





4	User Training	✓	<ul style="list-style-type: none"> * User Manual * Help Desk * On-site Training * Online Training * Self training Document * Training Manuals 			Not Defined	✓				
5	Testing Criteria as per Software Testing Life Cycle (STLC)	✓	<p>Software Quality Assurance Plan (SQAP)</p> <ul style="list-style-type: none"> * SQA Responsibilities * SQA Meeting Plan * SQA Test Strategy * SQA Test Plan * Test Case Design * Usability Testing * SQA Metrics * SQA Tools for Testing * User Acceptance Testing 			Not Defined					Not Defined
6	Back-end Support (Database)	✓	MS SQL Server 2012	✓	Oracle Database 11g patch set 4	Oracle DB Licenses required	✓	MS SQL Server 2008 or higher			
7	PACS Solution		Not Defined	✓	<p>SKM Machine Interfacing (MI)</p> <ul style="list-style-type: none"> > Modality Machine Integration > PACS HMIS Broker > Lossless DICOM Compression per Modality > Storage Management System > Patient Picture Management System > DICOM Work list Modality Server 		✓	<p>PACS Solution (Gold)</p> <ul style="list-style-type: none"> > PACS Server > Lossless DICOM Compression > PACS Viewer > DICOM Media - Writing > Image Routing > PACS - Image Integrator HMS 		<p>Exclusive Item(s). Not Include in the cost.</p> <p>i) Any 3rd party Licensing ii) HW for PACS</p>	

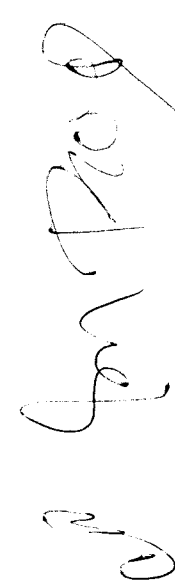
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8	Server Machine	✓	<ul style="list-style-type: none"> * Server (SAS) * Server (SATA) 		<p>Brand & Specs will be provided after detailed visit of CPEIC Multan</p>	<p>DB Server:</p> <p>Intel Xeon Gen 4, 2.6 GHz, 64 GB RAM, 4TB SAS RAW Raid 1+0</p> <p>DB Backup / Weblogic Server:</p> <p>Intel Xeon Gen 4, 2.6 GHz, 32 GB RAM, 4TB SAS RAW Internal SAS</p>	✓	<p>Database Server: 2x Intel Xeon E5-2630 v3, 2.4 GHz, 64 GB Memory, 2x300 GB SAS (15K RPM), RAID Controller with 1 GB NV cache, Redundant Power Supply, Keyboard/Mouse</p> <p>Application, Internet & Exchange Server: 2x Intel Xeon E5-2609 v3, 1.9 GHz, 64 GB Memory, 2x300 GB SAS (15K RPM), RAID Controller with 1 GB NV cache, Redundant Power Supply, Keyboard/Mouse</p>	<p>Delivery Time = 8-12 week</p>
9	Desktop Computer	✓	PCs		<p>Brand & Specs will be provided after detailed visit of CPEIC Multan</p>	Core i5, 4GB RAM	✓	<p>Dell Optiplex 3020 MT</p> <p>Intel Core i3 Gen 4, 3.50 GHz, 4GB DDR3 SDRAM, 500 GB (7200 rpm) HDD, Dell 18.5" 19" LED, Dell Optical Mouse / Keyboard</p> <p>Windows 7 Pro or Windows 8.1</p>	<p>3 years Dell standard Warranty</p> <p>2 years Extended Warranty can be separately purchased from Dell</p> <p>After 5 Years - Local SLA with MegaPlus (if required)</p>






10	Network Storage	✓	Brand & Specs will be provided after detailed visit of CPEIC Multan	✓	DAS NL SAS 16TB RAW SAN with FC SAS Drives RAW capacity 8TB Rack for storage	✓	SAN Solution 14/21/72 TB (RAW) Scale Out Storage Architecture Scalable upto 500 drives or higher RAID 10, RAID 5, RAID 6 etc	Delivery Time = 8-12 week 3 years Dell standard Warranty 2 years Extended Warranty can be separately purchased from Dell After 5 Years - Local SLA with MegaPlus (if required)
11	Printer(s)		Not Given			Not Given		Not Given
12	Thin Client		Not Given			Not Given	✓	1) Dell PowerEdge R730 2x Intel Xeon E5-2620v3, 2.4 GHz, 128GB RDIMM (8x16), 2x300 GB HDD, No Monitor 2) Dell PowerEdge R730 2x Intel Xeon E5-2620v3 2.4 GHz, 32 GB RDIMM, 2x300 GB HDD, No Monitor 3) Dell Wyse T10 with 3 year Warranty (Keyboard/Mouse)















