 0.5 µL</li> <li>Measuring time: 5-7 seconds approx.</li> <li>Digital Reading Display: LCD</li> <li>Power supply: Dry battery</li> <li>Automatic power-off</li> <li>Data management/Memory of at 150 - 1000 results with time and date</li> <li>Option of QC lockout</li> <li>Strips should be in individual foil packing</li> <li>Complete with lancet and puncturing device</li> <li>Must be CE Marked Product/ Export Quality</li> <li>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</li> </ul>	12			12
28	<p><b>Ambu Bag Adult</b></p> <ul style="list-style-type: none"> <li>Ambu Bag Adult</li> <li>100% latex-free Ambu bags</li> <li>Built-in pressure limitation</li> <li>Suitable for adults</li> <li>with face mask and single shutter valve.</li> <li>Autoclavable at 134°C.</li> <li>Must be CE Marked Product/ Export Quality</li> <li>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</li> </ul>	12			12

Project Director  
Rehab: DHQ/THQ Hospitals  
Government of Sindh, Karachi

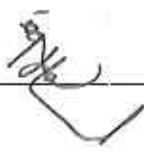
*[Handwritten signature]*

29	Autoclavable at 134°C.
	Must be CE Marked Product/ Export Quality
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End
13	Emergency Resuscitation Trolley
	Emergency Resuscitation Trolley
	Emergency trolley - 3 drawers or more
	Structure and drawers in epoxy powder coated steel with antibacterial and antimicrobial treatment, to improve infection Control
	Walls moulded strong polymer
	Ample worktop with moulded 4-sides raised rim and ergonomic built-in push handle, scratch resistant
	Extendable writing surface
	Equipped with:
	3 drawers in painted steel mounted on steel ball-bearing fully-extending rails, complete with handles with label holder for quick identification of content:
	1 drawer with Central locking system by knob with security breakable plastic seals.
	Upper part:
	S/S IV pole holder with 2 S/S hooks, height adjustable
	One (R/L) side:
	2 transparent tilt-out bins
	Shelf for vacuum pump
	Back side:

Project Director  
Rehab. Directorate  
Government of Sindh, Karachi

49

49

30	Oxygen tank compartment with holding straps, from 3 to 7 liters	10	Project Director Rehab. DHQTHQ-Hospitals Government of Sindh, Karachi	
	Storage space for catheters / probes			
	One Side (R/L):			
	Waste basket without lid, with removable internal			
	Must be CE / FDA approved Country of origin should be UK/USA/ EEC./Japan			
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End			
	Cardiac Monitor			
	Cardiac Monitor			
	05 Parameters Monitor with 12 inches or more, color TFT screen with touch screen			
	Built in ECG			
30	NISP			
	Respiration			
	Temperature			
	And SpO2 measurement with all standard accessories including reusable SpO2 probe.			
	Trends:			
	72 hours or more			
	Battery: 3 hours backup or more			
	System output:			
	Ethernet Network: 1 standard RJ45 socket			
	Defibrillation output: 18VDC connector			
	Must be CE / FDA approved Country of origin should be UK/USA/ EEC./Japan			




[illegible]

*[Handwritten signature]*

Project Director  
Health, Durgam Cheruvu  
Government of Karnataka

- Return zero position
- Comfortable Arm set
- Head rest adjustable for children position
- Removable silicone table tray
- Swing flexible balanced arm
- Two way high speed connection with tubing
- Two triple syringe with unit
- Two way connection with slow speed
- 2 Tubing three way syringe
- High suction and saliva ejector
- Air are vacuum motorized suction available
- Large surgical tray for operating
- Auto bowl flash & auto cup filter operated by button
- Pressure Bottle assembly
- Hot water system
- Water Filter
- Operating head light digital circulator with cold light reflector
- Movable cuspidor adjust at any position
- Air operated foot control
- X-ray viewer for intra oral X-ray
- Upholstery in different color options
- Luxury hydraulic pump stool for doctor stool or assistant stool for working
- Technical Specification
  - Safety switch to stop the chair from any entrapped equipment
  - Supply voltage: 220V, 50Hz
  - Air pressure: 50L/Min
  - Water pressure: 0.2 Mpa-0.4 Mpa
  - Unit can be operated on low voltage 24V
  - OIL FREE COMPRESSOR
  - Capacity for 1 dental unit
  - Tank capacity: 32 litre/min
  - Power 700 watt/min
  - Capacity discharge 0.8 Mpa
  - Desiccators System
  - Noise 56-65 db
  - Frequency 550W

	<ul style="list-style-type: none"> <li>• Air regulator which control air according to need</li> <li>• Air Filter which purify air from moisture</li> <li>• HIGH SPEED TURBINE x 2</li> <li>• Push type</li> <li>• Autoclave able</li> <li>• Single water spray</li> <li>• 400,000 Rpm</li> <li>• Two Hole Midwest system</li> <li>• Simple Bur Exchange Automatic Tension Grip</li> <li>• AIR MOTOR WITH STRAIGHT &amp; CONTRA ANGLE</li> <li>• Autoclave able</li> <li>• Variable speed 22000 Rpm</li> <li>• Two Hole Midwest system</li> <li>• Straight &amp; Contra angle attachment is separate</li> <li>• Slow speed with speed control system</li> <li>• Surgical procedure can be used</li> <li>• Complete set with EX203 motor, EX-06 straight attachment, NAC-E Contra head &amp; accessories</li> </ul>			
34	<p>Dental Instrument Set</p> <p>Dental Instrument Set</p> <p>Probe, Mouth mirror and Forceps</p> <p>Made from imported stainless steel, Rust resistant and Satin finish</p> <p>Must be CE Marked Product/ Export Quality</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>	8		
35	<p>Dental X-Ray</p> <p>Dental X-Ray</p> <p>Dental X-Ray Machine 8mA complete set with all standard accessories for its installation and commissioning</p>	1		

Project Director  
Health Department  
Government of Sindh, Karachi

<p>Output rating: 8mA/70 kVp. Time selector: 0.05-0.5 sec. 0.25-3.2 sec. X-ray tube: Stationary anode tube. Focal range: 0.7x0.7mm. Aluminum equivalent: 2.5 mmAL. Supply power allowance: +/- 10% Electric power: 110 or 220 VAC, 50/60 Hz</p> <p>Length: 1800mm</p> <p>Must be CE / FDA approved Country of origin should be UK/USA/ EEC/Japan</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>	<p>3</p>	<p>Project Director Rama Chandra Hospital Government of Sindh, Karachi</p>
<p>36</p> <p><b>Opthalmoscope</b></p> <p><u>Opthalmoscope</u></p> <p>Lens range: CD + 10 - 10 / 15 / 20 / 40 D;</p> <p>Aperture: Large aperture, small aperture, micro aperture, slit aperture, cobalt blue aperture &amp; fixation aperture.</p> <p>Filter: red free filter / Polarizing filter.</p> <p>Operation mode: Intermittent. On-time should not exceed to 2 min with off-time not less than 5 mins.</p> <p>Includes: Desktop charger &amp; rechargeable handle.</p> <p>Must be CE / FDA approved Country of origin should be UK/USA/ EEC/Japan</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>	<p>3</p>	<p>Project Director Rama Chandra Hospital Government of Sindh, Karachi</p>
<p>37</p> <p><b>Centralized Medical gases supply system</b></p> <p><b>ITEM 1.</b></p> <p><u>Centralized Medical gases supply system</u></p> <p><b>ITEM 1.</b></p> <p><u>Complete with Vacuum System</u></p> <p>AUTOMATIC MANIFOLD FOR OXYGEN FOR 2 X 10 CYLINDERS 1 No.</p> <p><u>WITH CONNECTION TO VIE TANK.</u></p>	<p>1</p>	<p>Project Director Rama Chandra Hospital Government of Sindh, Karachi</p>



Project Director  
Rahat Hospital  
Health Department  
Government of Sindh, Karachi

The Control Panel should handle three sources i.e. Two sized cylinders and one VIE Tank.
The Manifold shall be a fully automatic type & shall switch from Tank / Generation System to Cylinders bank without fluctuation in delivery supply line pressure
The system should be able to maintain continuous supply in case of power failure.
Capacity: 70-90, M3/h.
Function:
Fully automatic self-contained shuttles valve with no electrical power required for switching, Microprocessor based control panel with display.
Units of measure (psi/psig/Bar).
Make
ITEM 2
AUTOMATIC MANIFOLD FOR NITROUS OXIDE (2 X 5) 1 No
The Manifold shall be a fully automatic type & shall switch from "Bank in Use" to "Reserve" bank without fluctuation in delivery supply line pressure & without the need for external power after the switch-over the "Reserve" bank shall then become the "Bank in Use" and the bank in use shall become the reserve bank. The System should be able maintain continuous supply in case of Power failure.
Capacity 10 - 50 M3/h.
Function:

7/10/20

Project Director  
Health Department  
Government of Sindh, Karachi

Fully automatic self-contained shuttles valve with no electrical power required for switching. Microprocessor based control panel service and maintenance works can be carried out without stopping operation.	
Make	
ITEM 3	
WALL OUTLET	
Outlet should have double lock quick connect and gas specific. The latch / locking release mechanism should be incorporated on the gas outlet with geometrical key indexing and should have a parking facility so that in the event of release of probe by pressing the spring loaded center, the probe / flowmeter does not fall down.	
Gas outlets wall mounted, Complete in Box/casing gas Specific, Self sealing valve, indexed to eliminate interchangeability/erroneous tapping of gas and cover plate.	
Oxygen	Qty. 92 Nos.
Nitrous Oxide	Qty. 6 Nos.
Compressed Air 4/5 Bar	Qty. 92 Nos.
Make	
ITEM 4	
Air Venturi System with Gauge 25 Nos.	
The injector should be connected to wall source of pressure gas using direct probe or rail mounting system. Max. vacuum 650 to 700 mbar.	
System should be supplied with 02 liter Un Breakable & Sterilizable collection jar.	
Make	
ITEM 5(a)	
Multiple Zone Valve Box with Monitoring Gauge for three gases 3.	
No.	

Micro-processor controlled with digital display of pressure.
Each wall type zone valve box shall consist of the following Components:
A steel valve box which can house two to four shut-off-ball valve with tube extensions.
Make
ITEM 5(b)
Multiple Zone Valve Box with Monitoring Gauge for two gases 4 Nos.
Microprocessor controlled with digital display of pressure.
Each wall type zone valve box shall consist of the following Components:
A steel valve box which can house two to four shut-off-ball valve with tube extensions.
Make
ITEM 6
CEILING PENDANTS: 06 pendants
Each pendant comprises O2 Oxygen, 2 Air 4 Bar & 1 Nitrous Oxide Point
Flexible Ceiling Type Outlets:
Make
ITEM 7
OXYGEN FLOW METER WITH HUMIDIFIER & PROBES: 80 Nos.
With autoclave able and unbreakable humidifier bottle and probe.
ITEM 8

Project Director  
Health Department  
Government of Sindh, Karachi

75

57

<u>COPPER PIPING (IMPORTED FROM UK, EUROPE, USA):</u>	
Supply and installation of seamless copper pipe, deoxidize and for use in piped medical gas systems	
Therefore it is guaranteed that the tubes are leak-tight, free of pores, blisters etc. Tube is drawn seamless, according to HMT 2022 (HMT 02-01) Or equivalent.	
Material:-	
Copper tubes, including fixing clips for ceiling and walls, sleeves, reducers, tee's bends and soldering material,	
1350 Meter Size 15 x 1,	
1500 Meter Size 12 x 1,	
Make	
ITEM 9	
<u>ANESTHESIA SCAVENGING SYSTEM 5 Nos.</u>	
Anesthetic gas scavenging systems designed to remove exhaled anesthetic gas mixtures from operating theatres driven by Air/Oxygen at 05 bar or through vacuum plant, anesthetic rooms and recovery area.	
Make	
ITEM NO 10	
<u>Oil Free Duplex Air Compressor System</u>	
C1 DUPLEX SYSTEM	
100% oil free 10 HP duplex Medical Air Compressor Plan with air dryer, filters, Bypass system, Electrical Panel	
Air Compressor System x 2	
Motor Power (KW / HP): 3.7 / 5	
Piston Displacement: 541 lit/min	
Free Air Flow: 440 lit/min	

