Calculation is based on: Hospital town and Policlinic Located in 9 buildings in Mariupol City Hospital #1.

Block 1 Hardware and Software						
#	Item	Specification	Item Q	Cost Per Item USD	Total USD	Notes
1.1	PC	**1.** PC should be at least: • CPU: 3Ghz or simular AMD • RAM: 4 GB (in one slot) • HDD: 500GB 7200rpm SATA • Ports: 2x USB 2.0, 2xUSB 3.0; 1 VGA; 1 RJ-45; 10/100/1000 GbE • Minimum: Service/Warranty: 1-year parts, 1-year labor and 1-year onsite 2. Standard USB Mouse and Keyboard (with a Ukraine Layout). 3. Universal power filter	68	350	23800	Calculation is based on: 1. Administrative personal - 4 2. Polyclinic - 16 3. Doctors – 17 4. Nurses -17 5. Laboratory -7 6. Diagnostics – 4 7. Hospital reception -1 8. Policlinic reception -2
1.2	Monitor	**Monitor** of the PC should be at least: • Diagonal Size: 22" • Port: VGA • Resolution: FHD (1920 x 1080 @ 60 Hz) • Contrast ratio: 1000:1 static; 5000000:1 dynamic • Brightness: 250 cd/m²	68	120	8160	Same consideration as in 1.1

| 1.3 | UPS (Uninterruptable Power Supply) | **UPS** of the PC should be at least:

• Output power capacity: 600VA
• Max Configurable Power 600VA
• Nominal Output Voltage 230V
• Output Frequency (sync to mains) 50/60Hz +/- 3 Hz
• Output Frequency (not synced) 50/60 Hz +/-1 Hz
• Transfer Time 8ms typical: 12ms maximum
• Nominal Input Voltage 230V
• Input frequency 50/60 Hz +/- 3 Hz (auto sensing)
• Input Connections IEC-320 C14
• Input voltage range for main operations 150 - 280 V
• Maximum Input Current 3.0A
• Operating system : Windows 10
• cartridges: without a chip
• Standard warranty 2 years' repair or replace
• Should include all necessary cables (e.g. Power, display cables | 68 | 70 | 4760 | Same consideration as in 1.1 |
| 1.4 | Multifunction (Laser Printer / Scanner) | **Multifunction (Laser Printer / Scanner)** should be at least:

• Printer: Black/White.
• Functions: Print, copy, scan
• Resolution: 600 x 600 dpi
• Print Technology: Laser | 56 | 250 | 14000 | |

		• Print speed: Up to 20 ppm black; • Print languages: PCLmS, URF, PWG • Scan Resolutions: Hardware: Up to 300 x 300 dpi (color and mono, ADF); Up to 600 x 600 dpi (color, flatbed); Optical: Up to 300 dpi (color and mono, ADF); Up to 600 dpi (color, flatbed); • Connectivity: Hi-Speed USB 2.0 port (device); • Recommended monthly duty cycle: 5000 pages • Maximum monthly duty cycle: 10000 pages • Paper trays: 1 • Media types: Paper (laser, plain, rough, vellum), envelopes, labels, cardstock, postcards • Supported media weight: 16 to 43 lb • Supported media weight: 16 to 43 lb • Media weights by paper path: 60 to 163 g/m² • operating system : Windows 10 • cartridges: without a chip • Power: 240 VAC (+/- 10%), 50/60 Hz (+/- 2 Hz), 2.9 A • Should include all necessary cables (e.g. Power, USB cables). • Printer must include one appropriate cartridge. • Warranty: One year				

1.5	Printer for Reception	• Interfaces :USB
		• Width of consumable material: 57.5 mm
		• Auto-trim the check :Without trimming
		• Print Type : Thermal printing
		• Maximum printing speed: 70 mm / s
		• Font size :A: 12 x 24 points, B: 9 x 17 points
		• Diameter of consumable material: 80 mm
		• Adapter / power supply :DC 12 V, 2 A
		• Barcode printing support :
		  - 1D: UPC-A, UPC-E, EAN-13, EAN-8, CODE39, ITF25, CODEBAR, CODE93, CODE128
		  - 2D: PDF417, QR CODE, DATAMATRIX
		• operating system : Windows 10
		• Reliability :60 km
		• Should include all necessary cables (e.g. Power, USB cables).
			3	100	300	1 reception in hospital
						2 reception in policlinics

1.6	Microsoft MSDN lic		3	1200	3600	Installation will be done by IT specialist
1.7	Licenses For connection to Windows Server	Need government security certification	68	39	2652	Connect to Server in IT department City Council
1.8	OpenOffice	1. OpenOffice Writer 2. OpenOffice Calc	68	0	0	Can be installed by Need by IT specialist any number needed

Block 2 Network and cabling						
#	Item	Specification	Item Q	Cost Per Item USD	Total USD	Notes

2.1	Cable & cable box , rj-45 rosette box including installation	Cables with a length of more than 30 meters should have following characteristics(4 twisted pairs, copper, cat5e, UTP)	4	300	1200	Small buildings . Laboratory, Therapy , Infection department, pathoanatomical department
2.2	Cable & cable box , rj-45 rosette box including installation	Cables with a length of more than 30 meters should have following characteristics(4 twisted pairs, copper, cat5e, UTP)	4	1000	4000	Administrative building(include 5 departments) , Reception& surgery, Urology & diagnostic , Policlinic
2.3	Fire Cable including installation		1600	0.4	640	Fire Cable between all buildings in
2.4	Router	HPE MSR954-W with HPE 1Y FC CTR MSR954 1GbE SFP Rtr SVC [for JH297A]	2	1000	2000	1 for hospital town 1 for Policlinic Special Router for connection to server in city council
2.5	Managed Switch	Should be at least : • Router Switch, managed switch 3 levels , 24x 10/100/1000 Mbit / s Gigabit Ethernet, 2x 10G Ethernet SFP + • Patch panel	4	225	900	Administrative building(include 5 departments) , Reception& surgery, Urology & diagnostic , Policlinic
2.6	Managed switch	Should be at least: • Router Switch 10-port managed switch 3 levels. 10xSFP ports, 1xSFP + ports, 1xRJ45 Serial port • Patch panel	1	190	190	Main switch in start topology
2.7	Managed Switch	Should be at least : • 12-port managed Layer 3 switch, 8x10 / 100 / 1000Mbps RJ45 ports, 4x1000 Mbps SFP ports, 1xConsole JR45 port • Patch panel	4	150	600	Small buildings . Laboratory, Therapy -1, Infection department, pathoanatomical department

2.8	Media Converter	For one cable from both side RJ-45 & SFP/SFP+	1	50	50	Connect Bacterial laboratory with 1 computer
2.9	UPS for switch Rack mount	**UPS** of the switch should be at least: • Output power capacity: 800VA • Max Configurable Power 800VA • Nominal Output Voltage 230V • Output Frequency (sync to mains) 50/60Hz +/- 3 Hz • Output Frequency (not synced) 50/60 Hz +/-1 Hz • Transfer Time 8ms typical: 12ms maximum • Nominal Input Voltage 230V • Input frequency 50/60 Hz +/- 3 Hz (auto sensing) • Input Connections IEC-320 C14 • Input voltage range for main operations 150 - 280 V • Maximum Input Current 3.0A • Operating system : Windows 10 • At least for 4 devices • Standard warranty 2 years' repair or replace Should include all necessary cables (e.g. Power, display cables	2	300	600	1 for hospital town 1 for Policlinic Special Router for connection to server in city council
2.10	UPS for switch Rack mount	**UPS** of the switch should be at least: • Output power capacity: 600VA • Max Configurable Power 600VA • Nominal Output Voltage 230V	6	150	900	1. Infection department 2. Therapy -1 3. Laboratory 4. Pathoanatomical 5. Urology

		- Output Frequency (sync to mains) 50/60Hz +/- 3 Hz - Output Frequency (not synced) 50/60 Hz +/-1 Hz - Transfer Time 8ms typical: 12ms maximum - Nominal Input Voltage 230V - Input frequency 50/60 Hz +/- 3 Hz (auto sensing) - Input Connections IEC-320 C14 - Input voltage range for main operations 150 - 280 V - Maximum Input Current 3.0A - Operating system : Windows 10 - At least for 2 devices - Standard warranty 2 years' repair or replace Should include all necessary cables (e.g. Power, display cables				6. Surgery & reception
2.11	Network Box Rack	Should be at least: 9 units 19 '' - Include Universal power filter 5 sockets - Include Cable organizers	6	200	1200	1. Infection department 2. Therapy -1 3. Laboratory 4. Pathoanatomical 5. Urology 6. Surgery & reception
2.12	Network Box Rack	Should be at least: 18 units 19 '' - Include Universal power filter - Include Cable organizers	2	350	700	1 for hospital town 1 for Policlinic Special Router for connection to server in city council

Block 3 MIS

#	Item	Specification	Item Q	Cost Per Item USD	Total USD	Notes
3.1	MVP + Extra Modules (licences)	1. MVP need to authorize by MOH 2. Extra modules should be at least: • Medical Card • Reception • Medical form • Medical facility to patient notification • Laboratory • Treatment without hospitalization (for all medical facilities) • Storage • Reporting 3. On job training 4. Installation 5. Testing and launching (including development/ excepting internal decree and procedures to official launch the system) 6. Instructions and Manual	68	**480**	32640	Calculation is based on: • Administrative personal - 4 • Polyclinic - 16 • Doctors – 17 • Nurses -17 • Laboratory -7 • Diagnostics – 4 • Hospital reception -1 • Policlinic reception -2
3.3	1 year service agreement				3264	