

No. F. 27-2/25-PPL
Government of Pakistan
CENTRAL DRUGS LABORATORY
Drug Regulatory Authority of Pakistan
Ministry of National Health Services, Regulation & Coordination
4-B, SMCHS, Karachi

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INVITATION TO BID
(For Supply of Laboratory Equipment)

Central Drugs Laboratory a Federal Government Drug Testing Laboratory under Drug Regulatory Authority of Pakistan (DRAP), established under the DRAP Act, 2012, invites sealed bids from authorized distributors/suppliers having office/warehouse in Karachi, registered with Income Tax and Sales Tax Departments and are on Active Taxpayers List of the FBR for the supply of Laboratory Equipment to meet the requirement of Central Drugs Laboratory, Drug Regulatory Authority of Pakistan (DRAP), Karachi during the financial year 2024-25. Single stage two envelope procedure under the PPRA rules shall be followed for submission of bids. Bidding documents containing schedule of requirements can be downloaded from DRAP's official website www.dra.gov.pk or Public Procurement Regulatory Authority (PPRA)'s Online Portal e-Pak Acquisition and Disposal System (EPADS) i.e. www.eprocure.gov.pk for free download. The bids prepared in accordance with instructions in the bidding documents, must be submitted through EPADS by 31-01-2025. Bids will be opened on the same day at **11.30 AM** at DRAP HQ Islamabad.

(HAMZA ZUBAID MALIK)
Deputy Director (Procurement, Projects & Logistics)



CENTRAL DRUGS LABORATORY

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4-B, SMCHS, Karachi

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BIDDING DOCUMENTS **FOR SUPPLY OF LABORATORY EQUIPMENT** **DURING FY 2024-25**

1. INTRODUCTION

Central Drugs Laboratory, Drug Regulatory Authority of Pakistan, hereinafter referred to as CDL, is a federal drug testing laboratory under DRAP which is an autonomous body of the Federal Government established under the DRAP Act, 2012. The Authority invites sealed bids through EPADS from registered suppliers and authorized distributors for supply of Laboratory Equipment as per annexed Schedule of Requirements/ List of Items during the financial year 2024-25.

Single stage two envelope procedure under the PPRA rules shall be followed for submission of bids. The bidding proposals complete in all respect should be submitted online before the closing date as mentioned in notice on EPAD. Bids will be opened on the same day 30 minutes after closing time at DRAP HQ Islamabad or CDL, DRAP Karachi.

2. **TERMS & CONDITIONS.**

1. The firm must be well established and having office/ warehouse in Karachi.
2. Firm should be registered with the FBR for General Sales Tax and Income Tax.
3. Only registered suppliers/authorized distributors, who are on Active Taxpayers List (ATL) of FBR, are eligible to supply goods/ services to Government department.
4. Firm shall be required to produce attested copies of its registration with the Sales-Tax and Income-Tax Departments.
5. The bidding process of single stage two envelope comprising of 'technical proposal' and 'financial proposal' will be followed. Technical and Financial Bids should only be submitted through PPRA's E-Pads and bids submitted in hard form shall not be entertained.
6. Each bid should accompany with the amount of **earnest money (refundable) 2.5% of the quoted amount or as per following table against each quoted equipment whichever is higher** in the form of bank draft or pay order from any scheduled bank in favor of Drug Regulatory Authority of Pakistan, Islamabad and should reach the office of "Deputy Director (Procurement, Project & Logistics) DRAP HQ

Islamabad” not later than closing time on closing date. Technical bid of any firm whose earnest money is received in the office of Deputy Director (Procurement, Project & Logistics) DRAP Islamabad after closing date and time shall be rejected.

S. No	Equipment	Amount (Figures) PKR	Amount (Words) PKR
01	HPLC with PDA Detector	500,000/-	Five hundred thousand only
02	Microbalance	350,000/-	Three hundred and fifty thousand only
03	Next Generation Impactor + Dose Uniformity Sampling Apparatus	750,000/-	Seven Hundred and fifty thousand only
04	Thermal Gravimetric Analyzer	500,000/-	Five Hundred thousand only
05	Oven	150,000/-	One hundred and fifty thousand only
06	Hot Incubator	200,000/-	Two hundred thousand only
07	pH meter with printers	50,000/-	Fifty thousand only
08	Laboratory Refrigerator	75,000/-	Seventy-five thousand only

7. Earnest money of unsuccessful bidder will be returned at the end of tender process. However, earnest money of successful bidder and second lowest bidder will be retained until award of contract/ purchase order. The successful / lowest bidder will be required to submit performance guarantee amounting to 7.5% of the quoted amount. The same will be returned One year after successful installation (IQ/OQ) and training of relevant staff and shall be subject to deductions, if any, on account of penalty.
8. Quoted Rates must be inclusive of all taxes, GST will be paid by the firm itself and not by the end user i.e. DRAP. The rates must be valid for one financial year i.e. 2024-25 and no subsequent changes will be allowed.
9. The rates quoted by the firm must include all logistics cost, customs clearance charges, installation costs, any hidden / extra charges and training of DRAP's staff by the firm on the equipment supplied. DRAP will only reimburse rates quoted by the firm against every item.
10. Losses sustained by DRAP due to under quality/ poor quality supplies will be charged to the firm.
11. Only genuine/ original supplies as per mentioned specifications will be acceptable. Sub-standard supplies will be forfeited and liable to immediate cancellation of

supply order and black listing of the firm.

