

COMSATS University Islamabad, Lahore Campus Defence Road, Off Raiwind Road, Lahore

Tender No. CUI-LHR-TN-21-1471

Case # 3320

Single Stage Two Envelop Procedure

<u>Title of Tender:</u> <u>Lab Equipment's under CATBM PC-1, CUI-Lahore Campus</u>

A. GENERAL TERMS AND CONDITIONS

- 1. All pages of bidding documents are mandatory to be signed / stamped, meaning thereby bidder agrees to our terms & conditions mentioned herein, failing which the bid may be rejected.
- 2. Any addition, deletion or modification of any clause of the procurement terms & conditions/ BoQs of CUI Lahore Campus by any vendor will not be acceptable and may lead to rejection of the bid.
- 3. Only registered Suppliers, who are on Active Taxpayers List (ATL) of FBR (GST & NTN), are eligible to participate in tender.
- 4. The contract will be executed and handed over in satisfactory conditions up to the entire satisfaction of COMSATS University Islamabad, Lahore Campus.
- 5. Documents along with Pay Order / Demand Draft amounting to **Rs. 1000/-** as a tender document fee (Non-Refundable) shall be submitted in favor of COMSATS University Islamabad, Lahore Campus to the address given below. No bid will be accepted without tender documents' fee.
- 6. Part / Advance payments is not allowed.
- 7. The exact completion/installation/ delivery time from the date of the purchase / work order will be 60days. The handing over / completion time for this contract is of critical importance.
- 8. Your bid proposal should be inclusive of freight and all other taxes and to be delivered at COMSATS University Islamabad (CUI), Lahore Campus's premises.
- 9. After opening of bids, CUI-Lahore Campus will examine the bids for completeness as per tender document.
- 10. In case more than one bidder have quoted same rates for an item; the bidder securing more items (in terms of cost) will be awarded the specific item.
- 11. Purchase order (s) will be awarded to the evaluated lowest or technically recommended bidder (s) on the basis of item wise / subtotal wise / grand total wise according to the nature of BoQs.
- 12. The bid should be submitted in a sealed envelope up to May 19, 2021 on or before 1400hrs and will be opened on the same date at 1430hrs in the presence of available bidders. In case of any holiday is announced by the Govt. OR any unforeseeable circumstances that prevent the tender from being opened on the date announced (Force Majure Situation), the tenders will be opened on the very next working day. Timing will remain as mentioned in the tender notice.
- 13. COMSATS University Islamabad, Lahore Campus, will follow the PPRA rule of **Single Stage Two** Envelope Procedure;
 - i. The bid shall comprise a single package containing **two separate envelopes**. Each envelope shall contain separately the **financial proposal** and the **technical proposal**;

- ii. The envelopes shall be marked as "FINANCIAL PROPOSAL" and "TECHNICAL PROPOSAL" in bold and legible letters to avoid confusion;
- iii. Initially, only the envelope marked "TECHNICAL PROPOSAL" shall be opened;
- iv. The envelope marked as <u>"FINANCIAL PROPOSAL"</u> shall be retained in the custody of the procuring agency without being opened;
- v. The procuring agency shall evaluate the technical proposal in a manner prescribed in advance, without reference to the price and reject any proposal which does not conform to the specified requirements;
- vi. During the technical evaluation no **amendments** in the technical proposal shall be permitted;
- vii. The financial proposals of bids shall be opened publicly at a time, date and venue announced and communicated to the bidders in advance;
- viii. After the evaluation and approval of the technical proposal the procuring agency, shall at a time within the bid validity period, publicly open the financial proposals of the technically accepted bids only. The financial proposal of bids found technically nonresponsive shall be returned un-opened to the respective bidders;
- ix. and
- x. The bid found to be the lowest evaluated bid shall be accepted.
- 14. The envelope should be marked as under;

Secretary, Purchase Committee COMSATS University Islamabad, Lahore Campus

Defence Road, Off Raiwind Road, Lahore.

Tel: 042-111-001-007, Ext: 875

- 15. The envelope shall also bear the word "CONFIDENTIAL" and following identification quotation of "Lab Equipment's under CATBM PC-1, CUI-Lahore Campus".
- 16. The bid form (BoQs) must be duly filled in, stamped and signed by the authorized representative of the bidder.
- 17. If the vendor fails to deliver the goods / services to COMSATS University Islamabad (CUI), Lahore Campus within the given deadline, any of the following can be opted by CUI Lahore campus on the recommendation of the end user and approval of the authority;
 - a. An extension in the delivery period may be granted in case a valid reason/justification with necessary documentary evidence is provided by the vendor supporting the reason for delay.
 - b. A penalty upto 10% of the invoice value may be charged.
 - c. Purchase order may be cancelled along with confiscation of earnest money if the vendor fails to deliver the goods / services after the initial or extended delivery time, as the case may be.
- 18. If the delivered goods / services are not according to the required quality standards / specifications, the same shall be liable to be rejected after inspection. The vendor would be required to supply as per requirements mentioned in our BoQs, otherwise the purchase / work order will be cancelled after due date with confiscation of earnest money.
- 19. Deduction of Income Tax and any other tax will be deducted at source according to Government prevailing rules.

- 20. Payment will be made on submission of Invoice in the name of "COMSATS University Islamabad (CUI), Lahore Campus" with a copy of delivery challan (s) after the complete order has been supplied, inspected and accepted which includes delivery / installation, and COMSATS acceptance / inspection thereof.
- 21. All prices should be valid for at least <u>120 days</u>. Withdrawal or any modification of the original offer within the validity period shall entitle CUI-Lahore Campus to forfeit the earnest money in favor of the CUI-Lahore Campus and / or put a ban on such vendor participation in tenders / works.
- 22. It is the sole responsibility of the agent / supplier / manufacturer to comply with the applicable laws, be national or international.
- 23. In case of any dispute or grievance, the matter shall be addressed as per PPRA rules.
- 24. The CUI-Lahore Campus reserves the right to modify the quantities of goods / services at any time before the award of purchase / work order.
- 25. Any defective / sub-standard item (s) will be replaced by the bidder in same quoted cost. In case of failure to supply the specific item, CUI-Lahore may issue PO to next lowest bidder to supply the item while the difference of amount will be deducted from the 1st lowest bidder's earnest money.
- 26. CUI-Lahore Campus shall disqualify any firm(s), if at any stage; it finds that the information submitted, or documents provided are inaccurate, fake, ambiguous or incomplete.
- 27. <u>05%</u> of the total value of the <u>Invoice</u> will be retained as security by COMSATS University Islamabad (CUI), Lahore Campus, and will be released after warranty period i.e. <u>(As Mentioned in BoQs)</u> which will be counted from the date of Installation / Completion of work / Supply.
- 28. The bidder is required to furnish in form of <u>Bank deposit</u>/ CDR / Pay order equivalent to 2% of the total Bid price as <u>Earnest Money crossed in favor of "COMSATS University Islamabad, Lahore Campus"</u>. Which shall be released after the completion of work / supply on submission of written request on firm / company letterhead. Any bid not accompanied by Earnest Money shall be rejected without any right of appeal.
- 29. COMSATS University Islamabad, Lahore Campus reserves the rights to accept or reject the bid if;
 - i. Received without earnest money
 - ii. Received later than the date and time fixed for tender submission
 - iii. The tender is unsigned/unstamped
 - iv. The offer is ambiguous
 - v. The offer is conditional
 - vi. The offer is from a firm, which is black listed by any Govt. Office.
 - vii. The offer is received by telephone/telex/fax/telegram.
 - viii. Any unsigned / ambiguous erasing, cutting / overwriting etc. is made.
- 30. The bidder should furnish a certificate as worded below in token of acceptance of all the terms and conditions of the tender otherwise the tender will not be considered under any circumstances.
- 31. The undersigned affirm that the terms and conditions as contained in this document have been read and accepted and that in the event of selection of my/our rate the agreement in the prescribed form will be entered into:

•	Company / Vendor Name:
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• <u>P</u>	stal Address:
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•	Tel. / Mobile:	<u>Email:</u>
•	<u>NTN# :</u> <u>9</u>	<u>GST#:</u>
•	Signature:	

• Please also attach the Certificate supporting being Active Taxpayer as per requirement of <u>FBR.</u>

B. BoQs of Lab Equipment's under CATBM PC-1, CUI-Lahore Campus

<u>Technical Portion (Please mention the quoted model/ brand in technical portion with no mention of price otherwise the bid will be rejected)</u>

deta	iled below, is	allowed. Any addit	.) of CUI-Lahore Campus, a ional information may be m	entioned	Please mention the quoted
	e blank colun	Model / Brand with meeting			
	-Lahore Cam	the all specifications			
_	ially).	mentioned in BoQs			
Sr. #	Equipment Name	Required Specific	cations	Qty	
,,		Purpose of Ultrasonic Bath	For ultra-sonication in analytical, industrial and medical applications, including intensive cleaning		
		Material	Stainless Steel		
		Frequency range (kHz)	Sweeping frequency	02	
	T114 •	Timer	Must be present		
1	Ultrasonic	Temp. range (°C)	Up to 80 °C	_	
	Bath	Ultrasonic Power (W)	100 or higher		
		Control Mode	Digital		
		Capacity (L)	5 or more		
		Accessories	Basket	01	
		Accessories	Cover	01	
		Warranty	12 Months from the date of installation (parts and service)		
	3-D	Purpose	A 3D Camera/Scanner for scanning of objects as 3D feed models for 3D printers, with USB supported interface	01	
2	Camera	Camera resolution	12 MP or higher	01 No.	
		Scanning Volume	250×250×250 or higher		
		Accuracy	0.1 mm or better		
		Interface	USB 3.0		

		T	1	ı	CUI-LHR-PUR-Tender-001
		Software	For image acquisition and analysis		
		Computer/Lapto	As recommended by OEM		
		p	with power back up		
			Scanner stand, bracket,		
		A	turntable, requisite cables		
		Accessories	and all accessories which		
			are essential		
		Warranty	1-year or more		
		Purpose of the	A complete dental unit for		
		chair	dental patient treatment		
			- 3 hand pieces		
			- Individual air		
		Doctor's Tray	pressure controls with		
			gauge		
			- X-Ray Viewer		
			Water flow control		
			- Motorized chair.		
			- Up/down and back/forward		
		Dental Chair	movements		
		Dental Chair			
			- adjustable head neck Emergency stoppage		
	Dental Chair		Emergency stoppage switch		
			- Dental light Sensor		
		Dental Light:	LED		
			Up, Down, Back forward,		
			and inverse Movement of		
			the light head		
3			- Single Unit ceramic	01 each	
			Spittoon and Cup	UI Cacii	
			filler.		
			- Rotatable assistant		
		Cuspidor Unit	Arm		
			- Evacuator (air		
			operated) with flow		
			control hand piece. Water operated Saliva		
			Water operated Saliva ejector		
			- Air and Water supply		
		Junction Box	lines		
		Junetion Box	Air and water filters		
			Ultrasonic Scalar Built-in		
			Kit with tip and hand piece		
			Motorized Suction		
			Machine- compatible with		
		Accessories	unit		
			Air Turbine -compatible		
			with unit		
			Air compressor -		
			compatible with unit		

	T	T		T	CUI-LHR-PUR-Tender-001
		Warranty	1 year warranty		
		Purpose	For additive manufacturing of high-quality polymer and composite structures		
		build volume (cm)	23x15x15 or larger		
		Dual extrusion	Able to print with two different materials at a time		
		Layer Thickness (micron)	≤100		
		Positioning Precision	X, Y - 12 microns or better		
		Build Platform	■ Heated platform to temperature ≥ 120 °C Aluminum or glass materials		
	FDM	Filaments	■ Open source Filament needed − PLA, ABS, PCL (1 Kg each)	02	
4	printer	Nozzel Diameter (mm)			
		Filament extruder and winder	• Can extrude filaments from composites Should be compatible with the 3D printer		
		Softwares	System supporting softwares with lifetime license, should support STL files		
		Computer	Specifications As recommended by OEM with genuine windows		
		Power back up	as recommended by OEM for optimum operations		
		Warranty, Training and Others	12 Months Warranty from the date of installation with vendor having good local reputation with running machines and well-trained engineers		
	Liquid	Liquid nitrogen supply tank	Vertical Dewar Tank For safe supply and storage of liquid nitrogen	01	
5	nitrogen	Capacity	150 Liters or more	Nos.	
	tank	Max working pressure	2.5 Mpa or better Cylinder hand truck with wheels		

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			4 ft. or more flexible		
			braided stainless-steel		
			transfer hose		
		W/amanta v 0-	12 Months or more from		
		Warranty &	the date of installation		
		Others	(parts and service)		
			Electrochemical		
			Workstation for		
			electrochemical		
			measurements requiring		
			lower and higher currents		
			especially in the area of		
			Sensors		
			It should measure		
			1. Cyclic voltammetry,		
		D	2. Differential pulse	Ω1	
		Purpose	voltammetry,	01	
			3. impedance		
			spectroscopy,		
			4.amperometry,		
			5.Chornoamperometry,		
			6. Galvanostatic charge		
			discharge,		
			7. battery cycling and		
			8. Linear sweep		
			voltammetry,		
	Potentiosta	Electrochemical			
6		Impedance			
	t	Spectroscopy	10 μHz to 1 MHz		
		(EIS) frequency			
		range			
		Maximum			
		current	400 mA or better		
		Current Ranges	10 nA to 100 mA or better		
		Potential range	`-10 to + 10 V or better		
		1 otential range	Counter electrode (Pt) by		
			OEM	01	
				01	
			(Ag/AgCl) by OEM		
		Accessories	Reference electrode	01	
			(Hg/HgCl ₂) by OEM	* =	
			Working electrode (glassy	01	
			carbon) by OEM		
			Electrode Polishing kit	01	
			Unlimited licenses and		
			free lifetime software		
		Software	upgrades.		
			Must be compatible with		
			all provided hardware,		
	i e	Ĩ	an provided naraware,		<u> </u>

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			Advanced custom analysis with user-defined variables and models		
		Computer	Computer compatible with system and recommended by OEM with genuine windows	01	
		Power backup with additional Servo Stabilizer	online pure sinewave UPS built in AVR capable of regulating ± 30 volts Power factor ≥ 0.95 Power backup in case of power failure for at least 30 mins Lead acid free dry battery (1 year warranty) OR A better alternative as recommended by OEM for optimum operations 12 Months from the date of installation with vendor having good local reputation with running machines and well-trained	01	
		Installation	engineers Complete Installation, operation, Onsite Training		
		Warranty	12 Months from the date of installation with vendor having good local reputation for providing high quality equipment. Must have well-trained engineers. Engineers must have been trained by the OEM with proof of trainings by the OEM.		
7	Plasma Spray Unit	Purpose	This atmospheric plasma spray system should be capable of depositing Hydroxyapatite and titanium coatings on metallic Substrate	01	
		Control Unit	PLC unit to control all process (interfaces & displays should be in English)		

