

# GLOBAL TENDER ENQUIRY 2 PART TENDER FOR Mass Spectrometer with UPLC-Qty 01 No.

Tender Fee –Nil, EMD: Nil
Cost of Tender: Approx. Rs. 402 Lakhs
Last date for Sale of Documents: 10-02-2022 till 13.00hrs
Last date for submission: 10-02-2022 till 14.00hrs
Due date for opening bids: 10-02-2022 at 14.30hrs

**GENERAL CONDITIONS** 

(Tender documents consist of 22 pages, Pg. 1 to Pg.21 - Technical Bid, Pg. 22 - Price Bid)

Important Instructions: The bids shall be enclosed in an envelope and sealed duly marked "Mass Spectrometer with UPLC-Qty 01 No." Ref. No. INS/F-5539/2021-2022 (Y)"; addressed and to be mailed to "The Purchase Officer". The bids are liable to be rejected if the sealed envelope is not addressed to "The Purchase Officer" with Tender Ref. No. and Item Description. Offers delivered in person shall be deposited in the Tender Box Labelled as 'TENDER BOX FOR PURCHASE TENDER" kept in the Ground Floor, Reception at Administration Building. If the bids are sent through courier or mail, it should reach by submission Date and Time and inStem will not responsible for the delay.

#### Important instruction for the Tenderers: -

All tenders shall be made in ENGLISH only.

The details in regard to technical specification and other terms and conditions should be cogent and clear to the extent possible.

Sealed tenders are invited at Institute for Stem Cell Science and Regenerative Medicine -inStem, National Centre for Biological Sciences, GKVK Post, Bellary Road, Bangalore – 560 065 under 2 cover system from reputed OEM (Original Equipment Manufacturer) or reputed Manufacturers / Authorised Dealers for Supply, Installation, Commissioning and Technical Support for the following: -

#### Mass Spectrometer with UPLC-Qty 01 No.

The Technical and Financial / Price Bids shall be submitted simultaneously in two (2) cover (sealed) system. The proposals shall be evaluated in two stages: (1) Technical and (2) Price / Financial. Technical evaluation will be carried out and those Vendors who score minimum 75% will qualify for Price Bid opening. Thereafter, Financial Proposal shall be evaluated. The Commercially LOWEST BIDDER shall be the first preferred Vendor for award of Order.

- I) The EMD amount should be put in <u>first sealed cover Cover I</u>, and super scribed as <u>"Technocommercial Bid"</u> and should contain -
- 1. Acceptance of Technical specifications, Annexure- A (page 12) and terms and conditions. Tender document to be enclosed with Date, Signature and Seal in every Page.
- 2. Complete Technical details of the Instrument offered (Specifications, Technical Parameters, Advantages, etc.,)
- 3. Supplier profile & Schedule of Experience Annexure B
- 4. Supplier must describe in detail the technical support they will be able to provide in Bangalore. Only those companies will be considered who have engineers based in Bangalore who have been trained on the machines being quoted for, prior to the date of installation.
- 5. Suppliers must provide complete list of publications arising from use of their machines, in which the machines have been used for the applications listed. Enclose Data Sheet and Sample Analysis (if any)





- 6. Details of Warranty Services.
- 7. Details of "After Sales Service" and "Factory Trained Engineers" available in Bangalore.
- 8. Xerox copies of the Purchase Orders for having supplied similar Instruments in India.
- 9. Schedule of deviation from specifications / conditions Annexure C.
- 10. Any other information the bidder like to provide with Date, Signature and Seal (Annexures should be duly signed and filled with date wherever necessary) (Please attach additional sheet(s), wherever necessary)
- II) The <u>second sealed cover</u> Cover II super scribed <u>'Price Bid'</u> (page 22) should contain only rates (please attach additional sheet(s), wherever necessary) (should be duly signed with seal and filled with date wherever necessary)

THE ABOVE MENTIONED TWO COVERS SHALL BE SEALED ON THE OUTSIDE WITH WAX SEAL BEARING THE LOGO/NAME OF THE COMPANY SUBMITTING THE BID.

THESE TWO COVERS SHALL BE AGAIN PUT INTO A SINGLE WAX SEALED COVER super scribed "Mass Spectrometer with UPLC-Qty 01 No." and should reach INSTEM on or before 10-02-2022 before 14.00 hrs". This should be addressed to the Purchase Officer, inStem, NCBS, GKVK Post, Bellary Road, Bangalore – 65. The Techno – Commercial Bid will be opened on 10-02-2022 at 14.30 hrs.

On the date of tender opening (i.e. on 10-02-2022), only the Techno-Commercial Bids shall be opened in the presence of attending tenderers.

The Technical and Financial / Price Bids shall be submitted simultaneously in two (2) cover (sealed) system. The proposals shall be evaluated in two stages: (1) Technical and (2) Price / Financial. The Technical and Financial / Price Bids shall be submitted simultaneously in two (2) cover (sealed) system. The proposals shall be evaluated in two stages: (1) Technical and (2) Price / Financial. Technical evaluation will be carried out and those Vendors who score minimum 75% and above will qualify for Price Bid opening. Thereafter, Financial Proposal shall be evaluated. The Commercially LOWEST BIDDER shall be the first preferred Vendor for award of Order.

#### MANNER & METHOD FOR SUBMISSION OF BIDS:

- 1.1 Quotations must be submitted giving complete details using enclosed tender papers.
- 1.2 The rates quoted should remain valid for a period of 180 days from the date of Price Bid opening.
- 1.3 Each page of the tender except the Price & Delivery part shall be on printed letterheads or forms and bear the signature, date, name and designation of the person signing the offer. If they are not on letterheads, a rubber stamp indicating full name, address and phone No., Telex No., Fax No. etc. of the firm shall be affixed at the end of each page. The price & delivery part shall be as Annexure B attached.
- 1.4 This tender document is not transferable. Only the party to whom the tender documents have been issued shall be entitled to quote.
- 1.5 Bids containing erasures or alterations are liable to be rejected unless countersigned by the Authorised signatory.
- 1.6 All rates and total amount should be written both in figures and in words and if there is any discrepancy between the two, the lowest amount only will be considered.





- 1.7 Tenders will be opened in the presence of attending tenderers on 10-02-2022 at 14.30 hours. In the event the due date is declared as holiday, the tender will be opened on the following working day.
- 1.8 If the item offered is to be imported, arrangements for import will be made by the Institute. Import duty and customs clearance will be under purchaser's scope.
- 1.9 We reserve the right to place order for part/reduced quantity than what is specified in the Tender and also reserve the right to split the order to more than one supplier.
- 1.10 Any deviation/substitution in regard to the technical specification must be indicated in Annexure C of this tender document. Otherwise it shall be binding on the bidder to supply the items as specified in this tender specification.
- 1.11 All bids are to be submitted before the due date and time. The bids shall be enclosed in an envelope and sealed duly marked "Mass Spectrometer with UPLC-Qty 01 No."; Ref. No. INS/F-5539/2021-2022 (Y)"; and mailed to the Purchase Officer. Offers delivered in person shall be deposited in the Tender Box kept in the office. Due date for opening the bids: 10-02-2022 (14.00 hours).
- 1.12 Please return the tender papers including Conditions of Tender as well as the Annexures with your signature, rubber stamp and date affixed on each page.
- 1.13 All bids in response to this invitation of tender should be submitted in a manner and method specified above. Tender which do not comply with the above conditions are liable to be rejected.
- 1.14 Late and delayed tenders will not be considered. Therefore, tenderers shall ensure that the tender reaches the Purchaser on or before the due date and time stipulated for receipt of bids.

  TENDERS RECEIVED LATE OR AFTER THE DUE DATE WILL NOT BE CONSIDERED. INSTEM RESERVES THE RIGHT TO ACCEPT, REJECT ANY OR ALL TENDERS WITHOUT ASSIGNING ANY REASONS THERE OF.
- 1.15 Individuals signing the bid form and other supporting documents must specify the capacity in

which they sign, like -

- a) Whether signing as a Sole Proprietor of the firm or his attorney.
- b) Whether signing as a partner of the firm or his attorney
- c) Whether signing for the firm as Agent.
- d) Whether signing as Director of a Limited Company.
- 1.16 The details in regard to technical specification and other terms and conditions should be cogent and clear to the extent possible.
- 1.17 FOLLOWING ANNEXURES must be filled up properly
- (a) Technical Specifications Annexure A
- (b) Schedule of Experience Annexure B
- (c) Schedule of deviation from Annexure C
- Specifications/conditions
- (d) Schedule of price and delivery Annexure D





- 1.18 Each page of the tender except the Price & Delivery part shall be on printed letterheads or forms and bear the signature, date, name and designation of the person signing the offer. If they are not on letterheads, a rubber stamp indicating full name, address and phone No., Telex No., Fax No. etc. of the firm shall be affixed at the end of each page. The price & delivery part shall be as Annexure D attached.
- 1.19 All tenders shall be made in ENGLISH only.

#### 2. CATALOGUE/TECHNICAL LITERATURE

All necessary catalogue/drawing literature/data and details of item/s as are considered to be essential for full and correct evaluation of the bid shall invariably accompany the bid.

#### 3. BID GUARANTEE / EARNEST MONEY DEPOSIT: -

Bid Guarantee amount details are as below: -

Sl. No.	Item Description	BGA/EMD Amount
1.	Mass Spectrometer with UPLC-Qty 01 No	Nil

#### 4. AUTHORITY OF AGENTS

In case where a bid is submitted by an Indian Agent on behalf of his foreign principal, such bid should be supported with a letter of Authority from the principal that the Indian Agent has been authorised to submit the bid on behalf of the principal. The indigenous manufacturers shall submit their bids directly.

#### 5. PRICE

The tender to be quoted in foreign currencies & any other currencies approved/traded by RBI-USD/Euro/JPY/GBP/SGD/CAD/INR. The price/s quoted shall be firm till the complete execution of the order. All details relating to price, price breakup, inland transportation, documentation, taxes and duties, levies, Road/AIR/Marine freight charges, delivery terms (ex-works/F.O.R/F.O.B/CIP) mode of payment, mode of Dispatch, Insurance, Agency Commission, if any, should be clearly stated. For indicating the price, the tenderers may choose any/all of the following:

- a) Ex-works (all other charges to be indicated separately).
- b) F.O.R. site (i.e. Freight, Packing & Forwarding, loading on to the transport, documentation etc. included.) Internal transportation, Freight, Insurance, etc. to be shown separately.
- c) F.O.B (cost of goods, Packing & Forwarding, Inland Transportation, Documentation, etc. till the item is loaded on to the cargo carrier). Freight & Insurance charges to be separately indicated.
- d) CIP (cost of goods, packing & forwarding, documentation, freight, insurance, etc. all included). However, freight & insurance charges to be indicated separately.

  INSURANCE TO BE COVERED TILL inStem STORES.
- 6. The taxes (State, Central, Turnover tax, Works Contract Tax, etc.). Please specify which are applicable. The duties and other levies, freight, insurance shall be stated clearly and separately. Also please mention whether the same is included in the price/s quoted.

#### 7. VALIDITY OF BIDS

The bids should be valid for a period of 180 days from the date of opening of the Price bids. Bids with shorter validity period are liable for rejection.





#### 8. <u>DELIVERY</u>

The tenderer should clearly mention the time required for supplying the item. The period of delivery will be counted (a) from the date of receipt of the order in case of Indian supplier and (b) from the date of opening of letter of credit/receipt of order (in the case of sight draft/advance draft) for foreign suppliers. The delivery date is the date at which the equipment should be delivered at INSTEM.

#### 9. PACKING

The item should be packed appropriately so that it can sustain transit hazards, multiple landing, warehousing, etc. during transit.

#### 10. PLACE OF DELIVERY

In the case of items indigenously manufactured, ALL DELIVERIES shall be effected to the Institute for Stem Cell Science and Regenerative Medicine, National Centre for Biological Sciences, GKVK, Bellary Road, Bangalore-560065, whereas the foreign suppliers shall effect delivery up to Bangalore Airport, India by AIR only unless otherwise specified.

#### 11. GUARANTEE/WARRANTY

The item/s covered under this tender shall be subject to a guarantee for trouble free performance, workmanship, material etc., fulfilling the specifications mentioned in this tender for min. 36 months from the date of commissioning. If any defect is found in the material, workmanship or performance during the guarantee period the same may either be repaired/replaced by the supplier as the case may be free of charge. The guarantee period for replacement of parts or repair work shall be same as above. A guarantee certificate to this effect should be forwarded to us with your invoice. For order placed on foreign suppliers, the supplier shall specifically confirm that their Indian representatives, if any, will provide with after sales service and will attend to any repairs or technical problems that may arise.

#### 12. PERFORMANCE B/G

The successful bidder shall have to execute a performance B/G in accordance with the guarantee/warranty for 3% value of the order. This B/G has to be executed on an appropriate value of stamp paper in terms of a bank guarantee drawn on any Nationalized Bank or first class Foreign Bank and shall remain valid till the completion of the Defect Liability period/warranty period, with 6 months claim period.

#### 13. TAXES AND DUTIES

The Centre shall deduct all taxes and duties, as applicable, from time to time from the bills payable.

#### 14. PAYMENT TERMS

Payment Term: 90% against delivery; balance 10% on installation subject to receipt of PBG for 3% order value. The percentage of PBG will be determined based on the prevailing rules as of date of finalization of the tender

#### 15. CLARIFICATIONS

After opening the bids, if it becomes necessary for the purchaser to seek clarifications from the bidders, the same will be sought from the bidders. In such an event, the bidders will furnish all technical information / clarifications to the purchaser to reach on or before the due date fixed





for that purpose, indicating the Purchaser's tender reference. If the technical clarifications sought do not reach on or before the date fixed, the bids shall be summarily rejected without any further notice.

#### 16. RISK CLAUSE

Notwithstanding the other terms therein, the Centre at its option will be entitled to terminate the contract and to avail from elsewhere; at the risk and cost of contractor; either the whole of the contract or any part which the contractor has failed to perform within the time stipulated or if the same performance is not available, the best and the nearest available substitute thereof. The contractor shall be liable for any loss which the Centre may sustain by reason of such risk contract in addition to penalty.

As per O.M No. F.No.6/18/2019-PPD, dt.23/07/2020, the following condition to be fulfilled and the bidder to submit the following declaration on their Letter head.

- I. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is Registered with the Competent Authority.
- II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- III. "Bidder from a country which shares a land border with India" for the purpose of this Order means:
  - a. An entity incorporated, established or registered in such a country; or
  - b. A Subsidiary of an entity incorporated, established or registered in such a country; or
- c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
  - d. An entity whose beneficial owner is situated in such a country; or
  - e. An Indian (or other) agent of such an entity; or
  - f. A natural person who is a citizen of such a country; or
- g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.

#### 17. DISPUTE AND RESOLUTION

Any dispute or differences between the parties that cannot be settled by mutual discussion at appropriate levels shall be referred to the sole arbitration of the Director, INSTEM or his nominee and his decision in the matter shall be final and binding upon the parties to the dispute. The venue of arbitration proceedings shall be Bangalore. In respect of any matters pertaining to such arbitration, the courts of law in Bangalore will have exclusive jurisdiction. This Arbitration Agreement (hereinafter referred to as this "Agreement") relating to this Contract (hereinafter called the "Main Agreement" for this agreement) is made under the provisions of The Arbitration and Conciliation Act, 1996 as amended from time to time and the rules thereunder (hereinafter called The Arbitration Act).

#### 18. OTHER TERMS

- a) If electrical/ AC/ technical works contract, appropriate license defining the required expertise from the approved Licensing authority.
- b) The Centre, will at its discretion ask for a solvency certificate from your bankers.





#### 19. DEFINITION AND MEANINGS

In constructing these conditions, specifications, etc. in the tender document or the Annexures/Appendices the following words shall mean herein assigned definitions except where the subject context is otherwise stated.

**PURCHASER:** 

Shall mean the Institute for Stem Cell Science and

Regenerative Medicine

BID/TENDER:

Shall mean the proposal/document that the BIDDER submits in the requested and specified form or otherwise along with Annexures, Appendices, etc.

BIDDER/TENDERER:

Shall mean the firm/party who quotes against an

enquiry.

CONTRACTOR/SUPPLIER:

Shall mean the party to whom a Work Order/Purchase Order is awarded to undertake all or a part of the work covered by this tender document as well as an amendment orders relating to this tender issued by the Purchaser and shall include his/their legal

representative, assignee/s or successor/s.

**CONTRACT:** 

Shall mean and include the articles of agreement, Declaration form, the general and special conditions, the Annexures, the Schedule of Quantities & rates and the specifications attached hereto and the drawings, if

any.

ORDER VALUE:

Shall mean total value of the Purchase Order/Work order issued against this tender item including taxes,

levies, etc.

## 20. <u>TECHNICAL SPECIFICATIONS</u>

See Annexure - 'A'

21. For imported items, final price after totaling the prices of the individual items has to be mentioned with estimated freight, insurance, agency commission charges, etc. The price shall be

FOR CIP/CIF BANGALORE AIRPORT.

22. INSTEM reserves the right to split the quantities or reject one or more offers in full or part without

any reasons. Therefore, INSTEM decision is final and binding.

23. The quantity mentioned in the tender may be decreased/increased while ordering. However, the price quoted should be firm irrespective of change in the quantity.





#### 24. ACCEPTANCE OF TENDERS

INSTEM does not pledge itself to accept the lowest/ any tenders and reserves to itself the right to accept the whole or part of the tenders or a part of the quantity offered.

- 25. The firm may quote in Foreign Currency for direct import on CIP/CIF basis as well as in Rupees on FOR INSTEM basis for local supply. Please indicate insurance, freight and other charges separately for direct import.
- 26. Your Service Engineer should be fully trained to install the equipment and capable of maintaining the equipment during / after the warranty period.

#### 27. LIQUIDATED DAMAGES:

The successful bidder will have to agree that in case the item is not supplied within the agreed delivery schedule and after a grace period of seven days, then Liquidated Damages (not in terms of penalty) will be imposed automatically and be deducted from their bill at the rate of 0.5% per week subject to a maximum of 10% of the order value.

#### 28. Micro and Small Enterprises (MSEs):

a. Micro and Small Enterprises (MSE) must, along with their offer, provide proof of their being registered as MSE (indicating the terminal validity date of their registration) for the item tendered, with any agency

mentioned in the notification of the Ministry of Micro, Small and Medium Enterprises (Ministry of MSME)

b. The MSEs are exempted from payment of earnest money and tender fees subject to furnishing of relevant valid certificate for claiming exemption as per privilege rules of Government of India.

Since INSTEM is a Public Funded Research Organisation, registered under Government of India Notification No.51/96 – Customs and 10/97 – for Central Excise is applicable for the items listed in the notification.

#### 29. Eligibility for Participation:

- (i) Indigenous manufacturers and their authorized dealers are eligible and they will be considered as Local Supplier Class I/II for price preference as per GOI Notification vide OM bearing No.F-45021/2/2017-PP(BE-II) dated 04th June, 2020 and again on 16th September 2020 issued by Department of Industry and Internal Trade (Public Procurement Section), Ministry of Commerce & Industry, Govt. of India.
- (ii) In pursuant of the clarification vide GOI Notification vide OM bearing No.P-45021/102/2019-PP(BE-II) (E-29930) dated 26.11.2020 issued by Public Procurement Section, Department of Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, GOI that bidders offering imported products will fall under the category of Non-Local Suppliers and they can't claim themselves as Class I Local Supplier / Class II Local Supplier by claiming profit, warehousing, marketing, logistic, freight etc., as Local Value addition.
- (iii) Since it is Global Tender Enquiry (GTE) thus non supplier in terms of GOI Notification vide OM bearing No.F-45021/2/2017-PP(BE-II) dated 04th June, 2020 and again on 16th September 2020 issued by Department of Industry and Internal Trade (Public Procurement Section), Ministry of Commerce & Industry, Govt. of India are also eligible for participation in the tender.
- (iv) In pursuant of the OM bearing No.F.N.6/18/2019-PPD dated 23.07.2020 issued by Public Procurement Div., Department of Expenditure, Ministry of Finance, Govt. of India the





manufacturer/supplier are not eligible for participation if they are from such country which shares the land border with India. Offered items manufactured in such countries will not be considered.

The taxes (State, Central, Turnover tax, Works Contract Tax, etc.). Please specify which are applicable. The duties and other levies, freight, insurance shall be stated clearly and separately. Also please mention whether the same is included in the price/s quoted.

#### 30. FORCE MAJEURE CLAUSE:

a) Force Majeure means an event beyond the control of the supplier and not involving the supplier's fault or negligence and which is not foreseeable. Such events may include, but are not restricted to the acts of the purchaser either in its sovereign or contractual capacity, wars or revolution, hostility, acts of the public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes, lock-outs, and freight embargoes. However, it should not be used by a party to effectively to escape liability for bad performance.

If there is delay in performance or other failures by the supplier to perform its obligation under its contract due to event of a Force Majeure, the supplier shall not be held responsible for such delays/failures.

If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such conditions and the cause thereof within 21 days of occurrence of such event with reasonable evidence thereof. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as reasonably practical, and shall seek all reasonable alternative means of performance not prevented by the force majeure event.

If the performance in whole or in part or any obligation under this contract is prevented or delayed by any reason of force majeure for a period exceeding 90 days, either party may at it option terminate the contract without any financial repercussion on either side.

b) There may be a Force Majeure situation affecting the institute only, under which the institute shall have equal rights to claim relief under such Force Majeure situations.

For and on behalf of

Institute for Stem Cell Science and Regenerative Medicine

Purchase Officer

GKVK Post, Bellary Road, Bangalore 560 065. India Phone +91-80-23666341 /344/345/346 . Telefax +91-80-23636662 purchase@instem.res.in . www.instem.res.in





Declaration of Compliance of Order (Public Procurement No.1, 2 & 3) dtd 23-Jul-2020 & 24 Jul 2020 on Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017

This declaration must form part of all tenders & it contains general information and serves as a declaration form for all bidders. (Before completing this declaration, bidders must study the General conditions. Definitions, Govt Directives applicable in respect of Public Procurement No.1, 2 & 3) dtd 23 Jul 2020 & 24 Jul 2020 on Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017 & prescribed tender conditions).

DECLARATION BY AUTHORISED SIGNATORY OF THE FIRM
I, the undersigned,
as of
M/s (name of bidder entity), that:
1) The facts contained herein are within my own personal knowledge.
2) I have read the Order (Public Procurement No.1, 2 & 3) dtd 23 Jul 2020 & 24 Jul 2020 on the subject of Restrictions under
Rule 144 (xi) of the General Financial Rules (GFRs), 2017 regarding restrictions on procurement from a bidder of a country
which shares a land border with India and comply to all the provisions of the Order.
,
3) I certify that M/s (name of bidder entity) is not from such a country
or, is from such a country (strike out whichever is not applicable), has been registered with the Competent Authority. I
hereby certify that the SUPPLIER fulfills all requirements in this regard and is eligible to be considered. (Where applicable, evidence of valid registration by the Competent Authority is attached).
4) I understand that the submission of incorrect data and / or if certificate / declaration given by M/s
Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017.
Account and the last of the control of the last the last last of the last last last last last last last last
AUTHORISED SIGNATURE: DATE:
Seal / Stamp of Bidder





# Bid Security Declaration for Order Value > Rs.5 Lakh (to be submitted on Company's Letter Head)

I/We the undersigned hereby declare that if we withdraw or modify the bids during the period of its validity, or if we are awarded the contract and fail to sign the contract, or to submit a performance security before the deadline defined in the request for bids document or fail to execute the contract, we will be suspended for the period of time specified in the request for bids document from being eligible to submit bids for contracts with the entity that invited the bids.

Name and Signature of Authorized Signatory and Company Seal



# ANNEXURE-A-SPECIFICATIONS Mass Spectrometer with UPLC-Qty 01 No. TECHNICAL SPECIFICATIONS:

SI. No	-	Technical Requirements			
Appli	cation: Discovery anal	ctrometer and Liquid Chromatography system: ysis of metabolites, Proteins, lipids and small mol and small molecules. Structural elucidation of sm			
Α	Mass Spectrometry Technology required for discovery and quantitative analysis	of- flight-mass spectrometer with Trap feature.(for discovery and quantitative analysis) equired for iscovery and uantitative			
		Q TOF with trap feature (discovery and quantitative analysis)	Quadrupole-Ion trap- Orbitrap		
	Hardware feature	QJet ion guide, Zeno trap, LINAC collision cell,N-optic TOF analyzer	Electrodynamic Ion Funnel, Ultra-High-Field Orbitrap Mass Analyzer,High-capacity ion transfer tube (HCTT)		
i)	Mass Range	Quadrupole: m/z 5- 2250	Linear Ion Trap Standard M/Z: 50 - 2000		
		TOF m/z 5- 40000	High Mass : m/Z 200- 6000.		
			Orbitrap: upto m/z 6000 without precursor ion selection.		
ii)	Resolution	mass resolution that is equal to or greater than 42,000 (FWHM) measured on the (M+6H)6+ charge isotope cluster for bovine insulin at m/z 956	≥480000 (FWHM) at m/z 200		
iii)	Scan Rate	133 MS/MS Spectra per Sec or better	Orbitrap MS 40Hz or better.		
iv)	Mass Accuracy	≤ 2 ppm MS using external calibration.			
		< 0.2 ppm absolute error as demonstrated on the m/z 813 fragment ion of Glu- Fibrinopeptide B. using internal calibration.	< 3 ppm RMS using exteranl calibration < 1 ppm RMS using internal calibraiton.		



v)	Sensitivity (MS)	The instrument must sensitivity of 1 pg reserpine injection on column with S/N ≥2,500:1 for m/z 609.2806	50 fg of reserpine on- column injection with signla- to- noise ration 150:1 (ESI + Mode) or better.
	(MS/MS)	The instrument must have MS/MS sensitivity of 50fg on column for the transition m/z 609 to m/z 195.0651 with precursor isolation at unit mass resolution (0.7 ± 0.1 Da at half height) and S/N ≥400:1.	100 fg of reserpine on- column injection with signla- to- noise ration 200:1 (ESI + Mode)
vi)	Dynamic range	≥ 5 order of linear dynamic range	≥ 4 order of linear dynamic range
vii)	MS Scan power	MS <sup>n</sup> , n = 1 to 2	MS <sup>n</sup> , n = 1 to 2 or better.
viii)	Scan Mode	Data independent MS/MS scan,full-scan TOF MS/MS,	Data independent MS/MS scan synchronous MS3, Precursor Selection, Parallel reaction monitoring/ high resolution MRM.
		Data Dependent SWATH acquisition 2.0 with variable and Fixed Q1 isolation window	Synchronus precursor isolation upto 20 presursors per MS scan.
		Parallel reaction monitoring/ high resolution MRM (MRM <sup>HR</sup> )	Full scan  • SIM scan: Selected Ion Monitoring —in DDA* manner (discovery) —in targeted SIM manner based upon a sampledependent, user- defined mass list —with Targeted Mass Filter applied (confirmation)
	-	SWATH acquisition performance kit should include in the offer	AIF scan: All Ion     Fragmentation
		SWATH acquisition and IDA/DDA scan modes with EAD	
ix)	Fragmentation modes	Collision induced dissociation (CID) and user-tunable electron-based fragmentation mode operating at electron energies from 0 eV to 25 eV.	High Energy collision (HCD), CID
В	UHPLC system		



		•Pump:
Liquid	Chromatography	Binary Pumps/Solvent Manager.
Syster	n	Vacuum degassing capability Two/more-channel
		Operating Flow Rate Range to be 0.010 to 2.000 mL/min, in 0.001 mL increments.
		Effective System Delay Volume < 400ul, independent of system backpressure (with standard mixer) Plunger Seal Wash Integral, active, programmable Maximum Operating Pressure 17,500 or better. whichever is greater, based on retention time
		Flow Precision 0.1% RSD or ± 0.05 min RSD Flow Accuracy ± 1.0% or better
		Auto sampler
		Number of Sample Plates two (2) plates: 96 and 384 well plates; vial plate 1.5 or 2-mL vials, (100).
		Injection Volume Range 0.5 – 50 uL, in 0.1 uL increments, partial or full loop mode.
		Sample Delivery Precision < 0.3% RSD,
		Sample Carryover < 0.0015% or better
		Column Compartment
		Temperature Control 5 deg. C below ambient to 85 deg. C, 1.0 deg. C increments.
		Column Oven to house two, or more columns
		Total system (including pump & Autosampler) should be capable of operation at 17500 psi or better.
С	Spares and	a. LC-MS/MS startup kit should be supplied as standard.
	accessories	b. All required traceable standards for Mass calibration and tuning, HPLC calibration should be provided
		c. Standard Tool kit should be provided for Instrument maintenance
		d. Reputed highly branded solvent filtration unit with oil less vacuum pump and required accessories .
D	PC	e. Separate system for data acquisition and data analysis should be provided with specification as mentioned. Most recent factory recommended or Minimum Intel core i7 processor, 2.0 Ghz or more, 24"or more LCD/TFT Monitor, 500 GB HDD, SSD Read/Write, 8 GB RAM,4 USB Po or higher configuration for use with the above system to be provided



E	Software's	Instrument should have dedicated software for data acquisition and instrument control. Software for instrument control, data acquisition and data processing must be latest with perpetual license. Software update including newer version should be provided free of cost during the warranty period.
		Dedicated latest software package for Proteomics, metabolite /Lipid identification and characterization, relative and absolute quantifications Should be provided. Software should be able to perform alignment of multiple date sets, statistical analysis software and software for metabolite structure elucidation and swath analysis.
		LC system should be controlled by single software or the LC software should be integrated into the MS data acquisition software.
		The supplier will have to carry out successful Installation at the laboratory premises (where ever the system has to be installed) and provide on-site comprehensive training for a minimum of four scientific personnel operating the system till customer satisfaction and provide the training and troubleshooting in running the workflow as an when required during the period of contract.
G	UPS	The system should have UPS (minimum 10 KVA) of suitable rating with voltage regulation, spike protection and minimum 30 minutes back up for the supplied equipment.
Н	Nitrogen/Gas generator	System should include Nitrogen generator with latest gas panels with noise free compressor .
1	Gas cylinders	Any other gas cylinder (As required for the instrument) for performing the required applications must be included in the offer along with the gas regulators, gas purification panels, tubing's, connectors and moisture traps etc.
J	Warranty	3 years on all component of system
К	СМС	Comprehensive maintenance contract from OEM (for the whole set up) for five year should be quoted after the expiry of the warranty period.
L	AMC	AMC for next five year after the expiry of warranty should be quoted

Bidders should quote for all the points as per the NIT specifications covered in the Technical Evaluation Criteria (i.e., with and without marks).

The Bid will be treated as not complied if the above condition is not fulfilled.



# **INFORMATION TO TENDERERS**

The Tender shall be evaluated under 2 (Two) Bid System

I Technical Bid

II Financial Bid

# TECHNICAL SPECIFICATIONS & EVALUATION CRITERIA WITH MARKS FOR 2 PART TENDER FOR "Mass Spectrometer with UPLC-Qty 01 No".

	•	TECHNICAL EVALUATION CRITER	RIA WITH MARKS			
SI. No.		Technical Requirements				
Applic	ation: Discovery and	ectrometer and Liquid Chromatography system: alysis of metabolites, Proteins, lipids and small mole all molecules. Structural elucidation of small mole		on of peptide,		
A	Mass Spectrometry Technology required for discovery and quantitative analysis  Either Quadrupole-Ion trap-Orbitrap technology or Quadrupole- time- of- flight-mass spectrometer with Trap feature.(for discovery and quantitative analysis)					
		Q TOF with trap feature (discovery and quantitative analysis)	Quadrupole-Ion trap- Orbitrap			
	Hardware feature	QJet ion guide, Zeno trap, LINAC collision cell,N-optic TOF analyzer	Electrodynamic Ion Funnel, Ultra-High-Field Orbitrap Mass Analyzer, High-capacity ion transfer tube (HCTT)	4		
i)	Mass Range	Quadrupole: m/z 5- 2250	Linear Ion Trap Standard M/Z: 50 - 2000			
		TOF m/z 5- 40000	High Mass: m/Z 200- 6000.  Orbitrap:upto m/z 6000  without precursor ion selection.	10		
ii)	Resolution	mass resolution that is equal to or greater than 42,000 (FWHM) measured on the (M+6H)6+ charge isotope cluster for bovine insulin at m/z 956	≥480000 (FWHM) at m/z 200	20		
iii)	Scan Rate	133 MS/MS Spectra per Sec or better	Orbitrap MS 40Hz or better.	20		
iv)	Mass Accuracy	≤ 2 ppm MS using external calibration.				
		< 0.2 ppm absolute error as demonstrated on the m/z 813 fragment ion of Glu- Fibrinopeptide B. using internal calibration.	< 3 ppm RMS using exteranl calibration < 1 ppm RMS using internal calibraiton.	10		





v)	Sensitivity (MS)	The instrument must sensitivity of 1 pg reserpine injection on column with S/N ≥2,500:1 for m/z 609.2806	50 fg of reserpine on- column injection with signla- to- noise ration 150:1 (ESI + Mode) or better.	10
	(MS/MS)	The instrument must have MS/MS sensitivity of 50fg on column for the transition m/z 609 to m/z 195.0651 with precursor isolation at unit mass resolution (0.7 ± 0.1 Da at half height) and S/N ≥400:1.	100 fg of reserpine on- column injection with signla- to- noise ration 200:1 (ESI + Mode)	10
vi)	Dynamic range	≥ 5 order of linear dynamic range	≥ 4 order of linear dynamic range	
vii)	MS Scan power	MS <sup>n</sup> , n = 1 to 2	MS <sup>n</sup> , n = 1 to 2 or better.	
viii)	Scan Mode	Data independent MS/MS scan,full-scan TOF MS/MS,	Data independent MS/MS scan synchronous MS3, Precursor Selection, Parallel reaction monitoring/ high resolution MRM.	10
		Data Dependent SWATH acquisition 2.0 with variable and Fixed Q1 isolation window	Synchronus precursor isolation upto 20 presursors per MS scan.	
		Parallel reaction monitoring/ high resolution MRM (MRM <sup>HR</sup> )	Full scan  • SIM scan: Selected Ion Monitoring —in DDA* manner (discovery) —in targeted SIM manner based upon a sampledependent, user- defined mass list —with Targeted Mass Filter applied (confirmation)	
		SWATH acquisition performance kit should include in the offer	AIF scan: All Ion     Fragmentation	
		SWATH acquisition and IDA/DDA scan modes with EAD		
ix)	Fragmentation modes	Collision induced dissociation (CID) and user-tunable electron-based fragmentation mode operating at electron energies from 0 eV to 25 eV.	High Energy collision (HCD), CID	10
В	UHPLC system			



		•Pump:	
	Chromatography	Binary Pumps/Solvent Manager.	
Syster	m	Vacuum degassing capability Two/more-channel	
	2	Operating Flow Rate Range to be 0.010 to 2.000 mL/min, in 0.001 mL	
		increments.	
		Effective System Delay Volume < 400ul, independent of system	
		backpressure (with standard mixer)	
		Plunger Seal Wash Integral, active, programmable	
		Maximum Operating Pressure 17,500 or better. whichever is greater, based on retention time	
		Flow Precision 0.1% RSD or ± 0.05 min RSD Flow	
		Accuracy ± 1.0% or better	
		7 (cedi de) 2 2.070 61 Better	
		Auto sampler	
		Number of Sample Plates two (2) plates: 96 and 384 well plates; vial	
		plate 1.5 or 2-mL vials, (100).	
		Injection Volume Range 0.5 – 50 uL, in 0.1 uL increments, partial or full	
		loop mode.	
		Sample Delivery Precision < 0.3% RSD,	
		Sample Carryover < 0.0015% or better	
		Column Compartment	
		Temperature Control 5 deg. C below ambient to 85 deg. C, 1.0 deg. C increments.	
		Column Oven to house two, or more columns	
		Total system (including pump & Autosampler) should be capable of operation at 17500 psi or better.	-
С	Spares and	a. LC-MS/MS startup kit should be supplied as standard.	
	accessories	b. All required traceable standards for Mass calibration and tuning,	
		HPLC calibration should be provided	
		c. Standard Tool kit should be provided for Instrument maintenance	
		d. Reputed highly branded solvent filtration unit with oil less vacuum	
		pump and required accessories .	
D	PC	e. Seperate system for data acquisition and data analysis should be	
		provided with specification as mentioned. Most recent factory	
		recommended or Minimum Intel core i7 processor, 2.0 Ghz or more,	
		24"or more LCD/TFT Monitor, 500 GB HDD, SSD Read/Write, 8 GB RAM,4 USB Port	
		or higher configuration for use with the above system to be	
		provided	



#### Ref: INS/F-5539/2021-2022(Y)

#### **Tender Notice No.002/2021-2022**

	Total				
L	AMC	AMC for next five year after the expiry of warranty should be quoted	100		
К	СМС	Comprehensive maintenance contract from OEM (for the whole set up) for five year should be quoted after the expiry of the warranty period.			
J	Warranty	3 years on all component of system			
1	Gas cylinders	Any other gas cylinder (As required for the instrument) for performing the required applications must be included in the offer along with the gas regulators, gas purification panels, tubing's, connectors and moisture traps etc.			
Н	Nitrogen/Gas generator	System should include Nitrogen generator with latest gas panels with noise free compressor .			
G	UPS	The system should have UPS (minimum 10 KVA) of suitable rating with voltage regulation, spike protection and minimum 30 minutes back up for the supplied equipment.			
		The supplier will have to carry out successful Installation at the laboratory premises (where ever the system has to be installed) and provide on-site comprehensive training for a minimum of four scientific personnel operating the system till customer satisfaction and provide the training and troubleshooting in running the workflow as an when required during the period of contract.			
*		elucidation and swath analysis.  LC system should be controlled by single software or the LC software should be integrated into the MS data acquisition software.			
		Dedicated latest software package for Proteomics, metabolite /Lipid identification and characterization, relative and absolute quantifications Should be provided. Software should be able to perform alignment of multiple date sets, statistical analysis software and software for metabolite structure			
E	Software's	Instrument should have dedicated software for data acquisition and instrument control. Software for instrument control, data acquisition and data processing must be latest with perpetual license. Software update including newer version should be provided free of cost during the warranty period.			
E	Software's	Instrument should have dedicated software for data acquisition and			

Evaluation will be carried out and those Vendors who score minimum 75% will qualify for Price Bid opening. Thereafter, Financial proposal shall be evaluated. The Commercially LOWEST BIDDER shall be the first preferred Vendor for award of Order.

Bidders should quote for all the points as per the NIT specifications covered in the Technical Evaluation Criteria (i.e., with and without marks) The Bid will be treated as not complied if the above condition is not fulfilled.





### Ref: INS/F-5539/2021-2022(Y)

### **Tender Notice No.002/2021-2022**

# ANNEXURE – B

<u>SCHEDULE OF EXPERIENCE</u>
Please furnish list of major supplies/works undertaken in relevant to this tender during the past two years.

SI.	Name of the company	Name of	Purchase Order	Brief description	Value (Rs.)
No.	with full address	project	No. & date		
	,				
		-			
Signa	ture				
Name		0111,495.4			
Ivaille					
Desig	nation		3.00	2	
Name	of company	*			
Date					
Date					
Seal o	f the company				
	1				
	OPPRISON NO.				





#### **ANNEXURE - C**

# SCHEDULE OF DEVIATION FROM SPECIFICATIONS/CONDITIONS

All deviations from the spe	cifications/conditions sh	all be filled in by the	bidder in this schedule.	
		•		
				-
,				
-	ÿ.			
The bidder hereby certifies t	that the above mentioned	l are the only deviatio	ns from Technical Specif	ication
of this tender. [State NIL if	no deviation is envisage	d].	•	
Signature				
Name			777	
<b>.</b>				
Designation				
Name of the company		W		
Date				-
Seal of the company				





#### **COVER - II PRICE BID**

#### Mass Spectrometer with UPLC-Qty 01 No.

SI. No.	Item Description	Qty	Unit Price	Total Price
28				
-				
				п
	п.			

Please enter Unit Price, Total Price and Grand Total in figures as well as words. Unit price and Total Price may be entered below each item.