Project Director  
Rehab. Department  
Government of Sindh, Karachi

✓



Working Pressure: 9.5 KG/CV2G (135 PS)
Power Source: 380V / 3PH / 50HZ
Noise Level: 74 dB(A) at 1.5 Meter
Tank: 125 Liters
<b>Air Dryers</b>
2 x Dryer Model: AMH-12
Volume Flow Rate @ Inlet: 1200 lit/min @80 °C
Max. Operating Pressure: 14 barg.
Max. Ambient Temperature: 45 °C
Pressure Dew Point: -3 °C
Refrigerant:
Power Source: 230V / 1PH / 50HZ
<b>Filtration</b>
2 x Pre-Filter: F-012P - 1200 lit/min (3 Micron) ½"
4 x After-Filter: FT-012X - 1200 lit/min (0.01 Micron) ½"
1.5) By Pass System (Local with Imported Fittings):
Isolation Valves, Adaptors, Regulators & Pressure Switches.
<b>Make</b>
<b>Electrical Panel</b>
Simple Controlled Electrical Panel, Pressure based Automatic Switching between Compressors, Contractors, Overload, Power Indication Lights and Circuit Breakers.
Specifications / Requirements may be different from Hospital to Hospital, bidders are directed to visit Premises before bidding.
Must be CE / FDA approved Country of origin should be UK/ USA/ EEC/ Japan

Project Director  
Health Department  
Government of Sindh, Karachi

38	<p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p> <p>Split Air condition 1.5 Ton (Energy Sever) with Stabilizer</p> <p>Split Air condition 1.5 Ton (Energy Sever) with Stabilizer</p> <p>Complete with Installation at site</p> <p>Haire /dowlance/LC/Orient/Gr Equivalent</p> <p>Must be CE Marked Product/ Export Quality</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>	64			
39	<p>Autoclave Vertical</p> <p>Autoclave Vertical</p> <p>Capacity : 85 – 110 Liters</p> <p>Minimum Chamber size (mm) : 300 X 710D</p> <p>Maximum Chamber size (mm) : 420 X 795D</p> <p>Power source : AC 220, 50/60Hz</p> <p>Max Power consumption : 2.0KW</p> <p>Warming temperature range : 45 to 60 oC</p> <p>Agar dissolution temperature range : 60 to 100oC</p> <p>Chamber material : SUS304 (Stainless steel)</p> <p>Sterilization timer : 1 to 250 minutes</p> <p>Auto start timer : 1 minutes to 7 days</p> <p>Pressure gauge : 0 to 0.4 Mpa</p> <p>Must be CE / FDA approved</p> <p>Country of origin should be UK/USA/ EEC./Japan</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>	3			
40	<p>Baby Running Trolley with Warmer</p> <p>Baby Running Trolley with Warmer</p>	2			

Project Director  
Rehab. Department  
Government of Sindh, Karachi

41	Mobile resuscitation trolley with overhead warmer with integrated baby bassinet along with cushioned mattresses.	5
	Microprocessor control.	
	Audible and Visual high and low temperature alarms.	
	Display of skin Temperature, Air Temperature	
	Heater output (%).	
	APGAR Timer.	
	Resuscitation system	
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End	
	CE Marked Product/ Export Quality	
41	Defibrillator	5
	Defibrillator	
	with all Standard Accessories	
	• Adult/Pedia Paddle, Biphasic External Battery pack and all Standard Accessories.	
	• Biphasic Trans thoracic (external) defibrillator.	
	• Synchronized output with ECG.	
	• Control of energy charging/ delivering on main panel & apex paddle.	
	• Charging Indicators.	
	• The energy range should be adjustable for pedia and adults	
	• The Energy levels: 2, 5, 7, 10, 20, 30, 50, 100, 150, 200, 300, 360 joule, Auto sequence.	
	• Energy Selection: Rotating knob on unit, typical charging time to 360J: 8 second.	
	• Energy Selection: Rotating knob on unit	
	• Typical charging time to 360J: 8 second	

Project Director  
Health Department  
Government of Sindh, Karachi





43	Depth of field: > 18/4/2 mm	2	Project Director Rehab: DHQ/HQ Hospital Health Department Government of Sindh, Karachi		
	Light Intensity: > 28,000 lux				
	Interchangeable adjustable eyepiece 2.5X				
	Illumination: long life 5.9V / 5W LED				
	Superior optics with individually adjustable eyepiece				
	Built-in rheostat for brightness adjustment				
	Easily changeable, LED bulb				
	User-selectable built-in green filter				
	Two (gross/fine) focus adjustment handles				
	Two (gross/fine) height adjustment handles				
44	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End	2			
	Must be CE / FDA approved				
	Country of origin should be UK/USA/ EEC/Japan				
	Laryngoscope				
	Laryngoscope				
	floor optic laryngoscope with blades and halogen light source in the handle				
44	sterilizable with re-chargeable batteries.	2			
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End				
	Must be CE / FDA approved				
	Country of origin should be UK/USA/ EEC/Japan				
44	Over Head Operating Light	2			
	Over Head Operating Light				
	with all Standard Accessories				

*[Handwritten signature]*

Project Director  
Rahab, DHQTHQ Hospitals  
Health Department  
Government of Sindh, Karachi

<ul style="list-style-type: none"> <li>• High performance LED illumination for every type of surgery</li> <li>• Cold Light</li> <li>• White Light</li> <li>• Excellent contrast in the operating field</li> <li>• Shadows reduction in the surgical field and total illumination of the surface and at depth –</li> </ul>	<ul style="list-style-type: none"> <li>• BRIGHTNESS ADAPTER</li> <li>• IR-free light without heat in the surgical area and on the surgeon's head</li> <li>• A range for the integration of multimedia solutions</li> <li>• The design guarantees compatibility with laminar flows</li> <li>• Light-up system for minimally invasive surgery. The light beams coming out from the upper</li> <li>• part of the light head enable to visualize distinctly the surgical field maintaining the correct</li> <li>• vision of the screen</li> <li>• Digital touch control Surgical field focusing</li> <li>• IR Digital Finger touch sensor for intensity control</li> <li>• Power consumption 150 W + 140 W (For both light Head)</li> <li>• Frequency 50/60 Hz</li> <li>• Product class (EM50602-2-41)1:</li> </ul>
	<ul style="list-style-type: none"> <li>• Light source technical data:</li> <li>• Light Source : LEDs</li> <li>• Average life : 50,000 h</li> <li>• Max power : 180 W – 140 W (For Both Light Head)</li> <li>• Lighting at the centre, Ec @ 100cm</li> <li>• Illumination 2 x160,000 lux @ 1 meter-100cm (with one Light Head)</li> </ul>
	<ul style="list-style-type: none"> <li>• Total illumination 320,000 lux @ 1 Meter-100cm with both light head</li> <li>• Light regulation from 100% to 10% Digital Control</li> <li>• Color temperature, CCT 4,900° K ± 5%</li> <li>• Color rendering index, Ra 95±1</li> <li>• Chromaticity coordinates x=0.34, y=0.34</li> <li>• Temperature increase on patient 1°C</li> <li>• Light field dimension d10 @ 100cm 26cm</li> <li>• Light field dimensions d50 @ 100cm 13cm</li> <li>• Lighting depth L1+L2 : 111 cm</li> <li>• Lighting depth L1+L2 : 114cm</li> <li>• Light source technical data</li> <li>• Light Source : LEDs</li> <li>• Average life : 50,000 h</li> <li>• Max power : 180 W and 140 W</li> <li>• Lighting at the centre, Ec @ 100cm</li> </ul>



*[Handwritten signature]*

Project Director  
Health Department  
Government of Sindh, Karachi

<b>Phaco Machine</b>	
U/S Power	
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 Hand piece 4 Piezo electric crystal, 20 gm light weight	
Frequency 40 KHz (38.0+- 1.9KHz)	
Irrigation mode Through Foot Switch / Free Flow( Irrigation Continuous)	
Vacuum: 0-650mmHg+(Fix/Linear)	
Fluidic System Enhanced Fluidics	
Low compliance membrane technology for improved Chamber stability.	
surge suppression & 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	
Vitrectomy cutter 20-Gauge Guillotine(Auto clave able)	
Sub modes Cut I/A, I/A Cut	
Cut rates 10 to 1500 cuts / minutes	
Vacuum	
Coagulation 10 watt max, 75ohm	
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	



<p>Phaco Tip options A full line of phaco tip design including Kelman, ABS, Flared &amp; tapered</p> <p>Includes:</p> <p>U/S Hand piece – 3 U/S Hand piece</p> <p>Vitrector</p> <p>Foot switch</p> <p>Dust Cover</p> <p>Optional accessories 1/A tip bent .3mm – 3 1/A hand piece</p> <p>1/A Hand piece body</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p> <p>Must be CE / FDA approved</p> <p>Country of origin should be UK/USA/ EEC./Japan</p>				
<p>Refrigerator</p> <p>Refrigerator</p> <p>Haire /Cowlance/LG/Orient/ or Equivalent</p> <p>CE Marked / Export Quality</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>	5			
<p>Retinoscope</p> <p>Retinoscope</p> <p>Rotation: ±190 degree</p> <p>Length of streak image: ≥30mm</p> <p>Width of Length image: ≥1.5mm</p> <p>Operation mode: Intermittent, On-time should not exceed to 2 min with off-time not less than 5 mins</p> <p>Includes: Desktop charger &amp; rechargeable handle.</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p> <p>Must be CE / FDA approved</p> <p>Country of origin should be UK/USA/ EEC./Japan</p>	2			
<p>ABG Machine / Arterial Blood Gases</p>	1			

Project Director  
Health Department  
Government of Sindh, Karachi

9/11

Project Director  
Rehab. Department  
Government of Sindh, Karachi

<b>ABG Machine / Arterial Blood Gases</b>	
<ul style="list-style-type: none"><li>• should have a display of 10 inch or more Color touch screen</li><li>• should have a throughput of 250 samples per day or better</li><li>• should have inlet design reduces risk of air bubbles</li><li>• should have a built in printer</li><li>• should have Automated quality control</li><li>• should have Full LIS/HIS connectivity reduces transcription errors</li><li>• Analytical Performance</li></ul>	
<b>Measured Parameters:</b>	
The measured parameters should include the following:	
Type	Parameter
pH	pH, pH+
Blood Gas	pCO <sub>2</sub> , pO <sub>2</sub>
Electrolytes	cK <sup>+</sup> , cNa <sup>+</sup>
Oximetry	ctHb, sO <sub>2</sub>
<b>Derived Parameter:</b>	
The derived parameters should be,	
pH(T), pCO <sub>2</sub> (T), cHCO <sub>3</sub> (P), cBase(B), cBase(B,ox), cBase(Ecf),cBase(Ecf, ox), cHCO <sub>3</sub> (P,st), cH <sup>+</sup> , cH <sup>+</sup> (T), ctCO <sub>2</sub> (P), ctCO <sub>2</sub> (B), pH(st), pO <sub>2</sub> (T), pO <sub>2</sub> (A), pO <sub>2</sub> (A,T), p50, p50(T), p50(st), pO <sub>2</sub> (A-a), pO <sub>2</sub> (A-a,T), pO <sub>2</sub> (a/A), pO <sub>2</sub> (a/A,T), pO <sub>2</sub> (a,T)/FO <sub>2</sub> (I), cCa <sub>2+</sub> (7.40), Anion Gap(K <sup>+</sup> ) Anion Gap, DO <sub>2</sub> , Hct, pO <sub>2</sub> (x,T), ctO <sub>2</sub> 2(B),ctO <sub>2</sub> (a-v), ctO <sub>2</sub> (x), FShunt, FShunt(T), sO <sub>2</sub> , CtHb, RI, RI(T), mOsm, p50, p50(st), pO <sub>2</sub> (a)/FO <sub>2</sub> (I), DO <sub>2</sub> , Hct,pO <sub>2</sub> (x),BO <sub>2</sub> , VO <sub>2</sub> , Qx,Q1, V(B)	
<b>Technical Specifications:</b>	
Liquid Volume:195 micro litre	
Cycle time: 150 sec	
Measuring time: 80 sec	
<b>Hardware:</b>	
Intel celeron processor	
128 MB RAM	
CD/RW/DVD drive	
<b>Data Capacity</b>	
Should include the following results:	
Patient results: 2000	
Calibration results: 1000	
QC results: 1500	
System messages & service registrations: 5000	
Warranty period shall be of three years starting from date of supply of equipment to the Consignee End	
Must be CE / FDA approved	
Country of origin should be UK/ USA/ EEC/ Japan	

Signature

50	Centrifuge Machine 12 head	1					
	<p>Centrifuge Machine 12 head</p> <ul style="list-style-type: none"> <li>Capacity 12 tubes.</li> <li>Digital microprocessor controlled.</li> <li>Speed range 6000 rpm, digital display.</li> <li>Timer range 0 – 59 minutes and continuous run with lid lock system.</li> <li>Automatic imbalance indication with safety shut off.</li> <li>ABS housing resistant against shock &amp; chemicals.</li> <li>Foil Key Board, 10 acceleration &amp; deceleration rates.</li> </ul> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p> <p>Must be CE / FDA approved</p> <p>Country of origin should be UK/USA/ EEC/Japan</p>						
51	Electronic Balance	1					
	<p>Electronic Balance</p> <ul style="list-style-type: none"> <li>Capacity : 420 gm</li> <li>Readability : 0.1 mg</li> <li>Repeatability (sd) : 0.3 mg</li> <li>Linearity (+/-) : 0.5 mg</li> <li>Pan Size (mm / inch) : 90Ø / 3.5"Ø</li> <li>Response Time : 2 – 3 Sec</li> <li>Display : Alpha Numeric LCD Display</li> <li>Calibration : Motorised Internal Calibration</li> <li>Units of measure : g, mg, ct, GN, mo, oz, dwt etc.</li> <li>Rate Range : Full</li> <li>Operating Temp : + 10° to 40°C</li> <li>Sensitivity Drift. : 5 ± 2ppm (2 x 10 / °C)</li> <li>Minimum Sample Wt. as per USP : Approx 100 to 150mg</li> <li>Minimum Wt. as per (U=1%, sd=2) : 8 mg</li> <li>Application Modes : mg PCS, % Weighing, Animal / Dynamic Weighing, Check Weighing Automatic Density, Determination</li> <li>Should be CE Approved / Export Quality</li> <li>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</li> </ul>						
52	Microscope	3					

Project Director  
Relief Pharmacy Hospital  
Health Department  
Government of Sindh, Karachi

Microscope	<p>Compact, lightweight, Ergonomic design with enhanced operability. Outstanding optical performance with elegant ergonomic touches. Newly developed objective lenses for flat Chromatic aberration corrected images.</p> <p>Provides clear and bright image at every magnifications. Siedentopf-type eyepiece tube inclined at 30°, allowing comfortable viewing in a natural posture.</p> <p>Infinity optics treated with anti-mould paint and agent in-side the microscope at critical places.</p> <p>Optical System : Achromat set 4x, 10x, 40x, and 100x oil.</p> <p>Observation tube : Complete with Binocular Eyepiece tube.</p> <p>Nosepiece : Reversed Quadruple revolving</p> <p>Stage : Rectangular mechanical stage mounted on main body.</p> <p>Eyepiece : CFI 10x pair,</p> <p>Objective : CFI BE plan.</p> <p>Condenser : N.A. 1.25 with leaf-type diaphragm.</p> <p>Illumination : LED, High Illumination (50000 hours life).</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p> <p>Must be CE / FDA approved Country of origin should be UK/USA/ EEC./Japan</p>	8	<p>53</p> <p>Diathermy Machine</p> <p>Diathermy Machine</p>
------------	---	---	---

Project Director  
Health Department  
Government of South Karachi

7/11/20



Project Director  
Rehab: DHQTHQ Hospitals  
Health Department  
Government of Sindh, Karachi

<ul style="list-style-type: none"> <li>• Diathermy Electro Surgical Unit Bipolars &amp; Monopolar (Vio-cart System Carrier):</li> <li>• A Microcontroller-based isolated electrosurgical generator along with cart</li> <li>• For all general surgical procedures, including the adaptive REM system and instant response system.</li> <li>• Power Supply 220 Vac 50/60 Hz</li> <li>• Safety Features &amp; Specifications:</li> <li>• Instant / Response technology</li> </ul>	<ul style="list-style-type: none"> <li>• Three internal microcontrollers</li> <li>• Spray coagulation</li> <li>• Leakage Current Controller</li> <li>• RF interference</li> <li>• Dosage error power monitor</li> <li>• Support for simultaneous coagulation</li> <li>• Recall of most recently used mode and power settings</li> </ul>
	<ul style="list-style-type: none"> <li>• Adjustable activation tone volume</li> <li>• Force Argon system compatibility.</li> <li>• 2 Monopolar instrument receptacle</li> <li>• 2 Monopolar footswitch receptacles</li> <li>• 1 Bipolar instrument &amp; receptacles</li> <li>• Preset monopolar cut 3 modes</li> <li>• Preset monopolar coag 4 modes</li> <li>• Preset Biopolar 3 modes</li> </ul>
	<ul style="list-style-type: none"> <li>• Maxim monopolar output (cut) 300 Watts</li> <li>• Maxim monopolar output (Coag) 120 Watts</li> <li>• Maxim output (Biopolar) 70 Watts</li> <li>• Safety Standards</li> <li>• IEC-601-1</li> <li>• IEC-601-1-2</li> <li>• IEC-601-2-2</li> <li>• Consisting of:</li> <li>• Electro Surgical Generator Power Supply 220 vac</li> </ul>
	<ul style="list-style-type: none"> <li>• 50/60 Hz.</li> <li>• Double pedal monopolar foot switch</li> <li>• Foot Switching Pencil Reusable</li> <li>• Std Bipolar foot Switch</li> <li>• Bipolar forceps cord</li> </ul>
	<ul style="list-style-type: none"> <li>• Crushing Forceps</li> <li>• Patient return Electrode without Cord</li> <li>• Clamp cord</li> <li>• Universal Monopolar Adaptor</li> <li>• Polished Stainless Steel Blade Electrode</li> <li>• Blade Electrode</li> </ul>



73

S6	Oxygen saturation range SPO2: 0-100%	27	Project Director Rehab: DHQ/HQ Hospital Government of Sindh, Karachi
	Built in Rechargeable Battery		
	High & Low adjustable alarms on SPO2 and Pulse rate		
	Memory of 100 hours or better and heart rate trends.		
	Complete with Adult Finger Clip Sensor, Pediatric Finger Sensor,		
	Power Cord, Rechargeable Battery, Operation Manual		
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End		
	Must be CE /EC/JIS/ FDA approved		
	Country of origin should be UK/USA/ EEC./Japan		
	Multiparameter Monitor / Patient Monitor		
	Multiparameter Monitor / Patient Monitor		
	• Optional dual-screen display, color TFT LCD screen with high-resolution		
	• Up to 64 real time waveforms for 16 BEDS simultaneously: ECG, SpO2, RESP, CO2, Dual IBP waveforms		
	• Selective waveforms and parameters		
	• Various configurations of main screen		
	• Convenient operation with touch screen or mouse		
	• Supporting LAN network		
	• Audible and visual alarms		
	• Up to 96 hours trend store and review		
	• Up to 720 alarm events store and review		
	• Up to 1000 NIBP measurements store and review		
	• Up to 48 hours of disclosure store and review		
	• Set up the color of waveforms/parameters		

Signature

Project Director  
Rehab. Department  
Government of Sindh, Karachi

<ul style="list-style-type: none"> <li>• Exchanging the position of patient window</li> <li>• Supporting Saadat external thermal recorder</li> <li>• Data Backup</li> <li>• Managing patient information</li> <li>• Compatible with Component Multi parameter Monitors</li> </ul> <p>Must be CE / FDA approved Country of origin should be UK/USA/ EEC./japan</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>	<p>8</p> <p>ECG Machine</p> <p>ECG Machine</p> <ul style="list-style-type: none"> <li>• ECG Machine 12 channel with Standard Accessories &amp; Trolley including consumable.</li> <li>• Single channel ECG machine for 12 lead ECG recording</li> <li>- Sensitivity : 5, 10, 20 mm/mV Reflective LED displays gives process information on:</li> <li>- Electrode faults, battery operation paper end</li> </ul> <p>Heart Rate: 35-240 min-1 Dimensions: W x D x H 338 mm x 340 mm x 98 mm</p> <ul style="list-style-type: none"> <li>• Operating Features And Characteristics</li> <li>• Manual and Automatic Operation</li> <li>• Thermal print head on A-4 size print.</li> </ul> <ul style="list-style-type: none"> <li>• Standard single channel with ECG paper in roll, 50 mm thermo-printer with 2 registration channels an 25mm/sec feed rate chart magazine or Z fold form</li> <li>• Recording Trace speed: 25 and 50 mm/sec</li> <li>• Muscle artifact and AC (50-Hz), interference filters</li> <li>• Defibrillation protection.</li> </ul> <ul style="list-style-type: none"> <li>• Parameters</li> <li>• Lead Selection Lead I, II, &amp; III, aVR, aVL&amp;aVF, V1, V2, V3, V4, V5 &amp; V6</li> <li>• Variable gain: 1/2, 1, 2 cm/mV</li> <li>• Other Features</li> <li>• Complete with standard accessories, including patient cable with re-usable electrodes for adult</li> </ul>
57	





<ul style="list-style-type: none"> <li>• TFT COLOR LCD DISPLAY</li> <li>• PERIPHERAL KERATOMETRY, CLBC, PUPIL SIZE, REFRACTION MAP</li> <li>• BUILT-IN PRINTER</li> <li>• ONE TOUCH LOCK</li> <li>• PUPIL AND IRIS SIZE MEASUREMENT</li> <li>• CLBC (BASE CURVATURE)</li> <li>• RETRO ILLUMINATION MODE</li> <li>• GRAPHICAL DISPLAY OF REFRACTION MAP</li> <li>• PERIPHERAL KERATOMETRY MEASUREMENT</li> <li>• RELIABLE KERATOMETRY DATA USING 2 MIRE RINGS AND 2 LED</li> </ul>					
<b>MEASUREMENT MODE:</b> <ul style="list-style-type: none"> <li>• K/R Mod : Continuous Keratometry &amp; Refractometry</li> <li>• REF Mod : Refractometry</li> <li>• KER Mode : Keratometry</li> <li>• CLBC Mode : Contact Lens Base Curve Measurement</li> <li>• KERP Mode : Peripheral Keratometry</li> </ul>					
<b>REFRACTOMETRY</b> <ul style="list-style-type: none"> <li>• Vertex Distance (VD) : 0.0, 12.0, 13.5, 15.0</li> <li>• Sphere (SPH) : -25.00 ~ +22.00 (When VD=12mm) (increments: 0.12 and 0.25D)</li> <li>• Cylinder (CYL) : 0.00 ~ 10.00D (increments: 0.12 and 0.25D)</li> <li>• CLBC Mode : 1 ~ 180° (increments : 1°)</li> <li>• Cylinder Form : -, +, *</li> <li>• Pupil Distance : 10 ~ 85mm</li> <li>• Minimum Pupil Diameter : Ø 2.0mm</li> </ul>					
<b>KERATOMETRY</b> <ul style="list-style-type: none"> <li>• Radius of Curvature : 5 ~ 10.2mm (increments : 0.01mm) 33.00 ~ 67.50D</li> <li>• Corneal Power : (when corneal equivalent refractive index is 1.3375)</li> <li>• d : (increments : 0.05/0.12 /0.25D)</li> <li>• Axis : 1 ~ 180° (increments : 1°)</li> <li>• Pupil, Iris Diameter : 2.0 ~ 14.0mm (increments : 0.1mm)</li> <li>• Memory of Date : 10 measurements for each eye</li> </ul> <b>OTHERS</b> <ul style="list-style-type: none"> <li>• Internal Printer : Thermal Line Printer</li> <li>• Power Saving : Automatic switch - off (5min)</li> <li>• Display : 6.5 inch Color TFT LCD</li> </ul>					
Must be CE / FDA approved Country of origin should be UK/USA/ EEC./Japan					
Warranty period shall be of three years starting from date of supply of equipment to the Consignee End					
Nitrous Oxide Cylinder					

Project Director  
 Rehab. Department  
 Government of Sindh, Karachi



*Handwritten signature*

<p>Formulas Includes:</p> <ul style="list-style-type: none"> <li>• 6 formulas for implant calculation: SRK-T, SRK II, HOLLDAV, BINKHOFST-II, HOFFER-Q, HAIGIS</li> <li>• Post-Op refractive calculation:</li> <li>• Pre-Op and Post-Op and Post-Op keratometry</li> <li>• 6 different methods for keratometry correction and Implant calculation: history derived, refraction derived, contact lens method, ROSA regression, SHAMMAS regression, double K / SRK-T (Dr ARAMBERRI's formula)</li> <li>• 9 different implant powers for desired ametropia value</li> <li>• Screen display of 2 different implant calculations</li> <li>• Implant values available in increments of: 0.25D or 0.50D</li> </ul> <p>SPECIFICATIONS:</p> <ul style="list-style-type: none"> <li>• Gain: 110dB</li> <li>• TGC: 0 to 30 dB</li> </ul> <p>SPECIFICATIONS:</p> <ul style="list-style-type: none"> <li>o Bias correction: 80 to 120%</li> </ul> <p>With:</p> <p>Compatible Printer</p> <p>Must be CE / FDA approved</p> <p>Country of origin should be UK/USA/ EEC/Japan</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>	<p>29</p>	<p>2</p>
<p>62</p> <p>Oxygen Cylinder with Flow Meter</p> <p>Oxygen Cylinder with Flow Meter</p> <p>BOC Tested 48 cft oxygen cylinder with Flow meter. Regulator</p> <p>Flowmeter</p> <p>0-15l/min</p> <p>With BS probe</p> <p>Should be CE Approved / Export Quality</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p> <p>Electric water cooler</p> <p>Electric water cooler</p> <p>complete with installation site</p> <p>Local / Imported</p>	<p>63</p>	

Project Director  
Rehab. Directorate  
Government of Sindh, Karachi



	Should be CE Approved / Export Quality								
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
64	Modified Microtome	1							
	Modified Microtome								
	Precision micrometer feed mechanism with a 'mono block' system. Ergonomic microtome design safety locking device to lock the hand wheel. Section counter with reset. Front or lateral coarse feed. Patented knife carrier system. Micrometer mechanism and coarse feed system in an enclosed housing vertical specimen movement on backlash and maintenance-free cross roller bearings. Trimming Automatic								
	Specimen Movement Vertical, retraction in return stroke								
	Section Feed 0.5-60 um								
	Feed time for 2um 0.5um								
	Feed time for 10um 1um								
	Feed time for 20um 2um								
	Max Horizontal range 28mm								
	Vertical stroke 64mm								
	Capacity 1100 ml								
	Must be CE / FDA approved								
	Country of origin should be UK/USA/ EEC./Japan								
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
65	Multi Media Projector	1							
	Multi Media Projector								
	Panasonic/Sony/LG/ or Equivalent								
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
66	Computer with LCD Screen complete set	8							
	Computer with LCD complete set								

Project Director  
Rehab: DHC/RHQ Hospitals  
Health Department  
Government of Sindh, Karachi

*[Handwritten signature]*

Handwritten signature

Project Director  
Health Department  
Government of Sindh, Karachi

<p>Core Si</p> <p>3.3 Ghz optical super combo</p> <p>500 GB HDD</p> <p>4 GB DDR 3 RAM</p> <p>19" LCD Monitor</p> <p>Key Board &amp; Mouse</p> <p>Intel / Dell / Hp / or Equivalent</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>	<p>4</p>	<p>3</p>
<p>67</p>	<p>4</p>	<p>3</p>
<p>68</p>	<p>3</p>	<p>3</p>

<p><b>Fax Machine</b></p> <p><b>Fax Machine</b></p> <p>10-ppm Laser Printing (A4)</p> <p>600 x 600 dpi Printing Resolution</p> <p>Caller ID Ready</p> <p>Super G3 Fax with 33.6 kbps Modem</p> <p>250-Sheet Paper Tray</p> <p>HP/Samsung/Sony/or Equivalent</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>	<p><b>Laser Jet Printer</b></p> <p><b>Laser Jet Printer</b></p> <p>Print Speed: Up to 35 ppm-black normal – letter A Size (8.5 in x 11 in) up to 35 ppm-black normal – A4 Size (8.25 in x 11.7 in)</p> <p>Interface: USB, Gigabit LAN</p> <p>Max Resolution (Max): 1200 dpi</p> <p>Media Sizes: 3 in x 5 in, Legal (8.5 in x 14 in), Letter A size (8.5 in x 11 in), 4.1 in x 5.8 in, 8.5 in x 13 in, A4 (8.25 in x 11.7 in), A5 (5.83 in x 8.25 in), A6 (4.13 in x 5.83 in), B5 (6.93 in x 9.83 in), Executive (7.25 in x 10.5 in), JIS B5 (7.17 in x 10.12 in)</p> <p>RAM Installed: 128 MB / 128 MB (Max), Monthly Duty Cycle: 50000 Pages &amp; Media Size Class: A4 / Legal</p> <p>HP/Samsung/Sony/ or Equivalent</p>
---	--

	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
69	<div>Weighting Scale</div> <ul style="list-style-type: none"><li>Professional Patient Scale with: integral digital height rod for determination of weight, height and Body Mass Index (BMI) in a single process</li><li>LCD Display for weight, height and BMI</li><li>Auto weight-lock function on stable weight</li><li>digital height rod with measuring range of 110cm – 200cm x 1mm)</li><li>heavy duty load cell platform, with solid robust cast iron construction</li><li>AC/DC adaptor and battery operation (6 x AA batteries)</li><li>Capacity and Graduation: 250kg x 100g</li></ul> <div>Imported / Superior Export Quality</div> <div>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</div>	2							
70	<div>Plaster Cutter</div> <div>Plaster Cutter</div> <div>Compact, lightweight plaster cutter equipped with a cooling fan</div> <div>With blade lock and adjustable guide and cutting depth gauge.</div> <div>wide range of saw blades</div> <div>Stainless steel blades .</div> <div>non-stick blades with PTFE coating</div> <div>Must be CE / FDA approved</div> <div>Country of origin should be UK/USA/ EEC./Japan</div> <div>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</div>	1							
71	Surgical Drum	62							

Project Director  
Rehab: DHAHQ Hospitals  
Health Department  
Government of Sindh, Karachi

*[Handwritten signature]*

<p><b>Surgical Drum</b></p> <p>Drum, domed top and bottom with sliding removable band and drop down-hasps</p> <p>Made from imported stainless steel, Rust resistant and Satin finish</p> <p>CE Marked Product/ Export Quality / Local</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>	
<p>72</p>	<p>2</p> <p><b>Emergency Resuscitation Trolley With Defibrillator</b></p> <p><b>Emergency Resuscitation Trolley With Defibrillator</b></p> <p>Emergency trolley - 3 drawers or more</p> <p>Structure and drawers in epoxy powder coated steel with antibacterial and antimicrobial treatment, to improve Infection Control</p> <p>Walls moulded strong polymer</p> <p>Ample worktop with moulded 4-sides raised rim and ergonomic built-in push handle, scratch resistant</p> <p>Extendable writing surface</p> <p>Equipped with:</p> <p>3 drawers in painted steel mounted on steel ball-bearing fully-extending rails, complete with handles with label holder for quick identification of content:</p> <p>1 drawer with Central locking system by knob with security breakable plastic seals.</p> <p>Upper part:</p> <p>S/S IV pole holder with 2 S/S hooks, height adjustable</p> <p>One (R/L) side:</p> <p>2 transparent tilt-out bins</p> <p>Shelf for vacuum pump</p> <p>Back side:</p> <p>Oxygen tank compartment with holding straps, from 3 to 7 ltrs</p> <p>Storage space for catheters / probes</p> <p>One Side (R/L):</p> <p>Waste basket without lid, with removable internal</p>

Project Director  
Health Department  
Government of Sindh, Karachi

9/6



<b>Defibrillator</b>
with all Standard Accessories
<ul style="list-style-type: none"> <li>Adult/Pedia Paddle, Biphasic External Battery pack and all Standard Accessories</li> <li>Biphasic Tran thoracic (external) defibrillator.</li> <li>Synchronized output with ECG.</li> <li>Control of energy charging/ delivering on main panel &amp; apex paddle.</li> <li>Charging Indicators.</li> <li>The energy range should be adjustable for pedia and adults</li> <li>The Energy levels: 2, 5, 7, 10, 20, 30, 50, 100, 150, 200, 300, 360 joule, Auto sequence.</li> <li>Energy Selection: Rotating knob on unit, typical charging time to 360J: 8 second.</li> <li>Energy Selection: Rotating knob on unit</li> <li>Typical charging time to 360J: 8 second</li> <li>Defibrillation: Via Paddles or combined defibrillation/pacemaker electrodes</li> <li>Printer: 50 mm thermo-printer with 2 registration channels at 25mm/sec feed rate.</li> <li>AED facility.</li> <li>Charging Time for full energy will be less than 5 sec.</li> <li>Screen Size of approx. 5 inch.</li> <li>Display of HR, ECG through paddles &amp; Lead patient cable.</li> <li>ECG Derivation: Via 3-lead (I, II, III, aVL, aVR, aVF, V1 ECG cable or via combined defibrillation/pacemaker electrodes, with 12-leads</li> <li>Built in recorder for printing of full summery.</li> <li>Alarms for High and low Heart rate, low battery warning.</li> <li>AC 220V / 50Hz operated.</li> <li>Built-in Rechargeable battery with charger for minimum 25 shocks at max. energy.</li> <li>Built in auto tester.</li> <li>External pediatric and adults Paddles, ECG cable.</li> <li>Compliance with international standards of MDD / FDA.</li> <li>AC 220V / 50Hz operated</li> </ul>
Must be CE / FDA approved
Country of origin should be UK/USA/ EEC/Japan

Project Director  
Health Department  
Government of Sindh Karachi

	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End				
73	<div>Diagnostic Set</div> <div>Diagnostic Set</div> <ul style="list-style-type: none"><li>• Ophthalmoscope with rechargeable battery handle.</li><li>• Lithium ion batteries and charger. Desk charger with individual holder for ophthalmoscope. Complete with case.</li><li>• FDA/ CE marked. Compliance with international standards of MDD /FDA.</li></ul> Country of origin should be UK/USA/ EEC./Japan Warranty period shall be of three years starting from date of supply of equipment to the Consignee End	4			
74	<div>Surgical instrument set</div> <div>Surgical instrument set</div> <div>Metal Ruler 6" (1 Nos)</div> <div>Scissor Handle #3 (1 Nos)</div> <div>Scissor Handle #4 (1 Nos)</div> <div>TC Wire Cutting Scissors Angled 4 3/4" (1 Nos)</div> <div>Rochester-Diamond Forceps 5 1/2" (1 Nos)</div> <div>Allies Tenaculum Forceps Delicate 5 1/2" (2 Nos)</div> <div>TC Deft NH Serr 4 1/2" (1 Nos)</div> <div>TC Crile-Wood NH Nipper Serr 6" (1 Nos)</div> <div>TC Ryder Micro NH Serr 6" (1 Nos)</div> <div>Stevens Tenotomy Scissors Delicate 3/5 4 1/2" (1 Nos)</div> <div>Stevens Tenotomy Scissors Delicate 3/5 4 1/2" (1 Nos)</div> <div>Metzger-Haum Scissors 4 1/2" (1 Nos)</div> <div>Reynolds Scissor "to Eye 6" (1 Nos)</div> <div>Serbin Dressing Forceps Delicate 5" (1 Nos)</div> <div>Serbin Tissue Forceps 182 Tissue Delicate 5" (1 Nos)</div>	4			