			CUI-LHR
	Communication Interface,		
	Data should be exportable		
	for use on computer		
	24-inch screen,		
Computer	independent power back		
Computer	up, other specifications as		
	recommended by OEM		
Plasma Gun	Power 80 KW or above		
	Current = up to 650 A or		
	higher		
Power Supply	Output power – 80 kW or		
	higher		
Mass flow	Gases (x2)		
controller	Powder (x1)		
Controller	Adequate regulators with		
	built-in safety and pressure		
	tested cylinders with		
	certificates		
Gas Regulators	Argon (2 stage regulator		
and cylinders	x1 and cylinder x2)		
	\ \		
	regulator x1 and cylinder		
Powder Feeder	x2)		
Powder Feeder	Powder feeder with		
Powder feeder			
unit	powder flow sensor and		
Danidan Hannan	requisite accessories		
Powder Hopper	3 (or more)		
volume (litres)			
Other Features	Commetitue		
Cooling System	Compatible cooling		
	system		
771	Suitable breakers,		
Electrical	switches, power		
Distributor	distribution cabinet and		
	wiring.		
Sand Blasting	Suitable sand blasting Unit		
Unit	for treatment of metal		
	surfaces		
	X travel (mm)= 1000 or		
Transverse unit	more	01	
(motorized)	Y travel (mm)= 300 or		
**	more		
Ventilation and	Locally provided	0.1	
dust removal		01	
system			
Spraying tool	For holding and rotating of	01	
boat	metallic substrate		
	Gas Safety system with		
Safety	Alarms and Leak		
1	detection, water and		

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			electrical safety mechanism		
			All requisite accessories		
			to perform		
			aforementioned functions		
			as intended including		
			gauges, valves, hosing,		
		Accessories	regulators, gas cylinders,		
		7 recessories	O-rings/sealing-rings must		
			be included etc.		
			Spray gun ceramic		
			ring x 2		
			Anode heads x 5		
			Cathode heads x 5		
			■ 2 kilograms – Titanium		
		Powders	powder		
		(Coating grade)	2 kilograms –		
			Hydroxyapatite powder		
			12 months or more from		
			date of installation		
			(including service and		
		Warranty and	parts) and technical		
		Company profile	support from local		
		company promi	company and OEM for		
			coatings development and		
			troubleshooting.		
			Complete on-site		
		Installation and	installation, demonstration		
		training	and training (multiple runs		
		daming	of coatings on metals)		
			Electrochemical Power		
		Purpose	supply for anodizing of		
		arpose	biomedical implants		
			DC electrochemical power		
		General features	supply		
			Minimum = 0		
		Output voltages			
		(V)			
		Output current			
8	power	(A)	`	01	
	supply	Power			
	with tank	1 0 W C1			
		Display			
			annoism mioimation		
		Accuracy			
		_	0.5 % or better		
		(
		Resolution	0.177		
8	supply	(V) Output current (A) Power Display Accuracy (voltages)	Maximum = 130 V (or higher) Minimum = 0 Maximum = 30 A (or higher) 5 kW or better Digital display for different information 0.5 % or better 0.1V	01	

				1	CUI-LHR-PUR-Tender-001
			Core i5 desktop with 23		
			inch FHD LED with 4k		
			resolution or better		
			512 gb ssd or better and		
			1TB hard disk or better		
			8 GB or better Ram		
			UHD display with		
			Dedicated 4gb graphics		
			card having 128-bit bus		
			speed or better.		
		Computer	Original Windows 10	01	
		Computer	Professional 64bit with life	V1	
			time license in bootable		
			usb		
			Wireless mouse with scroll		
			and side buttons		
			Wireless keyboard with		
			multimedia buttons		
			HD 720p (or better) Video		
			Calling Web Cam with		
			Autofocus and built-in		
			noise-reducing mic		
			1 year from the date of		
		Warranty	installation (parts and		
			services)		
		UPS	As recommended by OEM		
		T 4 11 4' 1	Onsight installation and		
		Installation and	training by qualified		
		Training	person		
		Purpose	To pack medical devices		
		Workroom size	500*500*80mm or bigger		
		W OI KIUUIII SIZE			
		Seal Length	Sealing length: 500*10mm		
			or bigger		
		Sealing speed	1-4 times/minute or higher		
		Materials used	Stainless Steel structure		
		Operating mode	2 modes or more		
	***	Display	Digital control		
	Vacuum	Installation &	Complete onsite	01	
9	Packing	training	installation and training	Nos.	
	Unit	Warranty &	12 Months from the date of	1 1000	
		Others	installation (parts and		
			service)		
			To pack medical devices		
			520*540*80mm		
		DZ500 2D	Sealing length: 500*10mm		
		Model	1-4 times/minute		
		1,10401	Stainless Steel structure		
		Ť	1 1 (37		i
			2 modes only (Vacuum and Seal)		

					CUI-LHR-PUR-Tender-001
10	Low-Flow Anesthesia System	Purpose Tidal volume Number of animals Accessories Warranty	Anesthesia system for delivery of anesthetic to prepare small animals for surgical procedures. From 25 ml or less to 1L or more Single or multi All the required hardware and connections included in the system 12 Months or more from the date of installation	02 Nos.	
11	Anesthesia Mask/Brea thing Circuit	General Feature Size Diaphragm	(parts and Service) Rodent face masks made from clear acrylic to anesthetize or resuscitate the rodents Large anesthesia mask with co-axial non-rebreathing system 44mm diameter 38mm deep Includes extra diaphragm material (200g or more).	04 Nos.	
		Purpose	 Capable of machining sophisticated metallic parts Machine should be an automatic turning lathe with an additional y-axis for milling operation 		
	Automatic 4-axis CNC	Turning Diameter over bed (mm) Turning diameter	400 or better 180 or better		
12	Lathe Machine	over slide (mm) X/Z axis travel (mm)	250/500 or better	01 No.	
		Working Piece Length (mm)	500 (or higher)		
		Boring size (mm)	100 or better		
		X/Z travel speed (m/mm)	10/12		
		Position Accuracy X/Z axis (mm)	0.012/0.014 or better		
		X/Z repeatability Accuracy (mm)	0.006/0.007 or better		

_	T	T = = 4 4	T		CUI-LITK-PUK-Tender-001
		Main spindle speed (rpm)	3000 or better		
		Number of Tool	4 or more		
		Stations boring tool size	Φ20 (or larger)		
		(mm)	#20 (of larger)		
		Accessories			
		y-axis	0.1		
		Jaw Chuck	01		
		Coolant device	0.1		
		with splash	01		
		guard Tools with tool			
		box	01 set		
		UUX	FANUC/Siemens/Mitsubi		
		Controller	shi/GSK or equivalent or		
			better		
		Software and	LCD display with USB		
		Programmer	port and PCMICA Card		
		Voltage	As Recommended by		
		stabilizer	OEM		
			Local company should		
			have established setup		
			and good reputation		
		Machine	along with history of		
		installation &	CNC operations,		
		training	repair,		
			installation/commissio		
			ning		
			Complete installation and On site training		
			and On-site training Warranty 12 months or		
		Warranty	Warranty: 12 months or more including service and		
		, arrainty	parts		
			• 4+1 or pure 5 axis		
			Capable of machining		
			sophisticated metallic		
		Purpose	parts	01	
			Should come with all		
			suitable attachments		
			and accessories		
	5 axis CNC	X/Y-Z travel in	110/110-85 or better		
13	Machining	mm			
	Center	XYZ resolution	7μm or better		
		A-axis (degree)	25/-135 or equivalent or		
		`	better range Continuous rotating		
		B-axis (degree) A and B axis	Continuous rotating		
		Resolution	0.01 degree or better		
		Main spindle			
		speed (rpm)	40000 (or more)		
	ionature & Stam				

				1	CUI-LITK-PUK-Tender-001
		Max Speed X/Y/Z (mm/min)	1500/1500/1500 or better		
		Maximum speed (degree/sec)	A-axis 35 or better		
		8	C-axis 35 or better		
			Machine enclosure with	01	
			door lock safety Tooling pack minimum 5	01	
			tools (1/8 inch) Tooling pack minimum 5		
		Standard Accessories	tools (1/16 inch) Basic tooling pack with	01	
		Accessories	minimum 3 tools	01	
			ER40 Collets (covering the range of 1/8-1 inch)	04	
			Tool collets (3 different sizes)	02 each	
		LAPTOP	As recommended by OEM with minimum core i5 11 th Gen with 512 GB SSD and 8GB Ram		
		Power backup	As recommended by OEM		
		Warranty & Service	Warranty: Minimum period of 1 year including service and parts		
		Purpose of hand piece	A dental hand piece is a hand-held, a mechanical instrument used to perform a variety of common dental procedures, oral surgery and altering prostheses with extra long burs		
14	Dental Hand piece straight	Body	- Compatible with variable contra attachments - Autoclavable up to 120°C	01 No.	
		Rotation	Up to 40000 RPM or more		
		Features	Variable control for speed		
		Warranty	12 Months or more from the date of installation		
15	Hot plates	Hot plate with magnetic stirrers	Equipped with power restore function after power failure Thermocouple compatible	14 Nos.	

	ı	1		T		CUI-LHR-PUR-Tender-001
		Stirring Sp range	peed	Up to 1500 rpm or better		
		Stirring vo (H ₂ O)		Up to 5 liter or more		
		Heating Po	ower	Ambient to 350 C or more		
		XX / +		12 Months from the date of		
		Warranty		installation		
	Clean	i. Or Do Si (8) To siz co Al co i. fro an - t - i 50 - p - I - c po	oor Side: ide Walls Nozzles op Side (ze:610*9 ompletely ISI 304 (oating micropro om the cond panic two door inside the 00 lux pre filter ISO class options: so	er: 1520W×1220D×2360H mm, S SS 304 1.2mm thick sheet S & Panel MS Powder coated, each side and 4 Nozzles on totally 20 nozzles), HEPA 15*69 mm The made out of stainless steel (satin), no need for powder (cessor controlled parameters control panel (touch screen) button, inside the air shower is in electrical interlock system the air shower fluorescent lamp G4 (EN 779) and HEPA filter S 5, GMP class A stainless steel AISI 316, carface, powder coated, UV-C te lamp installed within	1 No.	
16	Synthesis and Packaging Unit	ii Sur Ph 18 of iso cooch wwwa start - I - copo or	upply of harma gr. 8SWG Fif high derolation a complete voser. Ce vindow Santibacte inside the revent colass (double drop seal eads of a complete seal seads of a complete seal seal seal seal seal seal seal sea	ade, SS 304 Grind Finish rame, filling with Rockwool nsity (100 kg/m3), better and sound features with handle / Lock / Door enter Glass Double Glace quare flash type. rial silicone window frame silica gel to indensation between the two ble glass) at the underside completely ir leakage, to maintain are in the room es (handle, lock) out of		
			X7' X7' (Do	uble Door 2'X7' each)	22 Nos. 2 Nos.	
				uble Door 3'X7' each)	1 No.	

Supply of Emergency Door (Red Colour), Pharma Grade GI Powder iii. Coated, Aluminium Push Bar Handle/lock for Emergency Sealed all sides. (3'X7') Supply of Fixed Window; Frame SS 304, Pharma Grade, Single 5 mm fixed	
iii. Coated, Aluminium Push Bar Handle/lock for Emergency Sealed all sides. (3'X7') Supply of Fixed Window; Frame SS	
iii. Coated, Aluminium Push Bar Handle/lock for Emergency Sealed all sides. (3'X7') Supply of Fixed Window; Frame SS	
Handle/lock for Emergency Sealed all sides. (3'X7') Supply of Fixed Window; Frame SS	
sides. (3'X7') Supply of Fixed Window; Frame SS	
Supply of Fixed Window; Frame SS	
304 Pharma Grade Single 5 mm fixed	
Jot, i naima Otauc, Single J min macu	
glasses (for clean room).	
- double layer glass 6+6 mm, to be the	
same thickness as the wall panels,	
- antibacterial silicone	
- inside the window frame silica gel to	
prevent condensation between the two	
glass (double glass)	
- ISO 14644 requirements	
3'X2'-6" 10 Nos.	
Sizes 4'X2'-6" 4 Nos.	
5'x2'-6" 2 Nos.	
HEPA Filter Box (Laminar Air Flow):	
HEPA Filter Box Size (W: 4' H: 5' D: 3')	
with HEPA Filter H14 Eff: 99.997%,	
Blower, Air Diffuser ,Fluorescent & UV	
Light. It is a unidirectional airflow unit.	
HEPA-filtered vertical laminar airflow	
which is recirculated in the work zone	
creates an ultra-clean work environment	
for product protection	
Particular Advantages :	
No cross contamination.	
No risk or inhalation of product.	
Acrylic/glass around the	
working area.	
• Easy to clean.	
• It is equipped with an Electronic	
interlock system that prevents both the	
doors from being opened at the	
same time.	
HEPA Filter Pass Box includes	
Swing type doors with view panels.	
Door open indicator. Door open indicator.	
Material of Construction Matt Fig. 1. CS 204.18 GWG.	
Finish SS 304 18 SWG	
Touch pad controls System.	
ISO class 5, GMP class A	
- fan, air velocity setting option,	
microprocessor controlled parameters	
from the control panel (touch screen),	
differential pressure gauge, light 500 lux,	
UV-C sterilization light	
GMP compliance Cross Over Bench SS	
304 S Type W 60" H 18" 1 No.	
vi. option: with shoe compartment	
GMP compliance Cross Over Bench SS	
304 S Type W 36" H 18"	

