TENDER DOCUMENT NO. 5 (2024-25)

FOR SUPPLY OF

# GAS CHROMATOGRAPH MASS SPECTROMETER UNDER THE PROJECT FOSTERING SDG No. 9

FOR

MIZORAM SCIENCE, TECHNOLOGY & INNOVATION COUNCIL (MISTIC) GOVERNMENT OF MIZORAM

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#### No. B. 13017/20/2023-MISTIC MIZORAM SCIENCE, TECHNOLOGY & INNOVATION COUNCIL GOVERNMENT OF MIZORAM MIZORAM NEW CAPITAL COMPLEX, KHATLA, AIZAWL-796001

e-mail: mistic.dst@gmail.com Website: https://mistic.mizoram.gov.in.

#### PART – I: GENERAL INFORMATION

1.	Name of Authority Inviting Tender	Member Secretary, Mizoram Science, Technology & Innovation Council (MISTIC)	
2.	Name of work	Supply of Gas Chromatograph Mass Spectrometer (GCMS) under the project Fostering SDG No. 9	
3.	Completion period	70 (Seventy) days from the date of issue of supply order	
4.	Deadline for receiving bids	03.04.2025 up to (12:00 noon)	
5.	Date, Time & Place for opening of Bids	03.04.2025 at 2:00 pm in the Office Chamber of Member Secretary, MISTIC	
6.	Earnest Money	2% of the total bid value	
7.	Bid Validity	90 (Ninety) days from opening of Technical Bids	

### PART – II

#### TENDER NOTICE (No. 5 of 2024-25)

Sealed tender in two envelope system is invited from reputed companies or authorized dealers/distributors/suppliers for supply and installation of Gas Chromatograph Mass Spectrometer (GCMS) under the project Fostering SDG No. 9. Details can be obtained from MISTIC Office, MINECO, Khatla, Aizawl on any working day from 13.03.2025 during office hours and website https://mistic.mizoram.gov.in and https://tender.mizoram.gov.in. Last date of submission of bid is 03.04.2025 (12:00 noon) and will be opened on the same day at 2:00 pm at the office of the undersigned.

Date: 13.03.2025

Sd/-(H. LALSAWMLIANA) Member Secretary Mizoram Science, Technology & Innovation Council

### PART – III : INSTRUCTIONS TO BIDDERS (ITB)

#### **1.** General instructions:

- (a) Sealed tenders in two envelope system (Technical Bid and Financial Bid) are invited for supply of Gas Chromatograph Mass Spectrometer (GCMS) for the project "Fostering SDG No. 9" executed by Mizoram Science, Technology & Innovation Council (MISTIC).
- (b) The firms fulfilling the prescribed eligibility criteria may submit their bids, complete in all respect and in the manner prescribed in these ITB to MISTIC by **12:00 noon of 03.04.2025**.
- (c) A bidder must be the owner/manufacturer of a reliable company or its authorized dealers/distributors/suppliers dealing with the items for which bid is submitted. Preference may be given to manufacturer (OEM).
- (d) Bids which do not fulfil the criteria prescribed in the ITB shall be rejected summarily.
- (e) All documents relating to the bid shall be in English.
- (f) The bid documents are not transferable and the seal and signature of the authorized official of the firm must appear on all the papers and envelopes submitted.

#### 2. Submission of Bids:

#### A. Sealed Envelopes

- (a) Tender should be submitted in two bids i.e. technical bid and financial bid and must be kept separately in two sealed envelopes specifically mentioning 'technical bid' and 'financial bid' on the cover of the envelopes.
- (b) The above two sealed bids must be kept inside one big outer sealed envelope before submitting it.
- (c) The outer big envelope should be titled as "TENDER FOR SUPPLY OF GAS CHROMATOGRAPH MASS SPECTROMETER UNDER THE PROJECT FOSTERING SDG No. 9.
- (d) It should be addressed to 'Member Secretary, Mizoram Science, Technology & Innovation Council, Government of Mizoram, Aizawl'. It should also have the full postal address and contact number of the bidder.

#### **B.** Documents to submit

- (a) All bids should be submitted in the format prescribed in Part IV (Proforma of Bid) and Part V (Bill of Quantities) of the Tender Document.
- (b) The total rates quoted in the Financial/Price Bid should include basic price (per unit), packing, forwarding, transportation, transit insurance, loading & unloading, installation, demonstration & training and all applicable taxes.
- (c) Duly filled and signed Compliance (as per format at Annexure-II and Annexure-III must be submitted along with the technical bid)
- (d) The samples or brochures/catalogue should be submitted along with the tender.
- (e) Bids must be accompanied by Earnest Money of the amount specified in Clause 6 of the ITB.
- (f) All Bidders should submit copy of dealership/distributorship/supplier Certificate/Authorization letter.
- (g) The following criteria will be considered for evaluation of technical bid. Bidders are required to submit supporting documents.
  - Experience (year of incorporation)
  - Projects handled (track record, copies of purchase order, invoice of similar items supplied in the past 5 years)
  - Financial strength of the bidder (balance sheet, audited statement of account)
  - Original Equipment Manufacturer

- GST registration
- Quality certification (ISO, etc.)

## **3.** Detailed Specifications and estimated quantities:

List of items, detailed specifications and estimated quantities for which bids are invited are placed at Annexure-I.

## 4. Bid Price and Contract:

- (a) The contract shall commence from the date of issue of supply order and ends on the date of expiry of warranty period. It should be signed by the parties before the date of issue of supply order.
- (b) The rates and prices quoted by the bidder shall be fixed for one year and shall not be subject to adjustment.
- (c) All duties, taxes, royalties and other levies shall be payable by the bidder under the contract, or for any other cause, shall be included in the rates, prices, and total bid price submitted by the bidder.
- (d) All rates/prices quoted should be FOR Phaibawk, Seling, Mizoram.
- (e) Vendor is to ensure that quoted price is not more than the price quoted to any other customer in India, particularly to other Government Organization(s) since the past one year.

## 5. Warranty

- (a) Warranty for the equipment should be at least one year and should commence immediately upon the satisfactory commissioning. The equipment should be maintained / repaired /replaced free of charge by the supplier during its warranty period.
- (b) After warranty period is over, Annual Maintenance Contract (AMC) or Paid maintenance may commence. Supplier should not deny nor avoid such AMC/paid maintenance.
- (c) The bidder shall warrant that the equipment will be new, unused and in accordance with the Contract documents and free from defects in material and workmanship.
- (d) At the end of the warranty period, the Contractor's liability ceases except for latent defects. For latent defects, the Contractor's liability shall remain till the end of 5 years from the date of completion of warranty period.

#### 6. Earnest Money:

- (a) The bidder shall furnish, as part of the bid, Earnest Money of 2% of the bid value in the form of Demand Draft of a Scheduled Bank guaranteed by the Reserve Bank of India and issued in favour of the Member Secretary, Mizoram Science, Technology & Innovation Council. The Demand Draft shall be payable at Aizawl and valid for at least 3 months.
- (b) The Earnest Money of unsuccessful bidders will be returned after validity of bid is over.
- (c) The Earnest Money of the successful bidder will be released when the bidder has signed the Contract Agreement and furnished the required Performance Security.
- (d) The Earnest Money Deposit shall be forfeited:-
  - (i) In case a bidder withdraws its bids after opening of Technical Bid and before the expiry of the validity period of the Bid.
  - (ii) If bidder fails to deposit performance security within specified period as per intimation/ request from MISTIC.
  - (iii) If the bidder fails to execute the agreement within specified time as intimated/ requested.

## 7. Amendment of Bidding Documents:

(a) MISTIC may modify the bidding documents by issuing addenda before the deadline for submission of bids.

- (b) Any addendum thus issued shall be part of the bidding documents and shall be notified to all concerned.
- (c) To give prospective bidders reasonable time in which to take an addendum into account in preparing their bids, MISTIC shall extend the deadline for submission bids may be deemed necessary.

#### 8. Format and Signing of Bids:

- (a) The Bidder shall submit one bid comprising of the documents.
- (b) All pages of the bid shall be signed by the bidder.
- (c) The bids shall contain no overwriting, alteration or addition, except those to comply with instructions issued by MISTIC, or as necessary to correct errors made by the bidders, in which case such corrections shall be made by scoring out the cancelled portion, writing the correction and initialing and dating it by the bidder.

#### 9. Bid Opening:

- (a) The outer envelope and the inner envelope containing the Technical Bid of all Bids received within the stipulated time will be opened in the presence of the Bidders/Bidders' representatives who chose to attend at the time, date and place specified in Part-I.
- (b) The Bidders' names and such other details as MISTIC may consider appropriate, including availability of Earnest Money, documents enclosed and their validity shall be announced at the time of opening.
- (c) Evaluation of Bids with respect to Bid Security, Qualification information and other information shall be taken up immediately.
- (d) Minutes of the opening of Bid will be prepared and intimated to representatives of firms or bidders attending the bid opening.

#### **10.** Process to be Confidential:

Information relating to the examination, clarification, evaluation and comparison of Bids and recommendations for the award of a contract shall not be disclosed to the bidders or any other persons not officially concerned with such process until award to the successful bidder has been announced. Any attempt by a bidder to influence the Department's processing of bids or award decisions may result in the rejection of his Bid.

#### **11.** Clarification of Bids and Contacting the Department:

- (a) No Bidder shall contact MISTIC on any matter relating to its Bid from the time of the Bid opening to the time the contract is awarded.
- (b) Any attempt by a Bidder to influence the Bid evaluation, Bid comparison or contract award decision may result in rejection of his/her Bid.

#### 12. Examination of Bids and determination of Responsiveness:

- (a) During the detailed evaluation, MISTIC will determine whether each bid
  - (i) meets the eligibility criteria prescribed in the ITB
  - (ii) has been properly signed
  - (iii) is accompanied by the required securities, and
  - (iv) substantially responsive to the requirement of the Bidding Documents.
- (b) The responsiveness of the Bid will be further determined with respect to the remaining bid conditions, i.e., priced bill of quantities and technical specifications of the bid items.

#### **13.** Performance Security:

(a) Successful bidder will have to deposit 5% of the total bid/contract value as performance security in the form of Bank Guarantee/Demand Draft/Banker's Cheque in favour of Member Secretary, Mizoram Science, Technology & Innovation Council, payable at

Aizawl before award of the work. The performance security should remain valid for a period of 60 days beyond the date of completion of all contractual obligations of the supplier including warranty obligations.

- (b) Performance security should be deposited within 15 days from the date of issue of letter of acceptance.
- (c) The performance security deposit shall be forfeited in case any terms and conditions of the contract/agreement, etc. are infringed or the bidder fails to complete the supply in time.
- (d) Failure of submission of performance security and signed contract document within the stipulated time will result in cancellation of contract award.

#### 14. Delivery:

- (a) Time limit for delivery shall be maximum within 12 weeks from the date of issue of the purchase order.
- (b) All aspects of safe delivery shall be the exclusive responsibility of the vendor. The package will be opened at the destination site i.e. Phaibawk, Seling only in the presence of MISTIC user/representative and vendor's representative. The intact condition of the package and the seal/indicators for not being tempered with, shall form the basis for certifying the receipt in good condition.
- (c) Acceptance of part delivery shall be a prerogative of MISTIC.

#### 15. Payment Term:

Payment shall be made only after satisfactory completion of the supply, installation, demonstration and training, and submission of bills. MISTIC reserves the right to adopt its own methods to certify the satisfactoriness of compliance of the contract agreement before payment is made. Further, as this is a North Eastern Council (NEC) funded project, payment will be made after availability of fund from the NEC.

#### 16. Force Majeure:

If the performance of the obligation of either party is rendered commercially impossible by any of the events hereafter mentioned that party shall be under no obligation to perform the agreement under order after giving notice of 15 days from the date of such an event in writing to the other party, and the events referred to are as follows:

- (i) Any law, statute or ordinance, order action or regulations of the Government of India.
- (ii) Any kind of natural disaster, and
- (iii) Strikes, acts of the Public enemy, war, insurrections, riots, lockouts, sabotage.

#### 17. Applicable Law:

- (a) The contract shall be governed by the laws and procedures established by Govt. of India and subject to exclusive jurisdiction of Competent Court and Forum in Aizawl only.
- (b) Any dispute arising out of this purchase shall be referred to Member Secretary, MISTIC and if either of the parties hereto is dissatisfied with the decision, the dispute shall be referred to the decision of an Arbitrator, who should be acceptable to both the parties, to be appointed by the Member Secretary of the Council. The decision of such Arbitrator shall be final and binding on both the parties.

#### **18.** After Sales Service

(a) Vendors should clearly state the address of available nearest after sales service facilities in the region or state how after sales service is to be done, without which their offers will be rejected. Preference may be given to bidder offering minimum service response and corresponding

execution time for complaints submitted.

(b) Bidders should specify the minimum response time for rendering their after sales services in the format given in Part VII of this ITB (i.e. Provision of After Sales Service)

### **19.** Other Terms & Conditions:

- a) Mizoram Science, Technology & Innovation Council (MISTIC) reserves the right to postpone or cancel the bid, and the bidders will have to abide by such decision to postpone or cancel the bid process.
- b) The contract shall include supply, installation, demonstration and training of the equipment.
- c) Tender may be submitted on the printed letter head of the bidder in the prescribed format supplied with ITB.
- d) Late and delayed tender will not be considered. In case any unscheduled holiday occurs on the prescribed closing/opening date the next working day shall be the prescribed date of closing/opening.
- e) No enquiry from the bidder(s) shall be entertained during the course of evaluation during the course of evaluation of the tender till final decision is conveyed to the successful bidder(s). However, the Purchase Committee or its authorized representative may make enquiries/seek clarification from the bidders. In such a case, the bidder must extend full co-operation. The bidders may also be asked to arrange demonstration of the offered items, in a short period of notice.
- f) No payment will be made for any damaged goods supplied.
- g) Liquidated damages provisions for damages shall be included in conditions of the contract when delays in delivery of goods, completion of work or failure of the goods or works to meet performance requirements would result in extra cost or loss of revenue or loss of other benefits to the Department.
- h) Bidders who not meet the criteria of this documents are subject to be disqualified, if they have made untrue or false representation in the forms, statements and attachments submitted in proof of the qualification requirements or have a record of poor performance, not properly completing the contract, inordinate delays in completion or financial failure, etc.
- i) All the terms and conditions mentioned herein must be strictly adhered to by all the bidders. Conditional tenders shall not be accepted on any ground and shall be rejected straightaway. Conditions mentioned in the tender bid submitted by bidders will not be binding on MISTIC.
- j) In case of supply within Mizoram, Tax deduction at source, as per Order/Notification of the Govt. of Mizoram will be applicable.
- k) The acceptance of the quotation will rest solely with the Member Secretary, MISTIC who in the interest of MISTIC is not bound to accept the lowest quotation and reserves the right to himself to reject or partially accept any or all the quotations received without assigning any reasons.

Sd/-

## (H. LALSAWMLIANA)

Member Secretary Mizoram Science, Technology & Innovation Council

#### PART-IV

#### Proforma of Bid (In Firm/Company Letter Head)

Date : \_\_\_\_\_

То

The Member Secretary Mizoram Science, Technology & Innovation Council MINECO, Khatla Aizawl, Mizoram

Subject: Tender for Supply of Gas Chromatograph Mass Spectrometer under Fostering SDG No.

9 project

Sir,

I/We offer to execute the works described above and remedy any defects therein, and carry out the conditions of contract for total bid price Rs. \_\_\_\_\_ (in figures) Rupees \_\_\_\_\_ (in words)

We undertake to commence the works/supply on receiving work/supply order in accordance with the contract documents. This Bid and your written acceptance of it shall constitute a binding contract between us.

We understand that you are not bound to accept the lowest or any Bid you receive.

Authorized Signature:
Name and Title of Signatory:
Name of Bidder:
Address:

Note : The Bidder shall fill in and submit this Bid form with the Bid

#### PART-V FORM OF BILL OF QUANTITIES (To be enclosed in Financial Bid)

(Rates quoted are inclusive of all duties, taxes, royalties and other levies payable) (Rates quoted also include transportation, installation and demonstration of supplied items)

Sl.No	Items	Rate in Rs.	Rate in Word	Remarks
1	2	3	4	5
	Grand Total			

## PART-VI

#### LETTER OF AWARD

Date:\_....

To,

Name of Contractor/Firm Address of Contractor

Sub: Notice of Award

Sir,

This is to notify you that Mizoram Science, Technology & Innovation Council has accepted your Bid dated \_\_\_\_\_\_ for supply of the following items for the quoted price of Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_) only:-

(List of items with quantities and rates)

You are hereby requested to furnish Performance Security cited in Clause 13(a) of ITB for an amount of Rs. \_\_\_\_\_\_ (Rupees \_\_\_\_\_) within 15 days of the receipt of this letter of award and sign the contract (enclosed), failing which, action as stated in Clause 13 (d) of ITB will be taken.

Yours faithfully

Authorized Signature :\_\_\_\_\_\_ Name & title of signatory: \_\_\_\_\_\_

## PART-VII (In Letter Head of Firm/Company)

#### **PROVISION OF AFTER SALES SERVICE**

Date: \_\_\_\_\_

To,

Member Secretary Mizoram Science, Technology & Innovation Council

Subj: Provision of after Sales Service

We promise to deliver state-of-the-art after-sales service with prompt response and/or physical servicing after receiving complaint from the buyer of our items. Our time-frame for delivering such service will be as follows:-

- 1) Response to complaint (letter/email/phone/whatsapp, etc.): Within \_\_\_\_\_\_ hour/day/week
- 2) Rendering of physical service at site after complaint: Within \_\_\_\_\_\_ hour/day/week

Yours faithfully

Authorized Signature:
Name and Title of Signatory:
Name of Company with seal:
Address:

## PART-VIII ELIGIBILITY CRITERIA FOR BIDDERS/SUPPLIERS

- 1. The bidder should have experiences for supply of high-end analytical laboratory instruments (such as AAS, GCMS, ICPMS, ICPOES, UV-VIS, FTIR or equivalent Analytical Instruments) for work value more than any of the following. Completion certificate from competent authorities should be submitted as proof of credential.
- 2. Intending bidder should produce credentials of a similar nature of work of the minimum value of Rs 90.00 lakh during last 02(two) years prior to the date of issue of this notice. OR
- 3. Intending bidder should produce credentials of 02(two) similar nature of work, each of the minimum value of Rs 50.00 Lakh during 02(two years prior to the date of issue of the tender notice.
- 4. The bidder or OEM should have Laboratory Instrument Service Set up in the region or nearby viz. Guwahati, Kolkata so that they can render service support during period of warranty and annual maintenance for any shut-down or malfunctioning of instruments or any required application support during analysis (within warranty period).
- 5. Bidders should provide the Brochure, Make & Model number, required declaration on compliance in the Bid documents of the offered Instrument so that the Department can evaluate the specification and clarity of application of the offered instruments. All offered specifications need to be supported with literatures, specification sheet which should be available in the website as well. This is a critical requirement to get technically accepted. Any deviation needs to be mentioned in the compliance statement.
- 6. The bidder should have a turnover of at least Rs. 200.00 Lakhs in any of the last Three Financial Years.
- 7. OEM Authorization Certificate should be submitted for this bid.
- 8. OEM Annual Turn Over of Rs 200.00 Crores to be submitted.
- 9. Intending bidders have to the following documents also:a) Valid Professional Tax receipt i.e. latest e-challan.
  b) GST Registration certificate with valid 15-digit GSTIN No. & Acknowledgement copy of current GST Return.

c) PAN Card & IT Return Acknowledgement for last consecutive 3 (three) financial years ( 2021-22, 2022-23 & 2023-24).

d)CA Approved Audited balance sheet for last three years.

## ANNEXURE-I DETAILED SPECIFICATIONS AND ESTIMATED QUANTITIES OF EQUIPMENT

## GAS CHROMATOGRAPHY MASS SPECTROMETER (SELING)

SN	PARTICULARS	QNTY	SPECIFICATION
1.	Gas Chromatography Mass Spectrometer	1	Placed below in next pages

## **SPECIFICATIONS FOR**

# Gas Chromatograph Mass Spectrometer with Auto Injector & other Accessories

GC-MS	Quantity:1
Gas Chromatograph:	• Should have an operating range of few degrees above ambient to
	450°C.
	<ul> <li>Maximum Heating Rate:125°C/min or better</li> </ul>
	• Oven Cool-Down time should be 450 °C to 50 °C in <4 minutes
	(Ambient at 22deg C)
	• Typical Retention Time Repeatability: <0.008 min or better
	• Typical Peak Area Repeatability: <1.0 % RSD or better,
	• Number of Ramps/Plateaus: 32/33 or more.
	Pneumatic controls
	Electronic pneumatic controls should be integral part of injector and
	detector modules No extra tubing and wires should be needed to
	operate electrical valves, and deliver carrier, detector and make-up
	gases to injectors and detectors. The digital carrier gas controller
	should allow operating in constant and programmed flow and
	pressure modes.
	Integrated Electronic Control (IEC)
	Gas specification
	• Up to 18 channels of integrated electronic gas control
	• Pressure set points minimum increments: 0.01 kPa (0.001 psi) for entire range of 0-150 psi
	• Temperature pressure variation: max ±0.07 kPa/°C (±0.01
	psi/°C)
	• Pressure accuracy: $<\pm1\%$ (FS)
	<ul> <li>Pressure set point precision: ±0.3 kPa</li> </ul>
	<u>Carrier Gas Control Common to all Injectors</u>
	• Split ratio: up to 12500:1
	• Pressure range: 0-1050 kPa (0 - 150 psi)
	Automatic Temperature and Pressure Compensation
	• Temperature compensated sensors are used in the oven and for
	all pressure sensors to automatically compensate ambient
	temperature variations.
	• Instrument and consumable health tracking with alert
	notifications for preventive maintenance
	• Streamline operations with tool-free instant Connect Column Lock for quick, safe, and leak-free capillary column installation
	Pneumatic Control Modes
	<ul> <li>Constant and programmed pressures</li> <li>Constant and programmed flows</li> </ul>
	Constant and programmed flows     Constant linear value it.
	• Constant linear velocity
	• Surged pressure split injection
	• Surged pressure splitless injection
	Total Flow Setting
	<ul> <li>Split flow: OFF or from 0-1250 mL/min in 0.1mL/min increments</li> </ul>
	Reduced split flow after injection with Gas Saver option
	<ul> <li>Purge flow: OFF or from 0.5-50 mL/min in 0.1mL/min</li> </ul>
Split/Splitlage Injector 01	increments
Split/Splitless Injector: 01	1 1 5
	installable within few minutes, and without any special tool.
	• The injector should be able to operate with capillary, wide bore
	and packed columns
	• Maximum Temperature: 400°C
	• Split Ratio: up to 12500:1

	D D 0 1000 1 D (0 145 DSD)
	Pressure Range: 0-1000 kPa (0-145 PSI)     Total Flow Setting:
	<ul><li>Total Flow Setting:</li><li>Control of split flow in 1 mL/min from 0 to 1250 mL/min</li></ul>
	<ul> <li>Purge flow from 0 to 50 mL/min</li> </ul>
Mass Spectrometer Detector	The source should be made of solid, non-coated, inert material
Mass Spectrometer Detector (Single Quadrupole):01 no	with Dual-stage mass filter & off-axis ion guide pre-filter for
(Single Quadrupole).or no	noise reduction.
	• Electron Impact Ionization (EI), with full scan (FS), SIM, and
	FS/SIM simultaneous within sample injection
	• Mass Range: 1.5–1100 amu or more with unit mass resolution
	• Pumping Systems: Suitable Turbomolecular pump (Single
	<ul><li>Pump)</li><li>Scanning speed: 20,000 amu/s or more.</li></ul>
	<ul> <li>Transfer Line Temperature: Up to 400°C or more.</li> </ul>
	<ul> <li>Emission Current: Up to 350 μA, with improved regulation at</li> </ul>
	low current
	• Electron Energy: Adjustable from 0 eV to 150 eV
	Mass Filter: Dual-stage, S-shaped mass filter with off-axis
	ion guide for noise reduction.
	• Mass Stability: Better than 0.1 u/48 hours/ $\Delta t \le 2$ K
	• <b>Detector with a warranty of three years</b> : Triple off-axis 10
	kV dynode, discrete dynode electron multiplier and electrometer linear range of $> 107 (0, 110 \text{ mA})$ . Electromic
	electrometer, linear range of $>10^7$ (0–110 µA), Electronic dynamic range $>10^9$ .
	<ul> <li>(IDL), calculated from the chromatographic peak area with</li> </ul>
	99% confidence interval: IDL $\leq$ 10 fg
	• Quadrupole: Should be made of solid, homogeneous, non-
	coated, nonheated, inert material, maintenance free having a
	warranty of five years.
	• Dual Filament for <b>extended operation and lifetime</b> & should
	be designed to ensure that both filaments offer similar analytical performance, it should be oriented in the same direction for
	improved performance and to have the provision to be protected
	by an electron lens.
	• Intelligent Instrument health monitoring capability to alert the
	users when to perform planned maintenance to avoid unplanned
	maintenance and performance issues.
	• AutoSIM, Timed-SIM, Retention Time alignment, Smart Tune
	<ul> <li>facility should be available</li> <li>Ion source types: Electron Ionization (EI) source with dual</li> </ul>
	• four source types: Electron fourzation (Ef) source with dual filaments in all ionization modes, programmable to 350°C
	<ul> <li>Filament Dual filament having same geometry &amp; orientation</li> </ul>
	• Library: Latest version NIST Library with Original CD should
	be quoted
	• Electronic dynamic range >10 <sup>9</sup>
Columns:	Capillary column for drugs and Narcotic (one for each segment)
	Column
	<ul> <li>TG-5 MS or any equivalent stationary phase column 30m X 0.25mm X 0.25 micro meter – 1No</li> </ul>
	<ul> <li>TG-624 or any equivalent stationary phase column 30m X</li> </ul>
	0.32mm X1.4um Capillary Column
Installation Kit with standard:	Installation Kit including tee unions, copper tube, tube cutter, brass
	nuts and ferrules
	• Brass Front/Back Ferrule 1/8" OD METAL CO – 6 Nos.
	• Retaining Nut 1/8" OD METAL COLUMN – 6 Nos.
	• Union $1/8$ TBG BR SW $- 2$ Nos.
	<ul> <li>Plug for Tube Fitting 1/8 – 4 Nos.</li> <li>Pro Closen Tube 1/8"X0.065"X50' – 1 No.</li> </ul>
	• Pre-Clean Tube 1/8"X0.065"X50' – 1 No.

	• Wrench Fixed $7/16IN - 1$ No.
	• Tube Cutter 1/8"-5/8" – 1 No.
	Package of kits for Autosampler – 1 No.
Computer and Printer for GC- MS system: 01 set	Suitable Branded Computer with installed software for running the GC-MS system & Laser Jet Printer.
Auto Injector /Sampler	Auto Injector with 8 or more number vials capacity which can be
	upgraded in future to Autosampler having capacity of sample
	more than 150 numbers -1No
	Syringes
	Standard: 10 μL
	Compatible with standard, gas-tight and plunger in-needle
	syringes
	Syringe volume to be available: 0.5 μL, 5 μL, 10 μL, 50 μL and 100 μL (50 mm needle length) with the same syringe holder
	Injection Parameters
	<ul> <li>Maximum injection volume: 80 µL (with 100 µL syringe)</li> <li>Minimum injection volume: 5 pL (with 0.5 µL syringe)</li> </ul>
	• Minimum injection volume: 5 nL (with 0.5 $\mu$ L syringe)
	<ul> <li>Injection volume: 1-50% for 0.5 μL, 5 μL and 10 μL syringes, 1-80% for 50 μL and 100 μL syringes</li> </ul>
	<ul> <li>Increments: 1% of the syringe volume</li> </ul>
	• Increments: 1% of the syringe volume Syringe rinsing
	Solvent bottles: 4 x 4 mL
	<ul> <li>Pre- and/or post-injection syringe wash: 0-15 rinses</li> </ul>
	Syringe wash with up to four different solvents in user's
	selectable combinations and optimized solvent volume
	<ul> <li>Solvent saving option to minimize solvent consumption, with</li> </ul>
	selectable percentage of syringe volume
	Sample taking
	<ul> <li>Two selectable vial sampling depths</li> <li>Programable filling strokes for bubble elimination (0-15 strokes)</li> </ul>
	<ul> <li>Selectable sample pre-washes (0-15 pre-washes)</li> <li>Viscous sample management with selectable sample drawing speed (Fast/Slow/ Custom) and programmable viscosity delay</li> </ul>
	(0-7 s)
	Area repeatability
	<ul> <li>&lt;0.3% RSD for C16 in heptane. Data obtained on ten</li> </ul>
	subsequent spitless analyses from 1 µL injected volume
	<ul> <li>Sample discrimination</li> <li>C40/C20 &gt; 0.95 with SSL injector</li> </ul>
	Carryover
	<ul> <li>&lt;0.001% measured by the residual area in a heptane blank following the injection of pure C16, using five post-washes with solvent A and five post-washes with</li> </ul>
	solvent B Linearity
	<ul> <li>&lt;4% RSD on response factor between 10% and 50% volume</li> <li>Screw Top 2ml size autosampler vial with cap &amp; septa – 200</li> </ul>
	nos
	10uL Fixed Needle Syringe 25 Gauge 50 mm Length for SSL
	and PTV for Auto Injector -2Nos
Concurrentes	Performance Spec Kit     EC 42 Calibratian Commonwed
Consumables	FC-43 Calibration Compound     GCMS Text 100 ng OEN
	GCMS Test 100 pg OFN     DWD CODD C12 TYPE M 250V MAX. For Autocomplete
	• PWR CORD C13 TYPE M 250V MAX. For Autosamplers, Modules and PC 2Nes
	Modules and PC -3Nos
	PWR CORD C19 TYPE M 250V MAX -3Nos
	Power cord for PC -2Nos     Snow Duck Eilement - 1No
	• Spare Dual Filament1No
	• Graphite/Vespel Ferrule 0.1-0.25mm ID Pk 10 -1PCKT
	• Graphite/Vespel Ferrule 0.32mm ID Pk 10 -1Pckt
	• Column nut, pk5 for SSL +m SSL Backflush 5/pk -1PCK

	<ul> <li>Capillary Column Nut for MS Detector 5/pk -1PCK</li> <li>Spring-loaded Transfer Line Nut -1No</li> </ul>	
	<ul> <li>Split/Splitless Mixed Liner Sample Pack 5/pk -1PCK</li> </ul>	
	• Septa BTO, blister pack 50/pk -2PCK	
	DEACTIVATED GLASS WOOL 10G -1No	
	Capillary Column Cutter -1No	
	Cotton Tip Applicator -1No	
	ALUMINUM OXIDE CLEANING COMPOUND -1No	
	• Liner Seal for SSL (pkg 5) -1PCK	
	• SSL Inlet base seal 2/pk -2PCK	
Gas Cylinder	O-Ring Parafluor -2 Pk 3 -2PCK	
Gas Cylinder	He Gas Cylinders (1Set) -UHP Grade Helium purity 99.999% with 7M3 of Gas filled in 47Itrs water capacity carbon steel cylinder confirming IS7285 & fitted with IS3224 Valve & Valve Guard	
Regulator & Gas Pannel	Double Stage Pressure Regulator for He Cylinder & Gas	
	Distribution Panel with Filters	
	Gas Purification Panel with fittings for He,	
	• Gas purification panel for all gases with required filters -	
	• MS powder coated panel body & frame (powder coating-9 Torph manage) (uii) Pressure gauge (manage 0, 15 hg/am2)	
	Tank process) (vii). Pressure gauge (range 0-15 kg/cm2)	
	<ul><li>Pressure Regulator metal body with locking system.</li><li>Toggle valve for ON/OFF Gas.</li></ul>	
	<ul> <li>Inlet connections are SS 1/8" dia and out connections are 1/8"</li> </ul>	
	dia	
UPS: 01 Set	• 10KVA true online UPS System having 1phase input & 1phase	
	output, with inbuilt isolation transformer, 12V, SMF battery	
	with Battery rack & Intercell connector to provide 30 minutes	
Warranty:	backup	
warranty.	• <u>Warranty:</u> Minimum 1 years from the date of installation & demonstration.	
	• Application support from Kolkata centre followed by efficient	
	service support as & when needed. Please give the details of the	
	concerned persons with contact details & Experience (Either of	
	Bidder or it's OEM). Please also give the list of the users in	
	Central Govt organization/State Govt Organization/PS/Public Listed Companies/ Reputed CSIR institutes & IIT'S/ IISER	
	with contact details in East India (Minimum ten installations)	
	in Eastern India & minimum three installations in	
	Mizoram/Aizawl). This is a decision-making criterion apart	
	from technical requirements & needs to fulfill to get	
Future Upgradability options	qualified System should be Field Ungradeable with the following	
to be available	System should be Field Upgradeable with the following Features in Future:	
	• The facility for no vent to change the column as well as source	
	cleaning without venting the vacuum of MS	
	• Simultaneous mounting of two nos of PTV on the GC.	
	• <u>Upgradation with vacuum Probe Interlock</u> & Never Vent	
	technology & V-Lock source plug to enables the users to save	
	additional time during GC maintenance, by changing the GC column as well as cleaning of Source, Changing from EI to CI	
	operation, Switching to DIP/DEP operation without the need to	
	vent the MS	
	• Upgradation with advanced source to achieve an IDL <1fg with	
	He carrier gas and Autosampler, eight sequential 5 fg OFN	
	spitless injections monitored for m/z 272 produce the following	
	instrument detection limit (IDL), calculated from the chromatographic peak area with 99% confidence interval: IDL	
	$\leq 1$ fg	

SP	ECIAL NOTE:
1.	All specifications offered Needs to be supported with original
	literature as well as the same literature needs to be available in
	the website of the manufacturing company.
2.	The offer to be made in details with all technical specification,
	item details with part nos (Only line items will not be accepted).
3.	All supporting technical literatures complying the technical
	specification need to be attached
4.	Extensive Training to be provided at installation site with a
	qualified application specialist
5.	There should be service support from Guwahati if not from
	Aizawl apart from Kolkata & Mumbai etc.
6.	The documents (PO's, Installation Certificate, Completion
	Certificate) to be provided towards prequalification criteria.

## ANNEXURE-II COMPLIANCE CERTIFICATE FOR MISTIC TERMS (To be enclosed in the Technical Bid)

Sl. No.	MISTIC Terms & Conditions	Yes/No
1	Rate quoted as per instruction	
2	Validity of quoted rate for 1 year agreed	
3	EMD submitted	
4	PBG term agreed	
5	Payment term agreed	
6	Delivery terms agreed	
7	Warranty period agreed	
8	Printed Literature provided	
9	Provisions of after sales service agreed	
10	Address of after sales service in India/region provided	
11	Applicable law terms agreed	
12	Experience certificate/document provided	
13	Projects handled/Track Record document provided	
14	Financial strength of the bidder (balance sheet, audited statement of account) provided	
15	OEM or others, please specify	
16	Quality certification (ISO, etc.) provided	
17	GST Registration Certificate provided	

(Signature with seal) \_\_\_\_\_

Vendor: M/S \_\_\_\_\_

Date : \_\_\_\_\_

#### **ANNEXURE-III**

## COMPLIANCE CERTIFICATE FOR DETAILED SPECIFICATIONS

### (To be enclosed in the Technical Bid)

Name of Equipment	Quoted Item Detailed Specifications	Complied (Yes/No)

(Signature with seal) \_\_\_\_\_

Vendor: M/S \_\_\_\_\_

Date : \_\_\_\_\_

\*Vendor must quote the parameter specification of the quoted product in this column in conformity with the specification listed in annexure. However, they should not just copy the specification from the tender call document. Failure to do so will lead to rejection of the tender.