12. **All items must be originally from USA / Europe or Japan only (The items supplied should originally be manufactured in the mentioned areas)**
13. The bidder shall indicate clearly, make, grade, brand, whether ex-stock or imported and origin of the Laboratory equipment against each item.
14. In case the firm is found to be of misstatement, or delayed supply of items beyond the period of 15 days for ex-stock items and 12 weeks for imported items or failed to provide the items of prescribed standard or refuse to supply any items during financial year 2024-25, his bid shall be cancelled without any notice and the earnest money will be forfeited and can be blacklisted.
15. DRAP reserves the right to reject all bids or proposals at any time prior to the acceptance of a bid or proposal. The Authority shall complete the tender process through E-pads. Any grievance / clarification of the firm shall be strictly dealt with in accordance with PPRA's E-Pads system.
16. Technical and financial evaluation report will be uploaded on PPRA's E-pads for added transparency in due course of time.
17. Blacklisted firm(s) shall not be eligible to participate. An affidavit / undertaking to this effect shall be attached with technical proposal.
18. Incomplete and conditional bids shall be rejected.
19. The quantities mentioned in schedule of requirement are for estimation only and the order quantities can vary subject to requirement of the Authority.
20. The bidders must quote against the same specifications mentioned in bidding document and prices must be filled in the schedule of requirement affixed with bidding document.

3. Tender eligibility/ Evaluation of Technical & Financial bids

Technical bids of all bidders shall be evaluated on the basis of fulfilling the following mandatory conditions/requirements. The bidders must attach documentary proof with the technical bid for their qualification as per the given criteria. Firms failing to fulfill any of the given conditions shall be disqualified and their financial bids will be returned / disqualified unopened.

Sr.	Eligibility/ Evaluation Criteria	Requirement	Supporting Documents to be Attached as
1.	Sales Tax Registration (Active Status)	Mandatory	Annex-A
2.	Income Tax Registration (Active Status)	Mandatory	Annex-B

3.	Must have minimum 5 years' experience (copies of experience letters of 2 reputed govt. organizations be attached).	Mandatory	Annex-C
4.	Affidavit/ undertaking that the firm has never been blacklisted by any organization/ government on judicial stamp paper.	Mandatory	Annex-D
5.	Certificate of Authorized Dealership for the item quoted where authorized dealers are available in Pakistan or CDL specific rights to sell and provide service for the item where authorized distributor is not available and certificate of training of engineer from manufacturer of equipment.	Mandatory	Annex-E
6.	Certificate of Country of Origin (USA/ Europe/Japan only)	Mandatory	Annex-F
7.	Affidavit / undertaking on stamp paper that the firm has read and agrees to the contents of the tender document.	Mandatory	Annex-G
8.	Detailed Specifications against the specification sheet provided for respective equipment (Annex-I to Annex-VIII). Evidence from official specification sheet to be attached and highlighted Firm Providing lower specifications will be disqualified.	Mandatory	Annex-H
9.	Earnest Money/ Bid Security as per clause 6 of terms and conditions through bank draft/ pay order (To be submitted with technical as well as financial proposal)	Mandatory	Hard copy of Bank Draft must be sent before closing date to DRAP HQ Islamabad

After technical evaluation, financial Bids of only technically qualified firms shall be opened and evaluated in accordance with PPRA Rules. Financial bids of technically unsuccessful bidders will be returned unopened. Submission of Bank drafts / pay orders as earnest money in respect of all bidders shall be mandatory. In absence of earnest money, the bid shall be rejected. Item-wise rates of items quoted by firms in the Schedule of requirements/ Annexure-IX will be evaluated and comparative statement prepared.

4. Preparation/ Submission of Bids

The bidding process of single stage two envelop comprising 'financial proposal' and the 'technical proposal' will be followed. The technical proposal must be submitted

through E-Pads and should include all the mandatory documents as indicated in the evaluation criteria. Financial proposal shall include the schedule of requirements (list of items) duly filled with rates in Pakistani rupees (including all taxes) and must be signed/ stamped by the bidder. A picture of Pay order/ bank draft for earnest money must be uploaded on E-pads alongwith technical and financial proposal and must be sent to Deputy Director (PPL) DRAP Islamabad.

5. Award Criteria

The technical bid of all the bidders who submit their proposal through E-pads will be evaluated in the light of all terms and conditions as mentioned in the tender document. The eligible bidder(s) who are found technically responsive / qualified will be informed through technical evaluation report published on E-pads. Financial bid of only technically responsive firms will be opened on date and time specified through E-pads.

The eligible bidders who comply with the required specifications and offer the lowest rates against each item will be declared as successful bidders and will be offered the contract for supply of specified items during the financial year 2024-25 as per terms and conditions of the tender document.

6. Penalties

The DRAP with the approval of Chief Executive Officer shall award the following penalties to defaulting bidders as follows:

- i. A bidder can withdraw its bid before opening of bids. However, after opening of technical or financial bids, the bidders will not be allowed to withdraw their bids. If any bidder opts to withdraw its bid, his bid money shall be confiscated in favor of DRAP.
- ii. Addition/ Modification of bids to alter its substance shall not be allowed after opening of bids. If any bidder found to have submitted fake document/ statement in support of his qualification, the bidder shall be disqualified and bid money forfeited in favor of DRAP and blacklisted.
- iii. In case of delay in supplies beyond the prescribed delivery period, a penalty @ 0.5% per day maximum up to 10% of the total value of work order will be imposed and recovered from the invoice/ bill or performance security of the bidder.
- iv. If a firm fail to comply with bidding document, letter of award, supply orders, specifications of items, DRAP shall award appropriate penalty including cancellation of contract/ forfeiture of bid money or performance security and shall be blacklisted.
- v. In case of any grievance, the firm may submit it to the grievance committee on E-pads which will announce its decision in 15 working days and the decision of the grievance committee will be final.