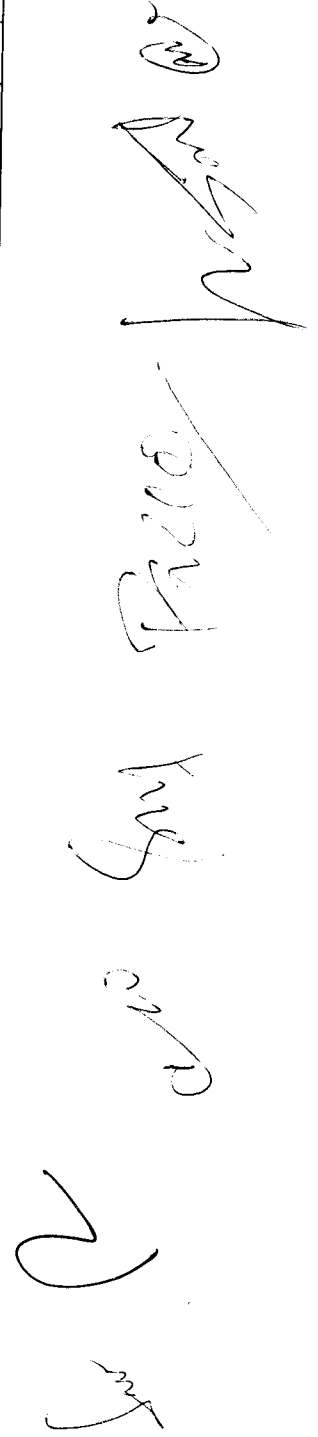
13	Laptop / Notebook	✓	Brand & Specs will be provided after detailed visit of CPEIC Multan			Not Given	✓	Dell Inspiron Model IN3542 Intel Core i3 Gen 4, 1.7 GHz, 4 GB RAM, 500 GB HDD, 15.6" Widescreen LED Windows 7 Pro or Windows 8.1	Delivery Time = 8-12 week 3 years Dell standard Warranty 2 years Extended Warranty can be separately purchased from Dell
14	UPS		Not Given			Not Given	✓	1) APC Back-UPS, 390 Watts, 650 VA, Model: BX650CI 2) APC Smart UPS, 500 Watts, 750 VA, Model: SMT750I 3) APC Smart UPS On Line, 1400 Watts, 2000 VA, Model: SURT2000XLI	Delivery Time = 8-12 week 1 years APC standard Warranty Local SLA with MegaPlus (if required)
15	ID Card Printer & Scanner		Not Given			Not Given			Not Given
16	Bio-Metric Machine								
17	Thumb Scanner for Patient Registration & Search		Not Given			Not Given			Not Given


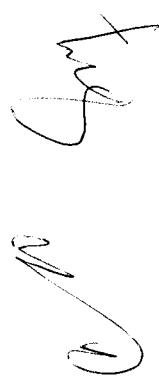
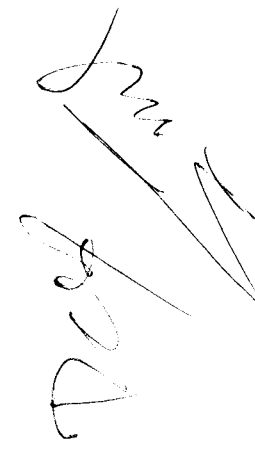

18	Token No. Light(s)			Not Given		Not Given		Not Given		Not Given
19	Cameras							Not Given		Not Given
20	10 Years Operation & Maintenance of entire Solution	√						Not Defined	√	Service/Support SLA can be done separately for 10 year(s)
21	Company Legal Presence in Pakistan for Development & Implementation of Automated System	√	<p>Gulf Marketing International H#11 B/2, Satellite Town Rawalpindi Near Kall Tanki Saidpur Road Ph:051-4426587 Fax: 051-4429080</p> <p>NTN: 2392066-1</p>	<p>Shaukat Khanum Memorial Cancer Hospital & Research Center Lahore 7-A, Block R-3, M.A. Hohar Town Lahore Ph: 042-35905000 Fax: 042-35945205</p> <p>NTN: 0786785-9 03-00-3004-029-64</p>	√	<p>MEGAPLUS 22C, Block M, Gulberg III, Lahore Ph: 042-35918111 Fax: 042-35918116</p> <p>NTN: 1430870-3 07-01-8471-126-82</p>				
22	Business Experience			Not Given						
	Business Experience in Years (Hardware)			Not Given						13 Year(s)
	Business Experience in Years (Software)			Not Given						08 Year(s)
	Relevant Business Experience in Years (Health Care App.)			Not Given						08 Year(s)
	No. of projects similar in nature Note: One Project must be similar in nature			Not Given						<p>a) Sharif Medical City (Ongoing)</p> <p>b) University of Lahore (Ongoing)</p> <p>c) Sheikh Zayed Hospital Lahore (Awarded by EGD)</p> <p>d) Omar Hospital & Cardiac Center, Lhr</p> <p>e) IIMCT Complex Hospital, Islamabad</p> <p>f) IIMCT Railway Hospital, Rawalpindi</p> <p>g) IIMCT Dental Hospital, Islamabad</p>