		CUI-LHR-PUR-Tender-00	VΙ
	option: with shoe compartment		
	GMP compliance Cross Over Bench SS		
	304 S Type W 42" H 1820"	1 No.	
	option: with shoe compartment		
	Gowning / De gowning Cabinets / Lockers 36"Wx78"Hx12"D (With six		
vii.	`	10 Nos.	
	- slope roof, to prevent collection of dust		
viii	Frame with 16SWG Table Top for Long		
	Lasting, Argon Welded.	1.77	
Si	96" L x 30" W x 42" H	1 No.	
31	36" L x 18" W x 42" H	2 Nos.	
	Stainless Steel 304 Dull Finish Sink with Table. Size 48 Length x 24" Depth x 36" Height with 6" Collar from Two Sides Sink and Back.		
ix.	Sink Size 24" Length x 18" Width x 16" Deep SS 304 Pipe 1 ½" x 1 ½" 16 SWG, Top 16 SWG with Two Doors	1 No.	
	- sensor tap, without touching PASS BOX (HATCH):		
	Pass Box Size (W: 2' H: 2' D: 1', & W 2' x H 2' x D 1-6" and other various sizes) with Fluorescent & UV Light. UV Light on during staging of product in the chamber.		
x.	Features: • 100% Stainless Steel 304 Non Magnetic Matt Finish 18 SWG thick. • Electronic Interlock door system for minimizing contamination. • Easy transfer of material to & fro without any personal movement. Acrylic panel door (with handle) to see-through.(UV Tampered Glass • UV / Fluorescent Light for		
Si	Germicidal & regular fluorescent for required Lux. ISO class 5, GMP class A W:2' H:2' D:1' W:2' H:2' D:1'-6"	6 Nos.	
		1 No.	
	HAND SANITIZER:		
xi.	Automatic Hand Sanitizer / Standard	4 Nos.	
	Dispenser for 900 ml Ethanol		
xii.	MS Powder coated HEPA FILTER HOUSINGS/BOXES with gaskits,		
7111			

					CUI-LHK-PUK-Tender-001
			differential pressure across HEPA,		
			holding arrangements, complete in all		
			respect.		
			26 ½ "X 26 ½"X10"	4 Nos.	
		sizes	20 ½ "X 20 ½"X10"	14 Nos.	
			14 ½ "X 14 ½"X16"	6 Nos.	
			Supply of U-TUBE Manometers /		
			Megnahelical gauges across filter		
			section and at Terminal/Room		
		xiii.	(Dawyers, USA)		
			Megnahelical gauges (0~100 Pa)	19 Nos.	
			Manometer Range 0" TO 5" WG	12 Nos.	
			100% Stainless Steel 304, Non Magnetic	12 1105.	
		xiv.	Matt Finish 16 SWG thick, GMP	3 Nos.	
		AIV.	DRAINS (4" DIA)	<i>5</i> 1103.	
			Pharma Grade conveyor belt use in		
			production line for material transfer,		
			material of conveyor should be rubber		
			(oil and heat resistant) single sealed		
		xv.	bearing, having width of less than 12",	1 SET	
			conveyor speed 0.3 m/Min, 220V/50 Hz,		
			60W Power consumption and transfer		
	_		weight 10 to 20 Kg/min(Approximate) To comply ISO 14644-1 / ISO 21501-4,		
			Remote Particle count Apparatus to		
		xvi.	measures air born particle sizes 0.1 to 10	1No.	
			μm, air flow from 0.1 CFM with analog		
			output option, wireless enabled, with		
}	<u> </u>		integrated pump/VHP Resistant		
			Company should have experience in		
		Others	development of clean rooms		
			 Design and installation of 		
			HVAC systems in clean rooms		

C. Bid Evaluation Criteria

All bids shall be evaluated in accordance with the following evaluation criteria and other terms & conditions set forth in this bidding document.

- 1. The bids shall be evaluated to strictly ensure that the quoted brand/ model meet all the BoQ/ specification requirements given in the bidding document for each item.
- 2. In addition to the BoQ requirements, vendors must meet the vendor qualification criteria /company profile requirements (if any), as set forth in this tender document.
- 3. Supporting literature (where available / required) of the quoted brand/ model must be attached for verification & technical evaluation of the required specification by the technical committee. In case of any clash is found between the quoted model and the supported literature may lead to rejection of bid.

D. <u>Financial Portion (Price and Brand/Model to be mention only in Financial Proposal in a separate sealed envelope)</u> Strictly on our BoQs Form.

Vendors are required to provide both unit and total price of each item and calculations must be made carefully to avoid mistakes. However, in case, total price does not match with the unit price and quantity due to calculation error or typo error, any of the following can be opted

- 1. The bid may be rejected on the reason of ambiguity (OR
- 2. Unit price will be considered as final and total price of the respective item will be calculated by multiplying it with the quantity required. Sub-totals and grand total will also be corrected accordingly.

belov	w, is allowed. A	ny additional inform	f CUI-Lahore Campus, as on ation may be mentioned in	the		l be quoted inc pplicable taxes	
			ce). Any modification in Clion of bid (fully or partially		Quoted	Unit Price	Total
Sr.#	Item Name	Specifications		Qty	Model / Brand	(Rs.)	Amount (Rs.)
		Purpose of Ultrasonic Bath	For ultra-sonication in analytical, industrial and medical applications, including intensive cleaning				
	Material Stainless Steel Frequency range (kHz) Sweeping frequency 02						
	Ultrasonic	Timer	Must be present				
1	Bath	Temp. range (°C) Ultrasonic Power (W)	Up to 80 °C 100 or higher				
		Control Mode	Digital				
		Capacity (L)	5 or more Basket	01			
		Accessories	Cover	01			
		Warranty	12 Months from the date of installation (parts and service)				
		Purpose	A 3D Camera/Scanner for scanning of objects as 3D feed models for 3D printers, with USB supported interface				
		Camera resolution	12 MP or higher				
2	3-D	Scanning Volume	250×250×250 or higher	01			
	Camera	Accuracy Interface	0.1 mm or better USB 3.0	No.			
		Software	For image acquisition and analysis				
		Computer/ Laptop	As recommended by OEM with power back up				
		Accessories	Scanner stand, bracket, turntable, requisite				

	T			1	CUI-LHK-I	PUR-Tender-001
			cables and all			
			accessories which are			
			essential			
		Warranty	1-year or more			
		Dumaga of the	A complete dental unit			
		Purpose of the	for dental patient			
		chair	treatment			
			- 3 hand pieces			
			- Individual air			
		D	pressure controls			
		Doctor's Tray	with gauge			
			- X-Ray Viewer			
			Water flow control			
			- Motorized chair.			
			- Up/down and			
			back/forward			
			movements			
		Dental Chair	- adjustable head			
			neck			
			Emergency stoppage			
			switch			
			- Dental light			
			Sensor LED			
			Up, Down, Back			
		Dental Light:	forward, and inverse			
			Movement of the light			
			head			
3	Dental		- Single Unit	01		
	Chair		ceramic Spittoon	each		
			and Cup filler.			
			- Rotatable assistant			
			Arm			
		Cuspidor Unit	- Evacuator (air			
		Cuspider onic	operated) with			
			flow control hand			
			piece.			
			Water operated Saliva			
			ejector			
			- Air and Water			
		Junction Box	supply lines			
		Junetion Dox	Air and water filters			
			Ultrasonic Scalar Built-			
			in Kit with tip and hand			
			piece			
			Motorized Suction			
		Accessories	Machine- compatible with unit			
			Air Turbine -			
			compatible with unit			
			Air compressor -			
			compatible with unit			

	T	ı			CUI-LHK	-PUR-Tender-00	/1
		Warranty	1 year warranty				
		Purpose	For additive manufacturing of high-quality polymer and composite structures				
		build volume (cm)	23x15x15 or larger				
		Dual extrusion	Able to print with two different materials at a time				
		Layer Thickness (micron)	≤100				
		Positioning Precision	X, Y – 12 microns or better				
		Build Platform	 Heated platform to temperature ≥ 120 °C Aluminum or glass materials 				
		Filaments	• Open source Filament needed – PLA, ABS, PCL (1 Kg each)				
4	FDM printer	Nozzel Diameter (mm)	0.3 to 0.5 (Any value in this range)	02 Nos.			
		Filament extruder and winder	• Can extrude filaments from composites Should be compatible with the 3D printer				
		Softwares	System supporting softwares with lifetime license, should support STL files				
		Computer	Specifications As recommended by OEM with genuine windows				
		Power back up	as recommended by OEM for optimum operations				
		Warranty, Training and Others	12 Months Warranty from the date of installation with vendor having good local reputation with running machines and well-trained engineers				

		T			CUI-	LHK-PUK-Tei	1461-001
5	Liquid nitrogen tank	Liquid nitrogen supply tank Capacity Max working pressure Warranty & Others	Vertical Dewar Tank For safe supply and storage of liquid nitrogen 150 Liters or more 2.5 Mpa or better Cylinder hand truck with wheels 4 ft. or more flexible braided stainless-steel transfer hose 12 Months or more from the date of installation (parts and	01 Nos.			
6	Potentiosta t	Purpose	Electrochemical Workstation for electrochemical measurements requiring lower and higher currents especially in the area of Sensors It should measure 1. Cyclic voltammetry, 2. Differential pulse voltammetry, 3. impedance spectroscopy, 4.amperometry, 5.Chornoamperometry, 6. Galvanostatic charge discharge, 7. battery cycling and 8. Linear sweep voltammetry,	01			
		Electrochemical Impedance Spectroscopy (EIS) frequency range Maximum current Current Ranges	10 μHz to 1 MHz 400 mA or better 10 nA to 100 mA or better				
		Potential range	`-10 to + 10 V or better				
		Accessories	Counter electrode (Pt) by OEM	01			
			References electrode (Ag/AgCl) by OEM	01			

				CUI-LHR	UK-1en
		Reference electrode	01		
		(Hg/HgCl ₂) by OEM	V1		
		Working electrode			
		(glassy carbon) by	01		
		OEM			
		Electrode Polishing kit	01		
			<u> </u>		
		Unlimited licenses and			
		free lifetime software			
		upgrades.			
		Must be compatible			
	C - C	with all provided			
	Software	hardware,			
		Advanced custom			
		analysis with user-			
		defined variables and			
		models			
		Computer compatible			
	Computer	with system and	01		
		recommended by OEM			
		with genuine windows			
		online pure sinewave	01		
		UPS	O1		
		built in AVR capable of			
		regulating ± 30 volts			
		Power factor ≥ 0.95			
		Power backup in case			
		of power failure for at			
		least 30 mins			
		Lead acid free dry			
	Power backup	battery (1 year			
	with additional	warranty)			
	Servo Stabilizer	OR			
		A better alternative as			
		recommended by OEM			
		for optimum operations			
		12 Months from the			
		date of installation with			
		vendor having good			
		local reputation with			
		running machines and			
		well-trained engineers			
		Complete Installation,			
	Installation	operation, Onsite			
		Training			
		12 Months from the			
		date of installation with			
	W 7 4	vendor having good			
	Warranty	local reputation for			
1	•				
		providing high quality			
		providing high quality equipment. Must have well-trained engineers.			

	T	T			CUI	I-LHK-PUK-Te	naer-vvi
			Engineers must have				
			been trained by the				
			OEM with proof of				
			trainings by the OEM.				
						+	
			1				
			plasma spray system				
			should be capable of				
		Purpose	depositing	01			
		1	Hydroxyapatite and				
			titanium coatings on				
			metallic Substrate				
			PLC unit to control all				
			process (interfaces &				
			displays should be in				
			English)				
		Control Unit					
			Communication				
			Interface, Data should				
			be exportable for use on				
			computer				
		24-inch screen,					
			/				
			independent power				
	Computer	back up, other					
			specifications as				
			recommended by OEM				
		Plasma Gun	Power 80 KW or above				
			Current = up to 650 A				
	DI.	Power Supply	1				
7	Plasma		or higher				
,	Spray Unit		Output power – 80 kW				
			or higher				
		Mass flow	Gases (x2)				
		controller	Powder (x1)				
		Controller	Adequate regulators with				
			1 1				
			built-in safety and				
			pressure tested cylinders				
		Gas Regulators	with certificates				
		and cylinders	Argon (2 stage regulator				
		and cylinders	x1 and cylinder x2)				
			Hydrogen (2 stage				
			regulator x1 and cylinder				
			(x2)				
		Powder Feeder					
			Powder feeder with				
		Powder feeder					
		unit	powder flow sensor and				
		requisite accessories					
		Powder Hopper	3 (or more)				
		volume (litres)	3 (or more)				
		Other Features					
	i .	Cilici i catules	Commetible				
				1		1	I .
		Cooling System	Compatible cooling				
		Cooling System	system				
		Cooling System Electrical Distributor	_				

-		<u> </u>	1 4 4 4		CUI-I	JHK-PUK-Tei	iuer-001
			distribution cabinet and				
			wiring.				
		Sand Blasting	Suitable sand blasting				
		Unit	Unit for treatment of				
		Onit	metal surfaces				
			X travel (mm)= 1000				
		Transverse unit	or more	01			
		(motorized)	Y travel (mm)= 300 or	01			
		,	more				
		Ventilation and	Locally provided				
		dust removal	J 1	01			
		system					
		-	For holding and				
		Spraying tool	rotating of metallic	01			
		boat	substrate	V1			
			Gas Safety system with Alarms and Leak				
		Safaty					
		Safety	detection, water and				
			electrical safety				
			mechanism				
			All requisite				
			accessories to perform				
			aforementioned				
			functions as intended				
			including gauges,				
			valves, hosing,				
		Accessories	regulators, gas				
		Accessories	cylinders, O-				
			rings/sealing-rings				
			must be included etc.				
			 Spray gun ceramic 				
			ring x 2				
			■ Anode heads x 5				
			Cathode heads x 5				
			■ 2 kilograms –				
		Powders	Titanium powder				
		(Coating grade)	• 2 kilograms –				
			Hydroxyapatite powder				
			12 months or more				
			from date of installation				
			(including service and				
		Warranty and	parts) and technical				
			* /				
		Company profile	support from local				
			company and OEM for				
			coatings development				
			and troubleshooting.				
			Complete on-site				
		Installation and	installation,				
		training	demonstration and				
		u a ii ii ii g	training (multiple runs				
			of coatings on metals)				

-			mi i i i s		CUI-	LHK-PUK-Tel	1461-001
		Purpose	Electrochemical Power supply for anodizing of				
			biomedical implants				
		- 10	DC electrochemical				
		General features	power supply				
			Minimum = 0				
		Output voltages	Maximum = 130 V (or				
		(V)					
			higher)				
		Output current	Minimum = 0	01			
		(A)	Maximum = 30 A (or				
		` '	higher)				
		Power	5 kW or better				
		Diamlary	Digital display for				
		Display	different information				
		Accuracy	0.5.0/ 1.44				
		(voltages)	0.5 % or better				
		Resolution	0.477				
		(voltages)	0.1V				
		(.0144503)	Core i5 desktop with 23				
			inch FHD LED with 4k				
		resolution or better					
	Electroche						
			512 gb ssd or better and				
			1TB hard disk or better				
	mical		8 GB or better Ram				
8	power		UHD display with				
	supply		Dedicated 4gb graphics				
	with tank		card having 128-bit bus				
	with tank	Computer	speed or better.				
			Original Windows 10	1			
			Professional 64bit with				
		1	life time license in				
			bootable usb				
			Wireless mouse with				
			scroll and side buttons				
			Wireless keyboard with				
			multimedia buttons				
			HD 720p (or better)				
			Video Calling Web				
			Cam with Autofocus				
			and built-in noise-				
			reducing mic				
			1 year from the date of				
	Warranty	installation (parts and					
		services)					
			,				
		UPS	As recommended by OEM				
	Installation and	Onsight installation and					
		Training	training by qualified				
		1141111115	person				

					CUI-	LHR-PUR-Tei	luer-uui
		Purpose	To pack medical devices				
		W. 1	500*500*80mm or				
		Workroom size	bigger				
		Seal Length	Sealing length: 500*10mm or bigger				
		Sealing speed	1-4 times/minute or				
		Materials used	higher Stainless Steel structure				
		Operating mode	2 modes or more				
		Display	Digital control				
	Vacuum	Installation & training	Complete onsite installation and training				
9	Packing	Warranty &	12 Months from the	01 Nos.			
	Unit	Others	date of installation (parts and service)	1105.			
			To pack medical devices				
			520*540*80mm				
			Sealing length: 500*10mm				
		DZ500 2D Model	300 1011111				
			1-4 times/minute				
			Stainless Steel structure				
			2 modes only (Vacuum and Seal)				
		Purpose	Anesthesia system for delivery of anesthetic to				
		Turpose	prepare small animals for surgical procedures.				
	Low-Flow	Tidal volume	From 25 ml or less to 1L or more				
10	Anesthesia System	Number of animals	Single or multi	02 Nos.			
		Accessories	All the required hardware and connections included in the system				
		Warranty	12 Months or more from the date of				

					CUI-LHR-P	UR-Tender-001
			installation (parts and Service)			
11	Anesthesia Mask/Brea thing Circuit	General Feature Size	Rodent face masks made from clear acrylic to anesthetize or resuscitate the rodents Large anesthesia mask with co-axial non-rebreathing system 44mm diameter 38mm deep	04 Nos.		
		Diaphragm	Includes extra diaphragm material (200g or more).			
		Purpose	 Capable of machining sophisticated metallic parts Machine should be an automatic turning lathe with an additional y-axis for milling operation 			
		Turning Diameter over bed (mm)	400 or better			
		Turning diameter over slide (mm)	180 or better			
	Automatic	X/Z axis travel (mm)	250/500 or better			
12	Lathe	Working Piece Length (mm)	500 (or higher)	01 No.		
	Machine	Boring size (mm)	100 or better	110.		
		X/Z travel speed (m/mm)	10/12			
		Position Accuracy X/Z axis (mm)	0.012/0.014 or better			
		X/Z repeatability Accuracy (mm)	0.006/0.007 or better			
		Main spindle speed (rpm)	3000 or better			
		Number of Tool Stations	4 or more			
		boring tool size (mm)	Φ20 (or larger)			
		Accessories				
	1	y-axis				
		Jaw Chuck	01			

	I	T =:	T		 -LNK-PUK-Tei	1401-001
		Coolant device with splash guard	01			
		Tools with tool box	01 set			
		Controller	FANUC/Siemens/Mits ubishi/GSK or equivalent or better			
		Software and Programmer	LCD display with USB port and PCMICA Card			
		Voltage stabilizer	As Recommended by OEM			
		Machine installation & training	 Local company should have established setup and good reputation along with history of CNC operations, repair, installation/commissioning Complete installation and Onsite training 			
		Warranty	Warranty: 12 months or more including service and parts			
		Purpose	 4+1 or pure 5 axis Capable of machining sophisticated metallic parts Should come with all suitable attachments and accessories 	01		
	5 axis CNC	X/Y-Z travel in mm	110/110-85 or better			
12		XYZ resolution	7μm or better			
13	Machining Center	A-axis (degree)	25/-135 or equivalent or better range			
		B-axis (degree)	Continuous rotating			
		A and B axis Resolution	0.01 degree or better			
		Main spindle speed (rpm)	40000 (or more)			
		Max Speed X/Y/Z (mm/min)	1500/1500/1500 or better			
		Maximum speed (degree/sec)	A-axis 35 or better			
			C-axis 35 or better			

					CUI	LHK-PUK-Tei	11461-001
		Standard	Machine enclosure with door lock safety	01			
			Tooling pack minimum 5 tools (1/8 inch)	01			
			Tooling pack minimum 5 tools (1/16 inch)	01			
		Accessories	Basic tooling pack with minimum 3 tools	01			
			ER40 Collets (covering	04			
			the range of 1/8-1 inch) Tool collets (3 different	02			
			sizes)	each			
		LAPTOP	As recommended by OEM with minimum core i5 11 th Gen with 512 GB SSD and 8GB Ram				
		Power backup	As recommended by OEM				
		Warranty & Service	Warranty: Minimum period of 1 year including service and parts				
		Purpose of hand piece Body	A dental hand piece is a hand-held, a mechanical instrument used to perform a variety of common dental procedures, oral surgery and altering prostheses with extra long burs				
14	Dental Hand piece straight	Potation	 Compatible with variable contra attachments Autoclavable up to 120°C 	01 No.			
			Up to 40000 RPM or more				
			Variable control for speed				
		Warranty	12 Months or more from the date of installation				

						CUI	-LHK-PUK-Te	1461-001
		_	ate with	Equipped with power restore function after power failure Thermocouple compatible				
15	Hot plate	Stirring range	g Speed	Up to 1500 rpm or better	14 Nos.			
		Stirring (H ₂ O)	g volume	Up to 5 liter or more	1103.			
		Heating	g Power	Ambient to 350 C or more				
		Warran	nty	12 Months from the date of installation				
16	Clean Synthesis and Packaging Unit	i.	mm, Door sheet Side Powder co and 4 Noz 20 nozzles mm completely steel AISI powder co - micropro parameters (touch screinside the - two door system - inside the lamp 500 I - pre filter - ISO class - options: polished si	: 1520W×1220D×2360H Sides SS 304 1.2mm thick Walls & Panel MS Dated, 8 Nozzles each side zles on Top Side (totally S), HEPA size:610*915*69 by made out of stainless 304 (satin), no need for Dating Decessor controlled So from the control panel Deen) and panic button, Dair shower Desired interlock Desired interlock Desired interlock Desired interlock	1 No.			

			CUI-	LHK-PUK-Tei	naer-uu1
ii	Doors (Pharma Grade): Supply of Door; Pharma grade, SS 304 Grind Finish 18SWG Frame, filling with Rockwool of high density (100 kg/m3), better isolation and sound features complete with handle / Lock / Door closer. Center Glass Double Glace Window Square flash type antibacterial silicone - inside the window frame silica gel		CUI-	LHK-PUK-1ei	nder-vv1
	to prevent condensation between the two glass (double glass) - drop seal at the underside completely heads of air leakage, to maintain overpressure in the room - accessories (handle, lock) out of stainless steel - ISO 14644 requirements - optional: stainless steel AISI 316, polished surface, powder coated, manual or automatic door closing mechanism				
	3'X7'	22 Nos.			
Sizes	4'X7' (Double Door 2'X7' each)	2 Nos.			
	6'X7' (Double Door 3'X7' each)	1 No.			
III.	Supply of Emergency Door (Red Colour), Pharma Grade GI Powder Coated, Aluminium Push Bar Handle/lock for Emergency Sealed all sides. (3'X7')	1 No.			
iv.	Supply of Fixed Window; Frame SS 304, Pharma Grade, Single 5 mm fixed glasses (for clean room). - double layer glass 6+6 mm, to be the same thickness as the wall panels, flushed surface with walls - antibacterial silicone - inside the window frame silica gel to prevent condensation between the two glass (double glass) - ISO 14644 requirements				
	•	10			
	3'X2'-6"	Nos.			
Sizes	4'X2'-6"	4 Nos.			
	5'x2'-6"	2 Nos.			
	HEPA Filter Box (Laminar Air Flow): HEPA Filter Box Size (W: 4' H: 5' D:				
v.	3') with HEPA Filter H14 Eff: 99.997%, Blower, Air Diffuser ,Fluorescent & UV Light. It is a unidirectional airflow unit. HEPA-	2 Nos.			

				CUI-	LHK-PUK-Tei	1uc1-001
		filtered vertical laminar airflow				
		which is recirculated in the work				
		zone creates an ultra-clean work				
		environment for product protection				
		Particular Advantages:				
		No cross contamination.				
		No risk or inhalation of				
		product.				
		• Acrylic/glass around the				
		working area.				
		• Easy to clean.				
		• It is equipped with an				
		Electronic interlock system that				
		prevents both the doors from being				
		opened at the same time.				
		HEPA Filter Pass Box				
		includes Swing type doors with view				
		panels.				
		• Door open indicator.				
		Material of Construction Matt				
		Finish SS 304 18 SWG				
		Touch pad controls System.				
		ISO class 5, GMP class A				
		· · · · · · · · · · · · · · · · · · ·				
		- fan, air velocity setting option,				
		microprocessor controlled parameters				
		from the control panel (touch screen),				
		differential pressure gauge, light 500				
		lux, UV-C sterilization light				
		GMP compliance Cross Over Bench				
		SS 304 S Type W 60" H 18"	1 No.			
		option: with shoe compartment	1 110.			
		GMP compliance Cross Over Bench				
	vi.	SS 304 S Type W 36" H 18"	2 Nos.			
		option: with shoe compartment				
		GMP compliance Cross Over Bench				
		SS 304 S Type W 42" H 1820"	1 No.			
		option: with shoe compartment	11,00			
		Gowning / De gowning Cabinets /				
		Lockers 36"Wx78"Hx12"D (With				
		six partition and doors with lock &	10			
	vii.	keys	Nos.			
		- stainless steel	1105.			
		- slope roof, to prevent collection of				
		dust				
		Stainless Steel 304 Grind Finish				
		Table (Working Bench), 18SWG				
	viii.	1.5" Pipe Frame with 16SWG Table				
		Top for Long Lasting, Argon				
		Welded.				
		96" L x 30" W x 42" H	1 No.			
	Sizes	36" L x 18" W x 42" H				
			2 Nos.			
		Stainless Steel 304 Dull Finish Sink				
		with Table.				
	ix.	Size 48 Length x 24" Depth x 36"	1 No.			
		Height with 6" Collar from Two Sides	1 110.			
		Sink and Back.				
L	ļ					

					CUI-	LHR-PUR-Tei	1der-001
			Sink Size 24" Length x 18" Width x				
			16" Deep				
			SS 304 Pipe 1 ½" x 1 ½" 16 SWG,				
			Top 16 SWG with Two Doors				
			- sensor tap, without touching				
			PASS BOX (HATCH):				
			Pass Box Size (W: 2' H: 2' D: 1', &				
			W 2' x H 2' x D 1-6" and other				
			various sizes) with Fluorescent &				
			UV Light. UV Light on during				
			staging of product in the chamber.				
			Features:				
			• 100% Stainless Steel 304				
			Non Magnetic Matt Finish				
			18 SWG thick.				
		x.	Electronic Interlock door				
		^.	system for minimizing				
			contamination.				
			Easy transfer of material to				
			& fro without any personal				
			movement.				
			Acrylic panel door (with				
			handle) to see-through.(UV				
			Tampered Glass				
			UV / Fluorescent Light for				
			Germicidal & regular				
			fluorescent for required Lux.				
			• ISO class 5, GMP class A				
		Sizes	W:2' H:2' D:1'	6 Nos.			
		31263	W:2' H:2' D:1'-6"	1 No.			
			HAND SANITIZER:				
		xi.	Automatic Hand Sanitizer / Standard	4 Nos.			
			Dispenser for 900 ml Ethanol	F 1 103.			
			MS Powder coated HEPA FILTER				
			HOUSINGS/BOXES with gaskits,				
		xii.	IN/OUT Probes for measuring				
			differential pressure across HEPA,				
			holding arrangements, complete in all respect.				
			26 ½ "X 26 ½"X10"	4 Nos.			
				14			
		sizes	20 ½ "X 20 ½"X10"	Nos.			
			14 ½ "X 14 ½"X16"	6 Nos.			
			Supply of U-TUBE Manometers /				
			Megnahelical gauges across filter				
			section and at Terminal/Room				
		xiii.	(Dawyers, USA)				
		XIII.	Megnahelical gauges (0 ~100 Pa)	19			
			integration and gauges (0 ~100 1 a)	Nos.			
			Manometer Range 0" TO 5" WG	12			
			The state of the s	Nos.			

	100% Stainless Steel 304, Non		
xiv.	Magnetic Matt Finish 16 SWG thick,	3 Nos.	
	GMP DRAINS (4" DIA)		
	Pharma Grade conveyor belt use in		
	production line for material transfer,		
	material of conveyor should be		
	rubber (oil and heat resistant) single		
xv.	sealed bearing, having width of less	1 SET	
	than 12", conveyor speed 0.3 m/Min,		
	220V/50 Hz, 60W Power		
	consumption and transfer weight 10		
	to 20 Kg/min(Approximate)		
	To comply ISO 14644-1 / ISO		
	21501-4, Remote Particle count		
	Apparatus to measures air born		
xvi.	particle sizes 0.1 to 10 µm, air flow	1No.	
	from 0.1 CFM with analog output		
	option, wireless enabled, with		
	integrated pump/VHP Resistant		
	Company should have experience in		
	development of		
	clean rooms		
Others	 Design and 		
	installation of		
	HVAC systems in		
	clean rooms		

E. Special Terms and conditions;

- i. Bidders are requested to quote genuine / quality products without compromising on quality. The supplied products shall be inspected by our technical experts with respect to BoQs requirements and quality standards.
- ii. Please submit the technical and financial bid (rates) on our prescribed BoQs Form and clearly mention the quoted model/brand, with complete terms and conditions signed, stamped with both bids, otherwise your bid (s) may be rejected.
- iii. Purchase / work order (s) will be awarded on Item Wise Basis.
- iv. Kindly attach the Tender fee with Technical Bid and Bid money / CDR with Financial Bid.
- v. Multiple rates of an item may also lead to the rejection of bid / item.