Cost of Tender Documents - Rs. 1000/=

BIDDING DOCUMENTS

CIVIL HOSPITAL KARACHI

<u>HEALTH DEPARTMENT</u>

GOVERNMENT OF SINDH

Contract NO:- PD-Trauma Centre-CHK/035 (Rev) 2015-16

Supplying, Installation, Testing, Commissioning & Maintenance (during maintenance period) of

Information Technology Equipments

for the project

"Shaheed Mohtarma Benazir Bhutto Accident, Emergency & Trauma Centre and Ancillary Services Complex at Civil Hospital Karachi"

VOLUME-I

INSTRUCTIONS TO BIDDERS, SALIENT FEATURES / TERMS & CONDITION OF THE TENDER, GENERAL CONDITIONS, BID EVALUATION CRITERIA, ESSENTIAL REQUIREMENTS / TECHNICAL EVALUATION CRITERIA, FORM OF AGREEMENT, SCOPE OF WORK / TECHNICAL SPECIFICATIONS

SUMMARY OF CONTENTS

S.NO	DESCRIPTION	PAGE
1.	TITLE	1
2.	SUMMARY OF CONTENTS	2
3.	INSTRUCTIONS TO BIDDERS	3 TO 4
4.	SALIENT FEATURES / TERMS & CONDITION OF TENDER, QUESTIONNAIRE / PROFORMA –EVALUATION CRITERIA	5 TO 14
5.	FORM OF AGREEMENT	15 TO 16
6.	SCOPE OF WORK / BILL OF QUANTITIES / SPECIFICATION (TECHNICAL)	17 TO 25
7.	DRAWINGS (IF ATTACHED)	

INSTRUCTIONS TO BIDDERS

- 1. Civil Hospital Karachi invites sealed bids on single stage two envelopes system as per Sindh Public Procurement Rules 2010 from Manufacturers/Importers/Sole Agents/Contractors for "Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period) of Information Technology Equipments for the project Shaheed Mohtarma Benazir Bhutto, Accident, Emergency & Trauma Centre and Ancillary Services Complex at Civil Hospital Karachi", (Contract No. PD-Trauma Centre-CHK/035 (Rev) (2015-16).
- 2. Bidders are required to check that Tender Documents issued to them are complete in all respects as per Summary of contents related to Instructions to Bidders, Salient Features, Evaluation Criteria, Form of Tender, Form of Agreement, Specifications (Technical), Scope of Work, Drawings etc.
- 3. Bidders should examine carefully the Summary of Contents. They should visit and inspect the site at their own expense and responsibility and obtain all necessary information prior to submitting the Tender. Any detail/specification missing in the document should be obtained from the office of the Project Director before bidding. Once the Tender is submitted, it will be assumed that no further clarification was required.
- 4. The rates to be inserted in the Bill of Quantities shall be deemed to include all costs of whatsoever description and expenses necessary for the Supply, Installation, Testing, Commissioning and Maintenance of the Equipment/System together with all risks, taxes, liabilities and obligations, specific or implied, in the Tender Documents. Arithmetical errors, if any shall be corrected and Tender price amended accordingly.
- 5. No authorized alteration may be made in the Tender documents. If any such alteration is made, tender may be liable for rejection.
- 6. Any clarification, revision, addition or deletion, in the Tender documents may be made by the Project Director before the submission and opening of Tender in the form of Addendum/Corrigendum. This will be made only by formal Addendum/ Corrigendum issued by the Project Director and will become part of the Contract documents. Each Addendum shall be signed by the Tenderer and returned with other Tender documents.
- 7. The entire Tender Documents, listed duly priced, signed & stamped on each page and completed must reach at designated place in due time and dates as defined in the salient features of the Tender.
- 8. The Contractors whose Tender is accepted, by the Procurement Committee, will be required to enter into a Contract agreement as defined in the Form of Agreement.
- 9. All manufactured and other items should be used in the work in accordance with the instructions, specifications in the Tender Document and also in accordance with generally accepted norms of good workmanship.

- 10. The Tender documents referred to above constitute a part of this Tender and comprise of the following documents:
 - a) Instructions to bidders.
 - b) Salient Features / Terms & Condition of the Tender, General Condition, Questionnaire / Proforma – Evaluation Criteria.
 - c) Form of Agreement.
 - d) Scope of work / Bill of Quantities / Specification (Technical).
 - e) Bidding Documents (Volume II)
 - f) The Addendum (if any).
 - g) The Drawings (if any).
- 11. The Contractors are required to submit the site Organization chart, methodology & work schedule along with Tender documents.

SALIENT FEATURES / TERMS & CONDITION OF THE TENDER

	Agreement.		Government Laws.
(b)	Stamp Paper requirement for	:	may be necessary, by the Project Director.- Rs. 0.30% of the Contract Value or as prescribed by
16 (a)	Contract Agreement	:	The Contract shall enter & execute a formal Agreement as per the "Form" annexed with such modification as may be necessary, by the Project Director
15	Warranty Period with replacement of Parts and services		 The warranty period of parts with Free of cost replacement will be as under:- a. For PC warranty should be of three years (local) by manufacturer. b. All other warranty should be of two years (local) by manufacturer.
14	Maintenance Period		It will start after the satisfactory installation of the equipment and issuance of Installation Certificate from the concerned official. This period will remain functional till two years with replacement of parts.
13.	Installation Period	:	It will start immediately after receiving the requirement at site.
12.	Supply of Equipment	:	Within six to eight weeks after issuance of the purchase order.
11.	Amount of Tender / Bid Security	:	1% of the Contract value in shape of pay-order / Call Deposit from schedule Bank to be submitted along with Financial Proposal.
10.	Validity of Tenders	:	As per SPP Rules 2010 (Amended 2013).
9	Venue of submission & opening of Tenders	:	Board Room situated at Second Floor of the Administration Block of Civil Hospital Karachi.
8	Date of Opening of Financial Proposals	:	As informed by Project Director to all participants
7	Date & Time of Opening of Tenders / Technical Proposals	:	As published in newspapers
6	Date & Time of Submission of Tenders	:	As published in newspapers
5	Method of opening of Tender	:	It will be Single Stage Two Envelope system as per SPP Rules 2010 (Amended 2013).
4	Date of pre-bid meeting	:	In case requested by bidders or informed by Project Director.
3	Place of Issuance of Tender	:	Office of the Project Director, OPD-Block Civil Hospital Karachi.
2	Time & Date of issue of Tenders	:	From the date of publishing to one day before opening of Technical Proposal, during office hours.
			Maintenance (during maintenance period) of Information Technology Equipments for the project "Shaheed Mohtarma Benazir Bhutto, Accident, Emergency & Trauma Centre and Ancillary Services Complex at Civil Hospital Karachi" (Contract No. PD-Trauma Centre-CHK/035 (Rev) (2015-16)
1.	Name of Work & Address	:	Supply, Installation, Testing, Commissioning and

		1	
17	Terms of Payment to Contractors / Submission of Performance Guarantee	:	 The payment will be made to contractor after delivery of equipments at site subject to submission of Performance Security in the following manner; Pay-order equivalent to 5% of the value of Purchase order OR Bank Guarantee equivalent to 10% of the value of Purchase order
18	Release of Tender / Bid Security of 1%	:	 To un-successful bidders, on request. Earnest Money will be released to successful bidder after submission of the 5% Security Deposit and released of purchased order as per clause 19.
19	Security Deposit	:	 5% Security Deposit in the shape of two pay orders (2.5% each) will be submitted by Contractor with Project Director. Bank Guarantee of equal amount will also be acceptable.
20	Return of Performance Security	:	The Performance Security will be released after successful installation of equipment and issuance of satisfactory Performance Certificate from the Client.
21	Release of Security Deposit of 5%	:	 After completion of maintenance or Defect Liability period as under:- After satisfactory completion of maintenance period of Six Months – 2.5% After satisfactory completion of warranty period of two years – 2.5%
22	VARIATION IN CONTRACT PRICE.	:	No variation in price shall be allowed on any ground including currency fluctuation / variation or whatsoever.
23	Discrepancy.	:	If there is any discrepancy between Salient Features of Tender / Bidding Documents and respective contents mentioned elsewhere, Salient Features / Terms &
			Conditions of tender will govern.
24	Taxes.	:	Conditions of tender will govern. All taxes will be deducted as per prevalent laws of country.
24 25	Taxes. Approved makes.	:	All taxes will be deducted as per prevalent laws of
		:	All taxes will be deducted as per prevalent laws of country.
25	Approved makes. SPECIAL NOTE REGARDING	:	 All taxes will be deducted as per prevalent laws of country. As mentioned in items individually. Technical offers / commercial offers failing to demonstrate below details would be rejected: a. Quoted system must be of advanced & latest version. b. Tender must cover complete equipment. c. Quotation must provide all technical details upto the satisfaction of the client. d. Items should be quality approved from the concerned

29	Default in Preventive Maintenance, Breakdown and Emergency Calls.	:	 In case of default by the Contractor with respect to maintenance, break down and emergency calls, the same will be carried out within 24 hours by Department and the cost so incurred will be paid from the Retention Money. Moreover a 10% of the amount spent would be charged from the concerned contractor.
29	COST TO BE QUOTED IN BOQ.	:	 The Contractors shall quote DDP price of the equipments including all government taxes and delivering of equipment at site. It should also include cost during maintenance period including the parts and maintenance staff.
30	TENDER ACCEPTANCE	:	• The tender of those firms will only be considered who will quote all the tender items and lowest of total of all items will be considered as lowest.

GENERAL CONDITIONS

Note: No tender will be accepted after closing of the Tender box, whatsoever reason may be.