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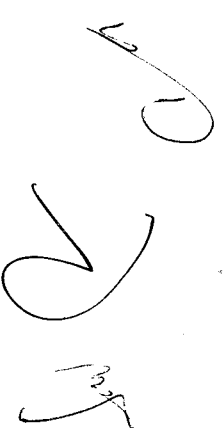



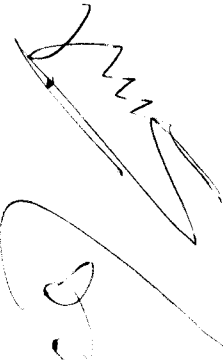

4	User Training	<ul style="list-style-type: none"> > Technical Support and User's Guide > Online Help, Support Services & Help Desk > FAQs > Tips & Tricks > Online Feedback > Classroom Training > Operational manual > One-to-One Personalized Training > Hand Hold Support to End Users > Centralized Help Desk > Phone Support 	<ul style="list-style-type: none"> > Testing Planning & Methodology > Unit Testing > GUI Testing > Functional Testing > Performance Testing > Integration Testing > Security Testing > Stress Testing > User Acceptance Testing > Test Plan & Test Reports 	<ul style="list-style-type: none"> > MySQL 	<ul style="list-style-type: none"> > Oracle 11g Enterprise Edition > Oracle Corporation, USA 	<ul style="list-style-type: none"> > PAXERAMED PACS Solution > - PaxerUltima > - Paxera Server > - PaxeraREP > - PaxeraBroker > Recommended H/W: > Dell Server R430 or better > 64 GB, MD 3400 Online Storage > 10 TB, Rack 24U, UPS, Patch Panel, SQL Server 2012 	<ul style="list-style-type: none"> > PAXERAMED, USA > * Web PACS 64cc License > * High Load PACS Server > * Reporting Module > * HL7 Message Broker / Worklist Generator 	Not Defined	Not Given
5	Testing Criteria as per Software Testing Life Cycle (STLC)							Not Defined	Not Given
6	Back-end Support (Database)	<ul style="list-style-type: none"> > MySQL 		<ul style="list-style-type: none"> > Oracle 11g Enterprise Edition > Oracle Corporation, USA 	50 (User License)			Not Given	Not Given
7	PACS Solution			<ul style="list-style-type: none"> > PAXERAMED PACS Solution > - PaxerUltima > - Paxera Server > - PaxeraREP > - PaxeraBroker > Recommended H/W: > Dell Server R430 or better > 64 GB, MD 3400 Online Storage > 10 TB, Rack 24U, UPS, Patch Panel, SQL Server 2012 	<ul style="list-style-type: none"> > PAXERAMED, USA > * Web PACS 64cc License > * High Load PACS Server > * Reporting Module > * HL7 Message Broker / Worklist Generator 	Not Defined	Not Given		




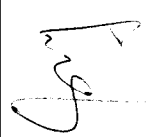

10	Network Storage			Not Defined	√	D-Link ShareCenter 2-Bay Cloud Network Storage Enclosure (DNS-320L) 2x1 TB HDDs			Not Given	
11	Printer(s)		HP LaserJet 30155dn (Heavy Duty) HP LaserJet 401 DN Thermal Printer AOC 88iii (Pharmacy)					Not Given	Not Given	
12	Thin Client			Not Given	√	HP Flexible t520 - GX-212JC 1.2 GHz - 4 GB, 8 GB			Not Given	

13	Laptop / Notebook	✓	HP Laptop Core i3, 2GB, 500 GB HDD, 15.6" Screen MS Windows 7	✓	Lenovo G50-30 15.6 inch (Black) Intel Celeron N2840 2.58 GHz, 4 GB DDR3L RAM, 500 GB HDD, Wi-Fi, Windows 8.1				Not Given
14	UPS	✓	1000W Signwave or 600 VA				Not Given		Not Given
15	ID Card Printer & Scanner	✓	Smart 50S Single Side Printer Patient Registration Card - Non RFID High Resolution 4 Colour Front / Back Printer 100% Credit Card Standard PVC Card Material MOQ. 5000 cards in one order Handheld Barcode Scanner	✓			Not Given		Not Given
16	Bio-Metric Machine	✓	F11 RFID & Fingerprint time attendance machine				Not Given		Not Given
17	Thumb Scanner for Patient Registration & Search	✓	Digital Persona USB Fingerprint Scanner				Not Given		Not Given

18	Token No. Light(s)	✓	1) Q-Matic Que Management System (Keypad Base System) OR 2) Q-Matic Que Management System (LAN Based PC Pre-installed System) Counter Displays Token Machine with Touch Screen (15") Canon EOS 1200D 18-55mm 18 Mega Pixel, SD Memory				Not Given		Not Given
19	Cameras	✓					Not Given		Not Given
20	10 Years Operation & Maintenance of entire Solution	✓						Not Defined	
21	Company Legal Presence in Pakistan for Development & Implementation of Automated System		CONSTRUCT 41 B - Gulbert II, Lahore Ph: 042-35760967 Fax: 042-35760967	✓	BEST 2nd Floor, Bahria Complex-I, M.T. Khan Road, Karachi Ph. 021-35635181 Fax: 021-35610507			CDigital H#389C, St. 85-8/4, Islamabad Ph. 051-4861597 Fax: 051-4861596	
22	National Tax Number Registration		NTN: 2459977-8		NTN: 0803344-7			NTN: 1539820-0	
	Sales Tax Registration		GST: 2459977-8		12-00-8900-002-64			07-01-9800-061-73	
	Business Experience		7 Year(s)		05 Year(s)			09 Year(s)	
	Business Experience in Years (Hardware)						Not Defined		Not Defined
	Business Experience in Years (Software)						Not Defined		Not Defined
	Relevant Business Experience in Years (Health Care App.)						Not Defined		Not Defined
	No. of projects similar in nature Note: One Project must be similar in nature		a) Medics Hospital, Lahore b) Al Shifa Clinic and Maternity Center, Multan c) Charisma Laser and Cosmetic Surgery Multan		Limited Module(s) Developed	a) HMIS (ERP) for Rahat Hospital b) Bahria Enterprises Information System for Bahria Foundation c) ERP for Dr. Zeenat Laboratories, Lahore			Experience in similar Project not Given

**CPEIC AUTOMATION & INFORMATION
MANAGEMENT SYSTEM**

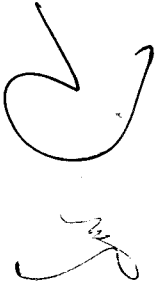
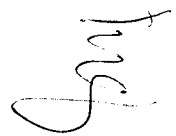



COMPARATIVE STATEMENT

Sr.#	Points / Questions that may be Explained / Answered.	M/S Construct, Lahore	M/S GM International, Lahore	M/S SKMCH&RC, Lahore	M/S BEST, Karachi	M/S MegaPlus, Lahore
1	What Technology will be used for proposed solution? (Front End / Back End)	PHP, MySQL	Dot Net (C#) SQL Server 2012 or Oracle 11g	Oracle 11g Database 11g Weblogic Server 11g Development suit	Java/J2EE, JSF 1.2, Rich Faces 3.3 Oracle 11g DB	ASP.Net & C# SQL Server 2012 Enterprise Ed.
2	Is the Proposed Solution require any licenses from third party? If Yes, Please specify with estimated cost.	No third party license required except MySQL.	Yes MS SQL Server 2012 R2 License	Yes Oracle 11g DB Dragon Licenses	Yes Oracle 11g DB SQL Server 2012 Enterprise or MySQL may be used	Yes Oracle Enterprise Ed. Or SQL Server Enterprise Ed. require 3rd party license.
3	Is the Proposed Solution is Role-Based access? (Y/N). Please explain.	Yes	Yes	Yes	Yes	Yes
4	Will the Proposed Solution will access data in real time via the Cloud? (Y/N)	Yes	Yes	Yes	Yes	Yes
5	Is the Proposed Solution support multi databases in multi server architecture in real time? (Y/N)	Yes	Yes	Yes	Yes	Yes
6	Is the Proposed Solution integrate with Windows and MS Office to share information with Stakeholders? (Y/N)	Yes	Yes	No	Yes	Yes
7	Is the Proposed Solution can be accessed from three client interfaces: Windows / Web / SharePoint?	It only accessible from web & windows	Yes	Web access available	Yes	Yes
8	Is the Proposed Solution support Clinical Standards:- > ICD-10 Coding (Y/N) > DICOM 3.0 Compliant (Y/N) > LOINC Coding (Y/N) > SNOMED -- CT Coding (Y/N) > HL7 Compliance (Y/N)	Yes Yes Yes No Yes	Yes Yes Yes Yes Yes	Yes Yes No Yes Yes	Yes Yes will be complied. Will be complied. Yes	Yes Yes Yes Yes Yes
9	Is the PACS solution is proposed by the Firm? (Y/N) if Yes; give detail.	Yes, No detail provided	Yes Firm has its own PACS solution	Yes ADF PACS Apps	Yes Paxeramed PACS solution	Yes Paxeramed PACS Server or Fujifilm PACS Server
10	Will the Proposed Project Documentation comply with the IEEE/ISO specifications for documentation? (Y/N)	Yes (Note: Firm is not an ISO certified)	Yes (Note: Firm is not an ISO certified)	Yes	Yes	Yes






