



## CORRIGENDUM

### Procurement of Laboratory Equipment's and Allied Accessories 2023

1. It is with reference to the issued tender notice no. **PID (P) 179/24** published in Daily Ausaf and Daily Lead Pakistan on **23-06-2024** and uploaded at [www.ppra.org.pk](http://www.ppra.org.pk), [www.kppra.gov.pk](http://www.kppra.gov.pk) [www.uoswabi.edu.pk](http://www.uoswabi.edu.pk) and [www.swabichamber.org.pk](http://www.swabichamber.org.pk).
2. In accordance to the PPRA and KPPRA rules the “**Pre Bid**” meeting will be scheduled on **09-07-2024** at **1130 a.m.** The Bids will be open on **18-07-2024** at **11:30 a.m.**, the meetings will be held in Swabi Chamber of Commerce and Industry.

**Muhammad Babar Hamayun**

**President**

**Swabi Chamber of Commerce & Industry**

1-B near EZDMC Office, Gadoon Amazai Industrial Estate -23454, District Swabi

Phone: (0938) 270396 | Email: [scii.swabi@swabichamber.org.pk](mailto:scii.swabi@swabichamber.org.pk)

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## **TENDER DOCUMENT**

**FOR**

**“Procurement of Laboratory Equipment’s and allied Accessories 2023”**

**For Swabi Chamber of Commerce & Industry, District Swabi**

**Swabi Chamber of Commerce & Industry**

1-B near EZDMC Office, Gadoon Amazai Industrial Estate -23454, District Swabi

Phone: (0938) 270396 | Email: [scci.swabi@swabichamber.org.pk](mailto:scci.swabi@swabichamber.org.pk)

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## **TENDER NOTICE NO**

### **Procurement of Laboratory Equipment's and Allied Accessories 2023**

Swabi Chamber of Commerce & Industry, invites sealed bids from the original manufacturers / authorized distributors / suppliers, registered with Income Tax and Sales Tax Departments for **“Procurement of Laboratory Equipment's and Accessories 2023”** as per details and specification given in “Bill Of Quantity”.

1. Bidding documents, containing detailed terms and conditions along with the list of items and equipments required are available for the interested bidders at the address given below upon the payment of Rs.1000/- (Non-Refundable) through pay order in favor of joint **Account Titled “Trade and Development Authority of Pakistan and Swabi Chamber of Commerce and Industry” Account No. “PK36NBPA0406004172942988”** National Bank of Pakistan main branch Swabi for this project. Bidding document may also be downloaded from <http://swabichamber.org.pk/> and <https://www.uoswabi.edu.pk/>.
2. Bid Security equivalent to 2% of total bid value in the form of Pay Order/ Demand Draft/ Banker's Cheque in favor of Account title “Trade Development Authority of Pakistan and Swabi Chamber of Commerce and industry” shall be submitted with the sealed proposal. Bids without the Bid Security will be non-responsive.
3. The sealed bids, prepared in accordance with the instructions in the bidding documents, and complete in all respects must reach at the address given below within 15 day i.e. **July 09<sup>th</sup>, 2024** after publishing this advertisement in newspapers. The Bids will be opened the same day at 10:30 am. **This advertisement is also available on PPRA website at [www.ppra.org.pk](http://www.ppra.org.pk) and [www.kppra.gov.pk](http://www.kppra.gov.pk).**

**Muhammad Babar Hamayun**

**President**

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## 1. **BACKGROUND:-**

Swabi Chamber of Commerce & Industry, invites sealed bids from the original manufacturers / authorized distributors / suppliers, registered with Income Tax and Sales Tax Departments for “**Procurement of Laboratory Equipment’s and Allied Accessories 2023**” as per details and specification given in “Bill Of Quantity”.

## 2. **SCOPE OF SERVICES**

The successful bidder (s) will be required to provide the items and equipments along with accessories as per specifications and requirement detailed in BOQs at the premises of University of Swabi (main campus), located at Anbaar, District Swabi, Khyber Pakhtunkhwa.