7. Payments for supplies

Payment to the approved suppliers shall be made within 45 working days of the

receipt of complete invoice/ bills for all such supplies which have been duly approved by the procuring agency and are in accordance with the specifications as per bidding documents. The supplier will submit to the procuring agency separate invoice/ bill for each purchase order along with delivery challan duly signed / verified by the receiving officer.

Requirement of Technical Specifications

S. No	Equipment	Specifications
01	HPLC with PDA Detector	Annex-I
02	Microbalance	Annex-II
03	Next Generation Impactor + Dose Uniformity Sampling Apparatus	Annex-III
04	Thermal Gravimetric Analyzer	Annex-IV
05	Oven	Annex-V
06	Hot Incubator	Annex-VI
07	pH meter with printers	Annex-VII
08	Laboratory Refrigerator	Annex-VIII

Name	HPLC with PDA Detector	Quantity	01
Required Specifications (Following or better)	Quoted Specification	Complies/ Not Complies	
<p><u>System comprising of followings:</u></p> <ul style="list-style-type: none"> • Quaternary Gradient Pump • Vacuum Degasser • Column Oven • Auto-Sampler • PDA Detector • Computer Data System with Windows based software including Computer and Laser Printer. • HPLC Installation kit / Performance Kit • Operating manual • Electrical: 220V 50Hz Single Phase <p><u>Specifications:</u></p> <ul style="list-style-type: none"> • Quaternary Gradient Pump <ul style="list-style-type: none"> ○ Operating principle: Dual-plunger pump, high-pressure gradient, low-pressure quaternary gradient ○ Flow range: 0.001ml/min - 10ml/min ○ Flow rate accuracy: $\leq \pm 1\%$ ○ Flow rate precision: $\leq \pm 0.06\%$ RSD ○ Maximum pressure: 11000 psi or better at up to 5ml/min ○ pH range: 1 to 14 ○ Line Voltage: 220V ○ Flow Control Monitoring: Automatic • Vacuum Degasser <ul style="list-style-type: none"> ○ Number of channel: 5 CHs ○ Maximum flow rate: 10ml/min per channel ○ Degassed flow line capacity: 350μL/line ○ Built in high efficiency, low volume, and vacuum degassing system with separate vacuum chambers for each solvent. <p><u>Column Oven</u></p> <ul style="list-style-type: none"> ○ Temperature range: Ambient - 10°C to 90°C. 			

- Temperature precision: $\pm 0.05^{\circ}\text{C}$
- Temperature accuracy: $\pm 0.5^{\circ}\text{C}$
- Column capacity: Minimum Three for 300mm Column or Five for 250mm Column
- Column switching: Automatic

Auto sampler

- Needle wash system as standard that uses fresh solvent with each injection.
- Sample capacity: 1.5ml x 160 or 2ml x 140
- Sample delivery Precision: $\leq 0.25\% \text{RSD}$ at $5\mu\text{L}$
- Injection Accuracy: $\pm 1\%$ at $5\mu\text{L}$
- Injector Linearity: ≥ 0.999
- Carry Over: $< 0.001\%$ with programmable needle wash Program
- Injection volume: $0.1\mu\text{L}$ - $2000\mu\text{L}$ with all necessary accessories.
- Sample Temp control: 4 to 40°C
- pH Range: 1 - 14

Photo Diode Array Detector:

- Slit Bandwidth: 1.5nm or better
- No. of PDA Channel: 1024.
- Wavelength: 190 - 800nm
- Optical Resolution: $\leq 1.5\text{nm}$
- Path-length: 10mm
- Low noise sensitivity = $< 5\mu\text{AU}$
- Drift : $\leq 0.5 \times 10^{-3} \text{AU/hr}$
- Wavelength Accuracy: $\pm 1\text{nm}$
- Flow Cell: Temperature Controlled.

Computer System:

Intel Core i5 14th generation 14.7GHz or above, 16GB RAM, 256 GB SSD, DVD Rom, Intel UHD Graphics , Ethernet LAN, USB Optical Mouse, USB Business Keyboard, 22" LED Monitor, Business series. Similar or Better Computer with Laser Printer Latest Model with Licensed Windows 10 upgradable to Windows 11 in the name of Central Drugs Laboratory

Chromatography Software:

Chromatography Software should help entire laboratory operates better and can be upgraded to network solution when required. Software should increase productivity and lower trainee cost.

Must have following features:

- Able to control equipment
- Must be able to create instrument processing methods, batch sequence, batch integration runs.
- Maintain compliance and security requirements.
- Improve information management, storage, and data management capabilities.
- Must Meet FDA CFR 21 Part 11 Compliance requirements.
- Upgradable to Network Solution
- Includes data integrity advance security and audit trail.
- Must be based on MS SQL Software.
- Must be able to support multi-vendor HPLC/UHPLC/UPLC systems.
- Software with built in relational database to allow search-ability, traceability & data filtering for all available information.
- The software must have a high security defined by user privilege and provide audit trail & electronic signature capabilities.
- Should be running on Windows 10 and new upgrades.
- Primary system security should be provided by the CDS and not the operating system. Data stored in the database should not be accessible directly by user.
- Calibration: Internal and external standard calculation methods, calibration of groups of peaks and reference peaks method for better identification.
- License to be provided to integrate with existing Lab Solution CS Software.