Miller-Serr Retractor Double End Sharp 6" (1 Nos)					
Iris Sissors Str 4 1/8" (1 Nos)					
Iris Sissors Cvd 4 1/8" (1 Nos)					
Mayo Sissors Str 5 1/2" (1 Nos)					
Mayo Sissors Cvd 5 1/2" (1 Nos)					
Witzelbaum Sissors Cvd 6" (1 Nos)					
Hartmann Mesquito Forceps Str 3 1/2" (3 Nos)					
Hartmann Mesquito Forceps Cvd 3 1/2" (3 Nos)					
Husted Mesquito Forceps Str 5" (6 Nos)					
Husted Mesquito Forceps Cvd 5" (6 Nos)					
Adson Dressing Forceps Str 4 3/4" (1 Nos)					
Adson Tissue Forceps Slide Grasping 4 3/4" (1 Nos)					
Allis Forceps 4x5 Teeth 6" (1 Nos)					
Extra De care Allis Forceps 4x5 Teeth 5" 9x1 Nos					
Freer Dissector Double End 5/8" (1 Nos)					
Joseph Hook 1 Prong Sharp 6 3/4" (2 Nos)					
Bachmaus Towel Clamp 3 1/2" (2 Nos)					
Bachmaus Towel Clamp 5 1/4" (6 Nos)					
Cushing Nerve and Vein retractor 5 1/2" Nos					
Frazier Suction Tube 7 French (1 Nos)					
Frazier Suction Tube 8 French (1 Nos)					
Gill Retractor D/E 4 1/2" (1 Nos)					
US Army Retractor (Set of 2) 8 1/2" (1 Nos)					
Serrin Retractor Double End Sharp 6 3/4" (1 Nos)					
Bullinger Sponge Forceps StrSerr 7" (2 Nos)					
Bullinger Sissors Forceps CvdSerr 7" (2 Nos)					
Forster Sponge Forceps StrSerr 9 1/2" (2 Nos)					
Made from imported stainless steel, Rust resistant and satin finish					
CE Marked Product/ Export Quality / Local					
Warranty period shall be of three years starting from date of supply of equipment to the Consignee End					
75				1	
Blood Bank Refrigerator					
Blood Bank Refrigerator					

Project Director  
Reliab: DHQTHQ Hospitals  
Government of Sindh, Karachi

Project Director  
Health Department  
Government of Sindh, Karachi

Make / Model	<ul style="list-style-type: none"><li>• Auto- defrost for maximum uniformity</li><li>• Forced air circulation for uniform temperature and fast door opening recovery</li><li>• Built-in chart recorder</li><li>• Micro-processor controller with digital display.</li><li>• Ambient temperature display.</li><li>• Automatic door closing system</li><li>• Second cabinet temperature probe</li><li>• Four casters, at least front two are lockable</li><li>• Self-closing door with 90° stop</li><li>• Safety Control System</li><li>• Built-in remote alarm contacts</li><li>• Keyed on/off switch with setpoint security</li><li>• Bright, LED interior lighting</li><li>• Temperature Test electronic probe/alarm test</li><li>• 48-72 Hours battery backup for alarms, loggings and temperature display in case of power cut.</li><li>• Battery level indication.</li><li>• Display Temperature graph</li><li>• Visual and acoustic alarm.</li><li>• Adjustable high/low temperature alarm.</li><li>• Alarm Features: Alarm for Power failure, Probe failure, instrument failure and Open door.</li><li>• Temperature Range (°C): 4=1</li><li>• Capacity: 160- 350Liter</li><li>• Bag Capacity:100-250 bags</li></ul> <p>Must be CE / FDA approved</p> <p>Country of origin should be UK/USA/ EEC/Japan</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>
76	<p>Digital blood shaker / Flow &amp; Weight Monitor</p> <p>Digital blood shaker / Flow &amp; Weight Monitor</p> <p>Must be the new generation scale/mixer. Made for stationary and mobile use</p> <ul style="list-style-type: none"><li>• Gentle mixing and control of collection time gives high quality blood (platelets)</li><li>• Automatic counterbalancing at start of procedure</li><li>• Manual or automatic working tube clamp</li><li>• Suitable for all blood bags on the market</li></ul>



	<ul style="list-style-type: none"> <li>Measures gross or net volume with the best accuracy of &lt;1%</li> <li>Automatic check on blood flow and collection time with buzzer alarm</li> <li>Continuous display of collected volume, flow and time during collection</li> <li>Preset standard volume – easy to change</li> <li>Adjustable limits for low and high flow and time alarm</li> <li>Repetitive notification of completed collection every minute including gentle mixing to avoid coagulation</li> </ul>				
77	<p><b>Technical Data</b></p> <p>Max Volume: (collected blood) 999 mL</p> <p>Accuracy: &lt;1% of max weight</p> <p>Taring range: 0-600g</p> <p>Mixing Cycle: 16 cycles/min</p> <p>Must be CE / FDA approved</p> <p>Country of origin should be UK/USA/ EEC./Japan</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>	1	<p>Project Director Rehab: DHQTHQ Hospitals Government of Sindh, Karachi</p>		
78	<p><b>Precision Calibration Weight For Shaker</b></p> <p><b>Precision Calibration Weight For Shaker</b></p> <p>CE Marked Product/ Export Quality / Local</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p> <p><b>Centrifuge Cell Washer (Electronic)</b></p> <p><b>Centrifuge Cell Washer (Electronic)</b></p> <p>Power supply : 200 – 240 V1~</p> <p>Frequency : 50 – 60 Hz</p> <p>Consumption : 180VA</p> <p>Immunity : EN 50082 – 1</p> <p>Max. Capacity : 12- 24 standard tubes (10x75mm or 12x75mm)</p> <p>Max. RPM (Speed) : 3,500 min-1</p> <p>Max RCF : 1,438</p> <p>Radius (Both rotors) : 105mm</p>	1			

	Max. Centrifuge Time : 9 min: 59sec Must be CE / FDA approved Country of origin should be UK/USA/ EEC./Japan Warranty period shall be of three years starting from date of supply of equipment to the Consignee End						
	Spring scale 500ml Spring scale 500ml						
79	CE Marked Product/ Export Quality / Local Warranty period shall be of three years starting from date of supply of equipment to the Consignee End	1					
	Ordinary Fridge 11CFT / Refrigerator 11cft Ordinary Fridge 11CFT / Refrigerator 11cft						
80	CE Marked Product/ Export Quality / Local Warranty period shall be of three years starting from date of supply of equipment to the Consignee End	1					
	Spot Light Spot Light						
81	Must be CE / FDA approved Country of origin should be UK/USA/ EEC./Japan Warranty period shall be of three years starting from date of supply of equipment to the Consignee End	2					
82	Spirometer Spirometer Portable Spirometer, Flow Detection Principle: Volume against time Volume Detection: Wedge Bellows, Accuracy when operated in operating temperature range. Conditions: Volume +/- 3% (Date 81) Flow +/- 5% (Up to 5 L/min) Maximum Displayed Volume 8 L	1					

Project Director  
Rehab: DHQHQ Hospital  
Health Department  
Government of Sindh, Karachi

Handwritten signature

83	Maximum Test Duration (FVC): 20 Seconds
	Back Pressure: Complete with A'S 1994 standards.
84	Printer: A4 Size Printer
	Parameters Measured: VC, FVC, FEV1.5, FEV2.5, FEV75, FEV75/FVC%, FEV1, FEV3/FVC%, PEF, FEF25-75%, FEV25-75% FVC, FEF-75-85%, FEF-2-1.2, FEF25%, FEF50%, FEF75%, FMIF, FET, MVVind, FVC, FVC/FVC%, PIF, FIF25%, FIF50%, FIF75%, FIF50%, FEF50%.
	Must be CE / FDA approved
	Country of origin should be UK/USA/ EEC./Japan
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End
	1
83	Slit Lamp
	Slit Lamp
84	Slit Lamp with tonometer and 90D lens
	Slit Lamp Microscope
	Type, Greenough type Magnification changing method,
	2-position lever, Eyepieces, 10x, 15x, Total magnification 10x, 15x, 25.5x
	Field of view 10 – 18 mm Fixation target, Slit width 0 to 15 mm, continuous
	Slit height: 0.5 to 15 mm, Filters Cobalt blue, heat absorption, green
	Light source (Bulb)
	With Applanation Tonometer
	Must be CE / FDA approved
	Country of origin should be UK/USA/ EEC./Japan
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End
	1
84	Refraction Set
	Refraction Set
	Hand held waterproof type
	clear image of specific gravity and refractive index scales
	Specific gravity scale reads from 1.000 to 1.050 in increments of 0.005.
	Refractive index scale if from 1.335 to 1.856 in 0.001 increments

Project Director  
Rehab: DHQ/HQ Hospitals  
Health Department  
Government of Sindh, Karachi

85	<p>Must be CE / FDA approved Country of origin should be UK/USA/ EEC./Japan</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p> <p>Otoscope</p> <p>Otoscope</p> <p>CE Marked Product/ Export Quality</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>	1			
86	<p>Audiometer</p> <p>Audiometer</p> <p>Two channels.</p> <p>Pure tone threshold audiometry by air conduction.Audiometry by bone conduction.</p> <p>Pure tone suprathreshold audiometry (SISIGRAM).</p> <p>Speech audiometry.</p> <p>Masking</p> <p>Synchronized masking.</p> <p>Intermediate frequencies: 125, 750, 1500 Hz.</p> <p>Internal database for more than 1000 tests.</p> <p>Intercom / Monitor.USB and parallel connections to external printer. USB computer connection</p> <p>Must be CE / FDA approved Country of origin should be UK/USA/ EEC./Japan</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>	1			
87	<p>Impedance meter</p> <p>Impedance meter</p> <p>Two channels.</p> <p>Pure tone threshold audiometry by air conduction.Audiometry by bone conduction.</p>	1			



Pure tone suprathreshold audiometry (SISIGRAM). Speech audiometry. Masking Synchronized masking. Intermediate frequencies: 125, 750, 1500 Hz. Internal database for more than 1000 tests. Intercom / Monitor USB and parallel connections to external printer, USB computer connection. Must be CE / FDA approved Country of origin should be UK/USA/ EEC./Japan Warranty period shall be of three years starting from date of supply of equipment to the Consignee End		
	1	
88. <b>Auto Processor Heavy Duty</b> <b>Auto Processor Heavy Duty</b> Table top film processor to process commercially available medical x ray films With roller transport system. Processing capacity of 70 film/hour or more. With temperature control system Automatic replenishment system. Complete with tank for developer, fixer and washer. Compatible with all common types of films and chemicals. Must be CE / FDA approved Country of origin should be UK/USA/ EEC./Japan Warranty period shall be of three years starting from date of supply of equipment to the Consignee End		
89. <b>Ultrasound Machine (Color Doppler Portable )</b> <b>Ultrasound Machine (Color Doppler Portable.)</b> High Resolution Portable B/W Ultrasound Machine having Digital Beam Focusing System for Abdominal/Obstetrical/Gynae/Urology/small parts with the following Composition: 15" to 12" or more TFT LCD monitor having wide viewing	2	

Project Director  
 Rehab. Department  
 Government of Sindh, Karachi

*[Signature]*

Choice upto four (04) transducer					
STC gain six steps or more					
B-mode imaging, harmonic imaging					
Depth: 24 cm or more.					
B/M scan, B (Single, Dual), B/M, M					
3~5 MHz Multi Frequency Convex Probe.					
Linear probe 5~10MHz (for small parts)					
Comprehensive measurement package/functions for abdomen and obs/Gynae.					
Built in battery.					
CD/DVD writer or USB port.					
B/W Ultrasound printer.					
Voltage Stabilizer.					
Mobile Trolley (local)					
Must be CE / FDA approved					
Country of origin should be UK/USA/ EEC/Japan					
Warranty period shall be of three years starting from date of supply of equipment to the Consignee End					
90	4				
Juster Fixed					
Juster Fixed					
Autoclave able					
Range:					
• 5µl					
• 10µl					
• 50µl					
• 100µl					
• 1000µl					
CE Marked Product/ Export Quality					
Warranty period shall be of three years starting from date of supply of equipment to the Consignee End					

Project Director  
Rehab: DGHQA Hospitals  
Health Department  
Government of Sindh, Karachi