- 1. As the building is under construction and finishing is underway, the Contractors responsible for "Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period) of **Information Technology Equipments**" will also repair all the damages done to the building while Installing Information Technology Equipments at no extra-cost. So the Contactors should take into account all such expenditures while quoting the bid.
- 2. In **Technical Bid**, the bidder must provide original data sheet, technical brochure, all other relevant documents, alongwith copy of Pay Order / Bank Draft without showing the amount figure otherwise, the bid will be ignored/rejected. The technical evaluation will be done on the basis of criteria given in tender document.
- 3. A Column is given against the specification of each item, the vendor has to fill up with YES / NO or put value as desired in the column. These specifications must be highlighted in the brochure; else the offer will be rejected.
- 4. In **Financial Bid**, the vendor should mention financial offer alongwith Pay Order / Bank Draft 1% value of quoted items in favor of Project Director Shaheed Mohtarma Benazir Bhutto Accident, Emergency & Trauma Centre and Ancillary Services Complex at Civil Hospital Karachi.
- 5. The bidder should supply the quoted items on DDP basis including all the government taxes and is responsible to supply the goods at the site at no extra cost within time as specified in Tender Document i.e. six to eight weeks. This period is extendable as per mutual agreement/demand of situation.
- 6. Suppliers / Contractors will be responsible for supply at consignees' end, free of cost and also responsible for free installation work, if required.
- 7. Price escalation will not be allowed.
- 8. The disclosure of firm's price at the time of opening of **Technical bid** will result in the rejection of the bid.
- 9. No tender will be entertained without earnest money. The earnest money will be forfeited to Government Treasury, in case of non-submission of security money within seven (7) days of receipt of the offer letter.
- 10. Only Manufacturer and / or Authorized Agent (if importer) can quote items.
- 11. Scrutiny of **Technical Bids** will be performed by the Procurement Committee. Financial Bids of only those firms will be opened who are qualified technically.
- 12. Certificate from the Sole Agent / Manufacturer has fully equipped Workshop Trained Personnel / Engineers and Equipment should be provided with technical bid and it can be physically verified by the administration of Civil Hospital Karachi.
- 13. The warranty period will commence from the date of installation of the Equipment at Shaheed Mohtarma Benazir Bhutto Accident, Emergency & Trauma Centre and Ancillary Services Complex at Civil Hospital Karachi.
- 14. Firm must provide complete details of their financial standing (at least three years), listing of similar items supplied in Karachi and also in Pakistan, bio-data of engineers with training certificates / test, details of local stock of spare parts for similar goods and details of office with number of personals.
- 15. The vendor has to quote only one rate for each item as per tender specifications. Hand written tenders should be signed.

- 16. The bidder shall submit with the bid, an <u>UNDERTAKING</u> on Non-Judicial stamp paper of Rs. 50/- duly attested by Oath Commissioner, stating that the equipments will be supplied brand new, free from defects as per the approved sample and will bind himself for availability of spares for a period of 10 years from the date of supply. In case of winding up of his business, the supplier shall be bound to make an alternate arrangement of spares and maintenance of equipments. In case of default, depreciated cost of medical equipment will be recoverable from vendor.
- 17. If it has been found that the information submitted by the bidder regarding his qualification and professional, technical, financial, legal or managerial competence as supplier / contractor is / was false and materially inaccurate or incomplete at any stage, then the bidder will be disqualified on his risk and cost.
- 18. Equipments will be handed over to the Project Director / Store officer of Civil Hospital Karachi.
- 19. If vendor doesn't supply the equipments in accordance with the supply order or fails to supply according to terms and conditions or in case of any other default, the Performance Security and Security Deposit would be forfeited and further action as per SPP rules would be taken against such vendor.
- 20. If the supplier fails to give supply or install within the stipulated period, Liquidated charges will be imposed.
- 21. The decision once taken will be final and will not be challenged in any Court of Law.
- 22. A copy of Income Tax, Certificate from Sindh Revenue Board and GST Registration Certificate should be attached alongwith **Technical Bid.**
- 23. Conditional Tender(s) against the Government rules and non-compliance of instructions mentioned in Tender Form & Hand written (overwriting or cutting) tender(s) will not be entertained.
- 24. The vendor must submit a Data Sheet on his firms' letter head according to the Tender Specifications Format mentioned in the tender and highlight the tender specifications in their Technical Data Sheet as well as in brochure / catalogue. Additional Features can be mentioned separately.
- 25. In case the information supplied by bidder in Questionnaire / Proforma is incomplete or incorrect, the tender will be liable for rejection.
- 26. The Medical Superintendent Civil Hospital Karachi / Procurement Committee reserves the right to reject or accept any / all tender(s) as per SPP Rules, 2010.
- 27. The offer will remain valid as per SPP Rules, 2010.

28. Criteria for Evaluation of Bid.

- a. Specifications compliance.
- b. After sale service facility.
- c. Authority letter from Manufacturer.
- d. Guaranty of Availability of parts of the supply articles for 10 years.
- e. Compliance of Terms & Conditions and Additional Terms & Condition of the Bid Form.

I / We agreed above mentioned terms & conditions:

Name of Contractor	Signature	
(CNIC NO	(Copy must be attached).)	
Full Address		

Rubber Stamp _____

QUESTIONNAIRE / PROFORMA (To be filled in by the vendor)

1. Name of institutions where the same items supplied with performance report

	• In Karachi	
	• In Pakistan	
2.	Factory address	

3. No. of Employees

4.	In case of manufacturer	Yes	No
	a. Registration with EOBI (Govt. of Pakistan)		
	b. Registration with Social Security (Provincial Government)		
	c. National Income Tax (Income Tax Department)		
	d. Sales Tax Registratione. Sindh Revenue Board Registration		
	(Copies of all certificates must be attached duly attested)		
5.	Spare parts Availability Guarantee (No. of years):		
6.	Equipment life period (number of years)		
7.	On call service charges (After expiry of maintenance period):		
	• Minimum:		
	• Per day:		
8.	In case of in house maintenance by Civil Hospital Karachi are y provide following during post warranty period	ou willing to Yes) No
	• Back up engineer support whenever requested:		
	• Prompt supply of spares		
9.	Are you Sole Agent of manufacturer (for importer): (If Sole Agent, a copy of Income Tax / GST Registration should Otherwise the offer will be ignored / rejected.	be attached)
10	. Year of Establishment of manufacturing unit		
11	. Warranty period (please provide following details):		
	• Uptime Guarantee:		%
	• Response time to maintenance request:		Hours

12. Briefly state facilities and benefits provided during warranty period:

Supplier's Name:			
Authorized Signature:		Designation	
		Rubber Stamp	
Contact No	Fax No	Cell No	
E. mail address:			

TECHNICAL EVALUATION CRITERIA

<u>Qualifying Marks – 70</u>

<u>S.NO.</u>	DETAILS	MAXIMUM MARKS
1.	Establishment of Firm since More than five years minimum	05
2.	(As per attached Proforma "A") Previous Performance with Government of similar works a. Morethan 3 years – 30 marks b. Upto 3 years – 20 marks Documentary Evidence must be attached. (As per attached Proforma "B")	30
3.	Authority Letter Valid Authority Letter from Manufacturer / Importer	10
4.	 Man Power Requirement 1. Must have proper well established workshop (Procurement Committee may visit the same) – 05 marks 2. Must have certified technical staff (Certificates must be attached) with other staff (at least 30 persons) on ledger (List of persons be attached) – 05 marks 	10 (Less than 30 persons will disqualify the firm from participating in the tender).
5.	<u>Affidavit regarding Blacklisting</u> The bidder should submit an affidavit that firm has never been blacklisted by any government, semi-government department or any other organization.	05
6.	<u>Affidavit regarding Litigation</u> The bidder should submit an affidavit that firm is not involved in Litigation with any government, semi-government department or any other organization.	05
7.	Certificates of Registration1. Income Tax2. GST3. Professional Tax4. Sindh Revenue Board5. Any other	05 (01 mark for each)
8.	Bank Certificate Bank Certificate that the bidder can perform business upto Rs.25.000 million or above	10
9.	 Financial Soundness of the Firm The bidder should submit following: a. Bank Statement for last 3 years with Bank Letter b. Audited Balance Sheet & Income Tax Returns for last 3 years 	20 (10 marks for each)

TOTAL 100 MARKS

ESTABLISHMENT OF FIRM

1.	Name of Firm:		
2.	Head Office Address:		
3.	Regional Office Address:		
4.	Telephone:	 Mobile: Fax: E-mail:	
5.	NTN Number: (Attach copy)	i	
6.	GST Number: (Attach copy)		
7.	Registration No. with Sindh Revenue Board: (Attach copy)		

PREVIOUS PERFORMANCE WITH GOVERNMENT OF SIMILAR WORKS

(Use separate sheet for each work)

1.	Name of Contract		
2.	Place of Execution / City		
3.	Name of Employer		
4.	Address of Employer		
5.	Letter of Award No.		
6.	Value of Contract	Pak Rupees	
7.	Date of award (Proof)		
8.	Date of completion (Proof)		
9.	Contract Duration		
10.	Performance Certificat	e	

FORM OF AGREEMENT

1 THIS AGREEMENT made this dav of Between Messrs. Project Director "Shaheed Mohtarma Benazir Bhutto, Accidents, Emergency & Trauma Centre and Ancillary Services Complex at Civil Hospital Karachi" being hereinafter called the "OWNER" which expression shall, wherever the context so permits, mean and include its successors in interest, executors, administrators, liquidators, nominees and assignees of the ONE PART, and Messrs. hereinafter called the "CONTRACTOR", which expression shall, wherever the context so permits, mean and include its heirs, successors in interest, executors, administrators, liquidators, nominees and assignees of the OTHER PART.

WHEREAS:

- a. The Owner had invited tenders from various contractors for Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period) of **Information Technology Equipments** for the project Shaheed Mohtarma Benazir Bhutto, Accident, Emergency & Trauma Centre and Ancillary Services Complex at Civil Hospital Karachi (Contract No. PD-Trauma Centre-CHK/035 (Rev) 2015-16) in accordance with the requirements, drawings, plans and instructions prepared by the owner, and contained in the tender documents issued by the Owners.
- b. In response to the invitation of the Owner, the Contractors have tendered their quotations and rates and have offered to carryout the supply, completion and maintenance of the aforesaid project and facilities in accordance with the requirements, conditions of contract, documents, standard quality, plans, drawings and instructions of the Owner.
- c. The Owner is willing and agreeable to accept the aforesaid quotation, rates and offer of the Contractor on the various terms and conditions specified herein and in the documents listed is Clause-1, below.