Manufacturer Origin: USA, Japan and Europe.

NOTE: IQ /OQ to be performed by the suppliers, whereas PQ protocol and support should be provided by supplier.

Additional accessories required for each unit:

D2 Lamp For UV/ PDA detectors Qty. 01
Plunger Seals Qty 04,
Check Valve In and Out (Pair of 2) Qty. 01
Solvent Inlet Filter (06) for each HPLC system
Needle seal for auto injector Qty. 02
Peak nut Qty 16

TRAINING :-

The supplier must provide training for the users of the instruments at site, after installation and commissioning.

SYSTEM WARRANTY AND TECHNICAL SUPPORT :-

The supplier must provide assurance of following requirement:

- Supplier must have a facility/setup in Karachi.
- Supplier must provide the operational training to end-user(s).
- Supplier must perform IQ/OQ of instrument by manufacturer certified engineer.
- Supplier must have a dedicated team, consists of sales, engineers and application engineers/chemist to provide efficient & effective support of the equipment during equipment breakdown.
- Engineer should certify directly from the manufacturer regarding instrument repair, maintenance calibration, and validation and must submit a copy of engineer's certificate(s).
- The supplier must demonstrate that it has a proven appropriate set-up and

<p>capability to provide after-sales service efficiently and effectively.</p> <ul style="list-style-type: none"> • The supplier should have the facility of a similar system to that the proposed tender to provide assurance for back up support for testing must be available at the supplier's facility during equipment breakdown. • Supplier must provide warranty and comprehensive support including preventive maintenance, corrective maintenance, qualification and calibration of equipment for a period of 2 years with parts and another 3 years without parts at no cost to CDL. • The warranty shall commence only upon successful completion of the Acceptance Test or commissioning. 		
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Assistant Director-V (MIS)
 Thursday, 16 January, 2025, 11:53:4 AM
 Deputy Director (Procurement, Projects & Logistics)
 Monday, 13 January, 2025, 1:11:15 PM
 Ijaz Mustafa
 Assistant Director-V (MIS)
 Thursday, 16 January, 2025, 11:53:4 AM

Name	Microbalance	Quantity	02
Required Specifications		Quoted Specification	Complies/ Not Complies
<p><u>Technical Specification :-</u></p> <p>Minimum Weighing Capacity (USP):- 0.82mg</p> <p>Minimum Weighing Capacity (U=1%, k=2):- 0.082mg</p> <p>Minimum Load:- 0.1mg</p> <p>Readability:- 1µg</p> <p>Linearity:- ± 3 µg</p> <p>Pan size :- Ø 90x90 mm approx</p> <p>Eccentric Load deviation 3 µg</p> <p>Printer :- Dot Matrix.</p> <p>Data Transfer: PC;</p> <p>Printer; USB stick</p> <p>Connectors: LAN, USB, R232, Wifi/Bluetooth</p> <p>Compliance: 21CFR part 11, User Management with password, GMP, GLP, Data integrity, Date and Time stamped</p> <p>Anti-Static Ionizer: Built In or as an accessory</p> <p>Originally Made in USA / Europe/ Japan / Australia</p> <p><u>OTHERS :-</u></p> <p>Instrument(s) must be GLP/GMP compliant A declaration of Conformity certificate must be provided.</p> <p><u>TRAINING :-</u></p> <p>The supplier must provide training for the users of the instruments at site, after installation and commissioning.</p> <p><u>SYSTEM WARRANTY AND TECHNICAL SUPPORT :-</u></p> <p>The supplier must provide assurance of following requirement:</p> <ol style="list-style-type: none"> Supplier must have a facility/setup in Karachi. 			

<ol style="list-style-type: none"> 2. Supplier must provide the operational training to end-user(s). 3. Supplier must perform IQ/OQ of instrument by manufacturer certified engineer. 4. Supplier must have a dedicated team, consists of sales, engineers and application engineers/chemist to provide efficient & effective support of the equipment during equipment breakdown. 5. Engineer should certify directly from the manufacturer regarding instrument repair, maintenance calibration, and validation and must submit a copy of engineer's certificate(s). 6. The supplier must demonstrate that it has a proven appropriate set-up and capability to provide after-sales service efficiently and effectively. 7. The supplier should have the facility of a similar system to that the proposed tender to provide assurance for back up support for testing must be available at the supplier's facility during equipment breakdown. 8. Supplier must provide warranty and comprehensive support including preventive maintenance, corrective maintenance, qualification and calibration of equipment for a period of 2 years with parts and another 3 years without parts at no cost to CDL. 9. The warranty shall commence only upon successful completion of the Acceptance Test or commissioning. 		
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Name	Next Generation Impactor + Dose Uniformity Sampling Apparatus	Quantity	01
Required Specifications (Following or better)		Quoted Specification	Complies/ Not Complies
<p>Next Generation Impactor (for both MDI and DPI) Stages: 7 Flow rate range: 15-100L/min Particle size range: 0.24 – 14.1 micron (depending upon flow rate) Material of construction: Anodized Aluminium or 316 Stainless Steel</p> <p>NGI Induction Port with mouthpiece adapter NGI Presparator Set of Silicon Rinsing cap for induction port Set of Silicon Rinsing cap for preseparator Filter holder Sample Collection Cups for APSD NGI Cup Rack NGI Wash Rack</p> <p>Vacuum Pump Flow Controller Flow Rate Sensor Mouthpiece Adapter (for 24 types of inhalers) Flow Time Verification Kit Inline Adapter Kit Pack of 12 Inlet Filters Flow Meter Adapter for Ind Port/DUSA/WSC2/Filter Holder/Child Alberta Throat</p> <p>Custom Mouthpiece Adapter for Induction Port, DUSA, WSC2, Filter Holder and Child Alberta Idealised Throat</p> <p>Tooling Charge for Custom Mouthpiece Adapter Inhaler Testing Qualification Kit</p> <p>DUSA for MDI Sample Collection Tubes (10 Nos) Rinsing Caps (20 Nos)</p> <p>DUSA for DPI Sample Collection Tubes (10 Nos) Rinsing Caps (20 No)</p>			