## 3. **INSTRUCTIONS TO THE BIDDER:-**

The bids may be submitted along with the following documents:

1. The bidder (s) will submit the bids along with tender application form as per **Annex-I**.
2. The bidder (s) will submit their profile containing name of firm, its status, address, telephone number (s), fax number and other relevant information as per **Annex-II**.
3. The bids will be considered as non-responsive in case of non-completion or misdeclaration.
4. Bidders will furnish the information regarding experience of similar work over the last 5 years with major clients.
5. An affidavit to the effect that the firm is not blacklisted and is not in litigation with any organization / department, private or public may also be furnished.
6. Copy of STN & NTN Certificates may be enclosed with the bid.
7. The list of Clients both from public and private sectors may be attached.
8. Undertaking must be attached showing that the equipment/supplies quoted by the firm are imported through legal channel/(s) and no grey channel/ smuggled product / international warranty/ refurbished equipment is quoted.
9. Undertaking on company letterhead duly attested, that the items supplied will be in **Original Equipment Manufacturing** “OEM” packing and no tempering has been made.
10. Participating firm must mention online verifiable part numbers of offered products.
11. Participating firm must provide manufacturer’s authorization letter from principal in the name of President Chamber of Commerce and Industry. The Swabi Chamber will verify the genuineness of the authorization letter from the principal.

12. **“Bill of Quantity”** duly filled and attested may be attached.
13. Swabi Chamber of Commerce and Industry reserves the right to accept or reject any bid or to annul the bidding process and reject all bids at any time prior to Contract award as per PPRA rules, without thereby incurring any liability to the Bidders.
14. The bid will be evaluated on quality cum cost basis (70:30).
15. The Bidders are hereby informed that the Swabi Chamber of Commerce & Industry shall deduct Income Tax & Sales Tax at the rate prescribed under the tax laws of Pakistan, from all payments of successful Bidder.
16. The price quoted should be in Pak Rupees inclusive of all applicable taxes. The price quoted in this tender will be treated as final and must be valid for one hundred & twenty (120) days.
17. Rates should be quoted on the FCS basis (Free delivery at Consignee’s Store).
18. In case of supply of sub-standard / expired items / goods, the performance guarantee along with items supplied will be confiscated.

#### 4. **Procedure of Competitive Bidding**

Single Stage – Two envelope procedures, as per rule no. 36 (b) of Public Procurement Rules, 2004, will be followed as per following:

1. The bid shall comprise a single package containing two separate envelopes. Each envelope shall contain separately the financial proposal and the technical proposal.
2. The bid will be evaluated item wise. And single quote must be submitted for each item. In case of optional quotes, the bid will be considered non responsive.
3. The envelopes shall be marked as **“FINANCIAL PROPOSAL”** and **“TECHNICAL PROPOSAL”** in bold and legible letters to avoid confusion;
4. Initially, only the envelope marked **“TECHNICAL PROPOSAL”** shall be opened;
5. The envelope marked as **“FINANCIAL PROPOSAL”** shall be retained in the custody of the Swabi Chamber of Commerce & Industry;
6. Swabi Chamber of Commerce and Industry 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.
7. During the technical evaluation, no amendments in the technical proposal shall be permitted;
8. The financial proposals of bids, who qualify technical evaluation, shall be opened publicly at a time, date and venue announced and communicated to the bidders in advance;

9. The bid will be evaluated on quality cum cost basis (70:30).

**5. Submission and opening of Bids**

Bidding Document duly filled and complete in all respect along with all the requisite document and information can be submitted within 15days i.e. **July 09<sup>th</sup>, 2024** after publishing of this advertisement in newspapers. The bids will be opened on the same date at 10.30 am on the address given in the tender notice as per Rule No. 28 (2) of PPRA 2004.

**6. Bid Security**

All the Bidders are required to submit 2% bid amount of the actual bid in form of Pay Order/ Demand Draft/ Banker's Cheque and in favor of joint **Account Title** "Trade and Development Authority of Pakistan and Swabi Chamber of Commerce and Industry" **Account No.** "PK36NBPA0406004172942988" with the sealed proposal as per Rule No. 25, Public Procurement Rules, 2004. Bids without bid security will be rejected.

**7. Evaluation Procedure**

The bids will be evaluated on the basis of criteria, quantity and specifications mentioned in BOQs against each items as per technical evaluation criteria stipulated herein the bidding document. The unit price must be quoted in Pakistan Rupees and should be inclusive of all the taxes applicable.

**8. Delivery of items:**

The successful bidder will be liable to supply the requisite items within ninety days (90) from the issuance of date of purchase order.

**9. Performance Guarantee**

The Successful bidders will be required to furnish a performance guarantee of 10% of contract amount. The performance guarantee will be confiscated if the successful bidder (s) fails to provide the goods/ items as per BOQs and timelines. The successful bidder (s) will provide one (01) Year service repair and maintenance warranty for the supplied items/machinery.

**10. Payment Schedule**

The successful bidder (s) will be required to supply the items for which the work order has been issued as per rates and specification of quotes. After acceptance of the goods/items by the Swabi Chamber of Commerce and Industry and issuance of Work Completion Certificate/ Delivery

Challan, the supplier can process his case for payments. The supplier would submit his bill containing the details about Invoice number, date, list of items supplied, rates per unit inclusive of GST/any applicable taxes and total payment due. The payment will be made on actual basis after successful completion of work/ supply of items as assigned and the case regarding partial payment will not be accepted.

**A. Mandatory Requirement:**

1. Copy of STN & NTN Certificates may be enclosed with the bid.
2. Undertaking must be attached showing that the equipment/supplies quoted by the firm are imported through legal channel/(s) and no grey channel/ smuggled product / international warranty/ refurbished equipment is quoted.
3. Undertaking on company letterhead duly attested, that the items supplied will be in Original Equipment Manufacturing “OEM” packing and no tempering has been made.
4. Participating firm must mention online verifiable part numbers of offered products.
5. Participating firm must provide manufacturer’s authorization letter from principal in the name of President Chamber of Commerce and Industry. The Swabi Chamber will verify the genuineness of the authorization letter from the principal.
6. An affidavit to the effect that the firm is not blacklisted and is not in litigation with any organization / department, private or public may also be furnished.



## B. DETAILED TECHNICAL EVALUATION CRITERIA

S.no	Parameters against which technical evaluation shall be done	Scoring brackets	Total points allocated
<b>1</b>	<b><u>Profile</u></b>		
1.1	<u>Company Status:</u>		<u>15</u>
	Retailer of OEM	03	
	Dealer of OEM	07	
	Distributor of OEM	15	
1.2	<u>Similar type of Equipment Sold to Public Sector in last five (05) years.</u>		<u>15</u>
	≥ 2 ≤ 10	05	
	≥ 11 ≤ 20	10	
	≥ 21	15	
<b>2</b>	<b><u>Relevant Experience of Technical Team</u></b>		<b><u>15</u></b>
	≥ 2 ≤ 4-year experience	05	
	≥ 5 ≤ 8-year experience	10	
	≥ 10 years' experience.	15	
<b>3</b>	<b><u>Financial Strength of the Firm</u></b>		<b><u>10</u></b>
	Bank statements or tax returns showing cash flow between Rs. 20 Million and less than Rs. 30 million in the year last five (05) years.	5	
	Bank statements or tax returns showing cash flow of more than Rs. 30 million in the year last five (05) years.	10	
<b>4.</b>	<b><u>Technical Specification of Equipment Quoted</u></b>		<b><u>30</u></b>
	As per Specifications.	10	
	Above Specifications.	30	
<b>5.</b>	<b>Government / Public Sector Clients</b>		<b>15</b>
	≥ 1 ≤ 05	05	
	≥ 06 ≤ 20	10	
	≥ 21 ≤ 30	15	
		Total	<b>100</b>

(Passing marks / score = 50%)

**(To be separately sealed along with Bid Security)**

## FINANCIAL BID

Name of the Firm: \_\_\_\_\_

All prices must be inclusive of all applicable taxes (i.e. GST, Income Tax etc.)

S/No	Equipment	Quantity	Specifications
1	HPLC-PDA	Only One	<p><b>Pumping Unit (QUATERNARY GRADIENT)</b></p> <ul style="list-style-type: none"><li>• Solvent delivery method: Parallel-type double plunger</li><li>• Plunger capacity: 10 µL or above</li><li>• Maximum discharge pressure: 40 Mpa or above</li><li>• Pressure accuracy should be ±10% or 1.0 MPa, whichever is greater</li><li>• Flow-rate setting range: 0.0001 mL/min to 10.0000 mL/min</li><li>• Flow-rate accuracy: No more than ±1% or ±2 µL/min whichever is higher.</li><li>• Flow-rate precision: should be less than 0.06% RSD or 0.02 min SD, whichever is greater</li><li>• Typical pulsation up to 7 MPa</li><li>• Gradient type: QUATERNARY GRADIENT</li></ul> <p>• Mixing-concentration precision: 0.1% RSD max.</p> <p>• Constant-pressure solvent delivery: Supported</p> <p>• Safety measures: Liquid-leakage sensor, high-pressure/low-pressure limits</p> <p>• Capable of standalone operation using dedicated keypad</p> <p>• Operating temperature range: 4°C to 35°C</p> <p>• Warranty : 5 years of the HPLC (exclusive of accessories and consumables)</p> <p><b>Gradient mixer Specification:</b> Gradient mixer applicable for all mixing configurations. Variable mixing volume up to 2.6mL for analytical and semi-micro conditions.</p> <p><b><u>System Controller</u></b></p> <ul style="list-style-type: none"><li>• Function as a communication bus module with data buffering capability</li><li>• acquire up to 24 hours for one analysis at compatible sampling rate</li><li>• Allows the system to be controlled, monitored and maintained via Internet Web browser</li><li>• It come with Expert function in that if pressure falls</li></ul>

			<p>below specified value, the expert function will automatically purge the mobile phase</p> <ul style="list-style-type: none"> <li>• Store up to 20 analysis or above files with a total up to 400 steps of time programs</li> </ul> <p><b><u>Degassing Unit</u></b> Specification:</p> <ul style="list-style-type: none"> <li>• Membrane degassing unit with 5 or above flow lines</li> <li>• Maximum operating flow rate up to 10ml/min per flow line</li> <li>• It has a leak sensor as a safety feature, with drain pan.</li> <li>• Self-cleaning capability.</li> </ul> <p><b><u>Autosampler</u></b></p> <ul style="list-style-type: none"> <li>• Sample injection volume up to 2,000 uL</li> <li>• Zero sample loss during injection</li> <li>• Compatible number of samples to be processed automatically.</li> <li>• Needle aspiration speed should be variable up to 15µl/sec</li> <li>• Rinse aspiration rate should be variable up to 35µl/sec</li> <li>• Injection volume accuracy within 1% or above</li> <li>• The injection precision less than 0.3% of RSD value</li> <li>• Temperature settable range should be from 4 to 40°C.</li> <li>• It has a leak sensor, automatic rack and vial recognition</li> <li>• Have functions for maintenance and validation</li> <li>• Supply of at least 100 sample or more vials of 1.5ml capacity, complete with caps and septa</li> </ul> <p><b><u>Column Oven</u></b></p> <ul style="list-style-type: none"> <li>• Uniform temperature distribution and maintain constant temperature level</li> <li>• The temperature control range -10°C to 85°C settable at 1°C steps</li> <li>• Functions to prevent overheating and detect solvent leak</li> <li>• Have functions for maintenance and validation</li> <li>• Be able to handle multiple columns.</li> </ul>
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		<p><b>Photodiode Array Detector</b></p> <ul style="list-style-type: none"> <li>• The wavelength: range 190 nm to 800 nm</li> <li>• The photo-diode array detector should have 512 elements and an element resolution of 1.2nm/element must be available.</li> <li>• The detector must have 2 modes of operation using a variable slit: High Resolution mode at a slit width of 1.2nm and a High Sensitivity mode at a slit width of 8nm</li> <li>• A Conventional flow cell [12 µL volume, 10 mm cell path length, up to 12 MPa pressure] with temperature control</li> <li>• A Preparative flow cell 0.5mm for Preparative work.</li> <li>• The flow cells temperature: from ambient + 5°C to 50°C</li> <li>• Wavelength accuracy should be ±1 nm</li> <li>• A deuterium lamp [D2] and a Tungsten lamp [W] should be available as Light Source for UV and visible wavelengths respectively.</li> <li>• The selection of light source must be flexible to select D2, W or both [D2 +W] the lamps for analysis (3 modes)</li> <li>• Linearity should be as per ASTM method</li> <li>• It should have automatic wavelength accuracy check</li> <li>• Light sources and cell should be accessible from the front for easy maintenance.</li> </ul> <p><b><u>Refractive Index Detector:</u></b></p> <ul style="list-style-type: none"> <li>• Refractive index measurement range: 1 to 1.75 RIU</li> <li>• Range: A mode: 0.01 to 500 RIU.</li> <li>• P and L modes: 1 to 5000 RIU</li> <li>• Response: 0.05 to 10 sec, 10 steps</li> <li>• Polarity switching: Supported</li> <li>• Zero adjustment: Auto zero, auto optical zero, baseline shift functions</li> <li>• Maximum operating flow rate: up to 20 mL/min (150 mL/min with an option)</li> <li>• Temperature control of cell unit: 30 to 60°C (0.01°C steps)</li> <li>• Cell capacity: compatible</li> <li>• Material in contact with liquid: SUS316L, quartz, PTFE, Al2O3, ETFE or any other compatible.</li> </ul> <p><b><u>Auto Fraction Collector</u></b></p> <ul style="list-style-type: none"> <li>▪ Auto fraction collector compatible with the system</li> </ul>
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			<p>with tray having 150 or more positions for 3-5 ml tubes along with 200 tubes of 3-5 ml size of borosilicate glass with caps.</p> <p><b>COLUMNS:</b></p> <ol style="list-style-type: none"> <li>1. Two C18 5<math>\mu</math> x 4.6mm x 250mm with guard columns</li> <li>2. C8 5<math>\mu</math> x 4.6mm x 250mm with guard columns</li> <li>3. ODS Semi Preparative Column.</li> <li>4. Column for chiral compounds</li> </ol> <p><b>Software</b></p> <ul style="list-style-type: none"> <li>• The Software must be CFR 21 Compliance with provision to create up to 10 users</li> <li>• Electronic IQ OQ must be available with system.</li> <li>• Supported UPS must be quoted with up to one hour or more backup</li> <li>• Computer ( latest generation with up to date and complete specifications) and Laser printer (all in 1 printer) must be provided</li> <li>• Sample and Mobile Filtration Kit complete along with membrane filters of 0.45 <math>\mu</math> for Aqueous and non-aqueous solvents.</li> <li>• The supplier must perform the Complete IQ/OQ along with performance check as per manufacturer guide line against traceable standards and kits.</li> <li>• Ultrasonic bath with 5 L or more bath tub size</li> <li>• The instrument must be stable over a long period (24hours or more) of operation.</li> <li>• Accessories required must be the part of the system and the instrument must be ready to use.</li> <li>• Guarantee and warranty duration of the system and parts, and duration for free of cost after sale service must be mentioned.</li> <li>• All the relevant software (updated versions), Installation, Operation and Training must be provided by the supplier.</li> </ul> <p>Note:  <i>“Complete instruments along with all accessories and consumables required for installation and operation including voltage stabilizer as per standard for 220volts AC.”</i></p>
2	Freezer	Only One	220V (with minimum temp: -20 °C or below)
3	Gas Chromatography-	Only One	<p>The GC MS should have the following configuration:</p> <ul style="list-style-type: none"> <li>• Column Oven</li> </ul>

	<p>Mass Spectrometry (GC-MS)</p>		<ul style="list-style-type: none"> <li>• Split/Splitless Injector</li> <li>• MS Detector</li> <li>• FID Detector</li> <li>• Autosampler</li> <li>• Headspace Samplers</li> <li>• Data Management and Acquisition System</li> <li>• Software System</li> <li>• Accessories and standards</li> <li>• Training</li> </ul> <p><b>DETAIL SPECIFICATION:</b></p> <ul style="list-style-type: none"> <li>• Must be able to support 3 inlets, 4 detectors and 4 signals acquisition.</li> <li>• Must be able to install up to 6 electronic flow control units, providing control of up to 18 channels.</li> <li>• Must have advanced intelligent self-diagnosis feature. Electrical system, flow control systems and sensors must be fully supported by the operating software.</li> <li>• Must provide software that monitors GC counters and provides graphic display. Also must provide a real-time notification via indicator/advisor when a counter limit has been reached.</li> <li>• GC must have a full color touchscreen display with Graphical User Interface (GUI). One button access to service, maintenance and log from the keyboard must be available.</li> <li>• Retention time repeatability: &lt;0.008% (or equivalent to 0.0008min)</li> <li>• Area repeatability: &lt; 1% RSD</li> <li>• An extensive self-diagnosis function with safety features helps prevent unexpected instrument malfunctions. It enables a detailed diagnosis of the septum and insert usage status, whether there is a temperature sensor error, gas supply pressures, control status of each gas, ignition function, DC voltage, AD converter, and other factors.</li> <li>• Must be an Eco-GC with Gas Saver function that considerably reduces carrier gas consumption after injection or on stand-by.</li> <li>• Must have auto-shutdown feature that configures the GC to shutdown automatically after a batch run to conserve energy and gas</li> </ul>
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		<p><b>Column oven:</b></p> <ul style="list-style-type: none"> <li>• Operating temperature range: ambient + 2°C to 450°C</li> <li>• Oven temperature set point resolution must be 0.1°C</li> <li>• Oven must support 32 ramps / 33 plateaus and negative ramps must be allowed</li> <li>• Maximum achievable temperature ramp rate must be 120°C/min.</li> <li>• Oven temperature program set point resolution for the temperature ramp rate must be 0.01°C.</li> <li>• Maximum run time: 9999.99 minutes</li> <li>• Oven cools down from 450°C to 50°C must be less than 4 mins (under non-specific conditions), with built-in programmable oven cool-down rate available to cater for columns of different stability.</li> </ul> <p><b>Split/Splitless Injector:</b></p> <ul style="list-style-type: none"> <li>• Must be able to install up to 3 independently temperature-controlled injector units simultaneously</li> <li>• One-click opening of injector port by hand for easy maintenance</li> <li>• Must be suitable for all capillary columns.</li> <li>• Must be able to select carrier and makeup gas types: Helium, Hydrogen, Nitrogen or Argon.</li> <li>• Split ratio range: 0 to 9999.9 must be available to avoid column overload.</li> <li>• Maximum operating temperature up to 450°C.</li> <li>• Must consist of at least 3 pressure programming methods, including the constant linear velocity mode.</li> <li>• Number of pressure programming steps up to 7.</li> <li>• Pressure setting range : 0 to 1035 kPa (0 to 150 psi)</li> </ul> <p><b>DETECTORS:</b></p> <p><b>1.Mass analyzer and Detector</b></p> <p>The quadrupoles should be Metal quadrupole and have the pre-rods as filter to minimize the influence of contamination and thus increase the sensitivity</p> <p>The mass spectrometer must have Electron Ionization (EI) modes supplied as standard. Positive Chemical Ionization (PCI) and Negative Chemical Ionization (NCI) should be available as options.</p> <p>It should have a mass range of 10 to 1080 amu or better</p>
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		<p>with unit mass resolution over the entire mass range.</p> <p>It must be able to perform calibration manually as well as auto-tune at m/z 1066 [Tris(perfluoro nonyl)-S-triazine), molecular weight of 1485] to obtain accurate mass spectrum for high molecular weight compounds such as halogenated and derivatized compounds.</p> <p>The scanning speed capability should be 20,000 amu/sec (single scan) or better.</p> <p>The mass spectrometer should have stability as per standard.</p> <p>The ion source and transfer line must be independently heated over a user-selectable temperature range:  Ion Source: 140 to 350°C  Transfer Line: 50 to 350°C</p> <p>The ion source must be accessible from the front for ease of maintenance without the need to remove the top cover.</p> <p>The mass spectrometer must have a standard dynamic range.</p> <p>It should have high performance synchronous SIM/Scan with automated SIM set up that can convert a full scan method to a SIM or SIM/Scan method. The software must automatically configure the number of SIM group, SIM cycles across the peak and the ions added to each group.</p> <p>Software must have automatic SIM table creation function included to create SIM window base on elution time.</p> <p>The system should be able to automatically set up a SIM/Scan method from an injected standard.</p> <p>It should have a SIM capability of up to 64 groups of masses with 128 masses per group may be time programmed.</p> <p>The mass spectrometer should employ a unique over-drive lens to minimize random noise enhancing the Signal-to-Noise.</p> <p>EI scan sensitivity: Signal-to-noise (S/N) &gt; 2000 at m/z</p>
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		<p>272 for 1 pg octafluoronaphthalene (OFN) in EI scan</p> <p><b>2. Flame Ionization Detector (FID)</b>  The detector should be capable of detection of trace amount of compounds with sensitivity should be less than 1.2pgC/s.</p> <p>Temperature range of up to 450°C</p> <p>Dynamic range should be up to 10<sup>7</sup>.</p> <p>Able to control up to 3 channels of gas, i.e. H<sub>2</sub>, make-up and air (with electronic ON/OFF). The control range are to be for air: 0 – 1000mL/min, H<sub>2</sub>: 0 – 100mL/min, and make-up gas (N<sub>2</sub> or He): 0 – 1000mL/min.</p> <p>The flow has to be stable against temperature coefficient within 0.2%/°C change.</p> <p>At least have an acquisition time of 2ms (500Hz).  Must provide fast flame out detection and efficient automatic re-ignition.</p> <p><b>Autosampler</b>  Sample injection system with a 6-sampler rack as standard, and can easily configure to accommodate 12 or more samples.  Multifunctional, high throughput sampler which can accommodate up to 150 samples must be available.  Must have priority sampling mode to allow priority sample and method to be inserted into the sequence at any time.  Sample volume injection should be in the range of 0.1 ~ 8.0 µl. Optionally, should be capable of 0.5 ~ 40 µl &amp; 2.5 ~ 200 µl injection  Cross contamination of &lt;10<sup>-4</sup>  Area repeatability of injection amount must be less than 2%.</p> <p>Able to prepare ahead, for example washing the syringe with solvent prior to the next analysis</p> <p><b>HEAD SPACE SAMPLER</b>  Sample injection system with 90 vials capacity.  Sample loop with 1ml sulfinate sample loop as standard, with 0.2 ml or 3.0 absorbent trap as option.  5 levels of sample mixing option, from off (0) to levels 1</p>
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			<p>– 5.  Auto leak check must be available for all vials.  Vial warming temperature setting from 0 to 300°C, in 1°C increment.  The oven should be able to minimize heat loss and maintain high thermal stability during overlap analyses, with the conveyance of sample vial to the oven must be from bottom.  Maintain low carryover of lower than 0.0005% (under specific condition), with lower is preferred.</p> <p><b>Accessories that included into the system</b></p> <p>LATEST COMPATIBLE PC and Printer (multifunctional all in 1)  UPS (online and True sine wave) Must capable to back up complete GCMS for at least 20 minutes  GC startup kit</p> <p>One unit of moisture trap, oxygen trap and hydrocarbon trap</p> <p>02 He Gas Cylinders along with one regulator required for normal functioning must be included  02 Hydrogen Gas Cylinders along with one regulator and air compressor are required for normal functioning must be included  One gas tight syringe for gas samples</p> <p>One box of 200 samples vials with caps suitable for GC injection</p> <p>One copy of NIST mass spectra library (latest version)  The supplier must perform the Complete IQ/OQ along with performance check as per manufacturer guide line against traceable standards and kits.</p> <p><b>COLUMNS:</b></p> <ol style="list-style-type: none"> <li>1. TRB 5MS Capillary Column 30 m x 0.25 mm x 0.25um</li> <li>2. TRB 1 MS Capillary Column 30 m x 0.25 mm x 0.25um</li> <li>3. TRB-FFAP Capillary Column 30 m x 0.25 mm x 0.25um</li> <li>4. Capillary Column for analysis of Alcohol etc</li> <li>5. Meta .WAX Capillary Column 30 m x 0.25 mm x 0.25um</li> </ol>
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			<p>Guarantee and warranty duration of the system and parts, and duration for free of cost after sale service must be mentioned.</p> <p>All the relevant software (updated versions), updated MS libraries, Installation, Operation and Training must be provided by the supplier.</p> <p>Warranty: 5 years (exclusive of accessories and consumables)</p> <p>Note:  <i>“Complete instruments along with all accessories and consumables required for installation and operation including voltage stabilizer as per standard for 220volts AC.”</i></p>
4	Accessories for GC-MS and HPLC	Only One	Accessories compatible to GC-MS and HPLC, Quoted Compatible with GC-MS and HPLC.
5	Cyclones Clevenger	Only One	<p>Seeds Oil press, Automatic, Warranty of core components:1 Year or more</p> <p>The apparatus should be of high quality, complete with all accessories and ready to use.</p> <p>Glass apparatus should be made up of <i>heat resistant low expansion high quality borosilicate glass. The apparatus should include the following:</i></p> <ul style="list-style-type: none"> <li>• Steam generator</li> <li>• Compatible heating mantle</li> <li>• 5 L or more two necked distillation flask quickfit 24/29</li> <li>• 5 L or more single necked distillation flask quickfit 24/29</li> <li>• Cyclone Clevenger for Oil heavier than water</li> <li>• Cyclone Clevenger for Oil lighter than water</li> <li>• Compatible Condenser</li> </ul> <p>The apparatus must be ready to use.</p> <p>Installation, Operation and Training must be provided by the supplier.</p> <p>Note:  <i>“Complete instruments along with all accessories and consumables required for installation and operation including voltage stabilizer as per standard for 220volts AC.”</i></p>
6	Plant Digestion block	Only One	<p>KjelDigester, temperature accuracy (<math>\pm 10^{\circ}\text{C}</math>), temperature scope <math>400^{\circ}\text{C}</math>, voltage 220 V/50 HZ, power 3000 watt,</p> <ul style="list-style-type: none"> <li>• 50 x 250ml tubes along with compatible inert glass digestion tubes</li> <li>• Compact system includes: digestion block unit, separate microprocessor controller, tube rack/ draft shield, a set of digestion vessels, integrated cooling stand.</li> <li>• Manufactured from solid aluminium, encased in stainless steel, for acid and corrosion resistance</li> </ul>

			<ul style="list-style-type: none"> <li>• Unique flat plate design eliminates temperature variation across the digestion block</li> <li>• The apparatus must be ready to use.</li> <li>• Guarantee and warranty duration of the system and parts, and duration for free of cost after sale service must be mentioned.</li> <li>• All the relevant software (updated versions), Installation, Operation and Training must be provided by the supplier.</li> </ul> <p>Note:  <i>“Complete instruments along with all accessories and consumables required for installation and operation including voltage stabilizer as per standard for 220volts AC.”</i></p>
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**Muhammad Babar Hamayun**  
**President**

**Swabi Chamber of Commerce & Industry**

1-B near EZDMC Office, Gadoon Amazai Industrial Estate -23454, District Swabi

Phone: (0938) 270396 | Email: [scci.swabi@swabichamber.org.pk](mailto:scci.swabi@swabichamber.org.pk)

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**TENDER APPLICATION FORM**

Ref No.....

Dated.....

**President,**

Swabi Chamber of Commerce & Industry

1-B near EZDMC Office Gadoon Amazai Industrial Estate -23454, District Swabi.

Subject: **Tender for Supply of Laboratory Equipments, Laptop, Printer and Other Office Accessories**

1. Name of Applicant / Firm

.....

2. Address.....

.....

Phone No.....Mobile No ..... Fax No.....

3. Past Experience .....

4. Income Tax Certificate..... (Copy attached)

5. GST Certificate..... (Copy attached)

6. Certificate of Authorized Vender / Sole Distributor.....

7. Bid Amount .....

8. Earnest Money @ 2% of the Bid

Amount.....

9. Paid By ..... Pay Order No..... Dated.....

Bank.....

10. Cost of Tender Application Form (Non Refundable) Rs.1000/- Paid By Pay Order

11. No..... Dated..... Bank.....

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**Signature of Applicant & Stamp**

**TECHNICAL EVALUATION SHEET**

1. Company Name:

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2. Company Profile Establishment

3. Date of Incorporation:

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4. Location of Head Office:

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5. Details of Branch Offices across Pakistan:

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6. Human Resource Strength/ Work Experience of Technical Staff:

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(Provide Organogram & Resumes Separately)

7. Supply of laboratory equipments, IT equipment related Projects, etc. Details:

a. Number of projects so far completed with Public/ Private Organization:

i. Name

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ii. Year of completion (Most recent first): (with Contact Details):

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b. Number of ongoing projects in hand with Public/ Private Organizations:

i. Name

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ii. Year of acquirement (Most recent first): (with Contact Details):

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8. Industry Related Certification (Please Specify)

9. Proof of Distributor / Dealership with OEM

10. Annual turnover from Laboratory equipments, Laptop, Printer and other office accessories

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