92

91	Juster Adjustable Juster Adjustable Autoclave able Range: • 100µl - 1000µl • 10µl - 100µl • 1µl - 10µl CE Marked Product/ Export Quality Warranty period shall be of three years starting from date of supply of equipment to the Consignee End	2			
92	Glass wares Glass wares a- Test Tubes Size: i- 12 x 75 mm ii- 12 x 100 mm iii- 16 x 150 mm iv- 18x150 mm b- Glass Slides Plane Glass Slide Size: 1"x3" Thickness: 1-1.2 mm Frosted Glass Slide Size: 1"x3" Thickness: 1-1.2 mm c- Glass Cover Slips Size i- 24x 50 mm ii- 22x22 mm iii- 18x18 mm d- Beakers i- 50 ml ii- 100 ml iii- 500 ml iv- 1000 ml	1			

Project Director  
 Rehab: DHQTHQ Hospital  
 Health Department  
 Government of Sindh, Karachi

<p><u>Conical Flasks</u></p> <p>i- 50 ml</p> <p>ii- 100 ml</p> <p>iii- 500 ml</p> <p>iv- 1000 ml</p> <p>Must be CE / FDA approved</p> <p>Country of origin should be UK/USA/ EEC./Japan</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>	<p>1</p>	<p>Project Director Rehabilitation Department Government of Sindh, Karachi</p>
<p>93</p> <p>Wax bath</p> <p>Wax bath</p> <p>Thermostatically control with a safety cut out unit to heat adore free wax up to 18kg of wax, with water capacity of 17 liters. A smaller unit for hand therapy with wax capacity of 2.7kg.</p> <p>Wax purification unit for with a wax capacity of 10kg and water capacity 10 liters.</p> <p>Temperature range: 0-100°C.</p> <p>Unit complete with :</p> <p>Dust cover</p> <p>Tapped wax container</p> <p>Paraffin wax : 25kg</p> <p>Wax bath thermometer</p> <p>Must be CE / FDA approved</p> <p>Country of origin should be UK/USA/ EEC./Japan</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>	<p>1</p>	<p>94</p> <p>Laptop</p> <p>Laptop</p> <p>Core i3</p> <p>3.3 Ghz optical super combo</p> <p>500 GB HDD</p> <p>4 GB DDR</p> <p>19" Screen</p> <p>Intel / Dell / Hp / or Equivalent</p>



95

95	<p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p> <p>Multi Media Screen</p> <p>Multi Media Screen</p> <p>Unit to be Robust with all metal parts plated or finished in stove enamel.</p> <p>The viewing surface to be well protected by the steel barrel into which it rolls smoothly</p> <p>screen to be portable but able to be erected rapidly.</p> <p>height adjustable from 43 to 124 cms.</p> <p>Must be CE / FDA approved</p> <p>Country of origin should be UK/USA/ EEC/Japan</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>	1			
96	<p>Central Monitor Station</p> <p>Central Monitor Station</p> <p>Multi-Channel: 17-Inches or more colored Central Monitor with recording facility On Laser Printer</p> <p>digital HR with high and low alarms on all parameters selected on bedside monitors.</p> <p>Other parameters to be monitored as selected in the bedside monitors with automatic recording on alarm</p> <p>System should be quoted with 12 Nos.</p> <p>bedside monitor and central monitor to show 12 patient data. However, system should have capability of upgradation to display up to 16-patients data on the screen and system should have facility for 2nd displays monitor which can operate separately different information to monitor many patient data.</p> <p>Hard wire system with capabilities of Tele Monitoring as a future upgrade.</p> <p>Capability to store 72-hours trend data and up to 250 arrhythmia episodes of 8-seconds each and up to 4000 ST events for each patient</p> <p>Capability to store 72-hours</p> <p>Full disclosure ECG as well as 5 other waveforms for each patient.</p> <p>Built-in automatic Arrhythmia analysis and ST analysis</p>	2			

Project Director  
Reliable Hospital  
Health Department  
Government of Sindh, Karachi

[illegible]

9/6

99	CE Marked Product/ Export Quality	5			
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End				
100	Surgical instrument set (Orthopedic Surgery)	2			
	Surgical instrument set (Orthopedic Surgery)				
	Metal Ruler 6" (1 Nos)				
	Scalpel Handle #3 (- Nos)				
	Scalpel Handle# (- Nos)				
	TC Wire Cutting Scissors Angled 4 3/4" (1 Nos)				
	Rochester-Ogstoner Forceps 5 1/2" (1 Nos)				
	Allies Tenaculum Forceps De Carle 5 1/2" (2 Nos)				
	TC Delft NH Serr 4 1/2" (1 Nos)				
	TC-Grife-Wood NH-Na-nce Serr 6" (1 Nos)				
	TC Ryder M and NH Serr 5" (- Nos)				
	Stevens Tenotomy Scissors De Carle 5 1/2 4 1/2" (1 Nos)				
	Stevens Tenotomy Scissors De Carle 6 1/2 4 1/2" (1 Nos)				
	Mattesonbaum Scissors Cvd 4 1/2" (- Nos)				
	Reynolds Scis Nas Tip Cvd 6 1/2 Nos				
	Semkin Dressing Forceps Delicate 5" (1 Nos)				
	Semkin Tissue Forceps 1x2 Teeth Delicate 5" (2 Nos)				
	Miller-Senn Retractor Double End Sharp 6" (1 Nos)				
	ns Scissors str 4 1/8" (1 Nos)				
	ns Scissors Cvd 4 1/8" (1 Nos)				
	Mayo Scissors Str 5 1/2" (1 Nos)				
	Mayo Scissors Cvd 5 1/2" (1 Nos)				
	Mattesonbaum Scissors Cvd 6" (1 Nos)				
	Hartman Metcalf Forceps Str 3 1/2" (3 Nos)				
	Hartman Yaqouli Forceps Cvd 3 1/2" (3 Nos)				
	Waller Metcalf Forceps Str 5" (6 Nos)				

Project Director  
Health Department  
Government of Sindh, Karachi









<ul style="list-style-type: none"> <li>• Shall be a compact light weight, latest design, high performance standard for smooth precise cutting, good grip, minimal noise with set of angled nose pieces and straight nose pieces and craniotomies.</li> <li>• Motor Speed : 100,000 RPM</li> <li>• Can be sterilized in temperature: 135oF – 270oF</li> <li>• Noise Level : &lt;75db</li> <li>• Battery Pack with Charge Voltage: AC 220V/50Hz</li> <li>• Autoclavable</li> <li>• Discretionary speed control</li> <li>• Used for Craniotomy</li> <li>• Automatic-stopping function assure the security of operation</li> <li>• Auto-stop after drilling through to guarantee operation safety</li> </ul>							
<p>Must be CE / FDA approved Country of origin should be UK/USA/ EEC/Japan</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>							
<p>Humbies knife</p> <p>Humbies knife</p> <p>Made from imported stainless steel, Rust resistant and Satin finish</p> <p>Must be CE / FDA approved Country of origin should be UK/USA/ EEC/Japan</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>			1				
<p>Instrument Set for DHS/DCS</p> <p>Instrument Set for DHS/DCS</p> <p>Vario Case for DHS/DCS Instrument Set, without Lid, without Contents</p> <p>Lid (Stainless Steel), size 1/1, for Vario Case</p> <p>DHS/DCS Tap</p> <p>DHS Triple Reamer, complete, with long Reamer</p> <p>DHS/DCS T-Handle with Quick Coupling</p> <p>DHS Angled Guide 15°</p>			1				

2/1/16

Project Director  
Rehab. Department  
Government of Sindh, Karachi

DHS Angled Guide 150°	
DHS/DCS Direct Measuring Device	
DHS/DCS Wrench	
DHS/DCS Impactor	
DHS/DCS Centering Sleeve, short	
DHS/DCS Centering Sleeve, long	
DHS/DCS Guide Wire Ø 2.5 mm with threaded tip with trocar, length 230 mm	
Connecting Screw, short	
Guide Shaft, for Insertion of DHS/DCS Screws	
Connecting Screw, long	
DCS Triple Reamer, complete	
DCS Angled Guide	
DHS/DCS Wrench, for One-step Insertion Technique	
Connecting Screw, for DHS/DCS Wrench	
DHS/DCS Centering Sleeve, to be locked	
DHS/DCS Impactor, for One-step Insertion Technique	
Must be CE / FDA approved Country of origin should be UK/USA/ EEC./Japan	
Warranty period shall be of three years starting from date of supply of equipment to the Consignee End	
<b>Screw Box</b>	
<b>Screw Box</b>	
	1
Must be CE / FDA approved Country of origin should be UK/USA/ EEC./Japan	
Warranty period shall be of three years starting from date of supply of equipment to the Consignee End	
<b>Total Hip Set</b>	
<b>Total Hip Set</b>	



109	Must be CE / FDA approved Country of origin should be UK/USA/ EEC./Japan  Warranty period shall be of three years starting from date of supply of equipment to the Consignee End	1				
110	Laryngo Endoscope (Rigid) Laryngo Endoscope (Rigid)  Must be CE / FDA approved Country of origin should be UK/USA/ EEC./Japan  Warranty period shall be of three years starting from date of supply of equipment to the Consignee End	1				
111	Direct Laryngoscopy Fiber Optic Set Direct Laryngoscopy Fiber Optic Set  Must be CE / FDA approved Country of origin should be UK/USA/ EEC./Japan  Warranty period shall be of three years starting from date of supply of equipment to the Consignee End	1				
112	Otoscope Otoscope  CE Marked Product/ Export Quality  Warranty period shall be of three years starting from date of supply of equipment to the Consignee End	1				
	Tonsillectomy Set Tonsillectomy Set  Made from imported stainless steel, just resistance and satin finish					

Project Director  
Rehab. Directorate  
Health Department  
Government of Sindh, Karachi

113	CE Marked Product/ Export Quality	4					
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End						
	Mastroid and middle ear surgery set						
	Mastroid and middle ear surgery set						
114	CE Marked Product/ Export Quality	2					
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End						
	SMR, Septoplasty Set						
	SMR, Septoplasty Set						
115	CE Marked Product/ Export Quality	4					
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End						
	Skin grafting knife						
	Skin grafting knife						
	Made from imported stainless steel, Rust resistant and Satin finish						
116	CE Marked Product/ Export Quality	2					
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End						
117	Skin Graft Masher	2					
	Skin Graft Masher						
	• Dual position Adjustable V-10 or V15-types of V-Carriers						
	• During cutting the carrier is guided both at the left and the right side to assure straight movement						
	• Driven by the continuous rotation of handle						
	• Spring mechanism prevents blades damage						

Project Director  
Rehab: DHQ/THQ Hospitals  
Health Department  
Government of Sindh, Karachi

*[Handwritten signature]*

Project Director  
Rehab. Director Hospitals  
Government of Sindh, Karachi

118	<ul style="list-style-type: none"> <li>Individual blades can be replaced</li> <li>Cutting Axis with 30 blades diameter of 36mm</li> <li>Cutting axis can be replaced.</li> <li>Compact steel sterilization case for mesher</li> <li>Compact steel sterilization case for cutting axis</li> <li>Dual position Adjustable V-10 or V15-types of V-Carriers</li> <li>During cutting the carrier is guided both at the left and the right side to assure straight movement.</li> <li>Driven by the continuous rotation of handle</li> <li>Spring mechanism prevents blades damage</li> <li>Individual blades can be replaced</li> <li>Cutting Axis with 30 blades diameter of 36mm</li> <li>Cutting axis can be replaced</li> <li>Compact steel sterilization case for mesher</li> <li>Compact steel sterilization case for cutting axis</li> <li>UNIT SHOULD BE SUPPLIED WITH SKIN GRAFT MESHER COMPLETE SET (1)</li> <li>Compact steel sterilization case for mesher (1)</li> <li>FOC Hamaca V-Carrier( Derma carrier) 1X10 (1 boxes)</li> <li>Instruction Manual</li> <li>Service Manual</li> </ul> <p>Must be CE / FDA approved Country of origin should be UK/USA/ EEC/Japan</p> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>	2
	<p><b>Pneumatic Dermatome</b></p> <p><b>Pneumatic Dermatome</b></p> <p>Electric Dermatome complete with hand piece, power supply, power cord, Autoclave Case, width plates (04) and screw driver.</p> <p>dermatome delivers a smooth cutting action that consistently produces clean, uniform grafts. Virtually effortless cutting even excision of Escher.</p>	

119	Blade can be quickly and safely inserted. Select the proper width plate, thickness of cut and concentric the hand piece to the power supply					
	Light weight hand piece - only 30oz (.85 kg), providing exceptional maneuverability with less hand fatigue. Hand piece is also quiet and nearly vibration free.					
	Precise Thickness of cut from 0 to .030 inch.					
	(0 to 0.76 mm) in .002 inch (0.05mm) increments.					
	Width setting from 1 to 4 inches (3 to 10 cm) in 1 inch (3 cm) increments.					
120	No Lubrication required.					
	Easy sterilization for both pre-vacuum and Gravity displacement steam sterilization.					
	Dematome Blades sterile Pack (Bx / 10)					
	Must be CE / FDA approved					
	Country of origin should be UK/USA/ EEC./Japan					
121	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End					
	BP Knife Handle					
	BP Knife Handle					
	CE Marked Product/ Export Quality					
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End					
122	Met Scissor					
	Met Scissor					
	CE Marked Product/ Export Quality					
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End					
	Mayo Scissor					
123	Mayo Scissor					
	CE Marked Product/ Export Quality					
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End					
	Mayo Scissor					
	CE Marked Product/ Export Quality					

Project Director  
Reliab. DHQTHQ Hospitals  
Health Department  
Government of Sindh, Karachi



10/11/20

	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
	<u>Tenotomy Scissor</u>								
	<u>Tenotomy Scissor</u>								
122	CE Marked Product/ Export Quality	2							
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
	<u>Iris scissor (CVS)</u>								
	<u>Iris scissor (CVS)</u>								
123	CE Marked Product/ Export Quality	2							
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
	<u>Iris scissor (St)</u>								
	<u>Iris scissor (St)</u>								
124	CE Marked Product/ Export Quality	2							
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
	<u>Mayo Needle Holder</u>								
	<u>Mayo Needle Holder</u>								
125	CE Marked Product/ Export Quality	3							
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
	<u>Dissecting Forcep Tooth</u>								
	<u>Dissecting Forcep Tooth</u>								
126	CE Marked Product/ Export Quality	6							

Project Director  
Health Department  
Reliable District HQ Hospitals  
Government of Sindh, Karachi

	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End						
127	Macindo Diathermy Forcep						
	Macindo Diathermy Forcep						
	CE Marked Product/ Export Quality	3					
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End						
128	Debekary D / F						
	Debekary D / F						
	CE Marked Product/ Export Quality	3					
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End						
129	Lengenback Retactor (Small)						
	Lengenback Retactor (Small)						
	CE Marked Product/ Export Quality	2					
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End						
130	Lengenback Retactor (Medium)						
	Lengenback Retactor (Medium)						
	CE Marked Product/ Export Quality	2					
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End						
131	Lengenback Retactor (Large)						
	Lengenback Retactor (Large)						
	CE Marked Product/ Export Quality	2					

Project Director  
Health Department  
Government of Sindh, Karachi

Handwritten signature/initials.

	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
132	London Retractor								
	London Retractor								
	CE Marked Product/ Export Quality	2							
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
133	Waste Self Retaining Retractor								
	Waste Self Retaining Retractor								
	CE Marked Product/ Export Quality	2							
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
134	Killiner Retractor (Sharp)								
	Killiner Retractor (Sharp)								
	CE Marked Product/ Export Quality	2							
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
135	Senn retractor (Blunt)								
	Senn retractor (Blunt)								
	CE Marked Product/ Export Quality	2							
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
136	Gillies Skin Hook ( Single)								
	Gillies Skin Hook ( Single)								
	CE Marked Product/ Export Quality	3							

Project Director  
Rehab: DHQTHQ Hospitals  
Health Department  
Government of Sindh, Karachi

20/10/20

	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
	Double Ended Hook Retactor								
	Double Ended Hook Retactor								
137	CE Marked Product/ Export Quality	3							
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
	Mosquito Artery Forceps (CVD)								
	Mosquito Artery Forceps (CVD)								
138	CE Marked Product/ Export Quality	12							
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
	Mosquito Artery Forceps (St)								
	Mosquito Artery Forceps (St)								
139	CE Marked Product/ Export Quality	12							
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
	Crit Artery forcep (CVD)								
	Crit Artery forcep (CVD)								
140	CE Marked Product/ Export Quality	4							
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
	Crit Artery forcep (St)								
	Crit Artery forcep (St)								
141	CE Marked Product/ Export Quality	4							

Project Director  
Rehab. Department  
Government of Sindh, Karachi



	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End						
142	Kocher Artery forcep						
	Kocher Artery forcep						
	CE Marked Product/ Export Quality	8					
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End						
143	Artery forcep (CVD)						
	Artery forcep (CVD)						
	CE Marked Product/ Export Quality	4					
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End						
144	Artery forcep (St)						
	Artery forcep (St)						
	CE Marked Product/ Export Quality	4					
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End						
145	Robert Clam						
	Robert Clam						
	CE Marked Product/ Export Quality	4					
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End						
146	Lahey Artery Forcep						
	Lahey Artery Forcep						
	CE Marked Product/ Export Quality	2					

Project Director  
Health Department  
Government of Sindh, Karachi

	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
	Spong Holder Set								
	Spong Holder Set								
147	CE Marked Product/ Export Quality	2							
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
	Allies Tissue Forcep								
	Allies Tissue Forcep								
148	CE Marked Product/ Export Quality	4							
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
	Bab Cock Tissue Forcep								
	Bab Cock Tissue Forcep								
149	CE Marked Product/ Export Quality	4							
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
	Yanker Suction Nozzle								
	Yanker Suction Nozzle								
150	CE Marked Product/ Export Quality	1							
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
	Frazier Suction Nozzle								
	Frazier Suction Nozzle								
151	CE Marked Product/ Export Quality	1							

Project Director  
Rehab. Department  
Government of Sindh, Karachi

9/11/20

	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
	Scale								
	Scale								
152	CE Marked Product/ Export Quality	2							
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
	watson China								
	watson China								
153	CE Marked Product/ Export Quality	1							
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
	Curette								
	Curette								
154	CE Marked Product/ Export Quality	1							
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
	Prob with eye								
	Prob with eye								
155	CE Marked Product/ Export Quality	1							
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
	Towel Clip								
	Towel Clip								
156	CE Marked Product/ Export Quality	5							

Project Director  
Health Department  
Government of Sindh, Karachi

2/1/20

	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
157	<u>K Dish</u>	2							
	<u>K Dish</u>								
	CE Marked Product/ Export Quality								
158	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End	3							
	<u>Galli Pot</u>								
	<u>Galli Pot</u>								
159	CE Marked Product/ Export Quality	12							
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End								
	Portable BP Apparatus								
160	<u>Diathermy Bipolar</u>	1							
	<u>Diathermy Bipolar</u>								
	250 W to 300 W Monopolar, 80 to 100 W Bipolar								
159	Mains cord. 5m long, vario dual foot switch, explosion. Proof	12							
	silicon neutral electrode large 31 x 16cm								
	silicon rubber band with 4 buttons 1.5m								
160	cable for silicon neutral electrode 5m	1							
	attachment for monopolar coagulation-general surgery								
	handle with 2 activating buttons								
160	electrode cable, 1.5 M length	1							

Project Director  
Rehab. Department  
Government of Sindh, Karachi.



✓

Project Director  
Rehab: DHQTHQ Hospitals  
Health Department  
Government of Sindh, Karachi

knife electrode, 25mm long.					
Surgical electrode, ball-shaped, 4mm Dia m.					
Needle electrode, Str. Isolated, 125 mm					
knife electrode, Str. Isolated, 125 mm					
wire loop electrode, wire loop electrode 10mm Dia, Straight 150mm., ball electrode, 5mm Dia, Ball electrode.					
Attachment for monopolar coagulation-ENT					
Handle with 2 activating buttons					
electrode cable, 3.5m length, knife electrode, 25mm long.					
Surgical electrode ball-shaped, 4mm Diam					
Wire Loop electrode 10mm Dia m, Needle Electrode, 100mm					
Attachment for monopolar Coagulation Orthopaedics					
Handle with 2 activating buttons, Electrode Cable 3.5m length.					
Knife electrode, 25mm long, surgical electrode ball-shaped, 4mm Dia m					
Wire loop electrode, 10mm Dia m					
Attachment for Monopolar Coagulation-Urology					
Handle with 2 activating buttons, Electrode cable 3.5m length					
Knife electrode, 25mm long, surgical electrode ball-shaped, 4mm Dia m, Needle Electrode, Str. Isolated 125mm.					
wire loop electrode, wire loop electrode 10mm Dia, Straight 150mm., ball electrode, 5mm Dia, Ball electrode.					
Bipolar coagulation Forceps-ENT, Bipol. Cable for Forceps with flat socket					
Yasargil coag. Forceps 0.7mm, 175mm Length, Yasargil coag. Forceps 1.0mm, 195mm Length.					
Bipolar Coagulation Forceps, 220 mm					
Must be CE / FDA approved Country of origin should be UK/USA/ EEC /Japan					
Warranty period shall be of three years starting from date of supply of equipment to the Consignee End					
161 D & C set				4	
D & C set					

Scalpel Handle # 2 x 1
Scalpel Handle # 7 x 1
Scalpel Handle # 2L x 1
Crile Forceps Str 6 1/4" x 6
Crile Forceps Cvd 6 1/4" x 6
Dressing Forceps 8" x 1
Tissue Forceps 1 x 2 Teeth 8" x 1
TC Crile-Murray NH Serr 6" x 1
TC Mayo-Hegar NH Serr 7" x 1
Backhaus Towel Clamp 5 1/4" x 6
Bozeman Forceps Double Curved 10" x 1
Foerster Sponge Forceps Cvd Serr 9 1/2" x 2
Jackson Retractor Small Blade 3" x 1 1/2" x 1
Jackson Retractor Medium Blade 3 1/2" x 1 1/2" x 1
Auvard Weighted Speculum Medium 2 1/2 lbs. x 1
Graves Vaginal Speculum Medium 1 1/4" x 4" x 1
Graves Vaginal Speculum Large 1 3/8" x 4 1/2" x 1
Pederson Vaginal Speculum Small 1/2" x 3" x 1
Kogan Endospeculum w/ Gauge and Screws x 1
Goodell Dilator Large 13" x 1
Hegar Dilators (Set of 8) x 1
Sims Sound Plain 12 1/2" x 1
Sims Curette Sharp 11" #2 x 1
Sims Curette Sharp 11" #3 x 1
Sims Curette Sharp 11" #4 x 1
Sims Curette Sharp 11" #5 x 1
Kovorkian-Young Endocervical Curette w/ Basket 12" x 1
Schroeder Tenaculum Forceps 9 1/2" x 1
Javerts Forceps Serr 9 1/2" x 1
Made from: imported stainless steel, Rust resistant and Satin finish

Project Director  
Health Department  
Government of Sindh, Karachi

CE Marked Product/ Export Quality							
Warranty period shall be of three years starting from date of supply of equipment to the Consignee End							
162	Delivery table	4	<p>Project Director Reliable and HQ Hospitals Health Department Government of Sindh, Karachi</p>				
	Delivery table						
	Delivery table made in three sections. The backrest is adjustable with a friction clutch. Cushioned with a comfortable Rexene and foam. A sliding stainless steel receptacle tray is mounted under the hip area. Must include Lithotomy poles, Infusion stand, Stainless steel receptacle tray, Side rails						
	Export Quality/Local						
Warranty period shall be of three years starting from date of supply of equipment to the Consignee End							
163	Basic Instrument Set for LC / DC	1					
	Basic Instrument Set for LC / DC						
	Metal Ruler 6" (1 Nos)						
	Scalpel Handle #3 (1 Nos)						
	Scalpel Handle #4 (1 Nos)						
	TC Wire Cutting Scissors Angled 4 3/4" (1 Nos)						
	Rochester-Ochsner Forceps Cvd 5 1/2" (1 Nos)						
	Allies Tenaculum Forceps Delicate 5 1/2" (2 Nos)						
	TC Derf NH Serr 4 1/2" (1 Nos)						
	TC Crile-Wood NH Narrow Serr 6" (1 Nos)						
	TC Ryder Micro NH Serr 6" (1 Nos)						
	Stevens Tenotomy Scissors Delicate 5 1/2" 4 1/2" (1 Nos)						
	Stevens Tenotomy Scissors Delicate B/B 4 1/2" (1 Nos)						
	Metzenbaum Scissors Cvd 4 1/2" (1 Nos)						
	Reynolds Sciss Nar Tip Cvd 6 1/2" (1 Nos)						
	Semken Dressing Forceps Delicate 5" (1 Nos)						
	Semken Tissue Forceps Lx2 Teeth Delicate 5" (2 Nos)						
	Miller-Serr Retractor Double End Sharp 6" (1 Nos)						

Handwritten signature



80mm high density rigid insulation polyurethane insulation chiller; stain less steel height adjustable racking & rolling system, 304 grade stain less steel body storage trays 2°C to 4°C cooling system with digital control panel. Must be CE / FDA approved Country of origin should be UK/USA/ EEC./Japan Warranty period shall be of three years starting from date of supply of equipment to the Consignee End																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			</
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	----




2/6

Project Director  
Rajdhani DHQTHQ Hospitals  
Health Department  
Government of Sindh, Karachi

- Hat table top
- Compatible to flatwork ironer
- Powder coated legs
- Legs with rubber post to support and make it stable on ground
- C) Hot Head press, Air operated utility Press, lower buck with Steam & vacuum (1 No.)
- Hot head press with high grade nickel plated polish.
- Bottom with pad and cover for steam heating and non-steaming.
- System should capable to be connected with external steam and air supply and self-contained.
- Building water spray gun.
- Steam working pressure 5~8bar
- Steam consumption 10~12kg/hour
- Air working pressure 6~8 bar
- Air consumption 7~9NL/cycle
- D) Rotatory/Carousel ironing press, Steam operated (1 No.)
- Press for ironing linen
- Should be connected to a external compressor or distribution of compressed air
- Automatic switch over
- Heating steam capacity : 16~18kg/hour
- High output capacity
- Easy and fast operation.
- E) Washer Extractor medical Barrier capacity 60 kg or more, (2 Nos.)
- Steam Heated & electric driven, standard liquid soap connection, Programmable
- High Spin hygienic barrier washer extractor , Free standing
- Capacity: 60kg or more
- Frequency Controlled motor
- Steam heated, electrical driven
- Steam pressure: 3-8 bar
- Liquid soap inlet connection
- Microprocessor control system
- Warm water inlet connection
- Drum capacity 60~kg or more.
- Drum volume 650 liter or more
- Loading doors 1 ~ 2
- Unloading doors 1~2
- Water and steam inlet connection
- F) Drying Tumbler 50 kg (2 Nos.)
- Capacity 50 kg/h or more, dry linen
- Drum and electrical motor



	<ul style="list-style-type: none"> <li>• Calibration: Automatic or on demand</li> <li>Printer – Built in</li> <li>Parameters: Na+, K+, Cl-, Li++ &amp; Ca++ can also be performed on same instrument with same reagent pack.</li> <li>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</li> <li>Must be CE / FDA approved</li> <li>Country of origin should be UK/USA/ EEC./Japan</li> </ul>				
168	<p><b>Incubator</b></p> <p><b>Incubator</b></p> <ul style="list-style-type: none"> <li>• Volume max 55liter.</li> <li>• Maximum Dimension WxHxD (mm) : 400x400x330</li> <li>• APT-Line Pre Heating Technology.</li> <li>• Temp. Range up to 99.90C.</li> <li>• Microprocessor PID Controller with LED Display.</li> <li>• Timer 0-99 hrs.</li> <li>• Ventilation Slide &amp; Exhaust Duct.</li> <li>• Inner Glass Door.</li> <li>• ISO-9001 Certified.</li> </ul> <p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p> <p>Must be CE / FDA approved</p> <p>Country of origin should be UK/USA/ EEC./Japan</p>	1			
169	<p><b>Safety Cabinet</b></p> <p><b>Safety Cabinet</b></p> <ul style="list-style-type: none"> <li>• Cleanliness Class: Class 100 @ <math>\geq 0.5\text{mm}</math></li> <li>• Down flow Air Velocity: <math>\geq 0.3 \pm 0.02 \text{ m/s}</math></li> <li>• Inflow Air Velocity: <math>\geq 0.5 \text{ m/s}</math></li> <li>• Illumination: <math>\geq 800\text{Lx}</math></li> <li>• Noise: 62 dB (A)</li> <li>• UV Light: <math>\geq 30\text{w}</math></li> <li>• Overall Dimensions: 1360x790x2200</li> <li>• Interior Dimensions: 1200x610x580</li> <li>• Operator: min 1</li> </ul>	1			<p>Project Director Ref: Dhq/HQ Hospitals Health Department Government of Sindh, Karachi</p>

<ul style="list-style-type: none"> <li>• Fission structure: The front panels are detachable and easier to remove for filter and filter. Visible windows: with ant ultraviolet toughened glass and the height of glass can be adjustable.</li> </ul>	<ul style="list-style-type: none"> <li>• Audible and visual alarm.</li> <li>• Manufactured by 304# stainless steel.</li> </ul>	<ul style="list-style-type: none"> <li>• Cabinet feature:               <ul style="list-style-type: none"> <li>• Unitized drain pan beneath the work surface allows best arm position above the user's lap.</li> <li>• More impenetrable air barrier or momentum air curtain at the front of the cabinet.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Ultra-high efficiency filter system: efficiency is more than 99.999%.</li> <li>• Pressure sensor will watch the working condition of filter from time to time and alarm the operator if the pressure is over the setting value.</li> </ul>	<p>Displaying data in the screen:</p> <ul style="list-style-type: none"> <li>• Air-exhaust value (m3/h)</li> <li>• The velocity of air laminar flow (m/s)</li> <li>• Counter for exhaust fan</li> <li>• Counter for blower</li> </ul>	<p><u>Safety Control System:</u></p> <ul style="list-style-type: none"> <li>☑ Alarm for low air exhaust value</li> <li>☑ Alarm for low air-velocity of down laminar flow</li> <li>☑ Alarm for fault of exhaust fan</li> <li>☑ Alarm for closing condition of visible window</li> </ul>	<p>The exhaust fan will increase his rotate speed automatically in order to keep the working space and negative pressure inside cabinet in case something wrong happens with the blower.</p>	<p>Warranty period shall be of three years starting from date of supply of equipment to the Consignee End</p>	<p>Must be CE / FDA approved Country of origin should be UK/USA/ EEC./Japan</p>	<div>170</div> <div>Weighing Machine</div> <div>Weighing Machine</div> <div>Digital scale with extra-large LCD display (65 mm)</div> <div>Strong and durable</div>
<div>Project Director</div> <div>Rehab: DHQ/HQ Hospitals</div> <div>Health Department</div> <div>Government of Sindh, Karachi</div>									<div>14</div>

[illegible]



173	<b>Parameters</b> WBC, RBC, HGB, HCT, MCV, MCH, MCHC, PLT, NEUT%, LYMPH%, MONO%, EO%, BASO%, NRBC%, NEUT #, LYMPH#, MONO#, EO#, BASO#, NRBC#, RDW, SD, RDW-CV, MPV, P-LCR*, PDW*, PCT*, RET%, RET#, LFR, MFR, HFR, IRF, IG%, IG#, RET-He, IPF, WBC-BF, RBC-BF, MNS%, MIN#, PMN%, PMNH
	<b>Technology</b> Fluorescence flow cytometry method using semiconductor laser. (WBC, WBC 6 DIFF, IG, NRBC, RET, PLT Fluorescence) Hydrodynamic focusing DC detection method (RBC, PLT) PLT-F Specific Separated Channel Fluorescence Method. Cyanide-free Sodium lauryl sulphate hemoglobin method (HGB)
	<b>Throughput</b> CBC+NRBC+DIFF: Minimum 100 samples/hr. CBC+NRBC+DIFF+RET: Minimum 83 Samples/hr. Body Fluid analysis: Minimum 40 samples/hr
	<b>Discrete mode</b> 12 Discrete Mode & Unique available auto dilution mode.
	<b>Data Storage Memory</b> Analysis data with histogram: 100,000 samples Scattergrams: 100,000 samples 4GB
	<b>Reagents Management System</b> Radio frequency identification (RFID) for reagent lot, expiry date, type of reagents, number of test etc Color coded reagent cartridge compartment
	<b>Unique Mode</b> Accurate differential should be possible even in marked leukopenic samples with WBC counts as low as <0.1.
	<b>Ret He &amp; IRF:</b> Random access retic analysis with reportable IRF, LFR, MFR. Must be CE / FDA approved Country of origin should be UK/USA/ EEC/Japan
	Warranty period shall be of three years starting from date of supply of equipment to the Consignee End
	<b>Ventilator with all Standard Accessories</b>
5	
Ventilator with all Standard Accessories	
Ventilation Modes: • (S)CMV, SIMV, SPONT, Adaptive Mode, P-CMV, P-SIMV, NIV, APVcmv, APVs mv, DuoPAP and APRV, NIV-ST	

Project Director  
Rohat HQ Hospitals  
Health Department  
Government of Sindh, Karachi

<p>Special Functions:</p> <ul style="list-style-type: none"> <li>• Special functions should include nebulizer, manual breath, 100% O<sub>2</sub>.</li> <li>• Standby, sigh, apnea backup ventilation, tube resistance compensation</li> <li>• Patient Type</li> <li>• Should include adult, pediatrics, infant/neonate</li> </ul>	<p>Technical Specifications:</p> <ul style="list-style-type: none"> <li>• (S)CMV, P-CMV 5 to 120b/min</li> <li>• SIMV, PSIMV, DuoPAP 1 to 60b/min</li> <li>• Tidal volume starting from 2 ml up to at least 2000 ml</li> <li>• PEEP and CPAP ranges from 0 cmH<sub>2</sub>O not less than 50 cm H<sub>2</sub>O</li> </ul>	<p>Integrated ETCO<sub>2</sub> module</p> <ul style="list-style-type: none"> <li>• Oxygen from minimum range of 21% to 100%</li> <li>• The inspiratory to expiratory ratio starting from 1:9 up to 4: 1</li> <li>• Flow range from 1 l/min not less than 180 l/min</li> <li>• % minute volume in Adaptive Support Ventilation from 25% up till 350%</li> </ul>	<p>Alarms</p> <ul style="list-style-type: none"> <li>• Operator adjustable alarms should include low/high minute volume, low/high pressure, low/high tidal volume, low/high rate, apnea time and % leak</li> <li>• Special alarms should include Oxygen concentration, disconnection, loss of PEEP, exhalation obstruction, check settings, flow sensor alarms, power supply, batteries, and gas supply alarms should be added features</li> </ul>	<p>Event Log:</p> <ul style="list-style-type: none"> <li>• Storage and display of not less than 1000 events with date and time</li> </ul> <p>Ventilation Visualization:</p> <ul style="list-style-type: none"> <li>• Lung Dynamics: Should show real time visualization of the lungs with representations of tidal volume, lung compliance, resistance and patient activity</li> </ul>	<p>Ventilator Status: Visual representation of the ventilator dependency</p> <ul style="list-style-type: none"> <li>• 50 Monitoring parameters can be displayed</li> <li>• Real time waveforms: simultaneous display of up to 8 waveforms</li> <li>• Loops: Display of Volume, Flow, airway pressure, auxiliary pressure, or CO<sub>2</sub></li> <li>• Trending: Simultaneous display of 17 parameters trends for 1, 3, 12, 24 or 96 hours</li> </ul>
---	---	--	--	--	---

Project Director  
Rehmat Hospital  
Health Department  
Government of Sindh, Karachi

<ul style="list-style-type: none"> <li>• Power Supplies:</li> <li>• Up to 240 V AC at 50/60Hz</li> <li>• Should have back up batteries with at least 1 hour functionality</li> <li>• Physical Dimensions:</li> <li>• Should have detachable display, 15" or more, TFT color, backlit with touch screen</li> </ul>				
Warranty period shall be of three years starting from date of supply of equipment to the Consignee End				
Must be CE / FDA Approved Country of origin should be UK/USA/EEC./Japan				

Health Department  
Government of Sindh, Karachi

Project Director  
Rehab: DHQ/THQ Hospitals in Sindh  
Karachi