Inhaler testing workstation
Stand for 10 Collection Tubes
ITW Holder for DPI DUSA
ITW Holder for MDI/DPI Filter Support Cap
ITW Holder for FRS

Advanced Report Generator Software.

Indispensable help in APSD tests using ACI, NG or Impingers.

Data entry, User-friendly interface for inputting test data, including equipment types and performance metrics

Automatic validation checks to ensure data integrity and compliance with standard testing protocols FDA 21 CFR (USP, Ph. Eur.)

Pre-defined report templates that can be customized to fit specific research needs and formatting requirements

Automatic Calculations: built-in formulas to calculate metrics such as:

Emitted dose (ED), Metered dose (MD), MMAD (Mass Median Aerodynamic Diameter), GSD (Geometric Standard Deviation), FPD (Fine Particle Dose), FPF (Fine Particle Fraction), Recovery, Cumulative percentages

Ability to export reports in various formats (PDF)
Visualization tools for creating graphs and charts to illustrate test results.

TRAINING: -

The supplier must provide training for the users of the instruments at site, after installation and commissioning.

SYSTEM WARRANTY AND TECHNICAL

SUPPORT: -

The supplier must provide assurance of following requirement:

1. Supplier must have a facility/setup in Karachi.
2. Supplier must provide the operational training to end-user(s).
3. Supplier must perform IQ/OQ of instrument by manufacturer certified engineer.
4. Supplier must have a dedicated team, consists of sales, engineers and application

<p>engineers/chemist to provide efficient & effective support of the equipment during equipment breakdown.</p> <ol style="list-style-type: none"> 5. Engineer should certify directly from the manufacturer regarding instrument repair, maintenance calibration, and validation and must submit a copy of engineer's certificate(s). 6. The supplier must demonstrate that it has a proven appropriate set-up and capability to provide after-sales service efficiently and effectively. 7. The supplier should have the facility of a similar system to that the proposed tender to provide assurance for back up support for testing must be available at the supplier's facility during equipment breakdown. 8. Supplier must provide warranty and comprehensive support including preventive maintenance, corrective maintenance, qualification and calibration of equipment for a period of 2 years with parts and another 3 years without parts at no cost to CDL. 9. The warranty shall commence only upon successful completion of the Acceptance Test or commissioning. 		
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Deputy Director (Procurement, Projects & Logistics)
 Hamza Zubaid Malik
 Assistant Director-V (MIS)
 Thursday, 16 January, 2025, 1:11:15 PM
 Thursday, 16 January, 2025, 11:53:4 AM
 Thursday, 16 January, 2025, 11:53:4 AM

Name	Thermal Gravimetric Analyzer	Quantity	01
Required Specifications (Following or better)	Quoted Specification	Complies/ Not Complies	
Temperature range Ambient to 1100°C Measurable range (μV) ± 1 to $\pm 1000\mu\text{V}$ Measurable range (mg) $\pm 500\text{mg}$ Balance principle Parallel guide differential top pan type Weight readability 0.1 μg Thermocouple of platinum plus 10% platinum/rhodium (plug-in type) Detector Sample quantity 1g Max. in gross weight Atmosphere Air and inert gas Raise/Lower furnace The furnace can be raise or lower with the key on the front panel (only when the autosampler is not in operation). Interrupt measurement Possible Analysis conditions Heating rate Setting at 0.1°C/min or 0.1°C/hour increment/decrement, maximum heating rate 50.0°C/min Atmosphere Air or inert gas (nitrogen, helium, or argon) Static or 30 to 50 ml/min Sample form Substance which is solid or liquid at ambient temperature (A void measuring a sample possibly evolving toxic exhaust or generating corrosive degradation products) Cleaning condition "Cleaning" gas Clean air supply at the rate of 200 to 300 ml/min required in order to bake and clean up the furnace/detector. On/off control with the built-in solenoid valve. Flow Controller To control the flow rate of atmosphere gases (of two channels)			