11	What will be the maximum user response time in second over WAN, for the next screen to appear or the existing screen to refresh for submission of data??	100 ms ~ 150 ms	Less then 3 sec	1 s ~ 4 s	Max 3 sec	Ave. 2 s ~ 6 s
12	What will be the maximum user response time in second over LAN, for the next screen to appear or the existing screen to refresh for submission of data?	10 ms	Less then 3 sec	0.1 ms ~ 2 s	Max 1 sec	Ave. 2 s ~ 6 s
13	What will be the minimum implementation time required for the Proposed Solution in month(s)?	18 months	6 Months	6 months on as-is basis 18 Months on demand customization from Jul 16 to Dec 17	12 Months	6 Months
14	Will the Proposed Solution provide web portal service with both static and dynamic information? (Y/N)	Yes	Yes	No	Yes	Yes
15	Will the Proposed Solution supports e-mail / SMS Alert System? (Y/N)	Yes	Yes	Yes	Yes	Yes
16	What kinds of end-user (staff) trainings are required (On-Site/Of-Site) for Proposed Solution? Please clearly specify.	On-Site/Of-Site training with help desk & support	On-Site/Of-Site training with help desk & support	On-Site/Of-Site trainings	Technical Training End User Training	Admin user & HW training End User Training Training Material hosted on server
17	What Testing Criteria will the Firm adopt for Software Quality Assurance? Also give some detail against the point 3.3 titled "Testing Criteria" in the RFP (Bidding Documents), Page - 16	Quality Assurance Plan Test Plan & Test Reports	Using tool(s) Selenium IDE Web Driver	Software Testing Audits Reviews Inspections	Quality Assurance on the basis of IEEE & ISO standards.	Testing based on ISO procedures.
18	Will the Firm provide 10 years Operation and Maintenance support for the entire Proposed Solution?	Yes	Yes	Yes	Yes	Yes
19	Firm's National Tax Number Registration?	2459977-8	2392066-1	0786785-9	0803344-7	1430870-3
20	Firm's Sales Tax Registration?	2459977-8	23-00-3822-007-82	3793939	12-00-8900-002-64	07-01-8471-186-82
21	No. of business experience (Hardware) in years?	2 Years	Not Defined	Deals in HIS ERP Only	6 Years	15 Years
22	No. of business experience (Software) in years?	3 Years	Not Defined	15 + Years	6 Years	8 Years

23	No. of projects implemented similar in nature (complete solution)? Please specify atleast one. Visit may be scheduled.	Medics Hospital, Lahore	Doctors Hospital, Lhr RIC, Rawalpindi Zeenat Labs. Zinis Labs. Etc	PSSHMCH Manga Mandi & Muzaffargarh NIHD, AFIC Rawalpindi Maroof International Hospital, Islamabad Tabba Heart Institute, Karachi	SM&DC/SMCH, LHR UCM&D, LHR IIMCT Railway Hospital, Rawalpindi No. of DHQ Hospitals etc
24	Any other detail which is not provided in the Technical Proposal.	* M/S has not implemented any mega project. * c) Lack of business experience. * MySQL is not reliable for larger DB(s). * SNOMED-CT coding not supported. * Proposed solution implementation time too long.	* The administrator, Doctors Hospital & Medical Center has denied the claim of M/S GM International, LHR * M/S has not implemented any mega project. * M/S has no or lack of experience.	* LOINC support not available. * c) Web Portal Service is not available. * d) SKMCH&RC does not deal in H/W. * HIMS solution on as-is basis not required.	* Implementation time may be negotiated.

Remarks:

Good

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CPEIC Multan

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(Member)
Director Technical
CPEIC Multan

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(Chairman TAC)
Chief Cardiac Surgeon
CPEIC Multan