NOW THEREFORE, THIS AGREEMENT WITHNESSETH and in consideration of the mutual covenant and condition set forth herein, the parties hereto, do hereby agree, undertake and declare as under:-

- 1. The Following documents, hereinafter called "Contract Documents" shall be deemed to form, read and construed as an integral part of this Agreement:
 - a. Tender documents including Addendum (if any).b. Contractor's bid letter No. _____ dated _____.
 - c. Relevant Correspondence.
 d. Letter of Award No. _____ dated .
- 2. Notwithstanding anything contained to the contrary or in conflict with the provisions of this agreement in any of the documents mentioned in Clause 1, above, the provisions of this agreement shall prevail and the documents mentioned above shall be deemed to have been amended to the extent of inconsistency found therein, by the provisions of this Agreement, In case of inconsistency between any of the documents referred to herein, the later documents shall prevail and the tender documents shall be construed to have been amended to that extent.

- 3. In consideration of the Contractors supply, completing and maintaining the work, as described heretofore, in conformity in all respects with provisions of this contract to the entire satisfaction of the owner, and the Contractor acting, abiding and performing his duties and obligations strictly in accordance with the terms and conditions herein and documents of the contract mentioned hereinabove, the Owner shall pay to the Contractor amount as per contract documents listed above.
- 4. This contract shall not be transferable or assignable in whole or part of any of the parties hereto, provided that the Owner may assign his rights and obligations in whole or in part to any other Company which shall be entirely owned Company belonging to the same Group of the Companies as the Owner, In such an event such other Company shall be entitled to act as Owner under this contract.

IN WITNESS WHEREOF the parties hereto, acting through their respective representative, have caused this agreement to be signed, sealed and delivered in their respective names on the day and the year first mentioned hereinabove.

SIGNED, SEALED AND DELIVERED In the name and for and on Behalf of the Owner / PROJECT DIRECTOR	SIGNED, SEALED AND DELIVERED In the name and for and on Behalf of the CONTRACTOR
NAME:	NAME:
DESIGNATION:	DESIGNATION:
WITNESS:	WITNESS:
1. NAME:	1. NAME:
ADDRESS:	ADDRESS:
2. NAME:	2. NAME:
ADDRESS:	ADDRESS:

SUPPLY ITEMS / SCOPE OF WORK - SPECIFICATIONS (TECHNICAL)

Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period) of Information Technology Equipments for the project "Shaheed Mohtarma Benazir Bhutto, Accident, Emergency & Trauma Centre and Ancillary Services Complex at Civil Hospital Karachi" CONTRACT NO. PD-TRAUMA CENTRE-CHK/035 (REV) 2015-16

S. No	Specification	Qty	Unit	Yes / No / Put desired value
(1)	(2)	(3)	(4)	(5)
1	DEDSONAL COMPLITED (WITH WINDOWS LICENSED)	200	Unite	
1.	 PERSONAL COMPUTER (WITH WINDOWS LICENSED) Intel based Core i7 - 4790 (3.60 GHz) Processor or higher 8MB cache Motherboard Intel based Q87 Chipset or higher 8GB² DDRIII RAM 1600 MHz or higher 1TB SATA-II Hard Drive 7.2RPM or higher Extra SATA Port Required On Board DVD-RW Drive 1 x 1000 Express Gigabit NIC Integrated Graphics capability Upto2 or higher Expansion Slots (mix of PCI Slot and PCI-Express Slots) Support for Windows 8.1 Pro OS 300 watts or higher Non-hot plug power supply Ultrasharp LED Screen 19": Widescreen Flat Panel Display 19" wide viewable image size 1440x900 at 60Hz HD Resolution 250 CD/m² (typical) Colour Support: 16.78M colors Pixel Pitch: 0.248mm Height adjustable stand 100 to 240 VAC, 50 to 60 Hz, 1.5A (Maximum) 17 watts (typical) or 42 watts (maximum) Included with USB Cable, VGA Cable, DVI Cable, Drivers and Documentation, Media, Quick Setup Guide, Safety Information Accessories: Standard Pro Keyboard (USB) Standard Pro Keyboard (USB) Standard Optical Mouse (USB) 2.0 Speakers Included with HCU Cables, Drivers and Documentation, Quick Setup Guide, Safety Information Software: 3 Years Manufacturer Limited Warranty (Local) OS With Genuine License Key (most recent addition of Microsoft Windows 8.1 Professional DVD with genuine license key) Antivirus with Host Intrusion Prevention (Genuine license key) Built-in LOGO of Trauma Centre from Manufacturer Note: The complete system must be of international recognized brand Complete Job: Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period) Country of Origin: China, Malaysia, Taiwan or Equivalent 	200	Units	

THIN CLIENT OPERATING SYSTEM WITH NETWORK ATTACHED	100	Units
STOARAGE (NAS)		
• Genuine Windows® Embedded Standard 8.1 Professional (32/64-bit) with device manager services		
Processor / Chipset		
Standard Chassis		
 Intel (1.8 GHz, 1 MB L2 cache) with AMD Radeon HD Graphics 		
 Intel (1.5 GHZ, 1 WB E2 cache) with AWD Radcon HD Graphics Intel NM70 Express Chipset 		
Memory		
• Flash (boot drive) SSD32 GB upto 64 GB		
 Standard system memory 2 GB 		
 System memory reserved for graphics (minimum) 2GB 		
 Maximum system memory (memory speed is 1600 MHz) 		
 4 GB DDR3L 1600 MHz (4 GB x 1) 		
• Memory slots		
Storage		
• Primary Boot drive 16 GB MLC mSATA SSD (32 GB and 64 GB also		
available)		
• Primary Boot drive 16 GB MLC mSATA SSD (32 GB and 64 GB also available)		
• Secondary drive options 16, 32, and 64 GB MLC M.21 SSD2 SODIMMs		
• INPUT/OUTPUT (peripheral support)		
• Could be connected to printer Local and/or network printers (RDP, ICA, LPD)		
• Video Intel HD Graphics HD 2000 available With 1.8 GHz processor only. With VGA, HDMI, USB 2.0 Port		
Network Attached Storage (NAS) with real time Replica		
• 6 Bay Pro NAS 1.7 GHz Intel Base Dual Core 64 Bit Or Higher		
• 4 GB DDR-III Or Higher RAM		
• 2 x Gigabit Network Interface Ports		
• 2 x USB 3.0		
• Supported RAID 0,1,5,6, & 10		
 24TB DATA Storage Surveillance Hard Disk 5900 64MB Cache 		
Hot Swappable HDD Tray		
Networking		
Hardware Networking		
• 10/100/1000 Gigabit Ethernet (RJ-45)		
PXE TCD//D with DNS and DUCD		
TCP/IP with DNS and DHCP		
Ports & Connectors:		
• 2 USB 3.0; 4 USB 2.0; 2 Display port 1.2; 1 VGA; 1RJ-45; 1 Headphone; 1 microphone		
I/O Ports, Slots & Connectors Standard Chassis		
• 4 USB 2.0 ports (two in front, two in rear)		
 2 Display Port VGA/HDMI 		
 DC In 		
 Power LED With Power Button 1 RJ-45(rear) 		
 1 KJ-45(rear) 1 Headphone (front) 		
 1 Audio line in (rear) 1 Audio line out (rear) 		
• 1 Audio line out (rear)		
Accessories: • Standard Pro Kayboard (USP)		
 Standard Pro Keyboard (USB) Standard Optical Mouse (USB) 		
Standard Optical Mouse (USB)		1

	Communications:			
	• Broadcom 802.11a/g/n 2x2			
	• Wifi Network interface with Bluetooth® 3 - 10/100/1000			
	Protocols:			
	• Citrix® ICA; Citrix® HDX; Microsoft® RDP; Microsoft® RemoteFX (RFX); VMware Horizon view through RDP; VMware Horizon view			
	through PCoIP (Protocols are dependent on operating system installed)			
	Ultrasharp LED Screen 19":			
	Widescreen Flat Panel Display			
	 19" wide viewable image size 			
	 1440x900 at 60Hz HD Resolution 			
	• 250 CD/m ² (typical)			
	 Colour Support: 16.78M colors 			
	 Pixel Pitch: 0.248mm 			
	Height adjustable stand			
	• 100 to 240 VAC, 50 to 60 Hz, 1.5A (Maximum)			
	• 17 watts (typical) or 42 watts (maximum)			
	• Included with USB Cable, VGA Cable, DVI Cable, Drivers and			
	Documentation, Media, Quick Setup Guide, Safety Information			
	Software:			
	• 3 Years Manufacturer Limited Warranty (Local)			
	OS With Genuine License Key (most recent addition of Microsoft Windows			
	8.1 Professional DVD with genuine license key)			
	Antivirus with Host Intrusion Prevention (Genuine license key)			
	Built-in LOGO of Trauma Centre from Manufacturer			
	• 2.0 Speakers			
	• Included with CPU Cables, Drivers and Documentation, Quick Setup Guide, Safety Information			
	Note:			
	• The complete system including LED, USB Keyboard and USB Mouse			
	should be of same brand			
	The complete system must be of international recognized brand			
	Complete Job: Supply, Installation, Testing, Commissioning and			
	Maintenance (during maintenance period)			
	Country of Origin: China, Malaysia, Taiwan or Equivalent			
3.	ANTI VIRUS SOLUTIONS FOR PERSONAL COMPUTERS & THIN	01	Units	
	CLIENTS SYSTEM			
	Must have following features:			
	• Antivirus solution for Endpoint Protection of 200 Personal Computers & 100			
	Thin Client Systems for a period of 3 years (minimum)			
	Workstation & File Server Security			
	Application Control, Device Control and Web Control from the protection rester of the select tion			
	roster of the select tier			
	• It must include a mobile protection solution which consists of an endpoint security agent and mobile device management			
	• The antivirus solution must be of international recognized brand			
	• The antivirus solution must be of international recognized brand Complete Job: Supply, Installation, Testing, Commissioning and			
	• The antivirus solution must be of international recognized brand			
4.	• The antivirus solution must be of international recognized brand Complete Job: Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period)	10	Units	
4.	The antivirus solution must be of international recognized brand Complete Job: Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period) Country of Origin: China, Malaysia, Taiwan or Equivalent SCANNER	10	Units	
4.	 The antivirus solution must be of international recognized brand Complete Job: Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period) Country of Origin: China, Malaysia, Taiwan or Equivalent <u>SCANNER</u> 4800 x 9600 dpi optical resolution for exceptional scans of photos, slides, 	10	Units	
4.	 The antivirus solution must be of international recognized brand Complete Job: Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period) Country of Origin: China, Malaysia, Taiwan or Equivalent <u>SCANNER</u> 4800 x 9600 dpi optical resolution for exceptional scans of photos, slides, negatives, documents 	10	Units	
4.	 The antivirus solution must be of international recognized brand Complete Job: Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period) Country of Origin: China, Malaysia, Taiwan or Equivalent <u>SCANNER</u> 4800 x 9600 dpi optical resolution for exceptional scans of photos, slides, 	10	Units	

	• Duty cycle of up to 2,000 pages a day			
	Multipage scanning included with Automatic document feeder			
	Capacity: 50 sheets			
	Paper Size: Legal, Letter, A4 & Custom			
	• Scanning Speed: upto 10 pages or 4 images per minutes and preview scans in about 7 seconds			
	• Scanner have the option of scan, copy, print, e-mail, and more many features			
	 available using one touch buttons Plug & Play using Hi-speed USB compatible with USB 2.0 			
	 Media types: Paper (Banner, inkjet, photo, plain), envelopes, labels, cards 			
	(greeting, index), 3-D Objects, 35mm slides and negatives *using transparent materials adapter), iron-on transfers			
	• Scanner must be of latest version and international recognized brand			
	Complete Job: Supply, Installation, Testing, Commissioning and			
	Maintenance (during maintenance period)			
	Country of Origin: China, Malaysia, Taiwan or Equivalent			
5.	LASER PRINTER (BLACK & WHITE)	100	Units	
	• Up to 35 paper per minutes (PPM)			
	• Print Resolution: Upto 1200x1200 dpi, HP FastRes 1200; HP ProRes 1200;			
	Resolution Enhancement technology (REt)			
	Processor Speed: 800 MHz			
	 Memory: 256 MB (expandable up to 320 MB via 1 open 144-pin DIMM slot) 			
	 Durability ratings Recommended monthly volume: 750 to 3,000 pages; 			
	 Input Tray: 50-sheet multipurpose tray, 250-sheet input tray; Optional 500- 			
	sheet tray			
	• Output Tray: 150-sheet output bin with the feature of having automatic			
	reverse printing			
	• Duty cycle: 50,000 pages			
	• First page print out in 10 seconds or less			
	Network Integrated Connecticity III and USP 2.0. Ethernet 10/100/100 CP active to Walls and			
	 Connectivity: Hi-speed USB 2.0; Ethernet 10/100/100 GB network, Walk-up USB; Wireless 802.11b/g/n 			
	 Printer must be of latest version and international recognized brand 			
	Complete Job: Supply, Installation, Testing, Commissioning and			
	Maintenance (during maintenance period)			
	Country of Origin: China, Malaysia, Taiwan or Equivalent			
6.	LASER PRINTER (COLOUR)	01	Unit	
	 Speeds up to 35 pages or higher per minute Color/Black 	~ •	•	
	 Resolution: Upto 600 x 600 x 2 dpi (1200 DPI effective output) 			
	• Speed: 600MHz or higher			
	 Memory: 128MB memory or higher 			
	• First page print out in 10 seconds or less			
	• Duty cycle: 40,000 pages or higher			
	• Connectivity: High speed USB 2.0 port, Fast Ethernet 10/100 base, Wifi			
	802.11 b/g/n & Parallel port connectivity			
	• Auto on/off technology			
	Printer must be of latest version and international recognized brand			
	Complete Job: Supply, Installation, Testing, Commissioning and Maintenance			
	(during maintenance period) Country of Origin: China Malaysia Taiwan or Equivalent			
7.	Country of Origin: China, Malaysia, Taiwan or Equivalent DOT MATRIX PRINTER	15	Units	
1.	Technology	15	Units	
	 Printing Method: Impact Dot matrix 			
	• Number of Pins: 24 Pins			
				20

Number of columns: 80 columns			
Needles: 24 Needles Connectivity Interference USD 2.0 Type D. Social and Devalle1			
• Connectivity: Interfaces: USB 3.0 Type B, Serial and Parallel Print			
 Printing Speed: 300 Characters per second or higher 			
 High Speed - Draft: 10 cpi, 10 cpi: 75 chars/s, Draft: 10cpi: 225 char/s 			
 Carbon Copies: 3 plus one original 			
Paper / Media Handling			
• Document Feed: Single sheet rear, Continuous paper rear, Paper Output rear,			
Optional Automatic Document Feed (CSP): 50			
• Paper Format: Sheet Paper (Single-and multi-Layer), Continuous Paper			
(single-and multi-layer), Labels (Single-and Multi-layer), Roll Paper,			
Envelopes General			
 Compatible Operating System: Windows 2000, Windows 7, Windows 8, 			
Windows 98, Windows XP/Windows 7/8			
• Memory: 64 KB			
Ribbon Yield: 2000000 characters Black LQ			
Printer must be of latest version and international recognized brand			
Complete Job: Supply, Installation, Testing, Commissioning and Maintenance			
(during maintenance period)			
Country of Origin: China, Malaysia, Taiwan or Equivalent	200	TT. St.	
8. <u>UNINTERRUPTABLE POWER SUPPLY (UPS) 600 WATTS DRY</u> <u>BATTERY</u>	300	Units	
• Uninterruptable Power Supply (UPS) for Personal Computers and Thin			
Client Operating Systems			
Built-in Stabilizer			
• Self Diagnostics			
Sine-wave PWM Output			
Low-Battery Indication Advanced Uigh Deformance Architecture			
 Advanced High Performance Architecture Charging / Battery warning 			
 Continuous-rated Design 			
 Overload / Over-discharge Trip Indication 			
 Cold-Start Capability 			
 Audible Indication on Change-over 			
 Extended Back-Up Time 			
 Charging / Charged Indication 			
 Heavy-Duty Boost Charger 			
 Dry Maintenance free Battery (2x12V, 7AH) 			
 Quad-mode Charging 			
Reverse Battery Protection			
Phase Locking			
No-Load Shut-Down Mode			
• Sleep Mode			
Easy Battery Replacement			
Improved Voltage Regulation			
Current Limit			
UP Silone Monitoring & Shutdown Software			
Overload Protection			
Mains Protection			
Mains Filtering			
Battery over Voltage Protection			
Faulty-mains Protection			
			21

	Over-discharge Battery Protection			
	• The UPS must be of latest version and international recognized brand Complete Job: Supply, Installation, Testing, Commissioning and Maintenance			
	(during maintenance period)			
	Country of Origin: China, Malaysia, Taiwan or Equivalent			
9.	FAX MACHINE	02	Units	
	Device Type: Fax / Copier / Printer / Scanner			
	• Copier Type: Digital			
	• Fax Type: Plain paper			
	Printing Technology: Laser-Monochrome			
	 Monthly Duty Cycle (max): 8000 impression 			
	 Display: 2 lines / 16 digits / characters(Black lit LCD) 			
	 PC Connection Availability: Yes 			
	 PC Connection: USB 2.0 			
	Memory			
	• Standard Memory: 32.0 MB 32.0 MB			
	Max Supported Memory: 32.0MB 32.0 MB			
	Fax Machine			
	Max Transmission Speed: 33.6 kbps			
	Total Memory Capacity: 500 Pages			
	• Optical resolution: 600x600 dpi			
	Handset: Corded Handset			
	PC Faxing: Yes			
	Fax Machine Features			
	Automatic redialing			
	• Fax forwarding			
	Documents & Media Handling			
	Max Original Size: A4			
	Original Type: Sheets			
	Document Feeder Capacity: 30 Sheets			
	Min Media Size: 3in 5in			
	• Max Media Size: Legal (8.5 in x 14 in)			
	• Supported Media Type: Cards, transparencies, labels, plain paper, envelopes			
	Standard Media Capacity: 280 Sheets			
	Bypass Feeder Capacity: 10 Sheets			
	Output Trays Capacity: 100 Sheets			
	• Interface: USB 2.0			
	• Compatible Operating System: Windows 2000, Windows 7, Windows 8,			
	Windows 98, Windows XP			
	Copying			
	• Max Copying Speed: upto 600 x 600 dpi			
	• Max Document Enlargement: 400.0%			
	• Max Documents Reduction: 25.0%			
	• Max Printing Resolution: upto 1200 x 1200 dpi			
	• Max Printing Speed: upto 18.0 ppm			
	Image Enhancement: HP Fast Res 1200			
	Technology Scanning			
	Optical Resolution: 600x 600 dpi			
	Interpolated Resolution: 19200 x 19200 dpi			
	• Color Depth: 24.0 bit			
	• Fax Machine must be of latest version & international recognized brand Complete Job: Supply, Installation, Testing, Commissioning and			
	Maintenance (during maintenance period)			
	Country of Origin: China, Malaysia, Taiwan or Equivalent			
			<u> </u>	22

10.	PHOTOCOPIER	13	Units	
10.		15	Units	
	Technology: Laser, Mono/single component (Less Developer)			
	Type: Desktop Copier / Printer			
	Copy Speed: 35 Copies Per Minute			
	• Resolution: 600 x 600 dpi, 256 grayscale			
	• 1 st copy time: 5.9 seconds or less			
	• Warm-up time: 20 seconds or less			
	Continuous copy: 1 - 250 copies			
	Original/copy size: Max. A3			
	Memory Capacity: 32 MB Standard			
	• Zoom Range: 25% - 400% in 1% steps			
	• Paper Feeding Standard: 1 x 30th0 sheets universal feeder + 50-sheets Multi-			
	purpose/ bypass tray.			
	 Paper capacity: 350 sheets standard, Max. 1,250 sheets Digital Conv. Factured: Scene once print many. Electronic sorting. Automatic 			
	• Digital Copy Features: Scan-once-print-many, Electronic sorting, Automatic paper selection, Combined inch/metric copying, and Layout mode 2-in-I, 4-			
	in-1, Economy copy Mode.			
	 Drum life: Minimum 150,000 copies 			
	 Toner life: Minimum 8000 copies 			
	 Automatic Document feeder : Supplied as standard with machine 			
	 Trolley : Steel made supplied as standard with machine 			
	 Drum warranty : 3 years or 150,000 copies (whichever is earlier) 			
	 Warranty: 3 years parts 			
	 The copier must of latest version and international recognized brand 			
	Complete Job: Supply, Installation, Testing, Commissioning and			
	Maintenance (during maintenance period)			
	Country of Origin: China, Malaysia, Taiwan or Equivalent			
11.	HANGING TYPE PROJECTOR (ROOF MOUNTED)	10	Units	
		10	Childs	
	• 3 LCD technology			
	Project 3500 lumens			
	Brightness: 2700 ANSI			
	• Contrast: 3000:01:00			
	• Resolution: 1024x768 XGA			
	 Zoom: x1.6 Throw Ratio: 1.37 - 1.8:1 			
	 Lamp Life: 7000 hours in economy mode Lamp type: Bulb 			
	Lamp type: BulbProjector type: LCD			
	Power ConsumptionProjection distance			
	 Connectivity: HDMI, VGA, Audio with wireless option 			
	 Speakers: Built-in 			
	Communication: Network connection			
	 Compatibility: HD ready (Image frequency) 			
	 Line-in: 3.5mm or as per requirements 			
	 Microphone input 			
	 S-video in 			
	• USB			
	• VGA in			
	• Decoders: Audio, Video and image files			
	• Image Properties (Aspect ratio: 4:03)			
	• Power supply, Power connector & Remote Control			
	Motorization Screen with installation			
	• Size: 8x8 foot wall mounted or as per requirements			
				23

 The screen must be wall mounted It must have mechanically folding System Projector must be of latest version and international recognized brand Complete Job: Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period) Country of Origin: China, Malaysia, Taiwan or Equivalent 			
12. DESK TYPE PROJECTOR	06	Units	
 3 LCD technology Project 3500 lumens Brightness: 2700 ANSI Contrast: 3000:01:00 Resolution: 1024x768 XGA Zoom: x1.6 Throw Ratio: 1.37 - 1.8:1 Lamp Life: 7000 hours in economy mode Lamp type: Bulb Projector type: LCD Image size: 300x300 inches Power Consumption Projection distance Connectivity: HDMI, VGA, Audio with wireless option Speakers: Built-in Compatibility: HD ready (Image frequency) Line-in: 3.5mm or as per requirements Microphone input S-video in USB VGA in Decoders: Audio, Video and image files Image Properties (Aspect ratio: 4:03) Power supply, Power connector & Remote Control Motorization Screen with installation Size8x8 foot wall mounted or as per requirements The screen must be wall mounted It must have mechanically folding System Projector must be of latest version and international recognized brand Comprise Line-ino; Comparison and Maintenance (during maintenance period) Country of Origin: China, Malaysia, Taiwan or Equivalent 			
13. LED SCREEN 32" FOR OPERATION THEATRES	18	Units	
 Picture Quality: Full High Definition (HD) Resolution: 1920x1080 pixels Clear motion rate: 120 Wide color Enhancer Plus Eco Sensor Audio: Sound output: 10W x 2 Dolby® Digitla Plus or Dolby® Pulse SRS Theater Sound HD Speaker type: Down firing + Full range Connections: HDMI Port: 2 			

	• USB Port: 1			
	• Component in: 1			
	Digital Audio output: 1 optical			
	• ConnectShare TM Movie			
	Accessories			
	Power Cable			
	• LED Screen stand (wall mounted)			
	• Remote			
	International certified standards			
	• The screen must be of latest version and international recognized brand			
	Complete Job: Supply, Installation, Testing, Commissioning and			
	Maintenance (during maintenance period)			
	Country of Origin: China, Malaysia, Taiwan or Equivalent			
14.	LED SCREEN 40" FOR LOBBIES & WAITING AREA	15	Units	
	Picture Quality:			
	• Full High Definition (HD)			
	• Resolution: 1920x1080 pixels			
	• Clear motion rate: 120			
	• Wide color Enhancer Plus			
	• Eco Sensor			
	Audio:			
	• Sound output: 10W x 2			
	• Dolby® Digitla Plus or Dolby® Pulse			
	SRS Theater Sound HD			
	• Speaker type: Down firing + Full range			
	Connections:			
	• HDMI Port: 2			
	• USB Port: 1			
	• Component in: 1			
	Digital Audio output: 1 optical			
	• ConnectShare TM Movie			
	Accessories			
	Power Cable			
	• LED Screen stand (wall mounted)			
	• Remote			
	International certified standards			
	• The screen must be of latest version and international recognized brand			
	Complete Job: Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period)			
	Country of Origin: China, Malaysia, Taiwan or Equivalent			
	Complete Job: Supply, Installation, Testing, Commissioning and			

SIGNATURE

CONTRACTOR NAME

DATE & SEAL

BIDDING DOCUMENTS

CIVIL HOSPITAL KARACHI HEALTH DEPARTMENT GOVERNMENT OF SINDH

Contract NO:- PD-Trauma Centre-CHK/035 (Rev) 2015-16

<u>Tender Documents for</u> <u>Supplying, Installation, Testing, Commissioning &</u> <u>Maintenance (during maintenance period) of</u> <u>Information Technology Equipments for the project</u> <u>"Shaheed Mohtarma Benazir Bhutto Accident,</u> <u>Emergency & Trauma Centre and Ancillary Services</u> <u>Complex at Civil Hospital Karachi"</u>

VOLUME-II

FINANCIAL BID DOCUMENTS

SUMMARY OF CONTENTS

S.NO	DESCRIPTION	PAGE
1.	TITLE	1
2.	SUMMARY OF CONTENTS	2
3.	FORM OF BID	3 TO 4
4.	BILL OF QUANTITY	5 TO 14

FORM OF BID

The Project Director, Shaheed Mohtarma Benazir Bhutto, Accident, Emergency & Trauma Centre, And Ancillary Services Complex At, Civil Hospital Karachi

Sub: Supplying, Installation, Testing, Commissioning and Maintenance (during maintenance period) of Information Technology Equipments for the project Shaheed Mohtarma Benazir Bhutto, Accident, Emergency & Trauma Centre and Ancillary Services Complex at Civil Hospital Karachi / Contract No. PD-Trauma Centre-CHK/035 (Rev) 2015-16

Dear Sir,

1. Having examined the Tender Documents and the site conditions for the above mentioned Project, we, the undersigned offer to Supply, Installation, Testing, Commissioning and maintenance (during maintenance period) of the whole of the said works in conformity with the said tender Documents (and Addendum if any) for the sum of under-mentioned amount on **DDP basis**:-

Bid Price (In Figure):	
Bid Price (In Words):	

- 2. The above total sum is based on the quantities shown in the Bill of Quantities and other works as mentioned in Salient Features.
- 3. We undertake, if our tender is accepted, to sign an agreement within 15 calendar days following receipt of letter of award in the form laid out in annexure to this Tender with such alterations and additions thereto as may be required to adopt, such Agreement to circumstances of this Tender.
- 4. We undertake, if our Tender is accepted, to mobilize on site within 7 calendar days of receipt of the letter of award and commence the works on the first works comprised in the contract within the time of completion specified in the Salient Features.
- 5. We agree to abide by the Tender for a period of 90 calendar days from the date of opening of tender and shall remain binding upon us and may be accepted at any time before the expiration of that period.

- 6. Unless and until a formal Agreement is prepared and executed, this Tender together with your written acceptance thereof and other relevant correspondence subsequent to the Tender shall constitute a binding Contract between us.
- 7. We understand that you are not bound to accept the lowest or any tender you may receive, and that your will not reimburse any expenses incurred by us in preparing and submitting the Tender or otherwise in connection with the Tender.
- 8. As a guarantee for the performance of the undertakings and obligations of this Tender, we submit herewith Earnest Money/Bid Security equivalent to 1% of the quoted cost in an amount Rs. ______ (Rupees ______) in form of Pay Order issued by the Bank vide No. ______ dated ______ dated ______ made in your favor and made payable to you without any reference to us and valid for 90 calendar days from the date of submission of Tender.
- 9. The Tender Documents referred to above constitute a part of this Tender and comprise of the documents listed hereunder:
 - a. Instructions to bidders.
 - b. Salient Features / Terms & Condition of the Tender. Questionnaire / Proforma – Evaluation Criteria
 - c. Form of Agreement.
 - d. Scope of work / Bill of Quantities / Specification (Technical).
 - e. The Addendum (if any).
 - f. The Drawings (if any).

Dated this	 day	of			20	
Signature	 in	the	capacity	of		duly

authorized to sign bids for and on behalf of _____

(Name of Bidder in Block Capitals)
(Seal)

Witness:		
(Signature)	 	
(Name)	 	
Address:	 	
Occupation		

BILL OF QUANTITY

Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period) of **Information Technology Equipments (Re-tender)** for the project "Shaheed Mohtarma Benazir Bhutto, Accident, Emergency & Trauma Centre and Ancillary Services Complex at Civil Hospital Karachi" **CONTRACT NO. PD-TRAUMA CENTRE-CHK/035 (REV) 2015-16**

S.No	Specification	Qty	Unit	Unit Price	Total Amount
(1)	(2)	(3)	(4)	(5)	(6)
1.	PERSONAL COMPUTER (WITH WINDOWS LICENSED)	200	Units		
	• Intel based Core i7 - 4790 (3.60 GHz) Processor or higher				
	• 8MB cache Motherboard				
	• Intel based Q87 Chipset or higher				
	• 8GB ² DDRIII RAM 1600 MHz or higher				
	• 1TB SATA-II Hard Drive 7.2RPM or higher				
	Extra SATA Port Required On Board				
	DVD-RW Drive				
	• 1 x 1000 Express Gigabit NIC				
	Integrated Graphics capability				
	• Upto2 or higher Expansion Slots (mix of PCI Slot and PCI-Express Slots)				
	• Support for Windows 8.1 Pro OS				
	• 300 watts or higher Non-hot plug power supply				
	Ultrasharp LED Screen 19":				
	Widescreen Flat Panel Display				
	• 19" wide viewable image size				
	• 1440x900 at 60Hz HD Resolution				
	• 250 CD/m^2 (typical)				
	Colour Support: 16.78M colors				
	• Pixel Pitch: 0.248mm				
	• Height adjustable stand				
	• 100 to 240 VAC, 50 to 60 Hz, 1.5A (Maximum)				
	• 17 watts (typical) or 42 watts (maximum)				
	• Included with USB Cable, VGA Cable, DVI Cable, Drivers and				
	Documentation, Media, Quick Setup Guide, Safety Information				
	Accessories:				
	• Standard Pro Keyboard (USB)				
	• Standard Optical Mouse (USB)				
	• 2.0 Speakers				
	• Included with CPU Cables, Drivers and Documentation, Quick Setup Guide,				
	Safety Information				
	Software:				
	• 3 Years Manufacturer Limited Warranty (Local)				
	• OS With Genuine License Key (most recent addition of Microsoft Windows				
	8.1 Professional DVD with genuine license key)				

	• Antivirus with Host Intrusion Prevention (Genuine license key)				
	Built-in LOGO of Trauma Centre from Manufacturer				
	Note:				
	• The complete system including LED, USB Keyboard and USB Mouse should be of same brand				
	• The complete system must be of international recognized brand				
	Complete Job: Supply, Installation, Testing, Commissioning and				
	Maintenance (during maintenance period)				
	Country of Origin: China, Malaysia, Taiwan or Equivalent				
2		100	TT • .		
2.	THIN CLIENT OPERATING SYSTEM WITH NETWORK ATTACHED	100	Units		
	<u>STOARAGE (NAS)</u>				
	• Genuine Windows® Embedded Standard 8.1 Professional (32/64-bit) with				
	device manager services				
	Processor / Chipset				
	Standard Chassis				
	• Intel (1.8 GHz, 1 MB L2 cache) with AMD Radeon HD Graphics				
	 Intel NM70 Express Chipset 				
	Memory				
	• Flash (boot drive) SSD32 GB upto 64 GB				
	• Standard system memory 2 GB				
	• System memory reserved for graphics (minimum) 2GB				
	• Maximum system memory (memory speed is 1600 MHz)				
	• 4 GB DDR3L 1600 MHz (4 GB x 1)				
	Memory slots				
	Storage				
	 Primary Boot drive 16 GB MLC mSATA SSD (32 GB and 64 GB also available) 				
	• Primary Boot drive 16 GB MLC mSATA SSD (32 GB and 64 GB also available)				
	• Secondary drive options 16, 32, and 64 GB MLC M.21 SSD2 SODIMMs				
	• INPUT/OUTPUT (peripheral support)				
	• Could be connected to printer Local and/or network printers (RDP, ICA,				
	LPD)				
	• Video Intel HD Graphics HD 2000 available With 1.8 GHz processor only. With VGA, HDMI, USB 2.0 Port				
	Network Attached Storage (NAS) with real time Replica				
	• 6 Bay Pro NAS 1.7 GHz Intel Base Dual Core 64 Bit Or Higher				
	• 4 GB DDR-III Or Higher RAM				
	• 2 x Gigabit Network Interface Ports				
	• 2 x USB 3.0				
	• Supported RAID 0,1,5,6, & 10				
	• 24TB DATA Storage Surveillance Hard Disk 5900 64MB Cache				
	• Hot Swappable HDD Tray				
	Networking				
	Hardware Networking				
	• 10/100/1000 Gigabit Ethernet (RJ-45)				
	• PXE				
	• TCP/IP with DNS and DHCP				
			1	L	I]

Ports & Connectors:		
• 2 USB 3.0; 4 USB 2.0; 2 Display port 1.2; 1 VGA; 1RJ-45; 1 Headphone; 1		
microphone		
I/O Ports, Slots & Connectors		
Standard Chassis		
• 4 USB 2.0 ports (two in front, two in rear)		
• 2 Display Port VGA/HDMI		
• DC In & Power LED With Power Button		
 1 RJ-45(rear) 		
• 1 Microphone (front)		
• 1 Audio line in (rear)		
• 1 Audio line out (rear)		
Accessories:		
• Standard Pro Keyboard (USB)		
• Standard Optical Mouse (USB)		
Communications:		
• Broadcom 802.11a/g/n 2x2		
• Wifi Network interface with Bluetooth® 3 - 10/100/1000		
Protocols:		
Citrix® ICA; Citrix® HDX; Microsoft® RDP; Microsoft® RemoteFX		
(RFX); VMware Horizon view through RDP; VMware Horizon view		
through PCoIP (Protocols are dependent on operating system installed)		
Ultrasharp LED Screen 19":		
Widescreen Flat Panel Display		
• 19" wide viewable image size		
• 1440x900 at 60Hz HD Resolution		
• 250 CD/m^2 (typical)		
Colour Support: 16.78M colors		
• Pixel Pitch: 0.248mm		
Height adjustable stand		
• 100 to 240 VAC, 50 to 60 Hz, 1.5A (Maximum)		
• 17 watts (typical) or 42 watts (maximum)		
 Included with USB Cable, VGA Cable, DVI Cable, Drivers and 		
Documentation, Media, Quick Setup Guide, Safety Information		
Software:		
• 3 Years Manufacturer Limited Warranty (Local)		
• OS With Genuine License Key (most recent addition of Microsoft Windows		
8.1 Professional DVD with genuine license key)		
 Antivirus with Host Intrusion Prevention (Genuine license key) 		
 Built-in LOGO of Trauma Centre from Manufacturer 		
• 2.0 Speakers		
• Included with CPU Cables, Drivers and Documentation, Quick Setup Guide,		
Safety Information		
Note:		
• The complete system including LED, USB Keyboard and USB Mouse should be of same brand		
The complete system must be of international recognized brand		
Complete Job: Supply, Installation, Testing, Commissioning and		
Maintenance (during maintenance period)		
Country of Origin: China, Malaysia, Taiwan or Equivalent		

3.	ANTI VIRUS SOLUTIONS FOR PERSONAL COMPUTERS & THIN	01	Units	
	<u>CLIENTS SYSTEM</u>			
	• Must have fallewing factures.			
	 Must have following features: Antivirus solution for Endpoint Protection of 200 Personal Computers & 100 			
	Thin Client Systems for a period of 3 years (minimum)			
	 Workstation & File Server Security 			
	 Application Control, Device Control and Web Control from the protection 			
	roster of the select tier			
	• It must include a mobile protection solution which consists of an endpoint			
	security agent and mobile device management			
	• The antivirus solution must be of international recognized brand			
	Complete Job: Supply, Installation, Testing, Commissioning and			
	Maintenance (during maintenance period)			
	Country of Origin: China, Malaysia, Taiwan or Equivalent			
4.	SCANNER	10	Units	
4.		10	Units	
	• 4800 x 9600 dpi optical resolution for exceptional scans of photos, slides,			
	negatives, documents			
	• Superior color accuracy, photo reproduction with six-color, 96-bit scanning			
	Automatic red-eye removal and detail enhancement			
	• Duty cycle of up to 2,000 pages a day			
	• Multipage scanning included with Automatic document feeder			
	• Capacity: 50 sheets			
	• Paper Size: Legal, Letter, A4 & Custom			
	 Scanning Speed: upto 10 pages or 4 images per minutes and preview scans in about 7 seconds 			
	• Scanner have the option of scan, copy, print, e-mail, and more many features available using one touch buttons			
	• Plug & Play using Hi-speed USB compatible with USB 2.0			
	 Media types: Paper (Banner, inkjet, photo, plain), envelopes, labels, cards (greeting, index), 3-D Objects, 35mm slides and negatives *using transparent materials adapter), iron-on transfers 			
	Scanner must be of latest version and international recognized brand			
	Complete Job: Supply, Installation, Testing, Commissioning and			
	Maintenance (during maintenance period)			
	Country of Origin: China, Malaysia, Taiwan or Equivalent			
5.	LASER PRINTER (BLACK & WHITE)	100	Units	
	• Up to 35 paper per minutes (PPM)			
	• Print Resolution: Upto 1200x1200 dpi, HP FastRes 1200; HP ProRes 1200;			
	Resolution Enhancement technology (REt)			
	 Processor Speed: 800 MHz Mamoru 256 MB (our and able up to 220 MB via 1 open 144 pin DIMM 			
	 Memory: 256 MB (expandable up to 320 MB via 1 open 144-pin DIMM slot) 			
	• Durability ratings Recommended monthly volume: 750 to 3,000 pages;			
	• Input Tray: 50-sheet multipurpose tray, 250-sheet input tray; Optional 500- sheet tray			
	• Output Tray: 150-sheet output bin with the feature of having automatic			
	reverse printing Duty evelo: 50,000 pages			
	• Duty cycle: 50,000 pages			

	• First page print out in 10 seconds or less			
	Network Integrated			
	• Connectivity: Hi-speed USB 2.0; Ethernet 10/100/100 GB network, Walk-up			
	USB; Wireless 802.11b/g/n			
	Printer must be of latest version and international recognized brand			
	Complete Job: Supply, Installation, Testing, Commissioning and			
	Maintenance (during maintenance period)			
	Country of Origin: China, Malaysia, Taiwan or Equivalent			
6.	LASER PRINTER (COLOUR)	01	Unit	
	• Speeds up to 35 pages or higher per minute Color/Black			
	• Resolution: Upto 600 x 600 x 2 dpi (1200 DPI effective output)			
	 Speed: 600MHz or higher 			
	Memory: 128MB memory or higher			
	• First page print out in 10 seconds or less			
	• Duty cycle: 40,000 pages or higher			
	• Connectivity: High speed USB 2.0 port, Fast Ethernet 10/100 base, Wifi			
	802.11 b/g/n & Parallel port connectivity			
	• Auto on/off technology			
	Printer must be of latest version and international recognized brand			
	Complete Job: Supply, Installation, Testing, Commissioning and Maintenance			
	(during maintenance period)			
	Country of Origin: China, Malaysia, Taiwan or Equivalent			
7		1.7	TT • .	
7.	DOT MATRIX PRINTER	15	Units	
	Technology			
	Printing Method: Impact Dot matrix			
	• Number of Pins: 24 Pins			
	Number of columns: 80 columns			
	Number of columns: 80 columns			
	 Number of columns: so columns Needles: 24 Needles 			
	• Needles: 24 Needles			
	• Needles: 24 Needles			
	 Needles: 24 Needles Connectivity: Interfaces: USB 3.0 Type B, Serial and Parallel Print 			
	 Needles: 24 Needles Connectivity: Interfaces: USB 3.0 Type B, Serial and Parallel Print Printing Speed: 300 Characters per second or higher 			
	 Needles: 24 Needles Connectivity: Interfaces: USB 3.0 Type B, Serial and Parallel Print Printing Speed: 300 Characters per second or higher High Speed - Draft: 10 cpi, 10 cpi: 75 chars/s, Draft: 10cpi: 225 char/s 			
	 Needles: 24 Needles Connectivity: Interfaces: USB 3.0 Type B, Serial and Parallel Print Printing Speed: 300 Characters per second or higher High Speed - Draft: 10 cpi, 10 cpi: 75 chars/s, Draft: 10cpi: 225 char/s Carbon Copies: 3 plus one original 			
	 Needles: 24 Needles Connectivity: Interfaces: USB 3.0 Type B, Serial and Parallel Print Printing Speed: 300 Characters per second or higher High Speed - Draft: 10 cpi, 10 cpi: 75 chars/s, Draft: 10cpi: 225 char/s Carbon Copies: 3 plus one original Paper / Media Handling 			
	 Needles: 24 Needles Connectivity: Interfaces: USB 3.0 Type B, Serial and Parallel Print Printing Speed: 300 Characters per second or higher High Speed - Draft: 10 cpi, 10 cpi: 75 chars/s, Draft: 10cpi: 225 char/s Carbon Copies: 3 plus one original Paper / Media Handling Document Feed: Single sheet rear, Continuous paper rear, Paper Output rear, 			
	 Needles: 24 Needles Connectivity: Interfaces: USB 3.0 Type B, Serial and Parallel Print Printing Speed: 300 Characters per second or higher High Speed - Draft: 10 cpi, 10 cpi: 75 chars/s, Draft: 10cpi: 225 char/s Carbon Copies: 3 plus one original Paper / Media Handling Document Feed: Single sheet rear, Continuous paper rear, Paper Output rear, Optional Automatic Document Feed (CSP): 50 			
	 Needles: 24 Needles Connectivity: Interfaces: USB 3.0 Type B, Serial and Parallel Print Printing Speed: 300 Characters per second or higher High Speed - Draft: 10 cpi, 10 cpi: 75 chars/s, Draft: 10cpi: 225 char/s Carbon Copies: 3 plus one original Paper / Media Handling Document Feed: Single sheet rear, Continuous paper rear, Paper Output rear, Optional Automatic Document Feed (CSP): 50 Paper Format: Sheet Paper (Single-and multi-Layer), Continuous Paper 			
	 Needles: 24 Needles Connectivity: Interfaces: USB 3.0 Type B, Serial and Parallel Print Printing Speed: 300 Characters per second or higher High Speed - Draft: 10 cpi, 10 cpi: 75 chars/s, Draft: 10cpi: 225 char/s Carbon Copies: 3 plus one original Paper / Media Handling Document Feed: Single sheet rear, Continuous paper rear, Paper Output rear, Optional Automatic Document Feed (CSP): 50 Paper Format: Sheet Paper (Single-and multi-Layer), Continuous Paper (single-and multi-layer), Labels (Single-and Multi-layer), Roll Paper, 			
	 Needles: 24 Needles Connectivity: Interfaces: USB 3.0 Type B, Serial and Parallel Print Printing Speed: 300 Characters per second or higher High Speed - Draft: 10 cpi, 10 cpi: 75 chars/s, Draft: 10cpi: 225 char/s Carbon Copies: 3 plus one original Paper / Media Handling Document Feed: Single sheet rear, Continuous paper rear, Paper Output rear, Optional Automatic Document Feed (CSP): 50 Paper Format: Sheet Paper (Single-and multi-Layer), Continuous Paper (single-and multi-layer), Labels (Single-and Multi-layer), Roll Paper, Envelopes 			
	 Needles: 24 Needles Connectivity: Interfaces: USB 3.0 Type B, Serial and Parallel Print Printing Speed: 300 Characters per second or higher High Speed - Draft: 10 cpi, 10 cpi: 75 chars/s, Draft: 10cpi: 225 char/s Carbon Copies: 3 plus one original Paper / Media Handling Document Feed: Single sheet rear, Continuous paper rear, Paper Output rear, Optional Automatic Document Feed (CSP): 50 Paper Format: Sheet Paper (Single-and multi-Layer), Continuous Paper (single-and multi-layer), Labels (Single-and Multi-layer), Roll Paper, Envelopes General 			
	 Needles: 24 Needles Connectivity: Interfaces: USB 3.0 Type B, Serial and Parallel Print Printing Speed: 300 Characters per second or higher High Speed - Draft: 10 cpi, 10 cpi: 75 chars/s, Draft: 10cpi: 225 char/s Carbon Copies: 3 plus one original Paper / Media Handling Document Feed: Single sheet rear, Continuous paper rear, Paper Output rear, Optional Automatic Document Feed (CSP): 50 Paper Format: Sheet Paper (Single-and multi-Layer), Continuous Paper (single-and multi-layer), Labels (Single-and Multi-layer), Roll Paper, Envelopes General Compatible Operating System: Windows 2000, Windows 7, Windows 8, 			
	 Needles: 24 Needles Connectivity: Interfaces: USB 3.0 Type B, Serial and Parallel Print Printing Speed: 300 Characters per second or higher High Speed - Draft: 10 cpi, 10 cpi: 75 chars/s, Draft: 10cpi: 225 char/s Carbon Copies: 3 plus one original Paper / Media Handling Document Feed: Single sheet rear, Continuous paper rear, Paper Output rear, Optional Automatic Document Feed (CSP): 50 Paper Format: Sheet Paper (Single-and multi-Layer), Continuous Paper (single-and multi-layer), Labels (Single-and Multi-layer), Roll Paper, Envelopes General 			
	 Needles: 24 Needles Connectivity: Interfaces: USB 3.0 Type B, Serial and Parallel Print Printing Speed: 300 Characters per second or higher High Speed - Draft: 10 cpi, 10 cpi: 75 chars/s, Draft: 10cpi: 225 char/s Carbon Copies: 3 plus one original Paper / Media Handling Document Feed: Single sheet rear, Continuous paper rear, Paper Output rear, Optional Automatic Document Feed (CSP): 50 Paper Format: Sheet Paper (Single-and multi-Layer), Continuous Paper (single-and multi-layer), Labels (Single-and Multi-layer), Roll Paper, Envelopes General Compatible Operating System: Windows 2000, Windows 7, Windows 8, 			
	 Needles: 24 Needles Connectivity: Interfaces: USB 3.0 Type B, Serial and Parallel Print Printing Speed: 300 Characters per second or higher High Speed - Draft: 10 cpi, 10 cpi: 75 chars/s, Draft: 10cpi: 225 char/s Carbon Copies: 3 plus one original Paper / Media Handling Document Feed: Single sheet rear, Continuous paper rear, Paper Output rear, Optional Automatic Document Feed (CSP): 50 Paper Format: Sheet Paper (Single-and multi-Layer), Continuous Paper (single-and multi-layer), Labels (Single-and Multi-layer), Roll Paper, Envelopes General Compatible Operating System: Windows 2000, Windows 7, Windows 8, Windows 98, Windows XP/Windows 7/8 			
	 Needles: 24 Needles Connectivity: Interfaces: USB 3.0 Type B, Serial and Parallel Print Printing Speed: 300 Characters per second or higher High Speed - Draft: 10 cpi, 10 cpi: 75 chars/s, Draft: 10cpi: 225 char/s Carbon Copies: 3 plus one original Paper / Media Handling Document Feed: Single sheet rear, Continuous paper rear, Paper Output rear, Optional Automatic Document Feed (CSP): 50 Paper Format: Sheet Paper (Single-and multi-Layer), Continuous Paper (single-and multi-layer), Labels (Single-and Multi-layer), Roll Paper, Envelopes General Compatible Operating System: Windows 2000, Windows 7, Windows 8, Windows 98, Windows XP/Windows 7/8 Memory: 64 KB Ribbon Yield: 2000000 characters Black LQ 			
	 Needles: 24 Needles Connectivity: Interfaces: USB 3.0 Type B, Serial and Parallel Print Printing Speed: 300 Characters per second or higher High Speed - Draft: 10 cpi, 10 cpi: 75 chars/s, Draft: 10cpi: 225 char/s Carbon Copies: 3 plus one original Paper / Media Handling Document Feed: Single sheet rear, Continuous paper rear, Paper Output rear, Optional Automatic Document Feed (CSP): 50 Paper Format: Sheet Paper (Single-and multi-Layer), Continuous Paper (single-and multi-layer), Labels (Single-and Multi-layer), Roll Paper, Envelopes General Compatible Operating System: Windows 2000, Windows 7, Windows 8, Windows 98, Windows XP/Windows 7/8 Memory: 64 KB Ribbon Yield: 2000000 characters Black LQ Printer must be of latest version and international recognized brand 			
	 Needles: 24 Needles Connectivity: Interfaces: USB 3.0 Type B, Serial and Parallel Print Printing Speed: 300 Characters per second or higher High Speed - Draft: 10 cpi, 10 cpi: 75 chars/s, Draft: 10cpi: 225 char/s Carbon Copies: 3 plus one original Paper / Media Handling Document Feed: Single sheet rear, Continuous paper rear, Paper Output rear, Optional Automatic Document Feed (CSP): 50 Paper Format: Sheet Paper (Single-and multi-Layer), Continuous Paper (single-and multi-layer), Labels (Single-and Multi-layer), Roll Paper, Envelopes General Compatible Operating System: Windows 2000, Windows 7, Windows 8, Windows 98, Windows XP/Windows 7/8 Memory: 64 KB Ribbon Yield: 2000000 characters Black LQ Printer must be of latest version and international recognized brand Complete Job: Supply, Installation, Testing, Commissioning and Maintenance 			
	 Needles: 24 Needles Connectivity: Interfaces: USB 3.0 Type B, Serial and Parallel Print Printing Speed: 300 Characters per second or higher High Speed - Draft: 10 cpi, 10 cpi: 75 chars/s, Draft: 10cpi: 225 char/s Carbon Copies: 3 plus one original Paper / Media Handling Document Feed: Single sheet rear, Continuous paper rear, Paper Output rear, Optional Automatic Document Feed (CSP): 50 Paper Format: Sheet Paper (Single-and multi-Layer), Continuous Paper (single-and multi-layer), Labels (Single-and Multi-layer), Roll Paper, Envelopes General Compatible Operating System: Windows 2000, Windows 7, Windows 8, Windows 98, Windows XP/Windows 7/8 Memory: 64 KB Ribbon Yield: 2000000 characters Black LQ Printer must be of latest version and international recognized brand 			

BATTERY			
• Uninterruptable Power Supply (UPS) for Personal Computers and Thin			
Client Operating Systems			
• Built-in Stabilizer			
• Self Diagnostics			
• Sine-wave PWM Output			
• Low-Battery Indication			
Advanced High Performance Architecture			
• Charging / Battery warning			
Continuous-rated Design			
Overload / Over-discharge Trip Indication			
Cold-Start Capability			
Audible Indication on Change-over			
• Extended Back-Up Time			
Charging / Charged Indication			
Heavy-Duty Boost Charger			
• Dry Maintenance free Battery (2x12V, 7AH)			
Quad-mode Charging			
Reverse Battery Protection			
Phase Locking			
No-Load Shut-Down Mode			
Sleep Mode			
Easy Battery Replacement			
Improved Voltage Regulation			
Current Limit			
UP Silone Monitoring & Shutdown Software			
Overload Protection			
Mains Protection			
Mains Filtering			
Battery over Voltage Protection			
Faulty-mains Protection			
Over-discharge Battery Protection			
• The UPS must be of latest version and international recognized brand			
Complete Job: Supply, Installation, Testing, Commissioning and Maintenance			
(during maintenance period)			
Country of Origin: China, Malaysia, Taiwan or Equivalent			
9. $\underline{FAX MACHINE}$ 0)2	Units	
Device Type: Fax / Copier / Printer / Scanner			
Copier Type: Digital			
• Fax Type: Plain paper			
Printing Technology: Laser-Monochrome			
• Monthly Duty Cycle (max): 8000 impression			
• Display: 2 lines / 16 digits / characters(Black lit LCD)			
PC Connection Availability: Yes			
• PC Connection: USB 2.0			10

	Memory			
	• Standard Memory: 32.0 MB 32.0 MB			
	 Max Supported Memory: 32.0 MB 32.0 MB 			
	Fax Machine			
	Max Transmission Speed: 33.6 kbps			
	 Total Memory Capacity: 500 Pages 			
	 Optical resolution: 600x600 dpi 			
	 Handset: Corded Handset 			
	 PC Faxing: Yes 			
	Fax Machine Features			
	Automatic redialing			
	Fax forwarding			
	6			
	 Original Type: Sheets Desurrant Feeder Conseitur 20 Sheets 			
	• Document Feeder Capacity: 30 Sheets			
	Min Media Size: 3in 5in			
	• Max Media Size: Legal (8.5 in x 14 in)			
	• Supported Media Type: Cards, transparencies, labels, plain paper, envelopes			
	Standard Media Capacity: 280 Sheets			
	Bypass Feeder Capacity: 10 Sheets			
	Output Trays Capacity: 100 Sheets			
	• Interface: USB 2.0			
	 Compatible Operating System: Windows 2000, Windows 7, Windows 8, Windows 98, Windows XP 			
	Copying			
	 Max Copying Speed: upto 600 x 600 dpi 			
	 Max Document Enlargement: 400.0% 			
	 Max Documents Reduction: 25.0% 			
	 Max Printing Resolution: upto 1200 x 1200 dpi 			
	 Max Printing Speed: upto 18.0 ppm 			
	 Image Enhancement: HP Fast Res 1200 			
	Technology Scanning			
	 Optical Resolution: 600x 600 dpi 			
	 Interpolated Resolution: 19200 x 19200 dpi 			
	 Color Depth: 24.0 bit 			
	 Fax Machine must be of latest version & international recognized brand 			
	Complete Job: Supply, Installation, Testing, Commissioning and			
	Maintenance (during maintenance period)			
	Country of Origin: China, Malaysia, Taiwan or Equivalent			
10.	PHOTOCOPIER	13	Units	
	Technology: Laser, Mono/single component (Less Developer)			
	Type: Desktop Copier / Printer			
	Copy Speed: 35 Copies Per Minute			
	• Resolution: 600 x 600 dpi, 256 grayscale			
	• 1 st copy time: 5.9 seconds or less			
	• Warm-up time: 20 seconds or less			
	Continuous copy: 1 - 250 copies			
	Original/copy size: Max. A3			

Memory Capacity: 32 MB Standard			
• Zoom Range: 25% - 400% in 1% steps			
• Paper Feeding Standard: 1 x 30th0 sheets universal feeder + 50-sheets Multi-			
purpose/ bypass tray.			
• Paper capacity: 350 sheets standard, Max. 1,250 sheets			
• Digital Copy Features: Scan-once-print-many, Electronic sorting, Automatic			
paper selection, Combined inch/metric copying, and Layout mode 2-in-I, 4-			
in-1, Economy copy Mode.			
 Drum life: Minimum 150,000 copies 			
 Toner life: Minimum 8000 copies 			
• Trolley : Steel made supplied as standard with machine			
• Drum warranty : 3 years or 150,000 copies (whichever is earlier)			
• Warranty: 3 years parts			
• The copier must of latest version and international recognized brand			
Complete Job: Supply, Installation, Testing, Commissioning and			
Maintenance (during maintenance period)			
Country of Origin: China, Malaysia, Taiwan or Equivalent			
11. HANGING TYPE PROJECTOR (ROOF MOUNTED)	10	Units	
• 3 LCD technology			
Project 3500 lumens			
Brightness: 2700 ANSI			
• Contrast: 3000:01:00			
• Resolution: 1024x768 XGA			
• Zoom: x1.6			
• Throw Ratio: 1.37 - 1.8:1			
• Lamp Life: 7000 hours in economy mode			
• Lamp type: Bulb			
• Projector type: LCD			
• Image size: 300x300 inches			
Power Consumption			
Projection distance			
Connectivity: HDMI, VGA, Audio with wireless option			
 Speakers: Built-in 			
Communication: Network connection			
Compatibility: HD ready (Image frequency)			
Line-in: 3.5mm or as per requirements			
Microphone input			
• S-video in, USB, VGA in			
Decoders: Audio, Video and image files			
• Image Properties (Aspect ratio: 4:03)			
Power supply, Power connector & Remote Control			
Motorization Screen with installation			
• Size: 8x8 foot wall mounted or as per requirements			
• The screen must be wall mounted			
It must have mechanically folding System			
Projector must be of latest version and international recognized brand			
Complete Job: Supply, Installation, Testing, Commissioning and Maintenance			
(during maintenance period)			
Country of Origin: China, Malaysia, Taiwan or Equivalent			
	1		

12. DESK TYPE PROJECTOR 06 Units	
• 3 LCD technology	
Project 3500 lumens	
Brightness: 2700 ANSI	
• Contrast: 3000:01:00	
Resolution: 1024x768 XGA	
• Zoom: x1.6	
• Throw Ratio: 1.37 - 1.8:1	
• Lamp Life: 7000 hours in economy mode	
• Lamp type: Bulb	
Projector type: LCD	
• Image size: 300x300 inches	
Power Consumption	
Projection distance	
Connectivity: HDMI, VGA, Audio with wireless option	
• Speakers: Built-in	
Communication: Network connection	
Compatibility: HD ready (Image frequency)	
Line-in: 3.5mm or as per requirements	
Microphone input	
• S-video in	
USBVGA in	
 Decoders: Audio, Video and image files Image Properties (Aspect ratio: 4:03) 	
 Power supply, Power connector & Remote Control 	
Motorization Screen with installation	
 Size8x8 foot wall mounted or as per requirements 	
 The screen must be wall mounted 	
 It must have mechanically folding System 	
 Projector must be of latest version and international recognized brand 	
Complete Job: Supply, Installation, Testing, Commissioning and Maintenance	
(during maintenance period)	
Country of Origin: China, Malaysia, Taiwan or Equivalent	
13. LED SCREEN 32'' FOR OPERATION THEATRES 18 Units	
Picture Quality:	
Resolution: 1920x1080 pixels	
Clear motion rate: 120	
Wide color Enhancer Plus	
• Eco Sensor	
Audio:	
• Sound output: 10W x 2	
Dolby® Digitla Plus or Dolby® Pulse	
SRS Theater Sound HD	
• Speaker type: Down firing + Full range	
Connections:	
HDMI Port: 2	
USB Port: 1	

Component in: 1			
 Digital Audio output: 1 optical 			
 ConnectShareTM Movie 			
Accessories			
Power Cable			
 LED Screen stand (wall mounted) 			
Remote			
 International certified standards 			
• The screen must be of latest version and international recognized brand Complete Job: Supply, Installation, Testing, Commissioning and			
Maintenance (during maintenance period)			
Country of Origin: China, Malaysia, Taiwan or Equivalent			
14. LED SCREEN 40" FOR LOBBIES & WAITING AREA	15	Units	
Picture Quality:	_		
• Full High Definition (HD)			
• Resolution: 1920x1080 pixels			
• Clear motion rate: 120			
• Wide color Enhancer Plus			
• Eco Sensor			
Audio:			
• Sound output: 10W x 2			
• Dolby® Digitla Plus or Dolby® Pulse			
• SRS Theater Sound HD			
• Speaker type: Down firing + Full range			
Connections:			
• HDMI Port: 2			
• USB Port: 1			
• Component in: 1			
Digital Audio output: 1 optical			
• ConnectShare TM Movie			
Accessories			
Power Cable			
• LED Screen stand (wall mounted)			
• Remote			
International certified standards			
• The screen must be of latest version and international recognized brand			
Complete Job: Supply, Installation, Testing, Commissioning and			
Maintenance (during maintenance period)			
Country of Origin: China, Malaysia, Taiwan or Equivalent			
GRA	ND TOT	AL	

Grand Total in Pak. Rupees, on DDP basis _____