	<p>The gas ON/OFF control must be performed according to a temperature program, the atmosphere should be automatically changed during a measurement.</p>	
<p>Sample Pans</p>	<p>Platinum pan, ø6 × 2.5 Platinum lid, ø6 Al (Aluminium) crimp pans + lids, ø6 × 1.5 (50/set)</p>	
<p>Air Compressor</p>	<p>Oil Less Air Compressor capable of delivering Clean air supply at the rate of 200 to 300 ml/min required in order to bake and clean up the furnace/detector. On/off control with the built-in solenoid valve.</p>	
<p>Inert Gas</p>	<p>Nitrogen Gas cylinder with Regulator, Staibess Steel gas supply pipe</p>	
<p><u>Computer System:</u></p>		
<p>Intel Core i5 14th generation 14.7GHz or above, 16GB RAM, 256 GB SSD, DVD Rom, Intel UHD Graphics, Ethernet LAN, USB Optical Mouse, USB Business Keyboard, 22" LED Monitor, Business series. Similar or Better Computer with Laser Printer Latest Model with Licensed Windows 10 upgradable to Windows 11 in the name of Central Drugs Laboratory</p>		
<p><u>Software:</u></p>		
<p>Sample number:</p>	<p>Sample numbers can be specified</p>	
<p>Measuring conditions:</p>	<p>Before measurement is started, a s temperature program, and comme sample number.</p>	
<p>File name:</p>	<p>A file name can be specified for e Automatic naming function is pro</p>	
<p>Number of finish lines:</p>	<p>1 to 200 lines (Any number can be</p>	
<p>Display items:</p>	<p>Sample number, State, File name, temperature, Lot number, Comme Enable/Disable output.</p>	
<p>Sample insert/remove Temperature:</p>	<p>The temperature at which a sampl be specified.</p>	
<p>Report format:</p>	<p>Saved in the same report format a</p>	
<p>Automatic analysis:</p>	<p>Automatic analysis is performed f according to the analysing conditi Automatic analysis can be perform parameters including Temp./time Peak analysis, Baseline transition transition analysis, Heat analysis a</p>	

Automatic manipulation:	Automatic manipulation is performed for a measurement data file, according to the manipulating conditions used for the template file. Smoothing, Heat correction, Derivative, and Temperature correction can be performed.	
Automatic output:	Output to a printer and ASCII file is possible. The measurement program including file information and temperature program, analysis results, data history and measurement data are converted into strings and saved in an ASCII file.	
Data Reference	Files stored on the server PC are referred to using existing LabSolutions CS data manager.	
User management	The user management function should be used of existing LabSolutions CS client server software. Policies specific to thermal analysis are specified and managed using the system control function of existing LabSolutions CS client server software.	
Backing up data	Each project is backed up using the backup function of existing LabSolutions CS client server software.	
Compliance	21 CFR part 11, Data Integrity, ER/ES, GMP, GLP	
<p>Manufacturer Origin: USA, Japan and Europe. NOTE: IQ /OQ to be performed by the suppliers, whereas PQ protocol and support should be provided by supplier.</p>		
<p><u>TRAINING :-</u> The supplier must provide training for the users of the instruments at site, after installation and commissioning.</p>		
<p><u>SYSTEM WARRANTY AND TECHNICAL SUPPORT :-</u> The supplier must provide assurance of following requirement:</p>		
<ol style="list-style-type: none"> 1. Supplier must have a facility/setup in Karachi. 2. Supplier must provide the operational training to end-user(s). 3. Supplier must perform IQ/OQ of instrument by manufacturer certified engineer. 4. Supplier must have a dedicated team, consists of sales, engineers and application engineers/chemist to provide efficient & effective support of the equipment during equipment breakdown. 5. Engineer should certify directly from the manufacturer regarding instrument repair, maintenance calibration, and validation and must submit a copy of engineer's certificate(s). 6. The supplier must demonstrate that it has a proven appropriate set-up and capability to provide after-sales service efficiently and effectively. 		

<p>7. The supplier should have the facility of a similar system to that the proposed tender to provide assurance for back up support for testing must be available at the supplier's facility during equipment breakdown.</p> <p>8. Supplier must provide warranty and comprehensive support including preventive maintenance, corrective maintenance, qualification and calibration of equipment for a period of 2 years with parts and another 3 years without parts at no cost to CDL.</p> <p>The warranty shall commence only upon successful completion of the Acceptance Test or commissioning.</p>		
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Annex-V

Name	Oven	Quantity	01
Required Specifications (Following or better)	Quoted Specification	Complies/ Not Complies	
<p>Capacity: - 1.02 cu. ft. (29 Litre).</p> <p>Temperature range: - 5°C above ambient up to +200°C.</p> <ul style="list-style-type: none"> ➤ Fuzzy-supported Multi-Level-Controlling microprocessor controller adapting its performance to the volume for each thermo shelf ➤ Temperature measured through 4-wire Pt100 sensor individually for each thermo shelf ➤ Integrated timer for tempering and pressure (vacuum) profiles ➤ Digital electronic pressure control through solenoid valves ➤ Adjustment range from 10 mbar to 1100 mbar - digital (LED) ➤ Setting accuracy 1 mbar ➤ Rapid air intake for door opening (door is blocked under vacuum) programme 			

<p style="text-align: center;">reactivation at stored values</p> <ul style="list-style-type: none"> ➤ Vacuum drying process (vacuum cycles) is continued after power failure ➤ Multiple Over temperature Protection ➤ 220 V, 50/60 Hz, <p>Printer: - Chart Recorder OR Data Logger. Interfaces :- RS-232C (9-pin connector) / USB port / Ethernet. Originally Made in USA / UK / Japan / Germany / Switzerland or France.</p> <p><u>TRAINING :-</u> The supplier must provide training for the users of the instruments at site, after installation and commissioning.</p> <p><u>SYSTEM WARRANTY AND TECHNICAL SUPPORT :-</u> The supplier must provide assurance of following requirement:</p> <ol style="list-style-type: none"> 1. Supplier must have a facility/setup in Karachi. 2. Supplier must provide the operational training to end-user(s). 3. Supplier must perform IQ/OQ of instrument by manufacturer certified engineer. 4. Supplier must have a dedicated team, consists of sales, engineers and application engineers/chemist to provide efficient & effective support of the equipment during equipment breakdown. 5. Engineer should certify directly from the manufacturer regarding instrument repair, maintenance calibration, and validation and must submit a copy of engineer's certificate(s). 6. The supplier must demonstrate that it has a proven appropriate set-up and capability to provide after-sales service efficiently and effectively. 		
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<p>7. The supplier should have the facility of a similar system to that the proposed tender to provide assurance for back up support for testing must be available at the supplier's facility during equipment breakdown.</p> <p>8. Supplier must provide warranty and comprehensive support including preventive maintenance, corrective maintenance, qualification and calibration of equipment for a period of 2 years with parts and another 3 years without parts at no cost to CDL.</p> <p>9. The warranty shall commence only upon successful completion of the Acceptance Test or commissioning.</p>		
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Ijaz Mustafa
 Assistant Director-V (MIS)
 Thursday, 16 January, 2025, 11:53:4 AM

Hamza Zubaid Malik
 Deputy Director (Procurement, Projects & Logistics)
 Monday, 13 January, 2025, 1:11:15 PM

Ijaz Mustafa
 Assistant Director-V (MIS)
 Thursday, 16 January, 2025, 11:53:4 AM

Annex-VI

Name	Hot Incubator	Quantity	01
Required Specifications (Following or better)	Quoted Specification	Complies/ Not Complies	
<p><u>Specification :-</u></p> <p>Capacity :- 400Litre</p> <p>Temperature range :- Ambient +5 °C to 80 °C.</p> <p>Interior Stainless Steel</p> <p>Recovery Time 30 to 37: 10mins</p> <p>Power :- 220 Volts.</p> <p>Printer :- Printer or Data Logger for Humidity /Temp.</p> <p>Interfaces :- RS-232C (9-pin connector) I/O port / USB port / Ethernet.</p> <p>Originally Made in USA / UK / Japan / Germany / Switzerland or France</p> <p><u>OTHERS :-</u></p> <p>Instrument(s) must be GLP/GMP compliant A declaration of Conformity certificate must be provided.</p> <p><u>TRAINING :-</u></p> <p>The supplier must provide training for the users of the instruments at site, after installation and commissioning.</p> <p><u>SYSTEM WARRANTY AND TECHNICAL SUPPORT :-</u></p> <p>The supplier must provide assurance of following requirement:</p> <ol style="list-style-type: none"> 1. Supplier must have a facility/setup in Karachi. 2. Supplier must provide the operational training to end-user(s). 3. Supplier must perform IQ/OQ of instrument by manufacturer certified engineer. 4. Supplier must have a dedicated team, consists of sales, engineers and application engineers/chemist to provide efficient & effective support of the equipment during equipment breakdown. 5. Engineer should certify directly from the manufacturer regarding instrument repair, maintenance calibration, and validation and must submit a copy of engineer's certificate(s). 6. The supplier must demonstrate that it has a proven appropriate set-up and capability to provide after-sales service efficiently and effectively. 7. The supplier should have the facility of a similar system to that the proposed tender to provide assurance for back up support for testing must be available at the supplier's facility during equipment breakdown. 8. Supplier must provide warranty and comprehensive support including preventive maintenance, corrective maintenance, qualification and calibration of equipment for a period of 2 years with parts and another 3 years without parts at no cost to CDL. 9. The warranty shall commence only upon successful completion of the Acceptance Test or commissioning.. 			

Annex-VII

Name	pH Meter	Quantity	01
Required Specifications (Following or better)	Quoted Specification	Complies/ Not Complies	
<p>pH Range : -2.0 to 20.000</p> <p>pH Accuracy: ±0.002</p> <p>pH Resolution : 0.001</p> <p>mV Range : ± 2000.0</p> <p>mV Accuracy: ± 0.1</p> <p>mV Resolution: 0.1</p> <p>Temperature Range: -30°C to +130.0°C</p> <p>Temperature Accuracy: ± 0.1</p> <p>Temperature Resolution: 0.1</p> <p>Automatic Temperature Compensation</p> <p>Electrode: Standard (3 Nos.)</p> <p>Electrode Stand with Base: 01</p> <p>Calibration Standard solution (NIST traceable) pH 4, 7, 10 : Qty min. 100 ml each</p> <p>Memory: 250 analyses (20,000 data points)</p> <p>Data Transfer: PC; Printer; USB stick</p> <p>Connectors: LAN, USB, R232</p> <p>Compliance: 21CFR part 11, User Management with password, GMP, GLP, Data integrity, Date and Time stamped</p> <p>Printer: Dot Matrix</p> <p>Display: High Resolution Touchscreen</p> <p>Calibration: Capable of minimum 3 point calibration</p> <p>Originally Made in USA / Europe / Japan / Australia</p> <p>TRAINING :- The supplier must provide training for the users of the instruments at site, after installation and commissioning.</p> <p>SYSTEM WARRANTY AND TECHNICAL SUPPORT :- The supplier must provide assurance of following requirement:</p> <ol style="list-style-type: none"> 1. Supplier must have a facility/setup in Karachi. 2. Supplier must provide the operational training to end-user(s). 3. Supplier must perform IQ/OQ of instrument by manufacturer certified engineer. 4. Supplier must have a dedicated team, consists of sales, engineers and application engineers/chemist to provide efficient & effective support of the equipment during equipment breakdown. 5. Engineer should certify directly from the manufacturer regarding instrument repair, maintenance calibration, and validation and must submit a copy of engineer's certificate(s). 6. The supplier must demonstrate that it has a proven appropriate set-up and capability to provide after-sales service efficiently and effectively. 			

<p>7. The supplier should have the facility of a similar system to that the proposed tender to provide assurance for back up support for testing must be available at the supplier's facility during equipment breakdown.</p>		
<p>8. Supplier must provide warranty and comprehensive support including preventive maintenance, corrective maintenance, qualification and calibration of equipment for a period of 2 years with parts and another 3 years without parts at no cost to CDL.</p>		
<p>9. The warranty shall commence only upon successful completion of the Acceptance Test or commissioning..</p>		

Ijaz Mustafa
 Assistant Director-V (MIS)
 Thursday, 16 January, 2025, 11:53:4 AM

Hamza Zubaid Malik
 Deputy Director (Procurement, Projects & Logistics)
 Monday, 13 January, 2025, 1:11:15 PM

Ijaz Mustafa
 Assistant Director-V (MIS)
 Thursday, 16 January, 2025, 11:53:4 AM

Annex-VIII

Name	Laboratory Refrigerator	Quantity	01
Required Specifications (Following or better)	Quoted Specification	Complies/ Not Complies	
<p>Temperature control : 02°- 14°C Freezer Temperature : (-) 20 °C Temperature display : Digital (1° C increments) Capacity : 12.0 cu. ft. /340 Litre (Refrigerator) 2.90 cu. Ft. / 82 Litre (Freezing Compartment from -20° to -30°C) Temperature control : Electronic thermostat, alarm & memory Electric power : Single Phase / 220 V / 50Hz Doors : Glass Doors with heat reflective film Refrigerant : HFC Defrosting System : Cyclical defrosting & evaporator temp. detection System Interface : RS-232C (9-pin connector) I/O port / USB port Printer : Chart Recorder and Data Logger Originally Made in USA / Europe / Japan <u>OTHERS :-</u> Instrument(s) must be GLP/GMP compliant A declaration of Conformity certificate must be provided. <u>TRAINING :-</u> The supplier must provide training for the users of the instruments at site, after installation and commissioning. <u>SYSTEM WARRANTY AND TECHNICAL SUPPORT :-</u> The supplier must provide assurance of following requirement:</p> <ol style="list-style-type: none"> 1. Supplier must have a facility/setup in a local city where instrument will installed. 2. Supplier must have a dedicated team, consists of sales, engineers and application engineers/chemist to provide efficient & effective support of the equipment during equipment breakdown. 3. Engineer should certify directly from the manufacturer regarding instrument repair, maintenance calibration, and validation and must submit a copy of engineer's certificate(s). 4. The supplier must demonstrate that it has a proven appropriate set-up and capability to provide after-sales service efficiently and effectively. 5. The supplier should have the facility of a similar system to that the proposed tender to provide assurance for back up support for testing must be available at the supplier's facility during equipment breakdown. 6. Supplier must provide warranty and comprehensive support of equipment for a period of 12 months without extra cost. 7. Supplier must provide services during warranty period, immediate response on service calls, and bear the cost of Labor and Service Parts used for repairs. 8. The warranty shall commence only upon successful completion of the Acceptance Test or commissioning. 			

**LIST OF LABORATORY EQUIPMENT
TENDER ITEMS FOR FY 2024-25**

- Note:** i. All bidders are advised in their own interest to quote the price according to the required specification of items, the clarification regarding specification can be sought at the time of obtaining tender documents. After opening of bids and issuance of award letter, the firm will be bound to provide the items with required specification without any change in price.
- ii. Only specified items mentioned in list, not any other.
- iii. Quoted Rates must be legible and no cutting/overwriting allowed.
- iv. The undertaking at the end of financial proposal must be signed and stamped.

Annex-IX

[Letterhead of the Firm Containing Address, Phone Numbers]

SCHEDULE OF REQUIREMENTS
“Supply of Laboratory Equipment”

S. No	Equipment	Quantity	Price per Unit	GST Amount	Unit Price with GST	Total Price
01	HPLC with PDA Detector	01				
02	Microbalance	02				
03	Next Generation Impactor + Dose Uniformity Sampling Apparatus	01				
04	Thermal Gravimetric Analyzer	01				
05	Oven	01				
06	Hot Incubator	01				
07	pH meter with printers	02				
08	Laboratory Refrigerator	01				
Total Amount (Figures) PKR						
Total Amount in Words						

Undertaking: It is certified that the rate quoted is according to the specification of all items. Further information furnished here in and the documents submitted; is true and correct and nothing has been concealed or tampered with. We have gone through all the conditions of tender and is liable to any punitive action for furnishing false information / documents.

Dated this _____ day of January 2025

Signature

(Seal)

In the capacity of

Duly authorized to sign bids for and on behalf of: